Clitic pronouns and the lower phase edge*

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SUMMARY

Pronominal paradigms in Philippine-type languages show a robust and curious gap: in transitive clauses pivot arguments and non-pivot agents may have bound pronominal forms, appearing as second position clitics, but pronominal non-pivot themes must be full, free pronouns. This gap teaches us about the organization of the lower phase edge. As cliticization involves a syntactic dependency between the host and argument position and all syntactic dependencies are constrained by phases, the gap is explained if pivots and non-pivot agents are specifiers of the phase head, making them the only DPs accessible for operations from outside of the phase.

RÉSUMÉ

Les paradigmes pronominaux dans les langues du type philippin possèdent un curieux trou persistant : dans les propositions transitives, les arguments centraux et les agents non centraux pourraient avoir des formes pronominales liées, apparaissant comme des clitiques de seconde position, mais les thèmes pronominaux centraux doivent être des pronoms libres et complets. Ce trou nous apprend l'organisation du contour de la phase inférieure. Puisque la cliticisation implique une dépendance syntaxique entre la position de l'hôte et de l'argument et que toute dépendance syntaxique est bornée par les phases, le trou s'explique si les agents centraux et non centraux sont des spécificateurs de la tête de phase; ils sont ainsi les seuls syntagmes déterminants sur lesquels des opérations de l'extérieur de la phase peuvent s'effectuer.

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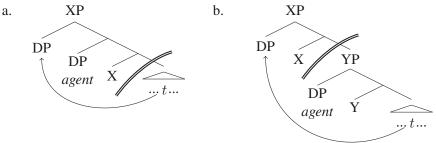
Throughout this paper, morpheme glosses and translations are modified from their sources for uniformity. The following glosses are used: AV = Actor Voice, PV = Patient Voice, LV = Locative Voice; ACC = accusative, GEN = genitive, NOM = nominative; AUX = auxiliary, IRR = irrealis, NEG = negation, PFV = perfective; PROX = proximate.

1 Introduction

Since the identification of a cyclic boundary which separates a lower, thematic domain—often referred to as the vP phase (Chomsky, 2000, 2001; see also Chomsky, 1986)—from a higher domain of the clause, more recent investigations have sought to articulate the fine structure of this lower phase edge (e.g. Pylkkänen, 2008; Travis, 2010; Legate, 2014). Material within the lower domain is inaccessible for syntactic operations from outside of the domain, unless that material occupies the phase edge—the phase head and its specifier(s) (Chomsky, 2000). One such operation is movement. Movement out of the lower phase must stop at its edge.

In this paper, we focus on identifying the precise position of the external argument with respect to the edge of this lower phase. Broadly, two views have been proposed in previous literature: (a) the external argument is generated as the specifier of the phase head, with any movements to the phase edge moving to another specifier (Chomsky, 2000, 2001; Nissenbaum, 2000; Legate, 2003, 2014; Aldridge, 2004, 2008; Rackowski and Richards, 2005; Harley, 2013; a.o.); and (b) the external argument is generated in a projection below the phase head (Marantz, 2001; Collins, 2005; Merchant, 2013; Coon et al., 2014). These two options are illustrated in (1). XP represents the lower phase, together with movement of another argument to the phase edge. The double line delimits the material which is inaccessible to syntactic operations from outside the XP phase.

(1) Two proposals for the lower phase XP, with movement to the phase edge:



We offer a new argument for the structure in (1a), for a range of Austronesian languages, from patterns of attested and unattested clitic pronouns. As we will review in §2, in transitive clauses, many Philippine-type Austronesian languages have two second position clitic pronoun series, corresponding to "pivot" arguments and "non-pivot" agents; bound pronominal forms for non-pivot theme/patient arguments in such clauses are curiously absent. This fact is common to a wide range of Austronesian languages and has been reconstructed in Proto-Austronesian (Ross, 2006). We contend that this paradigmatic gap is not accidental. Cliticization involves a movement relationship from a DP's argument position, within the lower phase, to the clitic's host in second position, outside of the lower phase. Under the organization of the phase edge as in (1a), to be elaborated in §3, the "pivot" argument and non-pivot agent are precisely the only two types of DPs which are accessible for syntactic operations from the higher phase. In §4, we extend the present proposal to intransitive environments and discuss some apparent counter-examples.

2 VOICE SYSTEMS AND CLITIC PRONOUNS

Many Austronesian languages exhibit what has been termed a *voice system*. Key characteristics of such voice systems are described in (2), taken from Erlewine, Levin, and Van Urk (2017: 376):

(2) Characteristics of voice systems:

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

Consider the Squliq Atayal examples in (3). These sentences all describe Yuraw cooking taro, but vary in word order and nominal and verbal morphology. In each example, one argument of the verb, which we call the *pivot* (in italics), is in sentence-final position and preceded by qu, which we gloss as nominative case. Voice morphology on the verb (in bold) correlates with the choice of pivot argument. Note that non-pivot arguments are also case-marked: non-pivot agents are genitive (also the case for possessors), whereas non-pivot themes are unmarked, glossed here as accusative.

- (3) a. Cyux **p**-hapuy sehuy sa knobuy qu *Yuraw*. Actor Voice (AV)

 AUX **AV.IRR**-cook taro(ACC) DAT kitchen NOM *Yuraw*'Yuraw cooks taro in the kitchen.'
 - b. Puy-**un** na Yuraw qu *sehuy*. Patient Voice (PV) cook-**PV** GEN Yuraw nom *taro* 'Yuraw cooked taro.'
 - c. Hpuy-**an** na Yuraw sehuy qu *knobuy*. Locative Voice (LV) cook-Lv GEN Yuraw taro(ACC) NOM *kitchen* 'Yuraw cooks taro in the kitchen.' [Squliq Atayal: Erlewine field notes]

Pronominals in Squliq Atayal can be expressed as free-standing pronouns or as second position clitic pronouns. Clitic pronouns can be used for pivots (4a) and non-pivot agents (4b), but full pronouns must be used for non-pivot themes (5). Notice that the clitic pronouns are hosted by the auxiliary in these examples and therefore appear preverbally, unlike regular DP arguments. In particular, the first person non-pivot theme in (5) is a full pronoun *kuzing*, following the verb. In examples without an auxiliary, clitic pronouns encliticize to the verb.

¹ Many Philippine-type languages have previously been described as exhibiting an ergative/absolutive alignment. See especially Aldridge (2004) for such an analysis of Seediq (Atayalic), and see Erlewine, Levin, and Van Urk (2017) and Chen (2017) for overviews and discussion of the ergative hypothesis. To the best of our understanding, the theoretical import of this paper does not change if the ergative hypothesis, especially that in Aldridge (2004), is adopted.

- (4) a. Nyux=**ku/saku** m-aniq sehuy.

 AUX=**NOM.1sg** AV-eat taro(ACC)
 - b. Nyux=**mu/maku** niq-un qu sehuy.

 AUX=**GEN.1sg** eat-PV NOM taro

 'I am eating taro.'
- (5) Wal=simu m-ita **kuzing**.

 AUX=2pl AV-see **1sg(ACC)**'You(pl) saw me.'

[Squliq Atayal: Erlewine field notes]

One mode of explanation for this gap would be to claim that bound forms do not exist for accusative pronouns. An argument against this alternative comes from languages such as Tagalog, where both non-pivot agents and non-pivot themes bear identical case markers. This is seen in (6).

- (6) a. Naka-kita ang lalaki **ng** ibon.

 AV.PFV-see NOM man **GEN** bird

 'The boy saw a bird.'
 - b. Na-kita **ng** lalaki ang ibon.

 PV.PFV-see **GEN** boy NOM bird

 'The/a boy saw the bird.'

[Tagalog: Henrison Hsieh (p.c.)]

Although both non-pivot agents and non-pivot themes are in genitive case, corresponding pronominal forms do not behave the same. Consider the genitive proximate demonstrative pronoun *nito* 'this one', which exists both as a second position clitic and full pronoun, and can be used both for animates and inanimates. In (7a), *nito* is the non-pivot agent of a PV clause and can appear as a second position clitic, hosted by negation, or appear as a full pronoun, in the postverbal field. In contrast, *nito* is a non-pivot theme in an AV clause in (7b), and can only occur as a full pronoun.

- (7) a. Ang lalaki ang hindi {=nito} na-kita {nito}.

 NOM boy NOM NEG GEN.PROX PV.PFV-see GEN.PROX
 'It's the boy that this one didn't see.'
 - b. Ang lalaki ang hindi {*=nito} naka-kita {nito}.
 NOM boy NOM NEG GEN.PROX AV.PFV-see GEN.PROX
 'It's the boy who didn't see this one.' [Tagalog: Henrison Hsieh (p.c.)]

The contrast in (7) shows that the lack of a clitic pronoun for a non-pivot theme cannot be reduced to surface morphological case. The proximate demonstrative takes the same genitive form *nito* as a non-pivot agent or non-pivot theme, but only the non-pivot agent can use the homophonous bound form, hosted by negation in (7a). The contrast here also forms a poverty-of-the-stimulus argument: Given the optionality in *nito* placement available in (7a), what input leads the child to learn that the same form is only available as a full pronoun and not a clitic if used for a non-pivot theme (7b)?

Similar facts in other Philippine-type Austronesian languages lead to the generalization in (8):

(8) **Generalization:** In transitive clauses, second position clitic pronouns in Philippine-type languages are limited to pivot arguments and non-pivot agents.

A number of clarifications are immediately in order. First, by *Philippine-type* languages we mean the Austronesian voice system languages of the Philippines, Taiwan, Borneo, northern Sulawesi, and Madagascar. This designation stands in contrast to *Indonesian-type* languages which we do not discuss here (see e.g. Blust 2013). Second, the generalization in (8) is limited to transitive clauses. As we demonstrate below, non-pivot themes of unaccusative clauses can also be realized as clitic pronouns. This finding is consistent with the present proposal, and is detailed in §4. Finally, the claim in (8) is not that voice system languages necessarily have clitics for both pivots and non-pivot agents. For example, Malagasy has bound pronominal forms only for non-pivot agents; there are no clitic pronouns for pivots in the language (Paul, 1996; Keenan and Polinsky, 1998; Zribi-Hertz and Mbolatianavalona, 1999).

The generalization in (8) also extends to languages with clitic doubling of full DP arguments. For example, in Nanwang Puyuma, both non-pivot agents and non-pivot themes are in genitive case, marked by *kan* for personal names and *kana* for definite common nouns (Teng, 2008; Chen, 2017). But as noted by Chen (2017: 15–16), the two types of arguments differ in their clitic-doubling behavior: non-pivot agents must be cross-referenced by a corresponding clitic pronoun on the verb, whereas non-pivot themes cannot be doubled by a pronoun.

- (9) a. **Tu**=trakaw-aw na palridring **kan** Siber. **GEN.3**=steal-PV NOM car **GEN** Siber
 - b. Trakaw i Siber kana palridring.

 Av-steal NOM Siber GEN car

 'Siber stole the car.'

[Nanwang Puyuma: Victoria Chen (p.c.)]

Crucially, we will maintain that cliticization and clitic doubling are, for the purposes of syntax, driven by the same operation(s); cliticization should be thought of as an instance of clitic doubling a null pronominal (e.g. Preminger, to appear)

Additionally, as we have previously discussed in Erlewine, Levin, and Van Urk (2017), the key properties of Austronesian voice systems (2) can also be found in Dinka (Nilotic; South Sudan). Dinka clauses are generally V2, with an auxiliary or lexical verb in second position, preceded by the pivot. Patterns of argument cross-referencing in Dinka also obey the generalization in (8). The verb or auxiliary in second position doubles a non-pronominal pivot with a prefix/proclitic. This is \hat{a} - in (10). In addition, if there is a pronominal non-pivot agent, it will appear as a suffix/enclitic on the second position head. This appears as $-k\hat{\mu}$ in (10b). In (11a), the non-pivot agent combines with the default PRF.PV auxiliary $c\hat{\mu}$ to become $c\hat{a}$.

- (10) a. Pêen à-nhiết Bôl. town 3sg-love.pv Bol.gen 'Bol loves the town.'
 - b. Pêen à-nhiár-kù. town 3sg-love.pv-1pl 'We love the town.'
- (11) a. Mòc à-**cá** t<u>î</u>iŋ. man 3sg-prf.pv.2sg see 'You have seen the man.'
 - b. Mòc à-cé yîin tiṇ. man 3sg-prf.av 2sg see 'The man has seen you.'

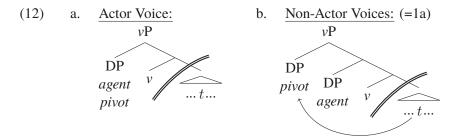
[Dinka: Van Urk to appear; (11a) Van Urk p.c.]

Most notably for our purposes, non-pivot themes must instead use full pronouns, as in (11b).

3 Proposal

The generalization that, in transitive clauses, only pivot arguments and non-pivot agent arguments can appear as second position clitic pronouns (8), can be productively understood as reflecting the organization of the lower phase edge. We adopt a phase-theoretic conception of Austronesian-type voice systems whereby the pivot argument is necessarily the highest DP in the lower phase of the clause (Aldridge, 2004; Rackowski and Richards, 2005), reflecting the intuition that the pivot argument occupies a designated and privileged position in the clause (Guilfoyle, Hung, and Travis, 1992).

We propose that in Philippine-type languages with pivot and non-pivot agent pronouns that are second-position clitics, the agent is base-generated as a specifier of the phase head. Here we refer to this phase as vP, but this label is not crucial; for example, it may be the projection labeled VoiceP as in Legate (2008). In Actor Voice, the external argument is the sole DP specifier at the phase edge (12a). In Non-Actor Voices, the pivot DP moves to an outer specifier of the phase head (12b), which can be thought of as the effect of an EPP feature on v (Aldridge, 2004, 2008) or object shift (Rackowski and Richards, 2005).



One famous property of voice system languages is their pivot-only extraction restriction (Keenan and Comrie, 1977; a.o.), in (2c). The organization of the lower phase edge in (12) *potentially* allows for higher probes to attract either the pivot or the agent in Non-Actor Voices. We follow Aldridge's (2004; 2017) proposal by which the probe triggering \overline{A} -movement to the CP edge will target the closest DP, and therefore will be unable to skip the pivot in Non-Actor Voice clauses (12b). This approach also predicts that, given a more articulated probe, extraction of a non-pivot agent may be possible. Non-pivot agent extraction is, for example, attested in Bikol (Lim and Erlewine, 2018). Similarly, as we have seen in detail above, cliticization also targets non-pivot agents.

Now, we turn to the derivation of second position clitic pronouns, maintaining the following positions. First, recall that we adopt the view that cliticization and clitic doubling are, for the purposes of syntax, driven by the same operation(s). Second, we posit that the second position clitic pronouns discussed here are hosted structurally higher than the lower phase edge. (We discuss another possibility, attested in Kavalan, in fn. 3.) In cases where the clitic pronouns are hosted on the verb, the verb itself has undergone head-movement to a higher position which could be called Aux or T. Finally, and most importantly, we maintain that clitic doubling involves movement. Clitics move from a position occupied by the noun phrase they double, to the host, although the clitic's ultimate surface position may be further affected by morphophonological considerations (see e.g. Billings and Kaufman 2004 for an overview of the factors that determine clitic position). Accounts vary as to

what moves—the head of the doubled noun phase (e.g. Roberts, 2010; Preminger, to appear), a clitic base-generated as a specifier of the doubled noun phrase (e.g. Torrego, 1988; Arregi and Nevins, 2012), or the entire noun phrase (Harizanov, 2014), but the data presented here can be captured under any of these proposals so long as Agree obtains prior to movement (Chomsky, 2000).^{2,3}

With these assumptions in place, the generalization on possible second position clitic pronouns in (8) falls out. First consider the derivation of Non-Actor Voices, (12b). The pivot argument (such as a theme in Patient Voice) and the non-pivot agent *both* occupy specifiers at the lower phase edge. Thus, both are accessible for syntactic operations from above such as clitic doubling. Next, consider the derivation of Actor Voices, (12a). Here, the agent is the pivot and is the only DP at the edge of the lower phase. Thus, the pivot agent is the only DP accessible for syntactic operations from above. Non-pivot themes—which may bear the same morphological case as non-pivot agents—remain within the complement of the phase head in Actor Voice clauses and are inaccessible for clitic doubling. If non-pivot agents were to occupy a position below the phased edge, as in (1b), we would expect them to be unable to be clitic doubled just like non-pivot themes, contrary to fact.⁴

4 Conclusion and extensions

The absence of second position clitic pronominal forms of non-pivot themes in Philippine-type languages follows from the organization of the lower phase edge. Non-pivot themes occupy a VP-internal position and are not visible to syntactic operations from outside of the lower phase. In contrast, pivot arguments, regardless of grammatical function, and non-pivot agents occupy positions at the lower phase edge. Agents are base-generated there; non-agent pivots move there. This pattern is unexpected if agents are generated within the lower phase and not at its edge.

In the remainder of this paper, we demonstrate that some apparent counter-examples are in fact consistent with the present proposal upon further consideration.

4.1 CLITICIZATION IN UNACCUSATIVES

We saw above that Nanwang Puyuma does not permit clitic doubling of non-pivot themes in transitive clauses, (9). But it does permit clitic doubling of such arguments in unaccusatives (Chen, 2017):

- (13) a. **Tu**=trerag-ay **kana** busisi na ruma'. **GEN.3**=fall.down-LV **GEN** bud NOM house 'The buds fell off onto the house.'
 - b. **Ku**=i-ka-latu idri-na barasa. **GEN.1s**=CV-STAT-Stumble this-NOM stone

 'I stumbled because of this stone.'

 [Nanwang Puyuma: Chen 2017: 79]

² An alternative family of analyses claim that clitics are base-generated at the host site and establish a co-referential relationship with their double (e.g. Sportiche, 1996; see also Travis, 2006). If this relationship is sensitive to the same locality considerations as Agree, the present data would also be amenable to such approaches.

³ We might expect to find analogs of (8) even when one or both of the elements is not a clitic but ϕ -agreement. Chang (1997) argues that non-pivot agents in Kavalan are in fact marked with ϕ -agreement while pivots are marked by clitics. However, neither ϕ -agreement nor cliticization is permitted for non-pivot themes.

⁴ Our proposal remains agnostic as to the precise mechanism by which morphological case on DP arguments is determined.

In (13), non-core arguments serve as pivot—a locative in (13a) and a reason in (13b), yielding Locative and Circumstantial Voice on the verb, respectively. Contrary to our generalization in (8), the non-pivot theme is clitic doubled; the same clitic pronoun that doubles a non-pivot agent in (9a) doubles a non-pivot theme in (13a). We direct the interested reader to Chen (2017) for arguments that the verbs 'fall' and 'stumble' are unaccusative. Similar patterns are discussed by Chen for Amis, Seediq, and Tagalog, and Coppe van Urk (p.c.) reports similar behavior in Dinka.

Despite this apparent exception to (8), the data can be understood within the current proposal in (at least) two ways: (i) As we have argued, only those arguments that occupy a position at the lower phase edge are eligible for clitic doubling. Therefore, we might imagine that unaccusative themes, unlike transitive themes, exceptionally undergo movement to the lower phase edge. In this position, they will be licit targets for clitic doubling. (ii) Unaccusatives may lack a lower phase entirely (e.g. Chomsky 2001; Coon et al. 2014, pace Legate 2003). If there is no lower phase in unaccusative clauses, we expect unaccusative non-pivot themes to be exceptionally licit targets for clitic-doubling even in-situ. We leave investigation of these and other possibilities to future work.

4.2 Non-pivot theme clitics in Isbukun Bunun

Isbukun Bunun, like the languages discussed so far, has two clitic pronoun series. One series marks pivots regardless of grammatical function. However, the other—called the default series (Li, 2010)—marks *both* non-pivot agents and non-pivot themes:

(14)Ludah-un=ku'=as hit-pv=**DFLT.1s=nom.2s** 'I hit you.'

M-adu'=ik=su' AV-like=NOM.1s=DFLT.2s 'I like(d) you.' [Isbukun Bunun: Li 2010: 58-59]

In (14a), the nominative clitic =as marks the pivot theme and the default clitic =ku' marks the agent. In (14b), the agent is the pivot, marked by =ik, and a default clitic, =su', marks the theme.

The ability to realize the non-pivot theme as a clitic is an apparent counter-example to (8). However, further investigation reveals that default clitics in Isbukun Bunun are not second position clitics. Thus, their behavior does not counter-exemplify (8). Default clitics must always encliticize to the verb (regardless of which non-pivot argument they mark). This stands in contrast to nominative clitics that must appear in second position, e.g. encliticizing to negation (Li, 2010).

(15)ma-ludah=mu' Na=ni'=ik FUT=NEG=NOM.1s AV-hit=DFLT.2P 'I won't hit you.'

Na=ni'=ik ludah-un=mu' FUT=NEG=NOM.1s hit-PV=DFLT.2P 'You won't hit me.'

[Isbukun Bunun: Li 2010: 102]

Our analysis for clitic pronouns in Philippine-type languages can in fact be easily extended to this behavior. If, in Isbukun Bunun, the host for clitic doubling of non-pivots in the language is the phase head itself, we expect both agent and patient arguments to be visible for the purposes of clitic doubling with the default series. There is no intervening phase boundary to block clitic doubling of the non-pivot theme.

REFERENCES

- Aldridge, Edith. 2004. Ergativity and word order in Austronesian languages. Doctoral Dissertation, Cornell University.
- Aldridge, Edith. 2008. Phase-based account of extraction in Indonesian. Lingua 118:1440–1469.
- Aldridge, Edith. 2017. ϕ -feature competition: A unified approach to the Austronesian extraction restriction. In *Proceedings of CLS 52*.
- Arregi, Karlos, and Andrew Ira Nevins. 2012. *Morphotactics: Basque auxiliaries and the structure of spellout*. Springer.
- Billings, Loren A., and Daniel Kaufman. 2004. Towards a typology of Austronesian pronominal clisis. In *Proceedings of AFLA 11*, ed. Paul Law, 15–29.
- Blust, Robert. 2013. The Austronesian languages. Asia-Pacific Linguistics, revised edition.
- Chang, Henry Yung-li. 1997. Voice, case, and agreement in Seediq and Kavalan. Doctoral Dissertation, National Tsing Hua University.
- Chen, Victoria. 2017. A reexamination of the Philippine-type voice system and its implications for Austronesian primary-level subgrouping. Doctoral Dissertation, University of Hawai'i.
- Chomsky, Noam. 1986. Barriers. MIT Press.
- Chomsky, Noam. 2000. Minimalist inquiries: the framework. In *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, ed. Roger Martin, David Michaels, and Juan Uriagereka, 89–156. MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A life in language*, ed. Michael Kenstowicz, 1–52. MIT Press.
- Collins, Chris. 2005. A smuggling approach to the passive in English. Syntax 8:81–120.
- Coon, Jessica, Pedro Mateo Pedro, and Omer Preminger. 2014. The role of case in A-bar extraction asymmetries: Evidence from Mayan. *Linguistic Variation* 14:179–242.
- Erlewine, Michael Yoshitaka, Theodore Levin, and Coppe van Urk. 2017. Ergativity and Austronesian-type voice systems. In *Oxford Handbook of Ergativity*, ed. Jessica Coon, Diane Massam, and Lisa deMena Travis, 373–396. Oxford University Press.
- Guilfoyle, Eithne, Henrietta Hung, and Lisa Travis. 1992. Spec of IP and Spec of VP: Two subjects in Austronesian languages. *Natural Language & Linguistic Theory* 10:375–414.
- Harizanov, Boris. 2014. Clitic doubling at the syntax-morphophonology interface: A-movement and morphological merger in Bulgarian. *Natural Language & Linguistic Theory* 32:1033–1088.
- Harley, Heidi. 2013. External arguments and the Mirror Principle: On the distinctness of Voice and v. *Lingua* 125:34–57.
- Keenan, Edward L., and Bernard Comrie. 1977. Noun phrase accessibility and Universal Grammar. *Linguistic Inquiry* 8:63–99.
- Keenan, Edward L., and Maria Polinsky. 1998. Malagasy (Austronesian). In *The handbook of morphology*, ed. Andrew Spencer and Arnold M. Zwicky, 563–623. Blackwell.
- Legate, Julie Anne. 2003. Some interface properties of the phase. *Linguistic Inquiry* 34:506–515.
- Legate, Julie Anne. 2008. Morphological and abstract case. *Linguistic Inquiry* 39:55–101.
- Legate, Julie Anne. 2014. Voice and v: Lessons from Acehnese. MIT Press.
- Li, Lilian Li-ying. 2010. Clitics in Nantou Isbukun Bunun (Austronesian). Master's thesis, National

Chi Nan University.

Lim, Cheryl, and Michael Yoshitaka Erlewine. 2018. Agent extraction and topicalization in Bikol. Presented at AFLA 25. Academia Sinica.

Marantz, Alec. 2001. Words. Presented at WCCFL 20, University of Southern California.

Merchant, Jason. 2013. Voice and ellipsis. *Linguistic Inquiry* 44:77–108.

Nissenbaum, Jon. 2000. Covert movement and parasitic gaps. In *Proceedings of NELS 30*, ed. M. Hirotani, A. Coetzee, N. Hall, and J.-Y. Kim, volume 2, 541–555.

Paul, Ileana. 1996. The Malagasy genitive. In *The structure of Malagasy*, ed. Matthew Pearson and Ileana Paul. UCLA Occasional Papers in Linguistics.

Preminger, Omer. to appear. What the PCC tells us about 'abstract' agreement, head movement, and locality. *Glossa* .

Pylkkänen, Liina. 2008. Introducing arguments. MIT Press.

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

Roberts, Ian. 2010. Agreement and head movement: Clitics, incorporation, and defective goals. MIT Press.

Ross, Malcolm. 2006. Reconstructing the case-marking and personal pronoun systems of Proto Austronesian. In *Streams converging into an ocean: Festschrift in honor of Professor Paul Jenkuei Li on his 70th birthday*, ed. Henry Yung-li Chang, Lillian Meijin Huang, and Dah-an Ho, 521–563. Institute of Linguistics, Academia Sinica.

Sportiche, Dominique. 1996. Clitic constructions. In *Phrase structure and the lexicon*, ed. Johan Rooryck and Laurie Zaring, 213–276. Springer.

Teng, Stacy Fang-ching. 2008. A grammar of Puyuma, an Austronesian language of Taiwan. Doctoral Dissertation, Australia National University.

Torrego, Esther. 1988. A DP analysis of Spanish nominals. Ms., UMass, Boston.

Travis, Lisa deMena. 2006. Voice morphology in Malagasy as clitic left dislocation or Malagasy in wonderland: through the looking glass. In *Clause structure and adjuncts in austronesian languages*, ed. Hans-Martin Gärtner, Paul Law, and Joachim Sabel. Mouton de Gruyter.

Travis, Lisa deMena. 2010. Inner aspect. Springer.

van Urk, Coppe. to appear. Pronoun copying in Dinka Bor and the Copy Theory of Movement. *Natural Language & Linguistic Theory*.

Zribi-Hertz, Anne, and Liliane Mbolatianavalona. 1999. Towards a modular theory of linguistic deficiency: Evidence from malagasy personal pronouns. *Natural Language & Linguistic Theory* 17:161–218.