Chapter 24

Lexical Category and Alignment in Austronesian

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24.1 The Alignment of Philippine-Type Languages

Philippine-type languages are often cited as exemplifying a cross-linguistically unique voice system, in which verb morphology can select not only an agent or patient, but also locative, instrumental, and other adjunct type relations as subject. Current syntactic treatments characterize this phenomenon alternatively as a rich voice system, a rich applicative system, “case agreement” or thematic nominalization. Relatedly, there is disagreement as to whether Philippine languages are best analyzed as ergative, accusative, active, or symmetrical. The uncomfortable position of Philippine languages in regard to more common alignment systems has been a long-standing topic in the typological literature (some earlier treatments include DeWolf 1988; Shibatani 1988; Himmelmann 1991).

Here, I present a critical review of three current syntactic analyses of Tagalog: the ergative analysis (Gerdts 1988b; De Guzman 1988; Liao 2004; Aldridge 2004), the case-agreement approach (Richards 2000; Rackowski 2002; Rackowski and Richards 2013:fn.2), for instance, states, “I suspect that the debate about whether Tagalog is ergative will prove to be a terminological one; Tagalog resembles ergative languages in some respects, and differs from them in others, and the only question is how vague we want the technical term ‘ergative’ to be.”
Richards 2005) and a nominalism analysis (Starosta et al. 1982; Kaufman 2009a,b), while advocating for the latter. I also present new data from Mamuju (South Sulawesi subgroup, Indonesia) to demonstrate that canonical ergative languages also exist within the Western Malayo-Polynesian subgroup of Austronesian. I argue that this retreat to the canonical ergative type is a result of the historical re-emergence of verbal predication.

The typical Austronesian “voice” paradigm is exemplified in (1) and (2) with Tagalog. Note that the use of each morpheme correlates with the selection of a different argument or adjunct as the “ang phrase.”

(1) a. B<um> ili ng bulaklak ang bán̄gô um.BEG-buy ng flower ang child for sa prisoner ‘The child bought a flower for the prisoner.’  
b. B<in>-∅ ng bán̄gô ng bulaklak para sa bán̄gô <BEG>buy-in ng Juan ang flower for sa prisoner ‘A/the child bought the flower for the prisoner.’  
c. I-bin>ili ng bán̄gô ng bulaklak ang bán̄gô i-<BEG>give ng child ng flower ang prisoner ‘A/the child bought the prisoner a flower.’  
d. B-bin>han ng bán̄gô ng bulaklak ang bán̄gô <BEG>give-an ng child ng flower ang prisoner ‘A/the child bought a flower from the prisoner.’

(2) a. Nag-bigay ng bulaklak sa bán̄gô ang bán̄gô mag.BEG-give ng flower sa prisoner ang child ‘The child gave a flower to the prisoner.’  
b. I-bin>igay ng bán̄gô sa bán̄gô ng bulaklak i-<BEG>give ng child sa prisoner ang flower ‘A/the child gave the flower to the prisoner.’

3 The different verbal morphemes glossed act for actor voice/agreement, pat for patient voice/agreement, conv for conveyance voice/agreement and loc for locative voice/agreement. The glosses should be self-explanatory except for the conveyance voice. The types of arguments and adjuncts selected by the conveyance voice do not seem to form a natural semantic class. They include instruments, benefactives, and themes. I adopt the term conveyance voice from Wolff (1973) based on its selection of objects that are conveyed away from the agent. It is also referred to as instrumental, benefactive and circumstantial voice in the literature. Note that the actor voice is indicated by <um> in (i) but by nag- in (ii). The latter form is best analyzed as a combination of <um> and pag-, a transitivity related prefix, but this will not concern us here.

Regarding spelling conventions, the Tagalog genitive case marker ng is an abbreviation for /naŋ/. I follow the accentual conventions of (Wolff et al. 1991) where final stress is treated as the unmarked default and penultimate stress/length is marked with an acute accent. The grave accent is used to indicate word-final glottal stop. Thus, bán̄gô indicates /ˈbaːtə/.
The proper analysis of the alternating morphology on the predicates (1) and (2) (glossed neutrally as <um>, nag-, i-, -an, etc.) as well as the markers introducing the arguments (ang, ng, sa) are at the crux of the debate on Philippine-type languages. As emphasized by Foley (2008), what makes the system atypical is its morphologically symmetrical nature; note that in each of the examples (1) and (2), one and only one voice marker appears. Following the typologically oriented work of Himmelmann (1991) and Foley (1998), I trace this symmetry to the root level, specifically, the lack of a clear contrast between entity-denoting and event-denoting roots. Crucially, when this contrast develops, as in many languages of Indonesia, more canonical alignment patterns emerge as well (Kaufman 2009b).

24.1.1 The Ergative Analysis of Philippine Languages

Under Aldridge’s (2004) ergative analysis of Tagalog, our example sentences in (1) would be analyzed as in (3), following the interpretation of the morphology presented in Table 24.1.

(3)  
(a) B<um>ili ng bulaklak ang bátà para sa bilanggô  
\text{ANTIPASS-buy OBL flower ABS child for PREP prisoner}  
'The child bought a flower the prisoner.'

(b) B<in>ili-∅ ng bátà ang bulaklak para sa bilanggô  
\text{<BEG>buy-TR ERG child ABS flower for PREP prisoner}  
'A/the child bought the flower for the prisoner.'

(c) I-b<in>ili ng bátà ng bulaklak ang bilanggô  
\text{APPL<BEg>give ERG child OBL flower ABS prisoner}  
'A/the child bought the prisoner a flower.'

(d) B<in>il-han ng bátà ng bulaklak ang bilanggô  
\text{<BEG>give-APPL ERG child OBL flower ABS prisoner}  
'A/the child bought a flower from the prisoner.'

Note that the symmetry referred to here is primarily morphological. The different "voices" are clearly not interchangeable in the majority of cases as they correspond to different possibilities for the definiteness of arguments. The term "symmetrical" has also been used in the sense of (Bresnan and Moshi 1990) to refer to the treatment of ditransitive objects. This is also unrelated to the morphological symmetry discussed here.

In later historical developments, this ergativity has also given way to a more accusative syntax, as it does in Indonesian and Malagasy. See Aldridge (2008a) for a formal treatment of accusative features in Austronesian.
The sentence in (3b) contains a canonical transitive clause with the zero allomorph of the transitive suffix -in.⁶ In this clause, the agent is marked with ergative case and the patient is marked with absolutive case. The sentence in (3a) must then be analyzed as an antipassive construction in which the agent is marked with absolutive and the patient is marked with oblique. In Tagalog, there is no formal difference between oblique and ergative case marking. Other Philippine languages, such as Ivatan (Reid 1966), distinguish these functions with separate case markers.

In support of the antipassive analysis of (3a), we can note the indefinite/non-specific interpretation of the object, a fact which has been commented upon in all descriptions and analyses of Tagalog (Bloomfield 1917; Schachter and Otanes 1982: 76; Wolff et al. 1991; Kroeger 1993; Maclachlan and Nakamura 1997: 310; Richards 2000; Rackowski 2002; Kaufman 2005; as well as older descriptive works). As pointed out by proponents of the ergative analysis, this is a typical property of antipassive patients and is seen clearly in numerous Inuit and Mayan languages. In Tagalog, the objects of putative antipassive verbs are robustly indefinite (except when the agent is extracted, see Adams and Manaster-Ramer 1988). For instance, in (4a) we see that a definite demonstrative is not felicitous (without a partitive reading) in the object position of an antipassive verb. There is no such constraint on the clause in (4b), with what is a canonical transitive verb on the ergative analysis.

(4) a. *?K<um>áin nito ang bátà
   <ANTIPASS>eat OBL.this ABS child
   (For, 'The child ate this.' OK for 'The child ate from this.'

The zero allomorph of -in is used in conjunction with the aspectual infix <in>. The <um> infix also has a zero allomorph which is used in the prospective aspect. Because both of these voice markers have zero allomorphs in their aspectual paradigm, neither can be said to be less marked than the other.
According to the criteria of case and transitivity, Tagalog, and the vast majority of Philippine languages, are clearly ergative. The problem, as noted by Foley (1998, 2008) and Himmelmann (1991, 2005) among others, is that there are few if any ergative languages outside the Austronesian family that use the same morphology for putative antipassives as well as monadic (underlyingly intransitive) predicates. In Philippine languages, not only is <um> used in antipassive contexts as in (5a), it is used in underlyingly intransitive predicates as in (5b). The same problem is noted by Paul and Travis (2006: 321) for Malagasy man- and holds throughout Philippine-type languages.

(5)  
   a. P<um>atay ng kambing si Galvan  
      <ANTIPASS.BEG>kill obl goat abs Galvan  
      ‘Galvan killed a goat.’  
   
   b. L<um>ákad si Galvan  
      <ANTIPASS.BEG>walk abs Galvan  
      ‘Galvan walked.’

Furthermore, <um> is used on meteorological verbs, which differ from canonical intransitives in disallowing an overt absolutive argument, as shown in (6). In this case then it seems that <um> simply functions to create an event-denoting predicate rather than reducing valency or relating a particular thematic role to the ang phrase.

(6)  
   a. <Um>áraw (*ang araw)  
      <ANTIPASS.BEG>sun abs sun  
      ‘It was sunny.’  
   
   b. <Um>ulan (*ang ulan)  
      <ANTIPASS.BEG>rain abs rain  
      ‘It rained.’  
   
   c. L<um>indol (*ang lindol)  
      <ANTIPASS.BEG>earthquake abs earthquake  
      ‘There was an earthquake.’

The question of the Tagalog antipassive is discussed at length by Aldridge (2012b), who argues that antipassives are not derived but rather combine with intransitive verbal morphology. Aldridge (2012b: 198-200) claims that a demotion analysis of antipassives requires downward movement of the demoted object, a possibility that is excluded by Chomsky (1995, 2005). While this is easy to argue from a Philippine perspective, it
remains to be explained why antipassive morphology only attaches to transitive verbs in other well-known ergative languages.\(^7\)

The two other verbal alternations involving \(i\)- and \(-an\) are treated as applicatives on the ergative approach (Aldridge 2004). The first promotes benefactives, instrumentals and conveyance objects to absolutive while the latter promotes directional and locative arguments. There are two difficulties with treating these morphemes as applicatives. The first is that, unlike traditional applicatives, they are always required to introduce arguments that correspond to their functions, whether selected by the predicate or not. For example, a predicate like \(bigay\) ‘give’ requires applicatives to promote both the theme and the recipient to absolutive position, as shown in (7).

\(7\)

a. Bigy-an mo ng mangga ang bátà
   give-APPL 2S.ERG OBL mango ABS child
   ‘Give the child a mango.’

b. I-bigay mo ang mango sa bátà
   APPL-give 2S.ERG ABS mangga PREP child
   ‘Give the mango to the child.’

This is typologically unusual, as one of the two alternations is generally treated as basic, but in Tagalog and other Philippine languages all such arguments are derived as there is no unmarked verb. The second difficulty is that we expect applicative morphology to co-occur with \(-in\), which under the ergative analysis must be treated as a simple transitive marker. Yet no Philippine language employs combinations such as \(i\)-STEM-\(-in\) or STEM-\(-in\)-an for these putative applicative constructions.

On the other hand, a strong piece of supporting evidence for the ergative view is the well-known restriction on extraction in Philippine and other Austronesian languages (as first discussed in a generative context by Keenan 1972). Ng-marked arguments in Tagalog cannot be topicalized, relativized, or clefted. This is demonstrated via ungrammatical topicalization of an ergative argument in (8) and an antipassive patient in (9). In both cases, topicalization of the corresponding absolutive argument is fully acceptable, as shown in the (a) sentences.

\(8\)

a. Ang bulaklak ay b<in>ili-∅ ng bátà
   ABS flower TOP <BEG>buy-TR ERG child
   ‘The flower, the child bought.’

b. *Ng bátà ay b<in>ili-∅ ang bulaklak
   ERG child TOP <BEG>buy-TR ABS flower
   (For, ‘The child, bought the flower.’)

\(^7\) The Chol intransitive marker \(-i\) and transitive marker \(-V\) may, however, be relevant here. The \(-i\) suffix appears with underlying monadic predicates as well as derived intransitives, such as passives. Antipassives are formed with a transitive light verb and thus do not display \(-i\). See Coon (2012) for discussion.
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(9) a. Ang bátà ay b<um>ili ng bulaklak  
    ABS child TOP <ANTIPASS.BEG>buy OBL flower  
    ‘The child, bought a flower.’

b. *Ng bulaklak ay b<um>ili ang bátà  
    OBL flower TOP <ANTIPASS.BEG>buy ABS child  
    (For, ‘A flower, the child bought.’)

Similar restrictions are attested in Mayan and Inuit languages among others. It is these facts, together with the reduced transitivity of “actor voice” verbs marked with <um> and mag-, that form the strongest arguments for the ergativity analysis of Philippine-type languages. To review, the most basic arguments for the ergative view are shown in (10) and those against it, in (11).

(10) a. indefiniteness (and low scope) of “actor voice” objects  
     b. restrictions on the extraction of “actor voice” objects and transitive agents  
     c. case marking pattern (e.g. gen/erg syncretism) common to other ergative languages

(11) a. absence of unmarked transitive and intransitive predicates  
     b. complementary distribution of “transitive” -in, and “applicatives” i-conv and -an LOC.  
     c. absence of a true de-transitivizing antipassive

24.1.2 The Case Agreement Analysis of Philippine Languages


In case agreement approaches, all arguments have their case checked in their respective A-positions after which object shift may occur. Object shift moves a DP to an outer specifier of vP above the merged position of the external argument. The verb then agrees with the highest argument, not for canonical agreement features, but rather for its case features. Rackowski (2002) proposes that complements of verbs receive accusative case and verbs register accusative agreement with -in (or its zero allomorph). External arguments receive nominative case from T with the corresponding verbal agreement being...
<um> or mag-. Nominative agreement with the external argument only takes place when no other argument has moved to a higher position. This is the case when the direct object is indefinite and there are no applicatives present. On this analysis, Tagalog also has null high and low applicatives (cf. Pylkkänen 2002) which promote benefactives, instrumentals, locatives, and other types of arguments and adjuncts. The high applicative assigns oblique case and the verb displays oblique agreement with the prefix i-. The low applicative assigns dative case and the verb displays dative agreement with the suffix -an. The merged structure of a benefactive (high) applicative construction is shown in (12) and the result of subsequent movement in (13). The applicative argument ends up on the edge of vP and enters into an agreement relationship with the verb which is spelled out as i-.

This analysis is significantly more abstract than that of the ergative analysis, in which voice morphology is interpreted directly as applicatives and transitivity markers. Here, the actual applicatives are only detectable indirectly through distinct agreement on the predicate. Note also that the cases with which the predicate agrees are abstract. As seen earlier, there are only three phonologically distinct argument markers in Tagalog but for the case agreement analysis to hold, there must be distinct oblique and dative cases underlingly that the verb agrees with. The interpretation of Tagalog's core functional morphology under this analysis is shown in Table 24.2.
The *ang* marker, interpreted as absolutive case on the ergative analysis, is treated as a topic marker of sorts under case agreement analyses. The *ng*-case, which instantiates both ergative case and oblique case on the ergative analysis is simply glossed as case in the case-agreement analysis. It is not clear what kind of case it is and the details of its assignment remain to be explained.

As with the ergative analysis, there are also difficult typological and theoretical questions that arise with ostensive applicatives in the case agreement approach. First of all, applicative objects must somehow retain their underlying (oblique and dative) case for case agreement to take place but in familiar nominative-accusative languages applicatives promote arguments to a position where they receive accusative case and behave as canonical direct objects. Second, it remains unclear why applicative objects must shift to the edge of vP and block agreement with the external argument. Without such movement, we expect to find structures like that in (14b), where the *ang* phrase...

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8 However, the use of “topic” cannot be taken too literally, as the *ang* phrase has been shown conclusively to not be an actual discourse topic (Kroeger 1993; Adams and Manaster-Ramer 1988; Kaufman 2005). For instance, in the following mini-dialogue, an *ang* phrase appears within the focus of a completely felicitous response. But see Richards (2000) for arguments that the *ang* phrase is similar to the topic position in Icelandic and other Germanic languages.

(i) A: Ano ang g<in>à~gawà ni Jojo
what *ang* <beg>imprf~do case Jojo?
‘What is Jojo doing?’

B: H<in>ú~hugás-an niya ang mga pinggan.
<beg>imprf~wash case.3s *ang* pl. dish
‘He’s washing the dishes.’

9 The literature on Bantu applicatives bears this out as well as studies of non-accusative languages such as those of the Salish family. Kiyosawa and Gerds (2010:41), for instance, shows that applicative objects across Salish languages are extracted in exactly the same manner as direct objects, not as obliques, which require nominalization of the clause.
benefactive fails to trigger case agreement on the verb. As pointed out by Rackowski and Richards (2005), such promotion without further movement is ungrammatical. They offer potential analogues from other syntactic domains but little if any cross-linguistic support exists for applicative objects blocking agreement with an external argument in nominative-accusative languages.  

(14) a. Ni-lútò-Ø ni Romeo ang adóbo para sa babáe 
beg-cook-Acc case Romeo ang adobo for prep woman 'Romeo cooked the adobo for the woman.'

(Rackowski and Richards 2005:ex.13a)

b. Ni-lútò-Ø ni Romeo ng babáe ang adóbo 
beg-cook-Acc case Romeo case woman ang adobo 'Romeo cooked the adobo for a woman.'

(Rackowski and Richards 2005:ex.11b)

The theory makes crucial use of Pylkkanen’s (2002) distinction between low and high applicatives but the Tagalog facts do not accord well with the theory’s prediction. Low applicatives relate a promoted argument to a direct object and are crucially dependent on the presence of a direct object. Rackowski (2002) argues that this is the case based on the data in (15).

(15) a. B<in>íg-y an ko ang ama ng anak. 
<beg>give-dat is ang father case child 'I gave the father his child.'

b. *B<in>íg-y an ko ang ama.
<beg>give-dat is ang father 'I gave (to) the father.'

However, the judgment reported for in (15b) seems better attributed to pragmatic rather than syntactic factors. There can be no act of giving without a theme and there is thus an expectation that the theme will be included in an out-of-the-blue context. Similar examples could be produced without a theme but more conclusive is the data shown in (16), which demonstrates that monadic predicates of all types can take -an, counter to the expectations of a low applicative in Pylkkanen's framework.

10 An analogy is made to the wager-class of verbs in English, in which an argument must move from its underlying position with no obvious motivation. Collins (2002) and Epstein and Seely (2006:83-5) question the judgments surrounding this phenomenon in English and it remains to be seen if the proposed link can be further substantiated.

(i) a. *John wagered Mary to have won the race.
b. Mary, was wagered t1 to have won the race.
(16) a. Ni-lakár-an ng bátà ang daan
   \textit{beg-walk-DAT \textit{case} child \textit{ang} road}
   ‘The child walked the road.’

b. S\textit{<in>}igaw-an ni Romeo si Jojo
   \textit{<beg\textit{shout-DAT \textit{case} Romeo \textit{ang} Jojo}
   ‘Romeo shouted at Jojo.’

c. \textit{<In\text{\textless{ubu-han ni Romeo si Jojo
   \textit{<beg\textit{cough-DAT \textit{case} Romeo \textit{ang} Jojo}
   ‘Romeo coughed at Jojo.’

d. Na-ulan-an si Jojo
   \textit{sta.beg-rain-DAT \textit{ang} Jojo}
   ‘Jojo was rained on.’

The role of specificity shift is crucial in both the ergative and case agreement approaches to Tagalog. Both predict, in their own ways, that a definite/specific object should not be possible for a matrix clause verb marked with \textit{\textless{um} or mag-. On the ergative analysis, these verbs are antipassives whose objects are assigned inherent oblique case from \textit{v} and remain in VP. In VP, they are subject to existential closure (Diesing 1992) and receive an existential indefinite interpretation. In the case agreement analysis, specificity triggers object shift, which puts a shifted object above the external argument and thereby triggers accusative agreement rather than nominative agreement with \textit{\textless{um} or mag-. Neither approach, however, seems to predict all the specificity facts of applicative constructions correctly. Rackowski (2002) and Rackowski and Richards (2005) explicitly claim that the underlying direct object in applicative constructions can be specific, offering the example in (17) as evidence.

(17) I-pinaglútò ni Romeo ng adóbo ang babáe
   \textit{obl\textit{-cook case Romeo case adobo \textit{ang} woman}
   ‘Romeo cooked (the) adobo for the woman.’ (Rackowski and Richards 2005: 570)

However, there is no independent evidence for the definite interpretation of the object in structures like (17). Nothing in (17) forces a specific interpretation and, in fact, evidence points to definite direct objects being just as marked as in structures such as (17) as they are as object of verbs marked with \textit{\textless{um} or mag-. This becomes clear by using pronominal arguments as diagnostics. As Rackowski and Richards (2005) show with (18), a pronominal object of an \textit{\textless{um} marked verb is ungrammatical. Unexpectedly, the same ungrammaticality appears with direct objects of -\textit{an} and \textit{i-} marked verbs, as in (19).

(18) *S\textit{<um>}ampal ko ang mandurukot.
   \textit{<nom.asp\textit{-slap 1s.case \textit{ang} pickpocket
   (For, ‘The pickpocket slapped me.’) (Rackowski and Richards 2005: 568, ex.4b)
In a regular matrix clause with a definite object and an oblique, the object must surface with *ang case and the oblique must surface as an oblique/prepositional object, as shown in (20).

(20) I-b<in>igy-an ni Maria si Romeo kay Juliette
obl-<beg>cook case Maria ang Romeo obl Juliette
'Maria gave Romeo to Juliette.'

Rackowski and Richards (2005: 568) follow Chomsky (2001) in positing that:

object shift occurs as the result of an EPP-feature on v that is present only when it has an effect on semantic outcome. There is an effect on semantic outcome because the position at the edge of the vP is assigned a specific interpretation, while everything internal to vP is assigned a nonspecific interpretation.

But there is an issue of derivational look-ahead in this account as well as an empirical problem. As *ng-marked objects cannot be specific/definite in a regular matrix clauses, we must assume that they are barred from leaving vP. This means that the presence of an applicative object must arbitrarily preclude an EPP-feature on v on this account. Barring any larger generalization which can be extracted from this coincidence, it merely describes the facts.

Regarding *ng-marked agents, Rackowski & Richards recognize the need to account for both an existential indefinite as well as a specific/definite reading for them. As seen in (21), a *ng-marked agent can felicitously be a proper name or an indefinite pronoun.

(21) Hindi b<in>igy-an (ni Jose/numan) si Maria ng
neg <beg>give-dat case Jose/case.anyone ang Maria case
pera money
'Jose/nobody gave Maria money.'

The reasoning for this ambiguity is that only internal arguments have the opportunity to undergo object shift. For arguments that do not have such an opportunity, specificity is unpredictable. But as we have seen in (19), this empirical claim cannot be upheld. A separate treatment is required for *ng-marked objects, which cannot be definite/specific, and *ng-marked agents, which can. This partially supports the ergative analysis in that ergative arguments are not known to show the kind of definiteness effects attested for antipassive patients. However, the restricted interpretation of direct objects of *-an and
i-verbs is equally problematic. On the ergative analysis, non-specific readings are only forced for antipassive patients but something extra must be said for -an and i-verbs, which can only be analyzed as transitive.

We find that the case-agreement analysis captures several important truths about Philippine voice systems, enumerated in (22). On the other hand, there remain theoretical issues with the analysis, some of which are summarized in (23).

(22) a. no unmarked verbs, (virtually) all inflected verbs show “voice morphology”
b. “voice morphology” is only marked once per verb
c. range of meanings associated with “voice morphology” resembles that of case marking
(23) a. incorrect predictions regarding definiteness/specificity
b. unusual properties of (null) applicatives
c. unclear what morphological case is and how it is assigned

24.1.3 The Nominalization Analysis of Philippine Languages

Yet another interpretation of Philippine-type verbal alternations views them as participant nominalizations. This was first proposed by Starosta et al. (1982) on a historical basis and further developed by Ross (2002, 2009) and, in synchronic terms, by Kaufman (2009a). On this approach, each “voice” indicates a different participant nominalization, as shown in Table 24.3. The three argument markers are interpreted as case, as in traditional descriptions. The ang marker indicates subject case, which can be termed either nominative or absolutive. The ng-case is first and foremost genitive case, that is, the case of possessors, but is recruited for other purposes due to the regular use of nominalized predicates. Finally, sa is an oblique case marker (and not a preposition as in the two approaches reviewed above).


12 For reasons of space, I do not discuss the difference between <um> and mag- although I treat mag-as containing an inner causative as suggested by Travis (2000). This is supported in Kaufman 2009c where I show comparative evidence for mag- being composed historically, and potentially synchronically, of the morphemes p<um>a<R>-<AV><CAUS><MIDDLE>-.

13 For all locality based approaches to the extraction restriction, including case agreement and the ergative analysis, there must in fact only be two cases. The oblique case, marked by sa, is treated as a preposition by these approaches because sa phrases can typically be fronted and topicalized regardless of voice. In other words, oblique phrases are effectively invisible for calculations of locality under previous approaches. But there are many reasons to believe that sa is a case marker rather than a preposition. It is in complementary distribution with the other case markers and is selected by bona fide prepositions, e.g.
This view differs from the previous two approaches in treating all predication in Philippine languages as inherently copular. The interpretation of the ang phrase is not derived through the use of applicatives but rather through copular identification with the predicate itself. To compare with Johns’ (1992) analysis of Inuktitut, she proposes that predications are formed compositionally in the manner shown in (24).

(24) a. kapi-jaq
   stab-PASS.PART
   ‘the stabbed one’

b. anguti-up kapi-ja-a
   man-ERG stab-PASS.PART-3S/3S
   ‘the man’s stabbed one’ OR ‘the one that the man stabbed’

c. anguti-up nanuq kapi-ja-a
   man-ERG polar bear.ABS stab-PASS.PART-3S/3S
   ‘The polar bear is the man’s stabbed one.’ OR ‘The man stabbed the polar bear.’
   (Johns 1992)

Applying this approach to Tagalog, we arrive at the following literal translations of for the basic “voice” alternations:

(25) a. K<um>áin ng dagà ang púsà
   <ACT.BEG>eat GEN rat NOM cat
   ‘The cat was the eater of a rat.’

b. K<in>áin-∅ ng púsà ang dagà
   <BEG>eat-PAT GEN cat NOM rat
   ‘The rat was the eaten one of the cat.’

Table 24.3 Nominalist analysis of Tagalog morphology

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<th>ang</th>
<th>NOMINATIVE/ABSOLUTIVE</th>
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<td></td>
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c. K<in>aín-an ng púsà ng dagà ang pinggan
   <BEG>eat-LOC GEN cat GEN rat NOM plate
   ‘The plate was the cat’s eating place of the rat.’

d. I-k<in>aín ng púsà ng dagà ang áso
   CONV-<BEG>eat GEN cat GEN rat NOM dog
   ‘The dog was the cat’s “eating benefactor” of the rat.’ (Kaufman 2009a: 6)

This avoids the difficulties of theta-linking approaches discussed by Rackowski (2002) as nominalization, like case, is well known to reflect thematic roles imprecisely. More importantly, nominalization also makes sense of the fact that Philippine predicate morphology does not distinguish between argument and adjunct. Barker (1998: 714) discusses at length the way in which English -ee nominalizations select participants that are not part of the argument structure of the corresponding verb.14 This offers an excellent analogue to one of the more typologically difficult aspects of Philippine-type voice.

As argued in Kaufman (2009a), the nominal nature of event-denoting predicates in Tagalog can also go a long way in explaining other curiosities of Philippine syntax, including:

(26) a. Near identical syntactic distribution of canonical event-denoting predicates (i.e. “verbs”) and entity-denoting predicates (i.e. “nouns”).

b. Identity between the case of ergative agents and possessors across Philippine languages.

c. Ungrammaticality of extracting genitive marked arguments corresponds with the difficulties of extracting possessors and other nominal dependents cross-linguistically.

d. Symmetric nature of Philippine “voice” – only one instance per predicate, as would be expected of nominalization morphology.

14 Barker utilizes the notion of “episodic linking” rather than argument structure to account for how participant nominalizations in English identify their referent.

… the meaning of the verb amputate guarantees the existence of a person undergoing amputation, even though there is no syntactic argument that corresponds to this participant… the fact that the person undergoing amputation is a participant of every amputation event is sufficient to enable a set of amputation events to characterize the -ee noun amputee: for each amputation event e, there exists an individual x which is a participant in e such that x is (becomes) an amputee. Thus amputee is episodically linked to the meaning of amputate despite the fact that there is no corresponding syntactic argument position.

Similarly, Aronoff (1980) discusses the role of Gricean principles in certain morphosyntactic alternations.
Event-denoting predicates in Philippine-type languages can always serve as the direct complement to case markers.\textsuperscript{15} There is no strong evidence from Philippine languages for null complementizers or headless relatives in (27b) and (c).\textsuperscript{16}

(27)  
\[a. \text{Ang áso} \text{ NOM} \text{ dog} \]  
\[\text{'the dog'} \]  
\[b. \text{Ang lú~lutú-in} \text{ NOM} \text{ IMPRF~cook-PAT} \]  
\[\text{'the thing to be cooked'} \]  
\[c. \text{Ang mag lú~lutò} \text{ NOM} \text{ ACT-IMPRF~cook} \]  
\[\text{'the one who will cook'} \]

The syntax of \textit{ng}-marked possessors and \textit{ng}-marked agents appears identical. That is, there is no reason to believe that the addition of the morphology in (28b) leads to a substantial difference in syntactic structure between (28a) and (b).

(28)  
\[a. \text{Súlat ni Juan iyan} \text{ write GEN Juan that:NOM} \]  
\[\text{'That is Juan's letter.'} \]  
\[b. S<in>úlat-∅ ni Juan iyan \text{ <BEG>write-PAT GEN Juan that:NOM} \]  
\[\text{'Juan wrote that.'} \]

Johns (1992) makes the same claim for Inuktitut pairs such as those in (29). Inuktitut \textit{ja} in (29b) functions similarly to the Tagalog patient nominalizer -\textit{in}/Ø. In both cases, a NP or DP predicate combines with a structural subject through a copular structure to yield a predication such as (28b).\textsuperscript{17}

(29)  
\[a. \text{anguti-up qimmi-a} \text{ man-GEN dog-3S/3S} \]  
\[\text{'the man's dog'} \]

\textsuperscript{15} Kaufman (2009a:25) points out an important exception to this pattern with the descendants of the original (non-nominalized) verbs in certain dialects of Tagalog.

\textsuperscript{16} But see Richards (2009) for some arguments to this effect and Kaufman (forthcoming) for a defense of the symmetry.

\textsuperscript{17} This is similar to Pearson's 2005 proposal of base generating the equivalent of the \textit{ang}-phrase in Malagasy in an A-bar position located in a high rightwards specifier and co-indexed with a lower null operator in an A-position.
b. anguti-up kapi-ja-a
   man-GEN stab-PASS.PART-3S/3S
   ‘the man’s stabbed one’
   OR ‘the one that the man stabbed’

There are two potentially independent conditions conspiring against fronting genitive arguments. On one hand, extracting ergatives should bear similarity to sub-extraction from NP in other languages, a highly constrained operation. Indeed, in Tagalog itself extraction of possessors is subject to precisely the same constraints as ergative extraction as shown by the illicit topicalizations in (30).  

\[(30)\]
\begin{itemize}
  \item a. B\text{	extless}in\textgreater ili-∅ ni Maria ang kótse ni Juan.
   \textsc{beg} buy-PAT GEN Maria nom car GEN Juan
   ‘Maria bought Juan’s car.’
  \item b. *Ni Juan ay b\text{	extless}in\textgreater ili-∅ ke__ ang kótse__.
   GEN Juan top \textsc{beg} buy-PAT is GEN nom car
   (For, ‘Juan, Maria bought (his) car.’)
  \item c. *Ni Maria ay b\text{	extless}in\textgreater ili-∅ ___ ang kótse ni Juan.
   GEN Maria top \textsc{beg} buy-PAT nom car GEN Juan
   (For, ‘Maria, (she) bought Juan’s car.’)
\end{itemize}

\[18\] Richards cites Cena’s (1979) examples in (i) of apparent possessor extraction as an argument against constraints on linking ergative extraction to possessor extraction.

\[(i)\]
\begin{itemize}
  \item a. Kasama ng doktor ang anak
    companion GEN doctor nom child
    ‘The child is with the doctor’
  \item b. ang doktor [na kasama ang anak]
    nom doctor lnk companion nom child
    ‘the doctor that the child is with’
\end{itemize}

(Cena 1979; Richards 2009)

As shown in (30), possessor extraction of the normal type is subject to exactly the same constraints as ergative extraction. A minimal pair for Cena’s example with an ostensibly verbal predicate, shown in (ii), demonstrates clearly that relativization of the ergative argument is no more marked than relativization of the possessor. I leave the analysis of this construction to further work noting only that Cena’s examples do not entail different treatments for possessors and ergative arguments.

\[(ii)\]
\begin{itemize}
  \item a. s\text{\textless}in\textgreater a~sama-han ng doktor ang anak
    \textsc{beg} impRF~accompany-LOC GEN doctor nom child
    ‘the doctor accompanies his/her child’
  \item b. ang doktor [na s\text{\textless}in\textgreater a~sama-han ang anak]
    nom doctor lnk \textsc{beg} impRF~accompany-LOC nom child
    ‘the doctor that accompanies his/her child’
\end{itemize}
Potentially separate from the issue of extraction from NP is the general ban on genitive predicates. This is independently necessary in Tagalog as shown in (31) and has clear cognates cross-linguistically. Genitive phrases can be modifiers, as in (31a) but not predicates, as shown in (31b). As in Hungarian and many other languages (Szabolcsi 1983), predicate and extracted possessors must be expressed as obliques or datives, as in (32).

\[(31)\]
\[
\text{a. Ang súlat ni Juan} \\
\text{nom write gen Juan} \\
\text{‘The letter of Juan’s’}
\]

\[
\text{b. *Ni Juan ang súlat} \\
\text{gen Juan nom write} \\
\text{(For, ‘The letter is Juan’s.’)}
\]

\[(32)\]
\[
\text{Kay Juan ang súlat} \\
\text{obl Juan nom write} \\
\text{‘The letter is Juan’s.’}
\]

Argument questions in Philippine-type languages have been widely analyzed with the interrogative phrase as the predicate of the clause (Paul 2001; Aldridge 2002; Oda 2002; Massam 2003; Potsdam 2006, 2009; Gerassimova and Sells 2008). As we have already seen that genitive predicates are banned, we also correctly predict that genitive case interrogatives should be ruled out, as seen in (33). Note that the genitive interrogative is allowale in an in-situ post-nominal position, as shown in (34) (see also Erlewine, Levin, and Van Urk, this volume, Chapter 16, n.21).

\[(33)\]
\[
\text{a. Kaníno ang súlat?} \\
\text{obl.who nom write} \\
\text{‘Whose is the letter?’}
\]

\[
\text{b. *Nino ang súlat?} \\
\text{gen.who nom write} \\
\text{(For, ‘Whose is the letter?’)}
\]

\[(34)\]
\[
\text{Ang súlat nino?!?} \\
\text{nom write gen.who} \\
\text{‘The letter of who?!?’}
\]

Similarly, if event-denoting predicates in Philippine-type languages are nominalized, we can rule out interrogatives like those in (35b) and (c), which attempt to make a predicate out of a genitive agent. The ungrammaticality in (35b) ensues from the constraint against genitive predicates and (35c) is ruled out on the simple basis of case preservation. What should be a genitive marked agent, as in (35a), cannot be expressed as an interrogative in the nominative (ang) case. A copular predication has at most two nominative marked
arguments, one in the predicate position and one in the subject position. The nominal approach to Philippine-type languages is thus uniquely able to unify the ungrammaticality behind (34) and (35), which is common to the vast majority of Philippine-type languages.

(35) a. Sú∼sulát-in ni Jojo ang libro
     IMPRF∼write-PAT GEN Jojo NOM book
     ‘Jojo will write the book.’

     b. *Nino ang sú∼sulát-in ang libro?
        GEN who NOM IMPRF∼write-PAT NOM book
        (For, ‘Who will write the book?’)

     c. *Sino ang sú∼sulát-in ang libro?
        NOM who NOM IMPRF∼write-PAT NOM book
        (For, ‘Who will write the book?’)

On this approach, genitive marked arguments in Philippine-type languages bear a certain resemblance to English of-phrases. Just like ng-phrases, of-phrases are highly restricted in predicate position (36), and also display restrictions on their extraction from NP, as shown in (37). 19

(36) The team is (*of) Juan’s.

(37) a. Juan was an employee of Rizal.
     b. *?Of whom was Juan an employee?

In (38), we see that these constraints do not hold for instrumental agents of passive verbs.

(38) a. Juan was employed by Rizal.
     b. By whom was Juan employed?

As pointed out in Kaufman 2009a, this could hold the key to why some ergative languages show a restriction on extracting the ergative argument while others do not (see Manning 1996 and Dixon 1994 for discussion). If the ergative argument is treated as a nominal dependent, we expect it to share a morphological case with possessors and resist extraction. If the ergative argument is a verbal dependent, we

19 See Davies and Dubinsky (2003) for a review of approaches to extraction from NP. Davies and Dubinsky rely on participant structure to derive the complex pattern of extractability from English NPs but they do not consider extraction from participant nominalizations. Other approaches have implicated the left branch condition (Ross 1967), the ECP (Chomsky 1981), the case filter (Huang 1982), movement of non-constituents (Bošković 2005), and most recently, the treatment of nP or DP as a strong phase (Chomsky 2001; Svenonius 2004).
expect it to share a morphological case with instrumentals or obliques and to allow extraction more freely. In particular, it seems that a genitive-ergative syncretism in combination with a pseudo-cleft strategy for interrogatives is what conspires to constrain extraction in ergative languages. In languages with the same syncretism but in-situ interrogatives, as Inuktitut, constraints against ergative interrogatives are not attested, as evidenced by (39). Indeed, even in the rare contexts that Tagalog allows wh-in-situ, as in (40), genitive interrogatives become acceptable (compare above).

(39) Kia Alaana kii-ja-nga?
who.gen Alana.nom bite-pass.part-3s/3s
'Who bit Alana?' (Yuan 2013)

(40) G<in>nawa-∅ nino ang sapatos na iyon?
<begin>make-pat gen.who nom shoe link that
'Who made those shoes?' (Schachter and Otanes 1982: 512)

The typological correlation is worth investigating on a larger scale but here we are most concerned with what happens when a bona fide \( v \) category develops from \( n \) and its consequences for ergativity. The crucial properties of the \( v \) versus \( n \) heads which determine lexical category are the following.

(41) \( n \) properties:
   a. possessor is projected [Spec, \( n \)]
   b. GENITIVE case to \( nP \)-internal phrases
   c. strong island properties

(42) \( v \) properties:
   a. agent is projected in [Spec, \( v \)]
   b. ACCUSATIVE case to object
   c. islandhood dependent on \( v \) features

The \( v \) category projects an agent and more generally, \( v \) is associated argument structure that is arguably not present in low nominalizations. While apparent arguments can nonetheless be expressed in low nominalizations, they are not distinguished by a distinct object case nor are they obligatory. The general assignment of genitive case within \( nP \) can be seen in (43), where the agent, instrument and a manner adverbial are all marked with ng-case.

(43) \( nP \) [B<in>uks-an ko ng sísí ng maingay] ang pintuan
<begin>open-loc is.gen gen key gen loud nom door
'I opened the door loudly with the key.'
Note also that the ergative argument is not obligatory nor must it be interpreted as pro when omitted in line with nominalizations cross-linguistically (Abney 1987; Alexiadou 2001; Himmelmann 1991: 22). The sentence in (44), for instance, can be uttered in an out-of-the-blue context without any implication regarding an agent. Optionality is expected for a possessor but not for the external argument of a transitive verbal projection.20

(44) Mukhang k<in>ain-∅ ang lahat
seem:LNK ⟨BEG⟩eat-PAT NOM all
'It seems that everything has been eaten.'

Relatedly, there are also patient voice predicates that function as adversatives and cannot take agents of any sort. Two such examples are shown in (45) and (46).21

(45) Ni-langgam-∅ ang asúkal
BEG-ant-PAT NOM sugar
'The sugar was infested with ants.'

(46) In-ú~ubo-∅ ang bátà
BEG-cough-PAT NOM child
'The child is (effected by) coughing.'

As discussed earlier, the full range of definiteness/specificity effects have presented difficulties to previous treatments of Tagalog. In the simplest case, which all theories have an account for, actor voice patients tend to be non-specific and strictly disallow pronominals, as seen in (47). More difficult to account for is the parallel constraint on themes of locative and circumstantial voice predicates, as seen earlier in (19).

(47) a. Nag-pi~pinta ng mukha si Juan
ACT.BEG-IMPRF~paint GEN face NOM Juan
'John paints faces.'

b. *Nag-pi~pinta ko si Juan
ACT.BEG-IMPRF~paint GEN NOM Juan
(For, 'John paints me.')

20 As Lawrence Reid points out (p.c.), this is not the normal state of affairs in the Cordilleran languages, spoken in North Luzon, Philippines. In many of these languages it seems that an ergative agent is obligatory with transitive predicates. I take this property to be a later historical development based on its narrow distribution but nonetheless very important with regard to the viability of a nominal analysis for the Cordilleran subgroup.

21 We can again draw a parallel to English patient nominalizations with -ee in that they appear to operate outside of argument structure (Barker 1998), attaching to monadic bases (standee, escapee) as well as nominal bases (hoaxee).
The nominalization approach suggests a parallel between these facts and similar constraints on definite of-phrase objects of nominals in English, as shown in (48).\(^\text{22}\)

\[(48)\]
\[\begin{align*}
a. & \quad \text{John is a painter of portraits} \\
    b. & \quad \text{*John is a painter of me}
\end{align*}\]

In English, this effect extends to themes of recipient nominalizations, as shown in (49). While (49a) shows that a definite theme is possible, a pronominal theme is completely unacceptable. Definite genitive case themes are thus possible in both English and Tagalog (under the right circumstances), but both languages strictly disallow pronominals in this position. A formalization of these facts must be postponed to later work but the parallels shown here are clearly promising.

\[(49)\]
\[\begin{align*}
a. & \quad \text{John was the awardee of the nobel prize.} \\
    b. & \quad \text{*John was the awardee of it.}
\end{align*}\]

In regard to the semantics of the nominative/absolutive phrase, it seems far more felicitous to attribute its referential properties to the case marker itself as an operator rather than strictly to object shift (as originally advocated by Himmelmann 1991). Out-of-the-blue exclamations such as those in (50) support such an approach. It would make little sense to derive the definiteness of (50b) via object shift or agreement with T. On the analysis suggested here, ang contains both case and definiteness features.\(^\text{23}\)

\[(50)\]
\[\begin{align*}
a. & \quad \text{Dagà!} \\
    & \quad \text{rat} \\
    & \quad \text{‘A rat!’} \\
    b. & \quad \text{Ang pangúlo!} \\
    & \quad \text{ang president} \\
    & \quad \text{‘The president!’}
\end{align*}\]

In the next subsection, we look at root level phenomena to demonstrate that much of the syntax attributed to the voice/agreement system is already present at the first phase of word building, further suggesting the absence of \(\nu\) in the functional inventory.

\(^{22}\) Note that \textit{John is a painter of mine} is acceptable on the possessive reading where I have a painter. According to several speakers I have consulted, this reading is also acceptable for the Tagalog constructions as in (47b) although I have not found naturally occurring examples of an aspect-inflected actor voice predicate with a possessor.

\(^{23}\) This approach is further supported by other Central Philippine languages which distinguish \([\pm\text{specific}]\) variants for each case marker (see McFarland 1974 and Zorc 1977 for examples). Of course, an analysis in which ang functions as a specific/definite determiner is not necessarily incompatible with object shift. As Edith Aldridge points out (p.c.), Austronesian languages which still show the same specificity/definiteness pattern without overt case markers suggest that a structural approach might still be necessary.
24.1.4 Ergativity on the root level

Foley (1998) argues that Tagalog roots are fundamentally different from those of English:

The lexeme *give* in English is a verb, with a corresponding argument structure <actor, undergoer, locative>. The Tagalog root *bigay* ‘give’ however is precategorial; it lacks a true argument structure, but does have a precategorial semantic structure like ‘the giving of something to someone by someone’.

On this view, it is the voice morphology which imbues words with argument structure rather than anything in the underlying semantic representation. This explains why notional valency has little consequence for the voice marking potential of roots in Philippine-type languages. There are, however, problems with the claim that roots lack category and argument structure altogether. In contrast to early claims made about Tagalog roots, they appear regularly in their bare form as both predicates and arguments. Unlike the predictions of the precategorial analysis, bare roots are restricted to particular readings and do not display flexibility in their distribution of thematic roles to genitive and nominative marked arguments. As discussed by Himmelmann (1991: 40) and Kaufman (2009a), the reading of a bare root is consistently that of a patient-oriented (or “proto-object”) entity. In Table 24.4, we find a list of roots and their glosses in the first two columns. In the following columns we see the event denoting predicates formed from these roots through the use of voice morphology.

<table>
<thead>
<tr>
<th>Table 24.4  Tagalog root meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root</td>
</tr>
<tr>
<td>√WALK</td>
</tr>
<tr>
<td>√EAT</td>
</tr>
<tr>
<td>√THINK</td>
</tr>
<tr>
<td>√KILL</td>
</tr>
<tr>
<td>√BREAK</td>
</tr>
<tr>
<td>√TEACH</td>
</tr>
<tr>
<td>√SAY</td>
</tr>
<tr>
<td>√BUY</td>
</tr>
<tr>
<td>√TAKE</td>
</tr>
</tbody>
</table>

Most surprising is the interpretation of stems with the causative prefix, as exemplified in Table 24.5 (adapted from Schachter 1976: 105). Here, we find that even when embedded under a causative head, these roots maintain their patient-oriented interpretation.
The patient-oriented nature of roots is projected to the clause level in predications, which is analyzed as essentially copular. Thus, even with a bare root predicate as in (51), the agentive argument surfaces with genitive case and the patient/theme argument surfaces with nominative/absolutive case.

(51) Háwak ni Jojo ang pera  
    hold  gen  Jojo  nom  money  
    'Jojo holds the money.'

Just as with fully inflected event-denoting predicates, extraction obeys the predicted pattern. The genitive argument is trapped within the domain of the nominal predicate and cannot be topicalized or otherwise extracted, as shown in (52).

(52) a. Ang pera ay háwak ni Jojo  
    nom  money  top  hold  gen  Jojo  
    'The money, Jojo holds.'

b. *Ni Jojo ay háwak ang pera  
    gen  Jojo  top  hold  nom  money  
    (For, 'Jojo, holds the money.')

So what does nominalization add to an already nominal root? Primarily, it changes its reference to that of a potential participant. Again, we can compare English -ee in a word like *hoaxee where it similarly attaches to a nominal stem to select a notional participant. Second, it also allows the root to combine with aspect inflection, which bestows an agentive reading to the genitive/ergative argument. 24 This is highly reminiscent of

<table>
<thead>
<tr>
<th>Causative stem</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAUS-√HAND.OVER</td>
<td>pa-ábot  'something caused to be handed over'</td>
</tr>
<tr>
<td>CAUS-√BRING</td>
<td>pa-dala  'something caused to be brought'</td>
</tr>
<tr>
<td>CAUS-√MAKE</td>
<td>pa-gawà  'something caused to be made'</td>
</tr>
<tr>
<td>CAUS-√COOK</td>
<td>pa-lútò  'something caused to be cooked'</td>
</tr>
<tr>
<td>CAUS-√KEEP</td>
<td>pa-tágò  'something caused to be kept'</td>
</tr>
</tbody>
</table>

---

24 Aspect inflection is generally impossible without voice with one exception. Predicates inflected for the immediate past show no voice marking and assign genitive case to all arguments. This is probably related to the exclamative function of the immediate past in Tagalog, as discussed in Kaufman 2011.
what has been described by Davis and Demirdache (2000: 100) for St’át’imcets, a Salish language.

In St’át’imcets, notionally bivalent roots surface as unaccusative predicates when used in their bare form. This is seen in (53), where the bare predicate *qam’t* ‘hit’ assigns the patient role to the subject *ti sqáycw-a* ‘the man.’ Similar to Tagalog, an agent must be licensed by a voice-related morpheme, as seen in the contrast between (54a) and (b). In (54b), the suffix -*en* introduces an agent and creates a transitive predicate. For Davis and Demirdache (2000), roots like *qam’t* and *máys* as well as “classic” unaccusative roots contain an underlying causer (following Chierchia 1989) but no agent. This accords relatively well with Tagalog bare root predicates in that they license causers but not true agents.25

(53) *qam’t* ti sqáycw-a
hit DET man-DET
‘The man was hit (with something thrown).’

(54) a. *Máys* ti tsícw-a
built DET house-DET
‘The house got built.’

b. Máys-en ti tsícw-a
built-DIR-ERG DET house-DET
‘(They) built the house.’

Let us briefly consider one theory of how Tagalog predicates are built from the root up. The category determining head *n* introduces a referential index (in the sense of Baker 2003). When the inserted root is entity-denoting, as in (55), this is entirely straightforward. In (55), the merged *n+√* stem simply takes on a referential index associated with an instance of *⟦dog⟧*. But determining how the reference is set with an event-denoting root, as in (56), is more complex, as it is often a particular participant rather than the event which the bare stem denotes on the surface.

(55)

```
      nP
     possess
      n'
      n0
      √P_entity
      √dog
```

The lack of an agentive reading with bare root predicates can be gleaned from (i), where the adverb *nang sindayà* ‘intentionally’ is shown to be infelicitous.

(i) *Bigay ko ang bulaklak (*nang sindayà)
give 1s.gen nom flower gen intentionally
‘The flower is my gift (?*intentionally).’
Despite lacking an argument structure, an event-denoting root projects associated thematic roles as Davidsonian event arguments (or “participants,” in the terminology of Grimshaw 1990). In the case of $\sqrt{GIVE}$ this will include at least a theme and a recipient, as shown. Let us then posit that when $\sqrt{VP}$ combines with $n$, the root raises to $n$ and $n$ probes downwards to select the nearest thematic role, which determines the meaning of the stem. This will naturally exclude an agentive interpretations of roots, as Agents are introduced by the higher functional projection, VoiceP (Kratzer 1996). It will also exclude possessor interpretations as the possessor role is projected to the specifier of $nP$ and is thus outside the c-command domain of $n$. We thus have a mechanism for deriving a phrase such as that in (57), where the root bigay $\sqrt{GIVE}$ is identified with the theme of the event, i.e. a gift. The possessor and the recipient are expressed as genitive and oblique phrases, respectively.  

(57) Bigay ni Nonoy kay Neneng ang bulaklak

‘The flower is a gift of Nonoy to Neneng’

The higher functional category VoiceP licenses an agent and hosts the voice marking in Voice$^0$, which allows the predicate to be identified with one of several thematic roles via episodic linking (Barker 1998) as in participant nominalization. The AspP projection houses aspect morphology and certain aspectual adverbs. These two functional categories undergo morphological merger, as evidenced by several points of syncretism in the Voice/Aspect paradigm and by the fact that voice marking is a prerequisite for aspect marking. We see a fully inflected analogue of (57) in (58).

26 Note that this predicts patient-orientation for all low nominalizations. This has been argued for independently by Salanova (2007) and is supported by the broad comparative study of Koptjevskaja-Tamm (1993). It may even be present in English bare nominalizations of bivalent roots (e.g. take as in ‘The take was $500’), which seem to only refer to the patient and never the agent.
The peculiar meaning of causative stems seen earlier in Table 24.5 is also predicted here by the fact that the causative head lies beneath the voice head. This is corroborated by the order of prefixes: the conveyance voice prefix and actor voice prefix are always external to the causative marker: i-\text{-conv-caus-}, mag-\text{-act-caus-}. The referential index is set by \text{n} and is not affected by further movement to the causative head, \text{pa-}. So while the causative projection introduces a causer, the causer is introduced too late to be identified with the meaning of the bare stem.

\begin{center}
\begin{tikzpicture}
\node (CausP) {CausP};
\node (Causer) [below left=of CausP] {Caus'};
\node (Possessor) [below=of Causer] {\text{pa-}nP};
\node (n0) [below=of Possessor] {n\text{'}\text{P}_{\text{Event}}};
\node (Theme) [below=of n0] {\text{\sqrt{\text{\text{\text{\sqrt{\text{GIVE}}}}}}}};
\node (Recipient) [below=of Theme] {\text{\sqrt{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{
24.2 Mamuju and the Re-emergence of v

In the following, we observe the basic morphosyntactic alternations of Mamuju, an Austronesian language of the South Sulawesi subgroup, to show the consequences of v on the syntax. What differentiates Mamuju from Tagalog is the loss of the nominal properties of event denoting predicates and the development of a strong Noun/Verb contrast (Himmelmann 2005: 128-131). Two important consequences of this are that agreement and valency changing operations make reference to underlying argument structure and that constraints on ergative extraction are loosened.

Mamuju displays clear differences from Tagalog on the level of root and word. One simple distinction between nouns and verbs in Mamuju is that only verbs can be the complement of the tense marker na future. As seen in (61b), nominal predicates cannot follow na. In Tagalog, there are no tense/aspect markers whose distribution distinguishes root classes.

(61) a. na menjari=a? guru jao di Udayana
   fut become=1sg.nom teacher there prep Udayana
   'I will be a teacher there at Udayana.'

   b. (*na) guru=a? jao di Udayana
      fut teacher=1sg.nom there prep Udayana
      'I am a teacher there at Udayana.'

Conversely, verbal roots cannot combine directly with a possessor, unlike nouns, as shown in (62). An overt nominalizing head must combine with a verbal stem before prior to modification by a possessor. As seen earlier, this is not the case in Philippine-type languages.

(62) a. *langi-na
      swim-3.gen

 b. bau-na
      fish-3.gen
      'his/her fish'

If the symmetric nature of Philippine-type alignment systems are due to the nominal nature of the roots, we expect that the emergence of v will allow for bona fide

27 Mamuju has so far only been described in a single article by Stromme (1994), who also published interlinearized text collections (Stromme 1991). That work has been supplemented by elicitation with native speaker Husni Husain over the course of a semester at the CUNY Graduate Center in 2009 as well as two weeks of field work in the Mamuju area itself. I thank Husni Husain for generously sharing his knowledge with us as well as my graduate students Eva Szymanski, Josh Gray, Ji Young Shim for their valuable input.
argument structure to be projected from the root and an absence of symmetry in the derivational morphology. Recall that in Tagalog, the notion of valency plays almost no role in determining a root’s morphological potential. This is seen clearly in table 24.6, where a notionally monovalent root, langoy ‘swim’ is compared with a bivalent root patay ‘kill.’ Both roots can take the full range of voice morphology suggesting that they are essentially of the same type at the point where they merge with Voice.

This contrasts starkly with Mamuju and other South Sulawesi languages. In Table 24.7, we see that the cognate Mamuju roots are in complementary distribution with regard to their morphosyntactic potential. An unergative verb like langi ‘swim,’ requires prefixation with mo- to form an intransitive predicate. In contrast, a bivalent root like patei ‘kill,’ cannot take the intransitive prefix but rather must be prefixed with antipassive mang- to enter into a intransitive predication. Bivalent stems must be prefixed with ergative agreement when forming transitive verbs, as seen with ku-patei ‘I kill (X).’ This agreement marking is impossible with monovalent roots like langi.

This development can be understood as part of the emergence of a robust $v$ category which converts the thematic structure of an event-denoting root into actual argument structure. Note also that, unlike in Philippine-type languages, we now find an unmarked class of intransitive and transitive verbs. Unaccusatives, like tama ‘enter’ in (63), do not require derivational morphology when surfacing as intransitive verbs. Similarly, bivalent roots are only prefixed with ergative agreement when functioning as transitive

<table>
<thead>
<tr>
<th>Table 24.6 Tagalog word classes</th>
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<tbody>
<tr>
<td>√LANGOY ‘swim’</td>
</tr>
<tr>
<td>&lt;um&gt; ACTOR VOICE</td>
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<tr>
<td>-in PATIENT VOICE</td>
</tr>
<tr>
<td>-an LOCATIVE VOICE</td>
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</tbody>
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<table>
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<tr>
<th>Table 24.7 Mamuju word classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>√LANGI ‘swim’</td>
</tr>
<tr>
<td>mo- ACTIVE</td>
</tr>
<tr>
<td>mang- ANTIPASSIVE</td>
</tr>
<tr>
<td>ku- ISG.ERG</td>
</tr>
</tbody>
</table>
verbs, as seen in (64). All predicates can host second-position pronominal clitics reflecting the absolutive argument.

(63) tama=do=ʔ di songi
    ENTER=ALREADY=1.ABS PREP room
    'I already entered the room'

(64) na-kita=ko
    3.ERG-see=2.ABS
    'S/he sees you.'

Note also the divergence in possessor and ergative agreement. The former is expressed via a set of suffixes and the latter through a set of verbal prefixes. In all Philippine-type languages, these two functions are expressed with the same set of pronouns, the typically second-position genitive clitics.

Importantly, Mamuju has a robust antipassive, which only combines with transitive predicates and is used to introduce indefinite objects, as can be seen in the comparisons in (65) and (66).

(65) a. na-kande i Husni bau
    3.ERG-eat ART Husni fish
    'Husni is eating the fish.'

b. mang-kande (bau) i Husni
    ANTIPASS-eat fish ART Husni
    'Husni is eating (fish).'

(66) a. mu-kita=a'
    2.ERG-see=1.ABS
    'You see me.'

b. mang-kita=a' bau
    ANTIPASS-see=1.ABS fish
    'I see a fish.'

In addition to the anti-passive, a limited number of verbs appear to take a “super-antipassive,” which has also been described for the neighboring Seko Padang language by

---

28 The antipassive mang- prefix derives historically from a distributive/pluralational infix *<ŋ> (Kaufman 2009c). The path from Proto-Malayo-Polynesian distributive marker to an antipassive marker in the South Sulawesi languages is straightforward. Just like antipassives, distributive verbs are bivalent but cannot take a specific or definite object. The Makassarese cognate aN(N)-is discussed by Jukes (2013).
Payne and Laskowske (1997). The super-antipassive also expresses the subject as an absolutive but does not allow for any objects whether definite or indefinite, as shown in (67).

\[(67) \quad \text{ka}\text{um}\text{ande}=\text{ko} \quad (*\text{bau})\]
\[\text{SUPER\text{\textsc{Antipass}}}\text{eat}=2.\text{ABS} \quad \text{fish}\]

'You eat.'

Mamuju also has a passive, marked on the verb with the prefix \textit{ni-}, shown in (68b). Ergative agreement is obligatory on transitive verbs and thus the passive allows for backgrounded or impersonal agents.

\[(68) \quad \text{a. } \text{Apna}\text{-kande todapa?}
\quad \text{what } 3.\text{ERG}-\text{eat} \quad \text{people}
\quad \text{‘What do the people eat?’}
\]
\[\text{b. } \text{Apni-kande } (*\text{todapa})\?
\quad \text{what } \text{PASS}-\text{eat} \quad \text{people}
\quad \text{‘What is being eaten?’}
\]

Mamuju has bona fide applicatives that promote benefactives and oblique arguments to absolutive. Furthermore, the division between low and high applicatives does not run into the difficulties noted earlier for Tagalog. In (69a), the applicative \textit{-ang} attaches low and transitivizes an intransitive verb by introducing a theme, thereby feeding ergative agreement. When \textit{-ang} merges as a high applicative, as in (69b), it attaches to a transitive stem (\textit{pa-\text{lamme}}) and introduces a benefactive.

\[(69) \quad \text{a. } \text{ku-\text{lamme-ang} buku}
\quad 1.\text{ERG}-\text{CAUS-\textsc{fall-appl}=2.\text{ABS}} \quad \text{book}
\quad \text{‘I dropped a book.’}
\]

The existence of a passive in Philippine-type languages is a somewhat difficult question. Reid and Liao (2004) and Tanangkingsing and Huang (2007) claim that \textit{ma-} verbs are essentially passives in Bontok and Cebuano, respectively, because of their inability to license agents. On the other hand, the \textit{ma-} prefix indicates non-volitionality and is obligatory on certain unaccusative predicates like ‘to fall’,

\[\text{The super-antipassive is more useful than it appears at first sight. With the loss of case marking on DPs, the difference between antipassive and super-antipassive is all that distinguishes a post-verbal object from a post-verbal subject in sentences like (i).}
\[(i) \quad \text{a. mangapa bongi itte ampe’ k}\text{um}\text{ande bau?}
\quad \text{why/when night DEM CONJ } \text{SUPER\text{\textsc{Antipass}}}\text{eat} \quad \text{fish}
\quad \text{‘What time did the fish eat last night?’}
\]
\[\text{b. mangapa bongi itte ampe’ mangande bau?}
\quad \text{why/when night DEM CONJ } \text{\textsc{Antipass}}\text{eat} \quad \text{fish}
\quad \text{‘What time did he eat fish last night?’}
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b. ku-pa-lamme-ang=ko buku
   IS.ERG-CAUS-fall-APPL=2S.ABS book
   'I dropped a book for you.'

Although the data on double applicatives is still unclear for Mamuju, other languages of Sulawesi allow for promotion of multiple adjuncts to arguments through applicative stacking. Tukang Besi, for instance, allows the comitative and benefactive applicative combination shown in (70). Among the South Sulawesi languages, Selayarese allows double applicatives when both the theme and recipient of a ditransitive verb are definite, as shown in (71) and Sirk (1996: 82) discusses an identical construction for Bugis. Recall that no Philippine-type language allows double applicatives of this type (on the analysis of the voice/nominalization morphology as applicative marking).\(^{31}\)

(70) No-wila-ngkene-ako te ina-no te Wa Ki'i.
   3.RL-go-COM-APPL CORE mother-3POSS CORE Wa Ki'i
   'She went with Wa Ki'i for her mother.' (Donohue 1999: 248)

(71) Ku-kiring-i-ang=ko doe'-injo
   IS.ERG-send-APPL-APPL=2S.ABS money-DEF
   'I sent you the money.' (Basri 1999: 313)

As shown in (72b), applicatives are incompatible with the antipassive. Aldridge (2012b) predicts this behavior via the requirement that applied objects require structural case, which is systematically lacking in antipassives.\(^{32}\)

which makes it look quite different from a traditional passive. (See Kaufman 2012 for a discussion of the historical development of *ma-* verbs). I thank Laurie Reid for bringing this point to my attention.

\(^{31}\) An apparent counterexample is found in the Cordilleran languages that employ the circumfix *i-* for the benefactive. While these were historically two morphemes (*i- conveyance* and *-an locative*), they have been reanalyzed as one. This is clear from the syntax of benefactives in the relevant languages, in which only one argument, the benefactive, is "promoted" to the nominative/absolutive.

\(^{32}\) Note that in Bajau, and potentially other Austronesian languages, antipassives can both host definite objects, as seen in (i), and freely allow combinations of actor voice and applicatives, as shown in (ii). The prefix must still be considered antipassive as it only attaches to transitive stems to make an absolutive argument from the agent.

(i) Nga-daka’ manu’ iru aku pugay uwa’-ku.
   ANTIPASS-catch chicken that IS do.for father-1S.GEN
   'I caught that chicken for my father.'

(ii) Nga-daka-an uwa’-ku manu’ iru aku.
   ANTIPASS-catch father-1S.GEN chicken that IS
   'I caught that chicken for my father.' (Donohue 1996: 789)

Bajau thus represents an intermediate stage between Mamuju and modern Indonesian, where the cognate *meng-* prefix has extended its domain to include many monadic verbs as well (e.g. Indonesian *menangis* /meN-tangis/ 'cry', *menyala* /meN-nyala/ 'to be on/alight').
Antipassives are, however, allowed to combine freely with applicatives when the agent is extracted, as in (73). This is the same condition under which definite patients are possible for actor voice predicates in Philippine-type languages.

\[(73)\] Sema mam-baca-ang Husni buku?
who antipass-read-app Husni book
‘Who read Husni a book?’

The Mamuju data observed thus far suggests that a verb’s underlying argument structure largely determines its morphosyntactic potential. The v category combines with event-denoting roots and projects a basic argument structure from the thematic structure. This structure can then be adjusted by transitivizing and detransitivizing morphology. In Philippine-type languages, to the extent that we can speak of a fixed argument structure, it is created by the nominalizing/voice morphology rather than inherited from the root.

I argued earlier that the simplest account of extraction constraints in Philippine-type languages unifies the patterns found across event-denoting and entity-denoting predicates. In Mamuju, where event-denoting predicates no longer have any nominal properties at all, we would expect a loosening of these extraction constraints. This expectation is borne out for topicalization, as shown in (74). Here, the ergative argument is extracted to a pre-verbal topic position, which was shown earlier in (8) to be generally ungrammatical in Tagalog.\(^{33}\)

\[(74)\] Baco na-patei Ali
Baco 3.ERG-kill Ali
‘Ali killed Baco.’ OR ‘Baco killed Ali.’

However, relativization and question formation are still restricted in the usual way, as seen in (75), which only has a single interpretation.

\(^{33}\) Edith Aldridge (p.c.) points out that the extraction might be expected if na- functions as a resumptive pronominal clitic. From a morphological perspective, ergative person marking in Mamuju appears to be standard agreement in that it is obligatory, attaches consistently to the left edge of the verbal stem and can co-occur with a co-referential pronominal argument. Nonetheless, it is possible that agreement plays a role in licensing topicalization, especially given that antipassive objects, which do not trigger agreement, are more highly constrained. See Kaufman (2008) for details.
It would seem then that extraction constraints can, historically speaking, outlast the nominal features of the predicate. Mamuju would seem to be an ideal candidate for an ergative analysis along the lines of Aldridge (2004) and would not pose any of the empirical hurdles found with Philippine-type languages enumerated in (11). The mang- prefix would be a true antipassive while the formatives me-, mo- and mu- could be treated as instantiations of intransitive v. Unlike as in Philippine languages, polyvalent roots would give rise to unmarked transitive verbs and the suffixes -i and -ang behave like true applicatives attaching to an unmarked transitive verb and, with agent extraction, to an antipassive. Nonetheless, I would argue that the restrictions on extraction in Mamuju obtain the best explanation as historical residue from Philippine-type morphosyntax.

Recall that two potentially independent factors account for extraction restrictions in Philippine-type languages: the constraints on extraction from NP and the ban on genitive predicates. As shown earlier in detail, Mamuju has developed a strong N/V distinction and thus constraints on extraction from NP have become irrelevant for ergative extraction. This explains why ergatives can be freely topicalized to the preverbal position as in (74). The second factor, however, remains firmly in place as seen in (76), which shows the only way a would-be genitive argument can be extracted. The “dummy” predicate ampunna ‘owner’ allows a possessor to be expressed as an absolutive argument.

(76) Sema ampunna ku’bur itte di bao di
who owner grave that prep down prep
Timbu me-loda batu?
Timbu AV.HAVE-roof stone
‘Whose is that grave down in Timbu with the stone roof?’

(Stromme 1991: Maradika Lasalaga)

Although there is no overt morphological case marking of DPs in any of the languages of the South Sulawesi subgroup, we find that the interrogative and relative marking elements themselves bear unambiguous traces of absolutive case. The interrogative pronoun sema ‘who’, which is plausibly derived from Proto-Austronesian *si-ima (Blust et al. 2010), contains a reflex of the personal nominative/absolutive case marker *si-.34

34 The presence of Proto-Malayo-Polynesian nominative/absolutive *si can also be found in Indonesian/Malay siapa ‘who’, among many other Austronesian languages. See Ross (2006) for a detailed reconstruction of the relevant Austronesian case markers. An alternative source of Mamuju sema is a hypothetical sai-ma ‘who-relt’. Blust et al. (2010) reconstructs *sai ‘who’ for Proto-Malayo-Polynesian and ma is found in Bajau and Kambera as a relativizer (although not attested for Mamuju). The nominative case element on sai is not as easy to isolate but given the reconstructions of the nominative singular proper name marker *sai and its plural counterpart *sa, it is not far-fetched to also relate the s(a) of sai to the nominative case function.
Crucially, no genitive/ergative variant (which we would expect to come out as *nema*) exists in Mamuju (nor in any of the South Sulawesi languages). Recall that genitive marked interrogative pronouns do exist in Philippine-type languages but can only be used with in-situ interrogative phrases, as seen earlier in (40), repeated here in (77).

(77) G<in>awà-∅ nino ang sapatos na iyon?
     <BEG>make-PAT gen.who NOM shoe LNK that
     ‘Who made those shoes?’ (Schachter and Otanes 1982: 512)

Similarly, the Mamuju relative marker *anu* is clearly cognate with the Tagalog nominative interrogative *ano* (underlyingly also /anu/). As the interrogatives themselves show morphological traces of absolutive case, it follows that only absolutive arguments can be clefted given case preservation. The proper morphological analysis then of interrogative sentences such as (75) is shown in the glossing of (78), where the case marked interrogative constrains the types of arguments that can be extracted. Similarly, the grammatical voice of verbs in relative clauses is constrained by the case of the relativizer, as exemplified in (79).

(78) Sema na-kita Ali?
     ABS.who 3.ERG-see Ali
     ‘Who did Ali see?’ NOT ‘Who saw Ali?’

(79) Ku-pe-ingarangng-i=mo apa anu ku-so'na
     1.ERG-TR-remember-APP=EMPH ABS.what ABS.RELT 1.ERG-dream
     sambongi. last.night
     ‘I remember all that I dreamt last night.’ (Stromme 1991: Alibe Niso‘na)

This analysis, although syntactically trivial, offers a morphologically well-founded basis for the difference between relativizations and question formation on one hand, which both require case marked operators, and topicalization, which does not. As we have seen, the former operations are just as constrained in Mamuju as they are in Philippine-type languages while the latter operation is freer, as constraints against extraction from NP are no longer relevant for event-denoting predicates.\(^{36}\)

\(^{35}\) The morphological argument is less clear with ‘what’ than ‘who’ as nominative ‘what’ can be treated as unmarked. Compare Tagalog *ano* ‘what,’ *ng ano* ‘gen what,’ *saan* ‘obl. what/where.’ However, the a- initial in the Mamuju relative marker *anu* and interrogative *apa* ‘what’ is found in a wide range of nominative/absolutive interrogatives throughout Philippine-type and Formosan languages. In Tagalog, we can compare the argument interrogatives *a-no, a-lin* ‘which’ and *si-no ‘nom.who’ which all begin with the putative nominative markers *a- or si- (for proper names) to the adjunct interrogatives *ilan* ‘how many,’ *kailan* ‘when,’ *bakit* ‘why,’ *magkano* ‘how much’ none of which begin with a-. Ross (2006) presents the comparative data but tentatively reconstructs the ‘a- formative with demonstrative features rather than case features.

\(^{36}\) Note however that this approach requires a view of the grammar that attributes more power to the lexicon than is currently popular in generative theorizing. In particular, a lexical gap in the case paradigm for certain operators must be able to block syntactic movements. This would not be
Note that this analysis extends beyond Mamuju and can account for a similar pattern in Indonesian, a language which is generally considered to have adopted a nominative-accusative alignment pattern (Chung 1976, 2008; Cole et al. 2008; Aldridge 2008a). As can be seen in (80), actor voice objects can be topicalized but not relativized in Indonesian.

(80) a. Orang itu, saya meng-ajak ke sini.
   person that 1SG ACT-invite to here
   ‘As for that person, I invited (him/her) here.’

b. *Orang itu yang saya meng-ajak ke sini.
   person that RELT 1SG ACT-invite to here
   (For, ‘That person whom I invited here.’) (Arka and Manning 2008: 53))

Again, we can plausibly attribute (80b) to the relativizer, which Adelaar (1992) reconstructs as ia-ng 3S.NOM-LNK. Indeed, ia functions as a strictly nominative case pronoun in the modern Indonesian as well. Compare in (81) the distribution of nominative ia with dia, a case neutral pronoun which can function as either subject or object of an actor voice clause (Musgrave 2001a).

(81) Dia/ia  me-lihat dia/*ia
          3S.NEUT/3S.NOM ACT-see 3S.NEUT/3S.NOM
   ‘He sees him.’

Were Indonesian to have in its functional inventory a case neutral relativizer (hypothetically diang), we might expect that extraction could take place from a wider array of syntactic positions. The prediction here is that Austronesian’s well-known “subjects only” condition on extraction can easily dissipate once the nominal features of event-denoting predication are lost, as it is then “relic” properties of functional items that keep the restriction in place rather than the strong island characteristics of Philippine-type predicates.

While constraints on ergative extraction are relatively tenacious among Indonesian languages, we do find several ergative languages that allow ergative extraction in a manner unknown among Philippine-type languages. This is exemplified here by Sumbawa Besar (as described by Shiohara 2013) and Selayarese (as described by Basri and Finer 1987; Basri 1999). The transitive verbal clause in Sumbawa employs an unmarked verb countenanced in a framework such as Distributed Morphology where the lexicon is reduced to almost nothing and the putative lexical gap relied upon above would itself have to be derived synchronically in the syntax. On the other hand, it is a perfectly natural analysis in Combinatory Category Grammar (Steedman 2001) where Mamuju anu would be of the category: (N\N)/(S/ NP_ABS), that is, a predicate which seeks a clause with a nominative argument gap to its right and a noun to its left to yield another noun via predicate modification.

37 See also Erlewine, Levin, and Van Urk, Chapter 16, this volume, who discuss Balinese pre-verbal subjects in object voice.
stem with prefixal ergative agreement and introduces the ergative argument with the case marker *lèng*, as seen in (82).\(^{38}\)

\[(82)\]  
\[ka=ku=inóm\ kawa\ nan\ lèng\ aku\]  
\[\text{PAST}=1\text{SG}=\text{drink}\ \text{coffee\ that\ by\ 1SG}\]  
\[‘I drank the coffee.’\]  
\[(\text{Shiohara}\ 2013: 132)\]

Antipassives are formed with the nasal prefix *N*- and subject agreement (which is similar, but not identical to ergative agreement). As shown in (84), antipassives do not allow for objects.

\[(83)\]  
\[a.\ ka=ku=ng-inóm\ aku.\]  
\[\text{PAST}=1\text{SG}=\text{ANTIPASS}=\text{drink}\ \text{1SG}\]  
\[‘I drink (something).’\]  
\[b.\ *ku=ng-inóm\ kawa\ (nan)\]  
\[\text{1SG}=\text{ANTIPASS}=\text{drink}\ \text{coffee\ (that)}\]  
\[(\text{For, ‘I will drink (the) coffee.’})\]  
\[(\text{Shiohara}\ 2013: 132)\]

Crucially, the restriction against antipassive objects (much like Mamuju’s super-antipassive in (67)) appears to be indefeasible and thus trumps the restriction against extraction of the ergative argument. The result is that agent extraction proceeds from a transitive clause as shown in (84a) in the presence of an object. The antipassive is used in subject questions only when no object is present, as in (84b).

\[(84)\]  
\[a.\ sai\ adè\ ka=tumpan’\ jangan=ta\]  
\[\text{who}\ \text{nom}\ \text{PAST}=\text{get}\ \text{fish=this}\]  
\[‘Who caught the fish?’\]  
\[b.\ sai\ adè\ ka=n-umpan’?\]  
\[\text{who}\ \text{nom}\ \text{PAST}=\text{ANTIPASS}=\text{get}\]  
\[‘Who already had a catch (in fishing)?’\]  
\[(\text{Shiohara}\ 2013: 135)\]

Topicalization of the ergative argument to a preverbal position is also possible, as expected, although interestingly, Shiohara shows that the ergative marker must be omitted in this construction, as shown in (85) (see n. 38).

\[\text{The pattern of a } lèng\text{-phrase agent triggering prefixal agreement appears very similar on the surface to that found in Acehnese (Durie 1985; Legate 2012b, 2014b). However, while Sumbawa clearly follows an ergative pattern, Acehnese is typically described as having an active-stative alignment type which Legate (2012b, 2014b) derives from properties of } \text{vP}. \text{Shiohara (2013) in fact glosses } lèng\text{ as ‘by’ but because } lèng\text{ seems obligatory on external arguments of transitive verbs, I re-gloss } lèng\text{ as } \text{erg}. \text{Shibatani (2008) argues that there is a significant difference between the verb in agent extraction, as in (84a), and a canonical declarative like (82). Space does not allow a more in depth discussion of the complex Sumbawa facts.}\]
Selayarese presents a similar state of affairs. The alternation in (86) shows that person marking and alignment are identical to Mamuju in the simple case. A definite object requires a transitive clause with ergative agreement and a second-position absolutive clitic. An indefinite object must be introduced with an antipassive/intransitive verb.

(86) a. Ku-halli’=i sapa=ɲjo
    1.ERG-buy=3.ABS house=DEF
    'I bought the house.'

    b. M-mali=a sapa
    INTR-buy=1.ABS house
    'I bought a house.'

As with Sumbawa and Mamuju, the external argument of both a transitive and intransitive predicate can be topicalized, as shown in (87).

(87) a. I Baso’ la-alle=i doe’=ɲjo
    PM Baso 3.ERG-take=3.ABS money=DEF
    'Baso took the money.'

    b. I Baso’ (a)ng-alle(=i) doe’
    PM Baso INTR-take=3.ABS money
    'Baso took some money.'

Like Sumbawa, but unlike Mamuju, this extends to cases of agent extraction in transitive clauses, as seen in (88), where the verb still takes ergative agreement rather than antipassive/intransitive morphology. Just like in the dialect of Sumbawa described by Shiohara (2013), this is the only option when the object is definite.39

(88) Inai la-sumbele=i tedong=injo?
    who 3.ERG-slaughter=3.ABS buffalo=DEF
    'Who slaughtered the buffalo?'

39 Note that the extraction of antipassive objects in Selayarese is still restricted just as in more morphosyntactically conservative languages. Recall that in Indonesian, where the cognate prefix meN- marks transitive active voice verbs, topicalization (but not relativization) of the object is permissible, as shown earlier in (80).

(i) *Doe (a)ng-alle=i i Baso’
    money INTR-take=3.ABS PM Baso
    (For, 'Money, Baso took.')

    (Finer 1994)
This also extends to relative clauses, as seen in (89), which are optionally introduced by the relative marker *nu*.

(89) a. *asu* (*nu*) n-datalaʔ bahi
dog RELT INTR-chase pig
‘the dog that chased a pig.’

b. *asu* (*nu*) la-datala-pjo=i bahi=pjo
dog RELT 3.ERG-chase-DEF=3.ABS pig=DEF
‘the dog that chased the pig.’

(89) adapted from Basri 1999: 292)

While this diachronic analysis of case marked relativizers and interrogative operators can extend to many Austronesian languages transparently there are inevitably exceptions. Bajau as described by Donohue (1996), for instance, shows the classic extraction restrictions but has a relativizer *ma* that alternates with ∅. Bajau *ma* is homophonous with the oblique case marker/preposition rather than an absolutive/nominative one and yet it is only the absolutive argument which can be relativized. The converse problem is found in Malagasy, where a focus marker which almost certainly also derives from PMP *anu* allows for clefting of prepositional phrases. (Note also that the Selayarese relativizer in (89) derives from *anu* yet allows relativization of the ergative argument.)

(90) T-amin-ny antsy no nanapaka ity hazo ity Sahondra
pst-with-det knife foc pst.act.cut this tree this Sahondra
‘It was with the knife that Sahondra cut this tree.’

(90) (Paul 2001)

Clearly, the etymology of relativizers and interrogatives is only suggestive of the solution proposed here. We cannot expect that the features and structures involved in questions and relative clauses will not diverge from their etymological roots. Nor should we expect that the features of a relative marker or interrogative may not be inherited by a lexical item that comes to replace it.

### 24.3 Conclusion

I have argued here that lexical categories play a critical role in accounting for the difference between Philippine-type language and related ergative languages of Indonesia. In particular, symmetrical voice systems in which every event-denoting predicate is marked with voice morphology emerge from non-verbal predicates. True argument structure with unmarked intransitive and transitive event-denoting predicates are rooted in verbal categories. Mamuju was presented as a canonical ergative language with a highly developed N/V contrast. As a result, it displays canonical antipassives and...
applicatives of a kind not found in Philippine-type languages. When event-denoting
predicates lose their nominal properties and become verbalized, certain syntac-
tic properties of ergative alignment (e.g. extraction constraints) are more likely to be
lost as predicted by Manning’s (1996: 21) hypothesis that “syntactic ergativity” results
from nominalization, in contrast to more surface-oriented “morphological ergativ-
ity.” Further research in the comparative syntax of Indonesian languages is necessary to
better understand the correlates between alignment-type, lexical category and extract-
ability. The bewildering assortment of agreement and argument marking patterns (see,
for instance, Kikusawa (Chapter 23, this volume) as well as the papers in Adelaar and
Himmelmann (2005), Wouk and Ross (2002), Arka and Ross (2005) and Adelaar (2013)
for a sample) will likely require decades to fully sort out. One of the purposes of this
chapter has been to suggest new potential correlations for further investigation as we
expand our empirical scope to the many under-described Austronesian languages of
Indonesia and beyond.

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ABBREVIATIONS

beg, begun aspect (a component of both the perfective and progressive); appl, applicative;
abs, absolutive; nom, nominative; gen, genitive; erg, ergative; tr, transitivity marker; prep,
general preposition; top, topic marker; anti, antipassive; superanti, super antipassive;
imprf, imperfective; dat, dative; obl, oblique; pass, passive participle; lnk, linker;
det, determiner; fut, future; art, article; pass, passive; dem, demonstrative; conj,
conjunction; caus, causative; vrb, verbalizer; emph, emphatic particle; nvol, non-volitional.