

# **Bikol clefts and topics and the Austronesian subject-only extraction restriction**

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Many Austronesian languages exhibit an extraction asymmetry whereby only the subject DP can be  $\bar{A}$ -extracted. We show that such extraction restrictions can vary between different  $\bar{A}$ -constructions in Bikol: local clefting is limited to the subject, whereas topicalization can target subjects and non-subject agents, but not other non-subject DPs. Following the phase-theoretic, locality-based approach to such extraction asymmetries in related Austronesian languages, we propose that clefting and topicalization differ in the featural specifications of their probes, but must always attract their closest matching goal. Evidence for this approach comes from interactions between clefting, topicalization, and hanging topic left dislocation in long-distance configurations. Such data motivates the view that the classic Austronesian subject-only extraction restriction is best characterized in terms of syntactic locality, rather than as a restriction on the grammatical function or morphological case of movement targets.

**Keywords** Bikol, Austronesian voice, extraction asymmetry, probing, locality, clefting, topicalization, syntactic ergativity

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# 1 Introduction

A major topic in Austronesian syntax has been the study of so-called “Austronesian-(type) voice systems” or “Philippine alignment.” In languages of this form, each clause has one argument which we call the “subject,” and only this designated subject argument can be targeted for  $\bar{A}$ -extraction. The nature of this subject-only extraction restriction has been a focal point for typological and theoretical discussions of extraction asymmetries (Keenan and Comrie, 1977; Schachter and Otnes, 1972; Aldridge, 2004; Rackowski and Richards, 2005, a.o.) as well as discussions of the nature of subjecthood itself (Keenan, 1976; Schachter, 1976, 1996; Guilfoyle, Hung, and Travis, 1992; Kroeger, 1993, a.o.).

In this paper, we describe patterns of  $\bar{A}$ -extractions — specifically, clefting and topicalization — in Bikol, an Austronesian language of the central Philippines closely related to Tagalog.<sup>1</sup> At first glance, Bikol exhibits a familiar Philippine voice system. In example (1a), the theme *lalaki* ‘man’ has been chosen as the designated subject and therefore is in nominative case. Patient Voice morphology on the verb reflects that the nominative argument is the verb’s theme. Local clefting is limited to this subject argument, as in (1b,c). Clefting of the non-subject agent *eskwela* ‘student’ in (1c) is ungrammatical both when retaining its original genitive case marker or changing it to nominative case. Local clefting thus manifests the basic subject-only extraction asymmetry predicted of Philippine voice system languages.

(1) **Local clefting is limited to the subject:**

a. Baseline Patient Voice (PV) clause:

G<in>adan su lalaki kaso eskwela.

PV-kill NOM man GEN student

‘The student killed the man.’

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<sup>1</sup>The following abbreviations are used in glosses for Bikol examples: AV = Actor Voice, PV = Patient Voice (see §2); NOM = nominative, GEN = genitive, DAT = dative; DEM = demonstrative. In addition, data in section 6 also use the glosses IPFV = imperfective, DEF = definite. All uncredited data come from our elicitation with two speakers of Bikol in Singapore, led by the second author.

b. Grammatical subject (theme) cleft:

Su lalaki su [g<in>adan \_\_\_ ning eskwela ].

NOM man NOM PV-eat GEN student

'It's the man that the student killed.'

c. Ungrammatical non-subject agent cleft:

\*Su / kaso eskwela su [g<in>adan su lalaki \_\_\_ ].

NOM / GEN student NOM PV-kill NOM man

Intended: 'It's the student that killed the man.'

In contrast, we observe that local topicalization in Bikol can target both subjects and non-subject agents. Examples (2a) and (2b) are both grammatical and express the same proposition that 'The student killed the man.' In (2a), the subject *lalaki* 'man' is topicalized to a pre-verbal position, whereas in (2b), the non-subject agent *eskwela* 'student' is topicalized to a pre-verbal position. When the non-subject agent is topicalized in (2b), its case marking changes to be in nominative case, resulting in a clause with two nominative phrases; however, (2b) unambiguously means 'The student killed the man,' and not 'The man killed the student.'

(2) **Grammatical topicalization of theme subject and non-subject agent:**

a. Su lalaki [g<in>adan \_\_\_ kaso eskwela ].

NOM man PV-kill GEN student

b. Su eskwela [g<in>adan su lalaki \_\_\_ ].

NOM student PV-kill NOM man

'The student killed the man.'

The availability of non-subject agent topicalization in (2b) is surprising against the backdrop of the widely-discussed subject-only restriction on  $\bar{A}$ -extraction in these languages.<sup>2</sup> In addition,

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<sup>2</sup>Examples similar to (2b) in other, related Philippine languages have been observed in passing by some authors. However, such examples are few and far between and they have not received serious attention. We return to this point in the conclusion.

the availability of two nominative-marked arguments in (2b) raises questions for the nature of nominative case and the interaction of voice marking and case in these languages, which we will address.

The core of our proposal will be that clefting and topicalization involve probes with different featural specifications: Clefting involves a head which probes for a [D] feature whereas topicalization probes for a [TOP] feature. Both probes must target the structurally closest matching goal (Rizzi, 1990, 2001; Chomsky, 1995, 2000) and then move it. Following the work of Aldridge (2004, 2008), Rackowski and Richards (2005), and others, the subject argument in Austronesian voice system languages is the highest argument in the lower phase, in a (outer) specifier of *v*P. Due to their differing featural specifications, clefting cannot attract another DP past the subject, whereas topicalization can skip the highest DP (the subject) and attract a non-subject agent occupying the inner specifier of *v*P. When the agent is itself the subject, in Actor Voice (AV), it is the only DP at the edge of the *v*P phase. Probing obeys Phase Impenetrability (Chomsky, 2000), explaining the unavailability of non-subject theme topicalization, illustrated in (3).

(3) **Non-subject themes cannot be topicalized:**

\*Su eskwela [nag-gadan su lalaki \_\_\_ ].

NOM student AV-kill NOM man

Intended: 'The man killed the student.'

Support for our locality-based approach will come from the behavior of long-distance clefting. In contrast to local clefting which is restricted to subjects, as in (1) above, long-distance clefting can target non-subject agents, as seen in (4). We argue that such examples involve a step of non-subject agent topicalization within the embedded CP which makes the embedded non-subject agent the highest DP within the embedded clause, which is then the closest target for matrix clefting.

(4) **Long-distance cleft of embedded non-subject agent:**

Su eskwela su [pig-balita ning radyo [CP na g<in>adan su lalaki \_\_\_ ]].

NOM student NOM PV-report GEN radio that PV-kill NOM man

'It's the student that the radio reported *t* killed the man.'

This and additional data inform our description of the nature of the basic Austronesian subject-only extraction restriction, obeyed in Bikol by local clefting. We argue that the observed “subject-only” extraction restriction must be characterized in terms of syntactic locality, reflecting the attraction of the structurally closest DP target, rather than any requirement to attract subjects or even nominative DPs.

Additionally, we will also discuss hanging topic left dislocation (HTLD), a non-movement-derived form of topic with an obligatory corresponding pronoun. As a non-movement construction, HTLD can be used for any DP argument: subjects, non-subject agents, as well as non-subject themes. Just as long-distance clefts can be fed by movement topicalization as in (4), allowing for non-subject agent clefts, long-distance clefts can be fed by embedded HTLD. This results in long-distance clefts with corresponding embedded pronouns, with no “extraction” restriction, unlike gapped clefts.

This paper is structured as follows. Section 2 introduces background on the interaction of case marking and voice morphology in Austronesian voice systems and how these properties manifest in Bikol. Local  $\bar{A}$ -extraction facts are presented in section 3, followed by our core analysis in section 4. In section 5, we discuss long distance clefting, which will provide the motivation for a locality-based characterization of the Austronesian extraction restriction. Along the way, we will describe two different types of topicalization, the organization of the  $vP$  phase edge, and the determination of morphological case in Bikol.

## **2 Case and voice in Bikol**

In this section we will introduce basic properties of Bikol morphosyntax which will be relevant for the subsequent study. Many Austronesian languages, including Bikol, exhibit a particular constellation of case marking, verbal morphology, and extraction interactions which have been termed a “voice system.” A summary of these key properties is reproduced in (5):

(5) **Characteristics of Austronesian-type voice systems:**

(Erlewine, Levin, and Van Urk, 2017: 376, with slight modifications to terminology used)

- a. A privileged argument: One argument is designated the “subject,” and is realized in a particular morphological form and/or structural position, regardless of its original grammatical function.
- b. Articulated voice morphology: Morphology on the verb varies with the choice of subject, including options for taking certain oblique arguments as subject.
- c. Extraction restriction:  $\bar{A}$ -extraction (*wh*-movement, relativization, topicalization, etc.) is limited to the subject argument.
- d. Marking of non-subject agents: Non-subject agents are morphologically marked, often coinciding with the form of possessors (i.e. genitive case).

Voice systems were made famous through the study of Philippine languages — especially Bikol’s sister language Tagalog — and therefore are sometimes referred to as “Philippine-type” alignments. However, such voice systems are attested in many other Austronesian languages beyond the Philippines. Chen 2017 describes it as “a typologically unique grammatical system found in nine of the ten Austronesian primary branches” (p. 1).<sup>3</sup> See Erlewine, Levin, and Van Urk 2017 and Chen 2017 for recent overviews of the properties of such voice systems and their analysis. As is noted in these works, there is significant variation in the terms used for such systems in previous literature.<sup>4</sup>

The core voice system properties in (5) are all readily observed in Bikol, although in the rest of the paper we will show that the facts surrounding  $\bar{A}$ -extraction (5c) is in reality more complicated. In the rest of this section, properties (5a), (5b), and (5d) of the Bikol voice system will be presented. Data on  $\bar{A}$ -extraction which partially supports the characterization in (5c) will be presented in the following section.

Canonical word order in Bikol is predicate-initial. Consider the examples in (6) below, which

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<sup>3</sup>Erlewine, Levin, and Van Urk (2015, 2017) observe that the Nilotic language of Dinka (South Sudan) also exhibits all of the characteristic properties of voice systems in (5), leading them to refer to these voice systems as “Austronesian-type.”

<sup>4</sup>In particular, other terms for what we call the “subject” here include terms such as “pivot” and “trigger.”

all express the basic proposition that ‘The woman bought cheese at the shop.’ In each example, there is one subject DP in nominative case, in bold in (6), and morphology on the verb correlates with this choice of subject argument. The subject can be the thematic agent (6a) or theme (6b), but can also be a non-core thematic argument such as a location (6c), which is otherwise expressed as an oblique. Post-verbal word order is free; only one, common word order is given for each example here.

(6) **Voice alternation in Bikol:**

a. Actor Voice (AV):

**Nag**-bakal **su** **babayi** ning keso sa tindahan.

AV-buy NOM woman GEN cheese DAT shop

b. Patient Voice (PV):

**Pig**-bakal kaso babayi **su** **keso** sa tindahan.

PV-buy GEN woman NOM cheese DAT shop

c. Locative Voice (LV):

**Pig**-bakal-**an** ning babayi **su** **tindahan** ning keso.

LV-buy GEN woman NOM shop GEN cheese

‘The woman bought (the) cheese at the shop.’

Non-subject core arguments are generally in genitive case. Case marker forms in Bikol can vary based on animacy and number, but these distinctions are not relevant here so they will not be reflected in glosses. See for example discussion in Mintz 1973 and McFarland 1974. In addition, specific non-subject themes appear in dative case rather than genitive case as in (7), but all non-subject agents are in genitive case, regardless of specificity.<sup>5</sup>

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<sup>5</sup>The Tagalog equivalent of this Differential Object Marking is well-studied; see e.g. Schachter and Otnes 1972 and, more recently, Sabbagh 2016. From a broader, pan-Austronesian perspective, Chen 2017 describes such dative case markers as a variant of the case marker for non-subject themes (in our terms, genitive) which encodes definiteness or specificity, rather than as a distinct case.

(7) **Specific non-subject themes are dative-marked:**

Nag-hiling sa babayi si Andrew.

AV-see DAT woman NOM Andrew

'Andrew saw the woman.'

Although the voice system allows for different arguments to be the subject and hence nominative, in the canonical, predicate-initial word order, it is not possible for two arguments of the clause to simultaneously be nominative. This explains the ungrammaticality of (8) below, in contrast to (6b) above.<sup>6</sup>

(8) **Only one (post-verbal) argument may be nominative:**

\*Pig-bakal su babayi (sa tindahan) su keso.

PV-buy NOM woman DAT house NOM cheese

Intended: 'The woman bought the cheese (at the store).'

It's worth noting that this "voice" system descriptively differs from familiar "voice" alternations in European (and other) language families. First, neither the Actor Voice nor Patient Voice appears to be morphologically or syntactically simpler on the surface, leading some authors to refer to such systems as "symmetric" voice systems; see especially Foley 2008. Second, in the non-Actor Voices (NAV) — which some authors refer to as "passives" — the agent argument continues to be a DP core argument of the clause, rather than a demoted oblique. The present paper will in fact offer further support for the view that NAV agents are full-fledged DP arguments.

Finally, we note that there is a not insignificant tradition of describing Philippine languages as exhibiting ergative/absolutive alignment. See for example Payne 1982; DeGuzman 1988; Gerdtz 1988; Mithun 1994; Aldridge 2004. Under this view, Actor Voice clauses are formally intransitive, with an oblique theme, and Non-Actor Voice clauses are formally transitive. Subjects are absolutive and NAV agents are ergative, with the case on non-specific AV themes then being a homophonous

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<sup>6</sup>The ungrammaticality of (8) even with *sa tindahan* intervening between the two core arguments shows that the ungrammaticality of (8) is not due to a simple ban on adjacent nominatives.

oblique. On this point, see especially Aldridge’s (2004; 2012) ergative analysis for Tagalog, whose voice morphology and case facts parallel the Bikol facts above. The subject-only  $\bar{A}$ -extraction restriction is then an absolutive-only extraction restriction, which is also attested in other language families where the “ergative” designation is less controversial, such as Inuit, Mayan, and Salishan. See Deal 2016 and Polinsky 2017 for two recent overviews of syntactic ergativity cross-linguistically. For two recent, critical reviews of the ergative hypothesis for Austronesian-type voice system languages, see Erlewine, Levin, and Van Urk 2017 and Chen 2017.

In this paper we use the terms nominative and genitive for the two core cases in Bikol, as in the earlier examples in this section, and later present an analysis for Bikol case and voice in these terms. However, we believe that the empirical contribution of our paper as well as its theoretical import is logically separable from this choice. Our core proposal for Bikol extraction facts, in section 4, in fact largely follows the syntax for Austronesian voice systems proposed in Aldridge’s work. Lessons for the analysis of syntactic ergativity — to the extent that Philippine voice system languages exhibit syntactic ergativity — will be presented at the end of section 5.

### 3 Local clefts and topics

In this paper we discuss clefting and two types of topic constructions in Bikol, which we refer to as topicalization and hanging topic left dislocation (HTLD).<sup>7</sup> In this section, we specifically consider local clefts and topics. As in many other Austronesian languages, DP *wh*-questions are formally clefts — see Potsdam 2009 for an overview — and therefore will not be described separately. In the interest of space, we will concentrate on extractions of agent and theme arguments from Actor Voice (AV) and Patient Voice (PV) clauses, but the salient facts here regarding PV agents also extend to other non-Actor Voices.

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<sup>7</sup>Only dependencies with DPs will be discussed, as the movement of non-DPs behaves quite differently in Philippine languages. See e.g. discussion of “adjunct fronting” in Kroeger 1991, as well as Hsieh in prep.

### 3.1 Clefts

As we have noted above, it is often claimed that only the subject can be  $\bar{A}$ -extracted in voice system languages (Keenan and Comrie, 1977), including in closely related Philippine languages (Kroeger, 1991; Reid and Liao, 2004; Aldridge, 2004; Rackowski and Richards, 2005). This characterization indeed holds for local clefting, our first  $\bar{A}$ -construction. Clefts have two parts: the exhaustive focus (or focus-containing phrase)<sup>8</sup> and the background (a gapped clause), separated by a nominative case marker. Example (9) shows that only the agent subject can be clefted out of an AV clause. Clefting the non-subject theme in (9b) is ungrammatical, whether retaining the original genitive case marker *ning* or changing the focus to be nominative. Example (10) similarly shows that only the theme subject can be clefted from a PV clause, as we also saw in (1) above.

(9) **Local clefting from an AV clause:**

a. Grammatical agent subject cleft:

[<sub>focus</sub> Su babayi] su [<sub>background</sub> nag-kaon (\*=siya) ning keso].  
NOM woman NOM AV-eat NOM.3sg GEN cheese

'It's the woman that ate the cheese.'

b. Ungrammatical theme cleft:

\*[<sub>focus</sub> Su/ning keso] su [<sub>background</sub> nag-kaon su babayi].  
NOM/GEN cheese NOM AV-eat NOM woman

Intended: 'It's (the) cheese that the woman ate.'

(10) **Local clefting from a PV clause:**

a. Grammatical theme subject cleft:

[<sub>focus</sub> Su lalaki] su [<sub>background</sub> g<in>adan (\*=siya) kaso eskwela].  
NOM man NOM PV-kill NOM.3sg GEN student

'It's the man that the student killed.'

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<sup>8</sup>The fronted constituent in a cleft is also sometimes called a "pivot," but we avoid this term as what we call "subjects" here have also been called "pivots" in some Austronesianist literature. See footnote 4.

b. Ungrammatical agent cleft:

\*<sub>[focus</sub> Su/kaso eskwela] su <sub>[background</sub> g<in>adan su lalaki].  
NOM/GEN student NOM PV-kill NOM man

Intended: 'It's the student that killed the man.'

The ungrammaticality of the nominative clitic pronoun =*siya* in both examples shows that local clefts must be gapped; i.e. they must have a post-verbal subject gap, not a corresponding pronoun. Post-verbal gaps will generally not be indicated in examples, due to the flexible post-verbal word order mentioned in section 2.

From these examples, we see that cleft-formation can only target the grammatical subject argument: the argument in nominative case and cross-referenced by voice morphology on the verb. Local clefting thus follows the claimed subject-only restriction on  $\bar{A}$ -extraction. As noted above, DP *wh*-questions are also formed using clefts and therefore follow the extraction restriction observed in (9–10).

### 3.2 Topics

Next, we turn to topics in Bikol. We use the term “topic” to refer to DP arguments in pre-verbal position without an exhaustive focus interpretation. Here we will leave the description of the precise discourse effects of topics for future work. Topics can be formed in two different ways in Bikol: topicalization and hanging topic left dislocation (HTLD). We will argue that topicalization involves movement, whereas hanging topics are base-generated high.

The examples in (11) involve topicalization of their subjects. (11a) has topicalized an agent subject from an AV clause and (11b) has topicalized a theme subject from a PV clause. Topicalization is associated with no intonational break and cannot be resumed by corresponding pronouns. In the following examples, topics (and corresponding pronouns, if any) are in bold.

(11) **Subject topicalization:**

- a. **Su babayi** nag-kaon ning keso.  
NOM woman AV-eat GEN cheese
- b. **Su keso** k<in>aon kaso babayi.  
NOM cheese PV-eat GEN woman  
'The woman ate (the) cheese.'

In contrast, hanging topics are followed by an obligatory intonational break and have a corresponding post-verbal pronoun. Consider the examples in (12) below. In (12a), the agent subject 'woman' is topicalized from an AV clause, followed by an intonational break — indicated by a # — with a corresponding post-verbal nominative pronoun =*siya*, which encliticizes to the verb. In (12b), the theme subject 'cheese' is topicalized from a PV clause, with a following pause and corresponding full pronoun.

(12) **Subject HTLD, with prosodic break and pronoun:**

- a. **Su babayi #** nag-kaon \*(=*siya*) ning keso.  
NOM woman AV-eat NOM.3sg GEN cheese  
'The woman<sub>i</sub>, she<sub>i</sub> ate cheese.'
- b. **Su keso #** k<in>aon kaso babayi \*(*ito*).  
NOM cheese PV-eat GEN woman NOM.DEM  
'The cheese<sub>i</sub>, the woman ate it<sub>i</sub>.'

The obligatoriness of the intonational break and corresponding pronoun are generally one-to-one. (An exception is discussed in footnote 19 below.) Throughout this paper, we will give English translations with canonical word order for Bikol examples with topicalization, as in (11) above, whereas we give English translations with hanging topics with corresponding pronouns for Bikol HTLD, as in (12). We have chosen to do this in order to highlight the presence or absence of the corresponding pronoun in the Bikol sentences through their English translations. We should however reiterate that we are making no claims regarding the discourse status of these two

constructions which here we call “topics” and, in particular, we make no claim that the information structural properties of these Bikol sentences match those of their English translations.

With these basic descriptions of the two forms of topics in place, we now consider which arguments can be targeted for topicalization and HTLD. Examples (11) and (12) above showed that both topicalization and HTLD can target subjects. Topicalization can additionally target the non-subject agent of a non-Actor Voice clause as in (13).

(13) **Non-subject agent topicalization:**

*Su babayi* k<in>aon su keso.  
NOM woman PV-eat NOM cheese

i. ‘The woman ate the cheese.’

ii. \* ‘The cheese ate the woman.’

Note that the topic in (13) must be in nominative case, even though the corresponding post-verbal position is a genitive case position. Example (14) retains the original genitive case marker on the topic *babayi* ‘woman’ in (13), resulting in ungrammaticality. Recall that multiple post-verbal arguments cannot be in nominative case; see (8) above.

(14) **Ungrammatical topicalization of non-subject agent with original case marker:** cf (13)

\**Kaso babayi* k<in>aon su keso.  
GEN woman PV-eat NOM cheese

On the surface, topicalizing a non-subject agent as in (13) results in a string with two nominative phrases: the pre-verbal topic ‘woman’ and the post-verbal ‘cheese.’ However, (13) is unambiguous in its interpretation: the post-verbal nominative phrase is unambiguously the grammatical subject of this PV clause and therefore the verb’s theme, whereas the pre-verbal nominative topic is unambiguously the non-subject agent.<sup>9</sup> Our proposal will account for this restriction.

Although non-subject agents can be topicalized, non-subject themes cannot. This is illustrated

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<sup>9</sup>This is not simply an effect of animacy. For example, example (2b) in section 1, which is structurally parallel to (13), is similarly unambiguous.

in (15) below, which attempts to topicalize the non-subject theme *keso* ‘cheese’ from an AV clause. The sentence is ungrammatical with *keso* in nominative or its original genitive case.

(15) **Topicalization of non-subject theme is ungrammatical:**

\***Su/ning keso** nag-kaon su babayi.  
 NOM/GEN cheese AV-eat NOM woman  
 Intended: ‘The woman ate (the) cheese.’

In summary, topicalization — which we will argue below to involve movement — does not follow a subject-only restriction, unlike clefting (9–10). In particular, clefting of non-subjects was ungrammatical even if the pivots are changed to be in nominative case; see (9b) and (10b) above. At the same time, topicalization is not unrestricted: agents are the only non-subject DPs that can be topicalized.

Next we turn to hanging topic left dislocation (HTLD). We saw in example (12) above that HTLD can target subjects. In addition, HTLD can target non-subject agents as well as non-subject themes as in (16–17) below. These examples each correspond to the topicalization examples in (13) and (15) above, where we saw that non-subject agents but not non-subject themes can be topicalized.

(16) **Non-subject agent HTLD:**

**Su babayi #** k<in>aon =niya su keso.  
 NOM woman PV-eat GEN.3sg NOM cheese  
 ‘The woman<sub>i</sub>, she<sub>i</sub> ate the cheese.’

(17) **Non-subject theme HTLD:**

**Su keso #** nag-kaon su babayi **sainya**.  
 NOM cheese AV-eat NOM woman DAT.3SG  
 ‘The cheese<sub>i</sub>, the woman ate it<sub>i</sub>.’

In these examples of non-subject HTLD (16–17), the topics themselves are in nominative case, even though their corresponding pronouns are in genitive or dative case.<sup>10</sup> Like (13) above, the resulting string has two nominative phrases, but each is unambiguous in its interpretation. The pre-verbal hanging topic must correspond to the post-verbal pronoun.

We conclude that there is no restriction on the DP arguments that can be targeted by HTLD. Below we will argue that this is because HTLD does not involve movement, in contrast to topicalization.

### 3.3 Summary

In this section, we presented data on clefting and two types of topics from local clauses in Bikol. Local clefting obeys the subject-only extraction restriction. Topicalization can target subjects and non-subject agents. Hanging topic left dislocation can target any core argument, including non-subject themes. These possibilities are summarized in (18) below.

(18) **Possible DP targets for local dependencies:**

	subject	non-subject agent	non-subject theme
clefting	○ (9a, 10a)	× (10b)	× (9b)
topicalization	○ (11)	○ (13)	× (15)
hanging topic left dislocation	○ (12)	○ (16)	○ (17)

Non-subject topics involve an apparent mismatch in case marking: the pre-verbal topic is in nominative case, instead of the genitive or dative case of its corresponding post-verbal gap or pronoun. In the next section, we present our analysis for Bikol voice and case, as well as the specific analyses for clefting, topicalization, and HTLD, with additional supporting data.

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<sup>10</sup>Recall from section 2 that specific non-subject themes are in dative case; see e.g. (7).

## 4 Proposal

In this section we present our analysis for the patterns of voice, case, and local dependencies in Bikol introduced in the previous section. A key point which we account for is the ability of topicalization to target non-subject agents as well as subjects, but not non-subject themes, in contrast to clefting which is strictly subject-only and hanging topic left dislocation (HTLD) which is unrestricted. To preview our account, we will propose that topicalization is a movement construction which involves probing for a discourse feature [TOP], whereas clefting involves probing for the feature [D]. The subject and non-subject agent are the only DPs at the  $vP$  phase edge, and so there is no way to target non-subject themes, even with a [TOP] probe. In contrast, HTLD is a non-movement construction, unrestricted by Phase Impenetrability. We will also discuss the determination of morphological case in Bikol, explaining the simultaneous appearance of two nominative phrases in resulting topic constructions.

Our proposal is presented in three parts. Section 4.1 presents our proposal for case and voice in Bikol. We present our analysis for the two topic constructions in section 4.2, followed by additional supporting data from patterns of multiple topics in section 4.3. Section 4.4 then presents our analysis for Bikol clefts. Note that all dependencies in this section will be local, accounting for the patterns presented in section 3 above. We then discuss long-distance clefting in section 5.

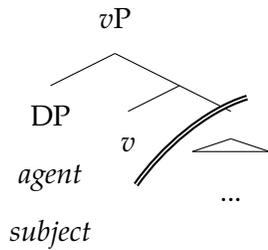
### 4.1 Voice and case in Bikol

We begin by presenting our framework for the voice system and morphological case in Bikol. For the voice system, we will follow the spirit of widely-adopted and influential phase-based approaches to voice systems in Philippine languages, drawing especially on the work of Aldridge (2004, 2008) and Rackowski and Richards (2005). Under such approaches, the subject DP is distinguished by being the highest DP in  $vP$  — the lower phase of the clause — in a (outer) specifier of  $vP$ . Agents are base-generated in  $\text{Spec},vP$ . In Actor Voice (AV) clauses, there is no movement to the edge of the  $vP$  phase; the agent subject is base-generated there as the only specifier of DP and remains the highest DP in the  $vP$ ; see (19a). In non-Actor Voice (NAV) clauses, a non-agent DP is

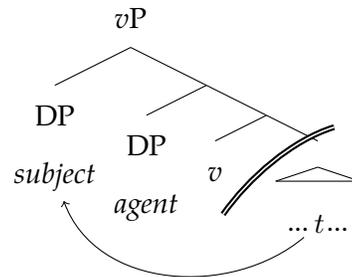
moved to the outer specifier of  $vP$ , above the agent DP (19b).<sup>11</sup> Specifiers of  $vP$  are illustrated on the left in trees, but this does not reflect their word order, which will be discussed below.

(19) **The  $vP$  phase in AV and NAV clauses:**

a. Actor Voice:



b. Non-Actor Voices:



$vP$  is a phase and therefore material within the complement of the phase head  $v$  will be inaccessible for syntactic operations from above (Phase Impenetrability; Chomsky, 2000). In (19), this domain of impenetrability is illustrated with a double line. This approach predicts a basic asymmetry between AV and NAV clauses: in AV clauses, the  $vP$  phase edge has only one DP which may be accessible for syntactic operations from above, whereas in NAV clauses, there are two. In the following subsection, we will propose that this is precisely what allows for topicalization to target only subjects (in AV and NAV clauses) and non-subject agents (in NAV); these are the only constituents in the lower phase which can move out. See also Erlewine and Levin 2018 for an additional argument for precisely this organization of the  $vP$  phase edge, based on the inventory of clitic pronouns in Philippine-type voice system languages.

Voice morphology is the realization of the head  $v$ , which the lexical verb  $V$  head-moves to. Aldridge 2004 and Rackowski and Richards 2005 differ in the precise mechanisms that relate the realization of voice morphology to movement of the subject in NAV clauses.<sup>12</sup> However, both of these approaches agree on the basic geometry for the  $vP$  phase edge in AV vs NAV clauses, reviewed in (19) above. We adopt this common proposal here. NAV clauses involve movement of

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<sup>11</sup>Complement CPs may also function as the subject and move to the outer specifier of  $v$ . This will be important in the analysis of long-distance dependencies, discussed in section 5.

the subject to an outer specifier of *vP* whereas AV clauses involve no such movement, leaving the agent to be the highest DP in the phase and the only DP at in the *vP* phase edge.

Post-verbal word order in Bikol is free, except for a requirement that complement clauses be rightmost. Following Erlewine's (2018) proposal for Toba Batak, another predicate-initial Austronesian voice system language, we propose that all constituents in *vP* are subject to scrambling, such that all linearizations of *vP* with the verbal complex (*v+V*) as the leftmost constituent can be generated. Scrambling of post-verbal constituents has been independently proposed for the sister language Tagalog by many authors: see Kroeger 1991: ch. 5, Richards 1993, Wegmüller 1998, and Rackowski 2002: 22–27.<sup>13</sup>

Next we turn to our proposal for morphological case determination in Bikol. Following Marantz 1991, we propose that morphological case in Bikol may be structurally assigned or realized with context-sensitive defaults. Marantz (p. 247) proposes that “unmarked case may be sensitive to the syntactic environment; for example, in a language GEN may be the unmarked case for NPs inside NPs (or DPs) while NOM may be the unmarked case inside IPs.”<sup>14</sup> In particular, we propose that default case within the *vP* phase is genitive — as has been recently proposed for Philippine languages more generally by Erlewine, Levin, and Van Urk (2018) — and default case within the CP phase is nominative. See also Baker 2015: ch. 4 for discussion of DPs realized with different default cases in the lower vs higher phases of clauses.

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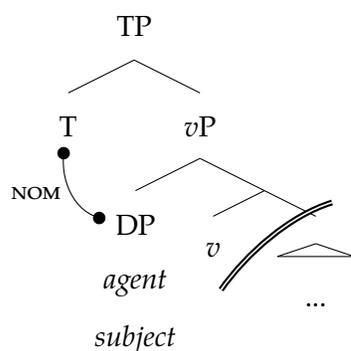
<sup>12</sup>Aldridge proposes that the movement reflects a [D] probe on NAV *v* with the EPP property, which is absent on AV *v*. This is related to her analysis of morphological case in these languages as being an ergative-absolutive pattern. In contrast, Rackowski & Richards describe the movement as a form of object shift, with voice morphology reflecting the choice of the outermost specifier of *vP*; see also Rackowski 2002. This latter approach builds on previous accounts of Austronesian voice morphology as so-called *wh*-agreement or case agreement, as in Chung 1982, 1994, 1998 and Pearson 2001, 2005. For our purposes, it is not necessary to identify the underlying mechanism which relates the choice of subject and choice of voice morphology.

<sup>13</sup>This scrambling could involve syntactic movements to positions above *vP*, as many of these authors propose, together with further verb movement to ensure that the verbal complex is leftmost. Alternatively, it could be a post-syntactic rearrangement of the constituents, as in Clemens 2014: ch. 4. Here, for presentational purposes, we simply consider different linearizations of *vP* without committing ourselves to a particular mechanism for this scrambling.

<sup>14</sup>See Levin 2015: ch. 6 for recent discussion of Marantz 1991. Relevant for us is Levin's discussion which concludes that “[Marantz's] categories of unmarked and default case must be collapsed” (p. 212). We use the term “default” here.

The derivation of AV and NAV clauses as well as the determination of morphological case will be illustrated below. We begin with the AV clause derivation in (20). Following the voice system proposal above in (19), the agent is base-generated in Spec,*v*P and no other argument is moved to the *v*P phase edge. We propose that T bears [PROBE:D] which assigns structural nominative case to its target.<sup>15</sup> As the agent is the highest DP in the *v*P — and, in this case, the only one accessible by Phase Impenetrability — [PROBE:D] on T necessarily targets the agent subject, which receives nominative case.

(20) **Actor Voice clause derivation:**



Any DP which is realized in the *v*P phase and lacks structural case-marking will receive default genitive case (Erlewine, Levin, and Van Urk, 2018). This accounts for the genitive case on non-subject themes in AV clauses.<sup>16</sup> The surface form computed for an AV clause is presented in (21). Recall that the linear order of constituents in the *v*P are subject to scrambling, with the only constraint being that the verbal complex be leftmost.

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<sup>15</sup>For explicitness, we use the notation [PROBE:F] to represent a probe for the feature [F], instead of the more common [uF] notation, which different linguists take to stand for “unvalued” or “uninterpretable”; see Pesetsky and Torrego 2007 for discussion. See Erlewine 2018 footnote 13 for more discussion of [PROBE:F] notation.

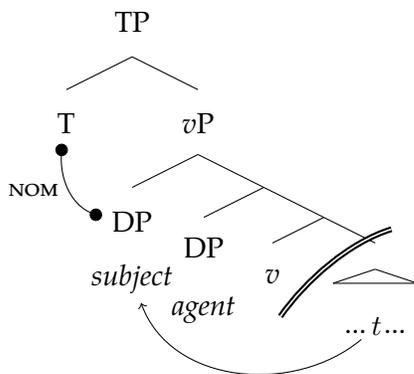
<sup>16</sup>As noted in section 2 above, it is also possible for non-subject themes to bear dative case, if specific. See e.g. Sabbagh 2016 for more discussion of the analysis of Philippine differential object marking.

(21) **An AV clause at PF:**

“AV-V NOM=DP<sub>ag/subj</sub> GEN=DP<sub>th</sub>” or “AV-V GEN=DP<sub>th</sub> NOM=DP<sub>ag/subj</sub>”

Next we turn to the derivation of Non-Actor Voice clauses. This is illustrated with the tree in (22). As we adopted above, in NAV clauses, a non-agent DP moves above the agent to an outer specifier of *v*P. [PROBE:D] on T will find the highest DP, which is the subject, and assign it structural nominative case.<sup>17</sup> The non-subject agent has not received structural case, so it will receive default genitive as it is in the *v*P.

(22) **Non-Actor Voice clause derivation:**



(23) **A PV clause at PF:**

“NAV-V NOM=DP<sub>subj</sub> GEN=DP<sub>ag</sub>” or “NAV-V GEN=DP<sub>ag</sub> NOM=DP<sub>subj</sub>”

It's worth highlighting that the *v*P phase boundary is relevant here in two distinct senses. For purposes of probing and movement, the complement of the phase head *v* constitutes a distinct domain, inaccessible for higher probing (Phase Impenetrability). This boundary is indicated by the double line in the trees above. However, for purposes of linearization (scrambling) and default case calculation, it is the entire *v*P maximal projection, including its specifiers, that behaves as a

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<sup>17</sup>We assume that subjects of other voices such as Locative Voice do not receive structural case lower, just as the theme subject in PV does not in (23). Such subjects could originate in an applicative layer, as proposed by Rackowski 2002, Aldridge 2004, and Rackowski and Richards 2005, or could have started with a preposition or oblique case which is then undone through a process such as Baker's (1988) Preposition Incorporation, as suggested in Guilfoyle, Hung, and Travis 1992: footnote 7 and Kroeger 1990. However, for our current purposes, we will concentrate on PV examples as illustrative of NAV clauses more generally.



in (25).

(25) **A moved non-subject agent at PF:**

“**NOM**=DP<sub>agent</sub> . . . [<sub>vP</sub> NAV-V **NOM**=DP<sub>subj</sub>]”

There are therefore two sources of surface nominative case in our proposal: structural nominative via Agree with T and default nominative in the CP phase. In (25), the post-verbal subject DP bears structural nominative whereas the pre-verbal non-subject agent bears default nominative by virtue of its position in the CP phase. As noted by Schütze (2001), identity between structural nominative and a default case in a higher domain of the clause (e.g. on topics) is cross-linguistically common.<sup>18</sup>

A consequence of this proposal is that, despite there being multiple sources of nominative case, only one DP can bear nominative case and appear in a post-verbal position. This is the subject DP which receives structural nominative from T, which can stay in the *vP* and therefore be linearized post-verbally. For any other DP to bear nominative case, it must move out of the *vP* into the CP phase and therefore be in a pre-verbal linear position. This explains the impossibility of multiple post-verbal nominatives, as illustrated in (8) above.

The analysis for Bikol voice and case presented in this section derives the surface morphosyntax for basic AV and NAV clauses in Bikol that we saw in section 2. In addition, two features of this approach will be important for the analysis of Bikol topics and clefts, which we turn to in the following sections. First, the new proposal that nominals in the CP receive default nominative will be important for deriving the case marking observed on topics. Second, two DPs are at the *vP* phase edge in NAV clauses — the subject and the non-subject agent — whereas only the agent subject is at the phase edge in AV clauses. While this is a feature of previous phase-based accounts

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<sup>18</sup>An alternative approach would be to claim that all nominative is the result of default nominative in CP, but with Agree with T making a DP target behave as if it is in the CP for the purposes of default case calculation. That is, even in cases where the subject stays in the *vP*, the subject will receive the CP’s default nominative, due to its Agree relationship with the CP phase’s T head. This alternative proposal has the conceptual advantage of claiming that all surface forms of nominative case are due to the same mechanism — default case in the CP — but with a new proposal regarding the effect of Agree with T. We will leave the full consideration of this alternative approach for future work.

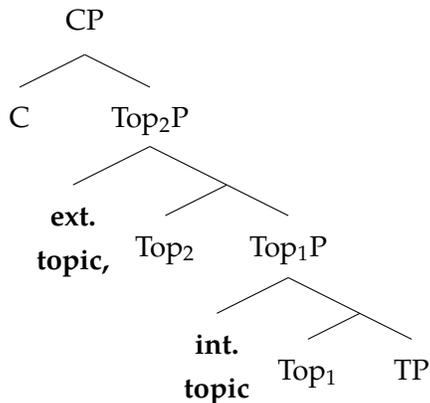
for voice system syntax in Rackowski 2002, Aldridge 2004, and Rackowski and Richards 2005, its consequences have not been fully discussed in previous work. This organization of the *v*P phase edge will be crucial for explaining the differing extraction restrictions on clefting vs topicalization in Bikol.

## 4.2 Topicalization and hanging topic left dislocation

Recall that there are two topic constructions in Bikol: topicalization, which involves a gap and no prosodic break, and hanging topic left dislocation (HTLD), which has a corresponding pronoun and a prosodic break. Topicalization can target non-subject agents as well as subject DPs, but not non-subject themes, whereas HTLD can target any DP argument. In this section we present our analysis for these facts.

We propose two functional heads in the clause periphery, which we simply label  $Top_2$  and  $Top_1$ , with  $Top_2$  c-commanding  $Top_1$ . In Rizzi 1997 terms, these can be thought of as heads in a split CP. This organization is illustrated schematically in (26):

(26) **The Bikol clause periphery:**



Topicalization is the result of  $Top_1$ : [ $PROBE:TOP$ ] on  $Top_1$  fronts any [ $TOP$ ] goal it finds to  $Spec,Top_1P$ .  $Top_2$  generates hanging topics: a DP is base-generated in  $Spec,Top_2P$  and binds a pronoun in its scope. Any constituent in  $Spec,Top_2P$  is followed by a prosodic break. In the following section, we present data from multiple topicalization which supports the higher position for hanging topics.

The claim that topicalization involves movement while HTLD involves base-generation and binding is supported by island-sensitivity (Ross, 1967). Examples (27–28) below show that topicalization but not HTLD is sensitive to islands, as diagnosed by examples with an attempted topic dependency into an adjunct island.

(27) **Topicalization is island-sensitive:**

- a. \*Su babayi pig-uran [<sub>island</sub> bagu pig-hiling ni Andrew ].  
 NOM woman PV-rain before PV-see GEN Andrew  
 Intended: ‘It rained [<sub>island</sub> before Andrew saw the woman].’
- b. \*Si Andrew pig-uran [<sub>island</sub> bagu pig-hiling su babayi ].  
 NOM Andrew PV-rain before PV-see NOM woman  
 Intended: ‘It rained [<sub>island</sub> before Andrew saw the woman].’

(28) **HTLD is island-insensitive:**

- a. Su babayi # pig-uran [<sub>island</sub> bagu pig-hiling =siya ni Andrew ].  
 NOM woman PV-rain before PV-see NOM.3sg GEN Andrew  
 ‘The woman<sub>i</sub>, it rained [<sub>island</sub> before Andrew saw her<sub>i</sub>].’
- b. Si Andrew # pig-uran [<sub>island</sub> bagu pig-hiling =niya su babayi ].  
 NOM Andrew PV-rain before PV-see GEN.3sg NOM woman  
 ‘Andrew<sub>i</sub>, it rained [<sub>island</sub> before he<sub>i</sub> saw the woman].’

Probing is subject to the Phase Impenetrability Condition (Chomsky, 2000); i.e. [<sub>PROBE:TOP</sub>] on Top<sub>1</sub> cannot probe into the complement of *v* and attract a matching goal. In AV clauses, this means that only one DP can be topicalized: the agent subject; see (19a). In NAV clauses, two DPs are potentially accessible for probing: the subject and the non-subject agent, which are both specifiers of *v*P; see (19b). Non-subject themes are not accessible for topicalization because of Phase Impenetrability. This accounts for the patterns of topicalizability documented in section 3: subjects and non-subject agents are the only DPs which can be topicalized.

[<sub>PROBE:TOP</sub>] will find the closest accessible target with the [<sub>TOP</sub>] feature. In cases of non-subject agent topicalization observed above, the non-subject agent bears a [<sub>TOP</sub>] feature but the subject

does not. Because the subject does not bear the feature that the probe seeks, it does not intervene for the topicalization of the non-subject agent.

Once a DP occupies Spec,Top<sub>1</sub>P or Spec,Top<sub>2</sub>P, if it has not received structural case, it will be realized with default nominative case; see (25) above. This explains the appearance of nominative case on non-subject topics, as in (29), which correspond to a post-verbal gap or pronoun which receives genitive or dative case.

(29) **Nominative case on non-subject topics:**

a. **Su babayi** k<in>aon su keso. = (13)

NOM woman PV-eat NOM cheese

'The woman ate the cheese.'

b. **Su babayi #** k<in>aon =niya su keso. = (16)

NOM woman PV-eat GEN.3sg NOM cheese

'The woman<sub>i</sub>, she<sub>i</sub> ate the cheese.'

c. **Su keso #** nag-kaon su babayi sainya. = (17)

NOM cheese AV-eat NOM woman DAT.3sg

'The cheese<sub>i</sub>, the woman ate it<sub>i</sub>.'

Our analysis also accounts for the unambiguous interpretation of examples such as those in (29) with two nominative arguments. As noted above, the only argument that can receive nominative case and be in a post-verbal position (and therefore within *v*P) is the subject, which receives structural nominative from T. Therefore, the post-verbal nominative 'cheese' in (29a,b) is necessarily the theme subject of the PV verb and the post-verbal nominative 'woman' in (29c) is necessarily the agent subject of the AV verb. The pre-verbal topic then is unambiguously interpreted as the other core argument, corresponding to the post-verbal gap or pronoun.

### 4.3 Multiple topic constructions

The analysis presented for the two topic constructions is supported by examples with multiple pre-verbal topics. We first consider the two grammatical PV examples in (30). Both topics in (30)

are in nominative case, as is independently predicted for each topic construction.

(30) **PV clauses with multiple topics:**

- a. Si Pedro # su babayi g<in>adan (=niya).  
 NOM Pedro NOM woman PV-kill GEN.3sg  
 i. 'Pedro<sub>i</sub>, he<sub>i</sub> killed the woman.'  
 ii. \* 'Pedro<sub>i</sub>, the woman killed him<sub>i</sub>.'
- b. Si Pedro # su babayi g<in>adan =siya.  
 NOM Pedro NOM woman PV-kill NOM.3sg  
 i. \* 'Pedro<sub>i</sub>, he<sub>i</sub> killed the woman.'  
 ii. 'Pedro<sub>i</sub>, the woman killed him<sub>i</sub>.'

Both examples in (30) are PV clauses with two pre-verbal DPs — Pedro and *babayi* 'woman' — but they differ in their interpretation, depending on the choice of post-verbal pronoun. In (30a), Pedro is the agent, corresponding to the post-verbal genitive pronoun, while *babayi* is the theme subject.<sup>19</sup> In (30b), Pedro is the theme subject, corresponding to the post-verbal nominative pronoun, while *babayi* 'woman' is the agent. Both examples are unambiguous in their interpretation.

The generalization is as follows. In these sequences of two topics, the first topic is a hanging topic, with a prosodic break and corresponding post-verbal pronoun, whereas the second topic is the result of topicalization. Example (31) below shows that it is not possible to add a prosodic break after the second topic, with or without a break after the first topic, and regardless of the choice of post-verbal pronoun.

(31) **No prosodic break possible after the second DP:**

- \*Si Pedro (#) su babayi # g<in>adan (=niya/=siya).  
 NOM Pedro NOM woman PV-kill GEN.3sg/NOM.3sg

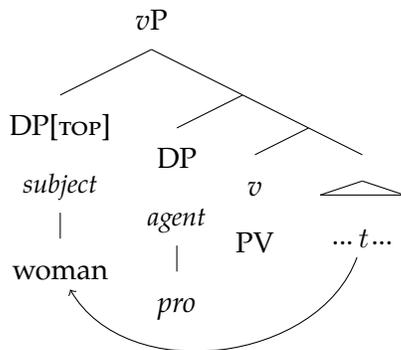
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<sup>19</sup>But note that the genitive clitic pronoun is optional in this example. We nonetheless analyze Pedro in (30a) as the result of HTLD, as it must be followed by its characteristic prosodic break, but with the pronunciation of its bound pronoun being optional. At this point we are unable to describe the precise conditions which govern this optionality, and leave this question open for future work.

This data in (30–31) supports our proposal that topics with a prosodic break and corresponding pronoun (hanging topics in Spec,Top<sub>2</sub>P) are structurally higher than topics with no break and no corresponding pronoun (movement-derived topics in Spec,Top<sub>1</sub>P).

Let’s consider the derivation of each of these PV multiple topic examples in (30). We first consider the derivation of (30a). Here there is a hanging topic binding an agent pronoun and a topicalized theme subject. We therefore begin by constructing a PV clause with the full DP ‘woman’ with a [TOP] feature as the theme subject and a pronoun as the agent DP. Following movement of the theme subject to an outer specifier of the *v*P, we result in a *v*P organized as in (32):

(32) *v*P for (30a):



The rest of the clausal spine is built following the hierarchy in (26), beginning with the merger of T. [PROBE:D] on T will Agree with the closest DP, assigning *babayi* ‘woman’ nominative case. The agent pronoun is in *v*P so it receives default genitive case. Top<sub>1</sub> is merged and its [PROBE:TOP] Agrees with the subject DP ‘woman’ and fronts it to Spec,Top<sub>1</sub>P. Top<sub>2</sub> is then merged together with another DP, Pedro, as its specifier, which binds the lower agent pronoun.<sup>20</sup> The clause is complete once we merge the C head to form the root CP. The resulting hierarchical structure is as in (33a) below, together with its final linearized structure in (33b).

(33) **Final structure for (30a):**

a. [CP [Top<sub>2</sub>P Pedro<sub>i</sub> Top<sub>2</sub> [Top<sub>1</sub>P woman Top<sub>1</sub> [TP T [*v*P *t*<sub>th/subj</sub> [*pro*<sub>ag,i</sub> [*v* ...

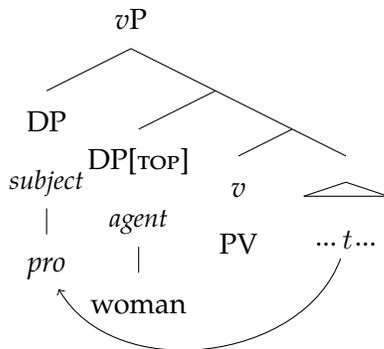
<sup>20</sup>We can think of the Top<sub>2</sub> head itself as having the semantics of a binder, as in Büring 2005 or similar to Constant 2014’s functional head for contrastive topics.

- b. “NOM=DP<sub>i</sub> # NOM=DP<sub>th/subj</sub> PV-V =*pro*<sub>ag,i</sub>.GEN”  
 ⇒ “si Pedro<sub>i</sub>, su babayi ginadan=*niya*<sub>i</sub>”  
 ‘Pedro<sub>i</sub>, he<sub>i</sub> killed the woman.’

Both topics are realized in nominative case: *babayi* ‘woman’ bears structural nominative from T whereas Pedro receives default nominative in the CP. The hanging topic in Spec,Top<sub>1</sub>P is followed by a prosodic break. The post-verbal pronoun is genitive and thus appears in the =*niya* form.<sup>21</sup> This results in the correct surface form attested in (30a), and also derives the correct, unambiguous interpretation for this string.

Next we turn to the derivation of example (30b). This example is superficially similar to (30a) but with a post-verbal nominative pronoun in place of the genitive pronoun in (30a), resulting in a markedly different interpretation, ‘Pedro, the woman killed him.’ We begin by building a PV *v*P with a pronoun theme subject moving to its outer specifier, above the [TOP]-marked agent DP *babayi*.

(34) *v*P for (30b):



We now build the higher phase. T is merged and [PROBE:D] Agrees with the closest DP target, which is the subject pronoun, assigning it nominative case. Next, Top<sub>1</sub> is merged and its [PROBE:TOP] finds the agent DP and moves it to Spec,Top<sub>1</sub>P. The Top<sub>2</sub> head is merged with its specifier, Pedro, which binds the theme subject pronoun. After merging C, we yield the structure in (35):

<sup>21</sup>The animate genitive pronoun is a clitic, =*niya*, which must later form a morphophonological word with a higher verbal functional head through an operation such as morphological merger (Embick and Noyer, 2001; Matushansky, 2006). See also Cardinaletti and Starke 1999 and Erlewine and Levin 2018.

(35) **Final structure for (30b):**

- a. [CP [Top2P Pedro<sub>i</sub> Top2 [Top1P woman Top1 [TP T [vP =*pro*<sub>th/subj,i</sub> [ t<sub>ag</sub> [ v ...
- b. “NOM=DP<sub>i</sub> # NOM=DP<sub>ag</sub> PV-V =*pro*<sub>th/subj,i</sub>.NOM”  
⇒ “si Pedro<sub>i</sub>, su babayi ginadan=siya<sub>i</sub>”  
‘Pedro<sub>i</sub>, the woman killed him<sub>i</sub>.’

Both topic DPs are in nominative case because they are pronounced in the CP phase. In addition, the clitic pronoun also received structural nominative case, resulting in the post-verbal clitic =*siya*. This results in the correct surface form in (30b), with the correct interpretation.

So far we’ve looked at multiple topics in a PV clause. Under our proposal both the subject and non-subject agent in a NAV clause are at the vP phase edge and thus accessible for topicalization, and both arguments can be targeted for HTLD as well. This allowed for the two minimally contrasting examples in (30) above which are both grammatical but with differing interpretations. But now consider multiple topics in an AV clause. Here we observe an asymmetry: Example (36a) is grammatical with its post-verbal dative pronoun, whereas (36b) is ungrammatical with its post-verbal nominative pronoun.

(36) **AV clauses with multiple topics:**

- a. Su eskwela # su lalaki nag-gadan sainya.  
NOM student NOM man AV-kill DAT.3sg  
i. ‘The student<sub>i</sub>, the man killed him<sub>i</sub>.’  
ii. \* ‘The student<sub>i</sub>, he<sub>i</sub> killed the man.’
- b. \*Su eskwela # su lalaki nag-gadan =siya.  
NOM student NOM man AV-kill NOM.3sg  
Intended: ‘The student<sub>i</sub>, he<sub>i</sub> killed the man.’

This asymmetry is predicted by our account. Following our proposal and the discussion of the PV examples in (30) above, the outer, hanging topic *eskwela* ‘student’ in (36) must bind the post-verbal pronoun, with the inner topic *lalaki* ‘man’ being moved from its base position. In an AV clause, only the agent subject is at the vP phase edge and thus available for topicalization. In

contrast, HTLD is not similarly limited as it does not involve movement. This together explains the grammaticality of example (36a). Example (36b) is ungrammatical because the non-subject theme *lalaki* ‘man’ would have to be moved from within the lower phase, in violation of Phase Impenetrability. This asymmetry observed in AV clauses with multiple topics in (36) thus further supports both our analysis for the difference between topicalization and HTLD as well as our proposal for the syntax of AV and NAV clauses, following Rackowski 2002, Aldridge 2004, and Rackowski and Richards 2005.

Our proposal for the derivation of topics via movement (topicalization) and base-generation (HTLD) thus accounts for basic patterns of topicalization but also more complex multiple topic patterns. Topicalization occurs when Top<sub>1</sub>’s [PROBE:TOP] moves its target. Subjects and non-subject agents are the only arguments at the *v*P phase edge, accessible for [TOP] probing from the higher phase. Non-subject themes are not accessible for topicalization, due to Phase Impenetrability. In contrast, hanging topics are base-generated high in Spec,Top<sub>2</sub>P, involving no movement and thus no sensitivity to the phase edge. Finally, both types of topics are necessarily in nominative case, either by being the subject which has received structural nominative from T, or by lacking structural case and bearing default nominative in the CP.

#### 4.4 Clefts

Recall that, unlike local topicalization, local clefting is limited to the subject:

(37) **Grammatical local subject cleft:** = (10a)

[<sub>focus</sub> Su lalaki] su [<sub>background</sub> g<in>adan kaso eskwela].  
 NOM man NOM PV-kill GEN student

‘It’s the man that the student killed.’

(38) **Ungrammatical local non-subject agent cleft:** = (10b)

\*[<sub>focus</sub> Su eskwela] su [<sub>background</sub> g<in>adan su lalaki].  
 NOM student NOM PV-kill NOM man

Intended: ‘It’s the student that killed the man.’

We propose that clefting involves a probe which attracts the closest [D], [PROBE:D]. This is functionally equivalent to Aldridge’s (2004; 2017) proposal where, in her terms, extraction involves a [ $u\phi$ ] probe. [PROBE:D] will necessarily target the closest constituent with a [D] feature. We furthermore propose that the background clause of a cleft is reduced, so it does not include the Top<sub>1</sub> or Top<sub>2</sub> projections proposed in the previous section. Concretely, we will assume here that the background clause is a TP in size.

As proposed by this analysis, clefting is island-sensitive. This is demonstrated with an adjunct island in (39). The island-sensitivity of clefting here can be contrasted to the island-insensitivity of HTLD in (28) above.

(39) **Clefting is island-sensitive:**

- a. \*<sub>[focus]</sub> Su babayi su <sub>[background]</sub> pig-uran <sub>[island]</sub> bagu pig-hiling ni Andrew]].  
 NOM woman NOM PV-rain before PV-see GEN Andrew

Intended: ‘It’s the woman that it rained <sub>[island]</sub> before Andrew saw *t*.’

- b. \*<sub>[focus]</sub> Si Andrew su <sub>[background]</sub> pig-uran <sub>[island]</sub> bagu pig-hiling su babayi]].  
 NOM Andrew NOM PV-rain before PV-see NOM woman

Intended: ‘It’s Andrew that it rained <sub>[island]</sub> before *t* saw the woman.’

Recall too that local clefts must have a post-verbal gap in the background clause, corresponding to the focus, further supporting their derivation via movement. (See examples (9–10) above.) This detail will become important in section 5, where we will see that long-distance clefts can have a pronoun in place of a gap.

We note that both aspects of our proposal for the structure of clefts — attraction by [PROBE:D] and the reduced size of the background clause — are necessary in order to derive their strict subject-only behavior, reflected in (37–38). If a more selective probe such as a hypothetical [PROBE:FOC] were utilized, we would predict that a non-[FOC] subject DP could be skipped, allowing the cleft to attract a [FOC] non-subject agent instead, just as we proposed that topicalization involves [PROBE:TOP].

At the same time, if the background clause contained Top<sub>1</sub> or Top<sub>2</sub>, a topic could be built first, making a non-subject argument the highest DP within the background clause. Subsequent

clefting with [PROBE:D] would be predicted to be able to attract that non-subject argument, fed by topicalization or HTLD within the background clause. One might imagine that this hypothetical possibility is independently ruled out, for example due to some inherent information-structural incompatibility between topics and foci. However, as we will see in the following section, precisely this interaction — topicalization feeding higher clefting — is possible from full CP embedded clauses in Bikol. Therefore, in order to derive the subject-only restriction on local clefts, we must additionally propose that the background clause is not a full CP.

#### 4.5 Summary

In this section we presented our proposal for Bikol clause structure, morphological case, topics, and clefts, following in large part previous work on the analysis of Philippine voice as in Rackowski 2002, Aldridge 2004, and Rackowski and Richards 2005. Concentrating on the salient difference between the two movement operations of topicalization and clefting, we proposed a locality-based account for the differing extraction restrictions.

Our analysis builds on common Minimalist assumptions regarding the locality of syntactic operations. In particular, movement is subject to Phase Impenetrability and is triggered by a probe which must target its closest goal (Chomsky, 2000, 2001 and many others). Following Aldridge 2004, 2017, the subject-only restriction on clefting is due to the probe involved ([PROBE:D]) necessarily attracting the highest DP. Topicalization instead involves an information-structurally articulated probe, [PROBE:TOP], which can skip a non-[TOP] subject DP to attract a non-subject agent topic. Phase Impenetrability explains the inability of topicalizing non-subject themes, which are not at the *v*P phase edge.

We additionally note that the differing behavior of local clefting and topicalization forms an argument against the Equidistance hypothesis. Equidistance (Chomsky 2000: 122, 130, 2001: 27) is a hypothesis that predicts that multiple specifiers of a single projection are “equidistant” from higher probes for the purposes of locality.<sup>22</sup> If both the subject and non-subject agent of a NAV clause both featurally match a higher probe (for example, [PROBE:D]), the probe could then Agree

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<sup>22</sup>See also Doggett 2004 for further discussion of Equidistance and independent criticism.

with either specifier of *v*P without incurring a violation. In Bikol, adopting Equidistance would incorrectly predict that non-subject agents could be clefted or receive nominative case. In contrast, we adopt a strict view of probe locality without Equidistance, where an outer specifier counts as closer to a higher probe than an inner specifier, but with clefting and topicalization probing for different features. This successfully derives the attested patterns of clefting and topicalization in the language.

Finally, we note that under our view, nothing about clefting is inherently linked to subjecthood. As proposed in section 4.4 above, background clauses of a local cleft are simply structured so that the subject is necessarily the highest DP. We predict that if there is a strategy for making a non-subject DP the closest to the cleft's probe, clefting would target this non-subject DP instead. We will see that this is the case in the next section, where we consider long-distance clefts.

## 5 Long-distance clefts and the Austronesian extraction restriction

In this section, we take a closer look at the nature of the famed Austronesian subject-only extraction restriction. We have seen that, in Bikol, this restriction is obeyed by local clefting but not by local topicalization or HTLD, so our approach will be to further study clefting in Bikol. At first glance, there are a number of different ways to characterize this type of extraction restriction:

(40) **Three characterizations of the classic Austronesian extraction restriction:**

- i. Subject-only: Only arguments cross-referenced by voice ("subjects") can be extracted.
- ii. Nominative-only: Only nominative arguments can be extracted.
- iii. Locality-based: Only the structurally highest argument can be extracted.

The challenge is to distinguish between these three different descriptions. Every clause has only one subject, which is in nominative case. Assuming that a topic cannot take be formed first (see section 4.4 above), every clause also only has one nominative argument, which is that subject. And assuming the basic proposal for the hierarchical structure of voice system languages (section 4.1 above), the highest argument in every clause will be the subject, in nominative case. Therefore, in basic examples of local clefting, these three descriptions in (40) are extensionally equivalent:

The subject is the only nominative argument, and is structurally highest. The study of local clefts alone does not allow us to determine the correct characterization of this restriction.

For this reason, in this section we will study long-distance clefting in Bikol. We begin in section 5.1 with some preliminary discussion of long-distance extraction in voice system languages. The core data on long-distance clefting will be presented in section 5.2. Unlike local clefts, long-distance clefting can target embedded non-subject agents as well as embedded subjects, which forms an argument against the “subject-only” characterization of clefting in (40i). We propose that, in such examples, embedded topicalization takes place first and feeds clefting. We support this approach, in section 5.3, with additional data from the interaction of long-distance clefting and embedded topics. In the end, we will be able to tease apart the “nominative-only” (40ii) and locality-based (40iii) approaches, solidifying our argument that the Austronesian extraction restriction exemplified by Bikol clefting must be described in terms of hierarchical structural configurations and the locality of syntactic operations.

### 5.1 Background: Voice systems and long-distance extraction

Just as  $\bar{A}$ -extraction from local clauses is limited in languages with Austronesian-type voice systems, long-distance extraction is also constrained in a similar fashion. Descriptively, extraction out of an embedded clause in Bikol requires that the embedded clause itself be the grammatical “subject” of the higher clause. In other words, long-distance  $\bar{A}$ -movement is always subextraction from a sentential subject. This pattern has been well-documented in Tagalog since Kroeger 1991: ch. 7, and is also a major point of the Rackowski and Richards 2005 analysis of Tagalog, discussed above.

Here we consider the long-distance clefting of embedded subjects, as in the grammatical examples in (41). The subjects of the embedded clauses are the theme Andrew in (41a), where the embedded clause is PV, and the agent ‘man’ in (41b), where the embedded clause is AV.

(41) **Long-distance clefting is grammatical across a PV verb:**

- a. Si Andrew su [TP pig-balita ning radyo [CP na g<in>adan kaso lalaki.  
 NOM Andrew NOM PV-report GEN radio that PV-kill GEN man  
 ‘It’s Andrew that the radio reported that the man killed *t*.’

- b. Su lalaki su [TP pig-balita ning radyo [CP na nag-gadan ki Andrew.  
 NOM man NOM PV-report GEN radio that AV-kill DAT Andrew  
 ‘It’s the man that the radio reported that *t* killed Andrew.’

Notice that in both cases the higher verb ‘report’ is in PV, with its agent ‘radio’ in genitive case as expected. We can think of the complement clause ‘that the man killed Andrew’ as the grammatical “subject” of the verb ‘report’ in PV, although CPs do not exhibit morphological case marking. The embedded subject is then subextracted out of the sentential subject to yield the grammatical cleft in (41).

The higher verb must be PV for this long-distance extraction to take place. Example (42) below minimally contrasts from (41a), with the higher ‘report’ clause in AV, and the result is ungrammatical. The subject of this higher clause is the agent ‘radio,’ instead of the complement clause.

(42) **Long-distance clefting is ungrammatical across an AV matrix clause:**

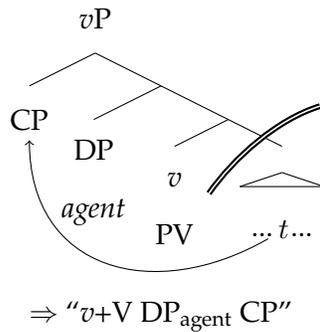
- \*Si Andrew su [TP nag-balita su radyo [CP na g<in>adan kaso lalaki.  
 NOM Andrew NOM AV-report NOM radio that PV-kill GEN man  
 Intended: ‘It’s Andrew that the radio reported that the man killed *t*.’

Under the Minimalist probe-driven conception of movement adopted here, what is important for our purposes is that the highest DP within the embedded CP will count as the “closest” for the cleft’s [PROBE:D] in (41), instead of the agent DP of the verb ‘report.’ Different approaches could be taken, but for concreteness here we briefly present and follow the analysis of long-distance extraction from Rackowski and Richards’ study of Tagalog. In grammatical cases of long-distance extraction as in (41), the complement CP itself moves to an outer Spec,*v*P above any agent DP. The verb is in the PV form, correlating with this movement of the theme to Spec,*v*P. This structure is illustrated in (26). Recall that *v*P will be linearized with the verbal complex leftmost, explaining the final word order.<sup>23</sup>

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<sup>23</sup>Embedded clauses are descriptively rightmost, which could be due to CP extraposition (see Van Urk and Richards, 2015) or an effect of the relative prosodic weight of CPs.

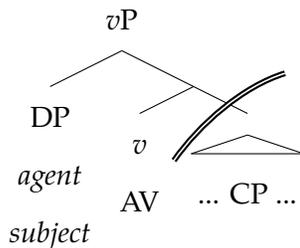
(43) An embedded CP in Spec,*v*P (PV), as in (41):



Rackowski & Richards propose that the movement of CP to Spec,*v*P involves the establishment of an Agree relationship with the CP, which makes it transparent for probing from above.<sup>24</sup> The cleft's [PROBE:D] will search into the subject CP first, matching with the highest DP goal within.<sup>25</sup> The result will be that [PROBE:D] will target the highest DP within the embedded CP rather than the matrix agent DP.

In contrast, if the higher verb is in AV as in (42), the complement CP will not move to Spec,*v*P. Due to Phase Impenetrability, it is impossible to probe into the CP which is inside the lower VP.

(44) An embedded CP in the complement of *v* (AV), as in (42):



The licit and illicit patterns of probing from above for a goal in the lower phase are summarized in (45). In simple cases of probing for a local goal, the goal must be in Spec,*v*P to be accessible for probing from above (45a–b) due to Phase Impenetrability, making subjects and non-subject agents

<sup>24</sup>Independent evidence from Zulu (Halpert, 2012, 2016: ch. 6, Halpert, in press), Dinka (Van Urk and Richards, 2015), and Hungarian (Den Dikken, 2018: ch. 4) support the idea that an Agree relationship with a CP is necessary for probing into it.

<sup>25</sup>A related and important detail in this configuration in (26) is that [PROBE:D] on T cannot skip the subject CP and Agree with the agent DP, which would otherwise predict the availability of nominative case on the agent DP in (41).

uniquely visible for probing from above. In cases where the goal is embedded within a CP, that CP itself must move to Spec,*v*P in order to escape Phase Impenetrability (45c–d).<sup>26</sup>

(45) **Patterns of probing:**

- |    |   |   |         |
|----|---|---|---------|
| a. | *PROBE ... [ <i>v</i> P                   | <i>v</i> <sub>AV</sub> [VP ... GOAL               |         |
| b. | PROBE ... [ <i>v</i> P GOAL               | <i>v</i> <sub>PV</sub> [VP ...                    |         |
| c. | *PROBE ... [ <i>v</i> P                   | <i>v</i> <sub>AV</sub> [VP ... [CP ... GOAL ... ] | (42/44) |
| d. | PROBE ... [ <i>v</i> P [CP ... GOAL ... ] | <i>v</i> <sub>PV</sub> [VP ...                    | (41/43) |

For these reasons, in all subsequent examples of long-distance clefting, the higher verb will be in PV. Such examples become ungrammatical with a different choice of voice marking, as in (42) above.

## 5.2 Long-distance clefting

As noted briefly above, long-distance clefting in Bikol differs from local clefting in being able to target non-subject agents as well as subjects. We have seen in example (41) above that embedded subjects can be clefted long-distance. Example (46), repeated from (4) above, shows that embedded non-subject agents can also be clefted long-distance. This clearly contrasts from the behavior of local clefts, which can only target subjects.

(46) **Long-distance cleft of embedded non-subject agent:** = (4)

Su eskwela su [<sub>TP</sub> pig-balita ning radyo [<sub>CP</sub> na g<in>adan su lalaki.  
 NOM student NOM PV-report GEN radio that PV-kill NOM man  
 ‘It’s the student that the radio reported *t* killed the man.’

We propose that long-distance clefting of non-subject agents as in (46) involves a first step of embedded topicalization, followed by long-distance clefting. First, we note that topicalization can take place within embedded clauses, moving a non-subject agent to the embedded CP clause

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<sup>26</sup>In their study of the Nilotic language Dinka, Van Urk and Richards (2015) have similarly argued that movement of an embedded CP to Spec,*v*P is necessary in order to extract out of that CP.

edge. Just as in topicalization in local matrix clauses, the non-subject agent topic *eskwela* ‘student’ appears in nominative case in (47).

(47) **Embedded topicalization of a non-subject agent:**

Pig-balita ning radyo [CP na **su eskwela** g<in>adan su lalaki.  
 PV-report GEN radio that NOM student PV-kill NOM man  
 ‘The radio reported that the student killed the man.’

The embedded non-subject agent *eskwela* ‘student’ is now the highest DP in the embedded CP in (47). If we cleft from (47), [PROBE:D] will search into the embedded CP, as the higher verb ‘report’ is PV, and attract the highest DP in the embedded clause. This allows for the successful derivation of the long-distance non-subject agent cleft in (46).

Now recall that Bikol also has another way to form topics, HTLD, associated with a prosodic break and a corresponding pronoun. HTLD can also target embedded CP edges, as demonstrated with an embedded non-subject agent hanging topic in (48). Clefting using [PROBE:D] from this structure in (48) will yield a long-distance non-subject agent cleft with a corresponding lower pronoun, which is indeed grammatical, in (49). (Topicalization and HTLD can in fact co-occur at an embedded clause edge, which will be discussed in the following section.)

(48) **Embedded HTLD of a non-subject agent:**

Pig-balita ning radyo [CP na **su eskwela #** g<in>adan =niya su lalaki.  
 PV-report GEN radio that NOM student PV-kill GEN.3sg NOM man  
 ‘The radio reported that, the student<sub>i</sub>, he<sub>i</sub> killed the man.’

(49) **Long-distance non-subject agent cleft with pronoun:**

Su eskwela su [TP pig-balita ning radyo [CP na g<in>adan =niya su lalaki.  
 NOM student NOM PV-report GEN radio that PV-kill GEN.3sg NOM man  
 ‘It’s the student<sub>i</sub> that the radio reported that he<sub>i</sub> killed the man.’ = (46)

Note that the cleft focus in (49) is not followed by the prosodic break associated with hanging topics (48). This is, however, predicted by our account, where the prosodic break associated with HTLD is tied to the pronunciation of a constituent in Spec,Top<sub>2</sub>P.

Furthermore, in contrast to topicalization, HTLD can also target non-subject themes. This predicts that an embedded non-subject theme can be clefted as long as it is fed by HTLD, not topicalization, making the corresponding embedded pronoun obligatory. This is borne out in (50).

(50) **Long-distance non-subject theme cleft requires pronoun:**

\*Su eskwela su [TP pig-balita ning radyo [CP na nag-gadan su lalaki \*(sainya).  
 NOM student NOM PV-report GEN radio that AV-kill NOM man DAT.3sg  
 'It's the student<sub>i</sub> that the radio reported that the man killed *him<sub>i</sub>*.'

In this section we've concentrated on the possibility of topicalization or HTLD feeding clefting as a means of clefting embedded non-subject arguments, but the same approach can also yield long-distance clefts of an embedded subject. As predicted by this approach, long-distance subject clefts as in (41) can also be accompanied by corresponding lower pronouns, which we propose reflects embedded HTLD followed by clefting.<sup>27</sup>

(51) **Long-distance subject cleft with pronoun, reflecting embedded HTLD:**

Si Andrew su [TP pig-balita ning radyo [CP na g<in>adan =siya kaso lalaki.  
 NOM Andrew NOM PV-report GEN radio that PV-kill NOM.3sg GEN man  
 'It's Andrew<sub>i</sub> that the radio reported that the man killed *him<sub>i</sub>*.' = (41)

The patterns of possible long-distance clefting with and without a corresponding pronoun are summarized in (52) below, together with the possibilities for different local dependencies from section 3 above. Local and long-distance clefting differ in two ways: long-distance clefting can have a corresponding pronoun, while local clefting cannot, and long-distance clefting can target a

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<sup>27</sup>In the case of long-distance subject clefting with a gap, as in (41) above, we hypothesize that its derivation may or may not involve a first step of embedded topicalization of the subject. These derivations may be practically indistinguishable.

greater range of possible DP arguments as its focus, also dependent upon the presence or absence of a pronoun.

(52) **Possible DP targets for local and long-distance dependencies, based on (18):**

	subject	non-subject agent	non-subject theme
local clefting (gap)	○	×	×
local topicalization (gap)	○	○	×
local HTLD (pronoun)	○	○	○
long-distance clefting (gap)	○ (41)	○ (46)	×
long-distance clefting (pronoun)	○ (51)	○ (49)	○ (50)

Our proposal that embedded topicalization and HTLD can feed long-distance clefting predicts precisely this pattern in (52). Unlike the edge of the cleft’s background clause which is reduced (TP), full CPs include the Top<sub>1</sub> and Top<sub>2</sub> projections, which can make a non-subject the highest DP in the embedded CP, which can then be clefted.

(53) **Long-distance clefting fed by topicalization and HTLD:**

- a. DP<sub>focus</sub> NOM [TP ... [CP *na* [Top<sub>2</sub> [Top<sub>1</sub> \_\_\_] [V ... (41, 46)
- ↑ \_\_\_\_\_ ]
- b. DP<sub>focus</sub> NOM [TP ... [CP *na* [Top<sub>2</sub> \_\_\_<sub>i</sub>] [Top<sub>1</sub> [V *pro*<sub>i</sub> ... (49, 51)
- ↑ \_\_\_\_\_ ]

We have already argued in section 4 that topicalization involves movement, explaining why it is limited to subjects and non-subject agents and leaves a gap, whereas HTLD involves base-generation, explaining why it is not limited to particular arguments and involves a pronoun. Long-distance clefting with a gap can be derived by a first step of embedded topicalization, explaining why it is not strictly subject-oriented, unlike local clefting. Clefting with a pronoun is only possible long-distance, because it is fed by HTLD, and consequently can target any DP argument. This derives the pattern in (52).

Finally, we note that there is a potential conceptual complication to this proposal. We have argued that a single constituent can first be made an embedded topic and then subsequently

clefted, yielding exhaustive focus semantics. Under some approaches to information structure, topic-hood and focus-hood are mutually incompatible. However, here we reiterate that we use the term “topic” (and the corresponding feature label [TOP] for movement topicalization) descriptively to refer to fronting which is not interpreted as an exhaustive focus. In particular, our core findings here would be unaffected if we describe topicalization as an optional, variant clause structure reflecting the presence of an optional feature [X] of no information-structural import.

### 5.3 Long-distance clefting and embedded topics

We have argued that long-distance clefting can involve a first step of embedded topicalization or HTLD. This approach then predicts non-trivial interactions between long-distance clefting and embedded topics. We will discuss such patterns in this section.

First, as a preliminary, we observe that topicalization and HTLD can simultaneously target an embedded clause edge, just as they can simultaneously target the edge of a simplex clause.<sup>28</sup> For ease of presentation, in this section we will use single and double underlines respectively for outer, base-generated hanging topics and inner, movement-derived topics, as well as their corresponding gaps. The two examples in (54) below are string-identical except for the choice of pronoun in the embedded clause and this corresponds to their different interpretations.<sup>29</sup>

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<sup>28</sup>In particular, recall that there are greater possibilities for multiple simultaneous topics in a non-Actor Voice clause than in an Actor Voice clause. (See especially (30) vs (36) above.) We therefore use examples with embedded PV clauses here.

<sup>29</sup>The optionality of the genitive clitic pronoun in (54a) parallels its optionality in unembedded contexts as well, as we observed in section 4.3. As noted there in footnote 19, we analyze such cases as involving an unpronounced variant of the genitive pronoun.

(54) **Multiple topicalization at an embedded clause edge:**

- a. Pig-balita ning radyo [<sub>CP</sub> na su lalaki # su eskwela g<in>adan ?(=niya).  
PV-report GEN radio that NOM man NOM student PV-kill GEN.3sg  
i. \* 'The radio reported that the man<sub>i</sub>, the student killed him<sub>i</sub>.'  
ii. 'The radio reported that the man<sub>i</sub>, he<sub>i</sub> killed the student.'
- b. Pig-balita ning radyo [<sub>CP</sub> na su lalaki # su eskwela g<in>adan =siya.  
PV-report GEN radio that NOM man NOM student PV-kill NOM.3sg  
i. 'The radio reported that the man<sub>i</sub>, the student killed him<sub>i</sub>.'  
ii. \* 'The radio reported that the man<sub>i</sub>, he<sub>i</sub> killed the student.'

In (54a), the hanging topic *lalaki* 'man' is interpreted as the non-subject agent, whereas in (54b), it is interpreted as the theme subject. Just as we established above in section 4.3 for unembedded multiple topic constructions, the generalization is that the post-verbal pronoun unambiguously corresponds to the higher, hanging topic. See (32–35) above for the derivation of these patterns, which also apply to the embedded clauses in (54).

The question now is what options are possible when we build clefts from these structures in (54). On the surface, the resulting clefts in (55) appear as long-distance clefts of *lalaki* 'man' with a single topic at the edge of the embedded clause. The two examples in (55) again differ only in the choice of pronoun after the embedded verb, and each example is unambiguous in its interpretation. Descriptively, the embedded post-verbal pronoun tracks the interpretation of the fronted cleft focus.

(55) **Long-distance clefts with an embedded topic:**

- a. Su lalaki su [TP pig-balita ning radyo [CP na \_\_\_ su eskwela g<in>adan ?(=niya).  
NOM man NOM PV-report GEN radio that NOM student PV-kill GEN.3sg  
i. \* 'It's the man<sub>i</sub> that radio reported that the student killed him<sub>i</sub>.'  
ii. 'It's the man<sub>i</sub> that the radio reported that he<sub>i</sub> killed the student.'
- b. Su lalaki su [TP pig-balita ning radyo [CP na \_\_\_ su eskwela g<in>adan =siya.  
NOM man NOM PV-report GEN radio that NOM student PV-kill NOM.3sg  
i. 'It's the man<sub>i</sub> that radio reported that the student killed him<sub>i</sub>.'  
ii. \* 'It's the man<sub>i</sub> that the radio reported that he<sub>i</sub> killed the student.'

Notice that the interpretations of (55a,b) correspond one-to-one to the interpretations of examples (54a,b) above. That is, each example in (55) is unambiguously interpreted as a cleft of the embedded hanging topic 'man' from (54). We indicate this in (55) with corresponding gaps in the embedded hanging topic positions.

The unavailability of the (i) interpretation in string in (55a) also teaches us that it is not possible to extract a post-verbal subject across a pre-verbal topic. Imagine a derivation where we begin with the embedded clause in (56a). If we were able to cleft the post-verbal subject 'man' out of this embedded clause, across the pre-verbal agent topic 'student,' we would predict the availability of the structure in (56b), as a type of long-distance theme subject cleft. This structure in (56b) is string-identical to (55a) and would have the unattested (55ai) interpretation.

(56) **Extraction of a post-verbal subject across a topic:**

- a. Embedded clause with topicalization:  
... [CP na su eskwela g<in>adan su lalaki  
that NOM student PV-kill NOM man  
'... that the student killed the man.'

- b. Hypothetical cleft of *lalaki* ‘man’ from (a), across the topic *eskwela* ‘student’:

\*Su lalaki su [TP pig-balita ning radyo [CP na su eskwela g<in>adan \_\_\_\_].  
 NOM man NOM PV-report GEN radio that NOM student PV-kill

Intended: ‘It’s the man that the radio reported that the student killed *t*.’ = (55ai)

We return now to the derivation of clefts from the embedded multiple topic structures in (54). The examples in (55) showed that clefting of the outer, hanging topics from (54) is possible. What about clefting the inner, movement-derived topics from (54)? This would result in long-distance clefts with embedded hanging topics, marked by their characteristic prosodic gap, with the cleft foci corresponding to gaps in the embedded inner, movement-derived topic positions. These hypothetical structures with their predicted interpretations are given (57). They are judged as ungrammatical.

(57) **Long-distance clefting across an embedded hanging topic:**

- a. \*Su eskwela su [TP pig-balita ning radyo [CP na su lalaki # \_\_\_\_ g<in>adan (=niya).  
 NOM student NOM PV-report GEN radio that NOM man PV-kill GEN.3sg

Intended: ‘It’s the student that the radio reported that the man<sub>i</sub>, he<sub>i</sub> killed *t*.’

- b. \*Su eskwela su [TP pig-balita ning radyo [CP na su lalaki # \_\_\_\_ g<in>adan =siya.  
 NOM student NOM PV-report GEN radio that NOM man PV-kill NOM.3sg

Intended: ‘It’s the student that the radio reported that the man<sub>i</sub>, *t* killed him<sub>i</sub>.’

The pattern observed in (55) vs (57) is presented schematically in (58) below. The data presented here strengthens the argument that clefting necessarily attracts the DP which is highest and therefore structurally closest to the probe. From a structure with multiple embedded topics as in (54), it is only possible to cleft the higher, embedded hanging topic (55) and not possible to cleft the lower, embedded movement-derived topic (57).

(58) **Long-distance cleft from an embedded clause with two topics:**

a.  $\underline{\text{DP}}_{\text{focus}} \text{ NOM } [\text{TP} \dots [\text{CP } na \text{ } [\text{Top2} \text{ } \_\_ ]_i \text{ } [\text{Top1} \text{ } \underline{\text{DP}} \text{ } [ \text{V } pro_i \dots ]$  (55)

b.  $*\underline{\text{DP}}_{\text{focus}} \text{ NOM } [\text{TP} \dots [\text{CP } na \text{ } [\text{Top2} \text{ } \underline{\text{DP}}_i \text{ } [\text{Top1} \text{ } \_\_ ] [ \text{V } pro_i \dots ]$  (57)

Similarly, from a clause with one pre-verbal topic and one post-verbal subject, it is not possible to extract the subject across the topic (56).

Moreover, recall from the previous section that topicalization can feed clefting in cases where there is no embedded hanging topic. This configuration is repeated here in (59) from (53a) above. The ungrammaticality of (58b) therefore cannot be attributed to a general immobility of inner, movement-derived topics.

(59) **Long-distance clefting can target a movement-derived topic:** = (53a)

$\underline{\text{DP}}_{\text{focus}} \text{ NOM } [\text{TP} \dots [\text{CP } na \text{ } [\text{Top2} \text{ } \_\_ ]_{\text{Top1}} \text{ } \_\_ ] [ \text{V} \dots ]$  (41, 46)

Such data helps us to distinguish between the “nominative-only” and locality-based characterizations of the Austronesian extraction restriction in (40) above. Although it is true that all DPs which can be clefted are nominative in their lower positions (subjects or topics), being nominative is not a sufficient condition to be clefted. That is, the proper characterization of the restriction on clefting cannot be that *any* nominative phrase can be clefted. Even if being nominative is a prerequisite for clefting — see e.g. Deal 2017 on deriving extraction asymmetries through case-discriminating probing — only the highest nominative DP can be clefted. In fact, because the structurally highest DP within any clause will necessarily be in nominative case (either a subject which receives nominative case from T, or a topic which has moved into the CP phase), a restriction of the cleft’s probe to nominative goals is unnecessary. The extraction restriction inevitably must make reference to locality, and any characterization additionally making reference to nominative case targets must be rejected on grounds of theoretical parsimony.

Finally, we note that this concluding lesson can also be translated into ergative hypothesis terms. As noted in section 2 above, there are many works which describe Philippine voice system

languages such as Bikol as exhibiting ergative/absolute alignment. This includes Aldridge 2004, whose influential approach to the basic clause structure of voice systems, we have adopted here. In brief, for these authors, what we have described here as nominative case is better described as absolute, and  $\bar{A}$ -extraction in these languages exhibit “syntactic ergativity”: in particular, an “absolute-only” extraction restriction. If we were to adopt the ergative hypothesis as a mode of description, we would conclude that the syntactic ergativity observed in Austronesian voice system languages — evidenced in clefts in Bikol — in fact should not be described as an “absolute-only” extraction restriction. The appearance of an “absolute-only” requirement on local clefts is due to the absolute subject argument being structurally highest in a cleft clause. The source of this “syntactic ergativity” then is, again, best described as a locality-based effect.

## 6 Conclusion

In this paper we’ve described and analyzed patterns of clefting and topic formation in Bikol, an Austronesian language of the central Philippines. Our analysis supports the view that the basic Austronesian “subject-only” extraction restriction is best analyzed in terms of hierarchical configurations and the locality of syntactic operations.  $\bar{A}$ -constructions which exhibit this “subject-only” extraction restriction, such as cleft-formation in Bikol, simply involve probing for [D] (Aldridge, 2004, 2017). In local clefts in Bikol, the subject is necessarily the highest DP, but in long-distance clefting, embedded topicalization or hanging topic left dislocation (HTLD) can apply first to feed the cleft with a subject or non-subject argument as its closest DP target. Furthermore, based on the interactions of long-distance clefting and embedded topics studied in the previous section, we conclude that considerations of syntactic locality is a necessary and sufficient condition for explaining the possible patterns for clefting in Bikol. Not only is there no preference for clefts to attract a “subject,” but it is insufficient and unnecessary to describe clefting as a case-discriminating (“nominative-only”) extraction restriction.

At the same time, we observed that topicalization — which is not bound by the basic subject-only restriction, even for local topics — is not completely unconstrained. The movement-derived construction of topicalization can target non-subject agents as well as subjects but not non-subject

themes. This is explained by the organization of the *vP* phase edge in Austronesian voice system languages: the agent is the only specifier of *vP* in Actor Voice, whereas in non-Actor Voices, the subject moves to an outer specifier of *vP*, resulting in two specifiers (Rackowski, 2002; Aldridge, 2004; Rackowski and Richards, 2005; Erlewine and Levin, 2018). *vP* is a phase, with these specifiers of *vP* being the only possible targets for syntactic operations from above. This contrasts with the behavior of HTLD, which can target any DP argument, including non-subject themes. Evidence from island-sensitivity motivates the view that HTLD does not involve movement, unlike topicalization and clefting.

Finally, we note that some examples of non-subject agent topics in other Philippine languages can be found in previous literature. The Tagalog example in (60) comes from De Guzman 1995 and shows that non-subject agents can be topicalized — with or without a corresponding pronoun — but non-subject themes cannot.<sup>30</sup> More recent experimental work by Pizarro-Guevara and Wagers (2018) has confirmed that Tagalog speakers accept non-subject agent topics but not non-subject theme topics, and that local non-subject agent topics are much more acceptable than local non-subject agent clefts.

(60) **Tagalog (De Guzman 1995: 56–57; reproduced in Latrouite 2011: 69):**

a. **Ang nanay,** lu~lutu-in (=niya) ang isda.

NOM mother IPFV~COOK-PV GEN.3sg NOM fish

‘The mother, (she) will cook the fish.’

b. ?? **Ang isda,** mag-lu~luto (nito) ang nanay.

NOM fish AV-IPFV~COOK GEN.DEM NOM mother

Intended: ‘The fish, mother will cook (it).’

Example (61) comes from Sells’s (2000) discussion of Kapampangan and shows a case of a grammatical non-subject agent topic. Non-subject theme topicalization is not attested in this work.

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<sup>30</sup>Miller 1988: 40–41 gives a similar example of a non-subject agent topic, which is also discussed in Kroeger 1991: 214–215. The impossibility of non-subject theme topics is not discussed by either of those authors.

(61) **Kapampangan (Sells, 2000: 124):**

Ing lalaki e =na =ya seli ing mangga.

NOM man not GEN.3sg NOM.3sg bought NOM

'The man did not buy the mango.'

Notice that in each of these grammatical examples, (a) the agent topic is in nominative case, resulting in a sentence with two nominative phrases, but (b) the interpretation of the sentence is unambiguous, and (c) the pronoun corresponding to the pre-verbal topic is in genitive case. These properties are exactly what we have observed in Bikol non-subject agent topicalization.

A similar phenomenon is also attested in Seediq, an Austronesian language of Taiwan (Atayalic), but where topics appear in a clause-final position instead of pre-verbally. Example (62) shows this alternation for a PV agent, with the agent in genitive case in the baseline (62a) but in nominative case in (62b) with a corresponding genitive clitic pronoun. In contrast, example (63) shows that such an alternation is unavailable for non-subject themes. See also Erlewine 2014 for further discussion.

(62) **Seediq non-subject agent topic (Aldridge, 2004: 44–45):**

a. Wada bube-un na Pawan ka dangi=na.

AUX hit-PV GEN Pawan NOM friend=GEN.3sg

b. Wada =na bube-un ka dangi=na ka Pawan-ni.

AUX =GEN.3sg hit-PV NOM friend=GEN.3sg NOM Pawan-DEF

'Pawan hit his friend.'

(63) **Seediq non-subject theme topic (Aldridge, 2004: 45):**

a. M<n>atis patis ka seediq kiya.

AV-write book NOM person that

b. \*M<n>atis ka seediq kiya ka patis.

AV-write NOM person that NOM book

'That person wrote a book.'

Such examples lead us to suspect that the availability of non-subject topics, especially with non-subject agents, may in fact be quite widespread across Philippine-type voice system languages. Examples of this form have largely been ignored in previous discussions of Austronesian syntax, but we believe that they are important data points which show that a characterization of all  $\bar{A}$ -extractions in these languages as strictly subject-only may be overly simplistic. We hope that our investigation into Bikol may offer a template for the description and analysis of the restrictions on different  $\bar{A}$ -dependencies, and we call on other Austronesianists to more carefully investigate such constructions.

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