

Building and Interpreting Clausal Possession in Isbukun Bunun

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ABSTRACT

This paper shows that clausal possession in Isbukun Bunun, a Formosan language, involves two distinct structures with one single thematic interpretation. Although thematically identical, the two distinct structures are not derived via agreement/movement from a single underlying structure. To best capture the (morpho)syntactic patterns within and beyond the phenomenon, the *too-many-structures* problem is best analyzed as involving distinct underlying structures with syntactic heads that are semantically null, and delayed saturation of thematic relations at the (morpho)syntax-semantics interface.

Introduction

Isbukun Bunun has two thematically identical possessive constructions:¹

- (1) Aiza inak asu.²
be_{Exist} 1SG.GEN dog
'I have a dog.'
- (2) Aiza-an saikin asu.
be_{Exist}-LV 1SG.NOM dog
'I have a dog.'

These two constructions have something very much in common. First, they convey thematically identical semantics as they both express a possessive relation (Zeitoun et al. 1999, Zeitoun 2000). In addition, both are essentially existential constructions as the verb root is *aiza*, exactly the form in existential constructions of the language (cf. Wu 2009):

- (3) Aiza uvaaz sia huma.
be_{Exist} child P field
'There is a child in the field.'

¹ Unless otherwise noted, all the Isbukun Bunun data cited in this paper were collected, in the summer of 2021, from Haisul Soqluman, to whom goes my deepest gratitude.

² Gloss: 1 = first person, 3 = third person, ACC = accusative, APPL = applicative, AV = Actor Voice, COMP = Complementizer, EUPH = euphonic affix, GEN = genitive, IRR = irrealis, LNK = Linker, LV = locative voice, NOM = nominative, OBL = Oblique, OBJ = object, P = preposition, PFV = perfective, PL = plural, POSS = possessive, PST = past, PV = patient voice, SG = Singular, SUBJ = subject.

However, despite their commonalities, morphosyntactic differences between the two constructions are obvious. The most obvious difference lies in whether the verbs in the constructions pick up the suffix *-an*, identical to the locative voice marker in the language:

- (4) Na-sabah-an adi lumah mas Taupas.
IRR-sleep-LV this room OBL Taupas
‘Taupas will sleep in this room.’

Moreover, the difference in the (non)existence of the locative voice morpheme unsurprisingly corresponds directly with distinct case-markings on the possessors. That is, the possessor is marked genitive in the bare *aiza* construction, but nominative in the *aiza-an* construction:

- (5) Aiza inak uvaaz.
be_{Exist} 1SG.GEN child
‘I have a child.’
- (6) *Aiza saikin uvaaz.
be_{Exist} 1SG.NOM child
- (7) Aiza-an saikin uvaaz.
be_{Exist}-LV 1SG.NOM child
‘I have a child.’
- (8) *Aiza-an inak uvaaz.
be_{Exist}-LV 1SG.GEN child

In addition, given the difference in the main verb’s capability of bearing the locative morphology, the two constructions expectedly differ in their syntactic behaviors with respect to A’-extraction asymmetry widely observed in Austronesian languages (Bell 1976; Keenan & Comrie 1977; Kroeger 1991; Paul 2000, 2002; Aldridge 2004, 2016; Rackowski & Richards 2005). That is, the possessor can be extracted in the *aiza-an* construction (9), but not in the bare *aiza* construction (10):

- (9) Sima aiza-an uvaaz?
who be_{Exist}-LV child
‘Who has a child?’
- (10) *Sima aiza uvaaz?
Who be_{Exist} child

These morphosyntactic differences reveal very clearly that the two possessive constructions have distinct surface structures. This raises the main question: how can an identical possessive interpretation be realized on the surface via two syntactic structures in the language? Specifically, as possession is fundamentally a relationship between two DPs (Szabolcsi 1981, 1994; Kayne 1993; Partee 1999), the possessor and the possessee, how do we map the possessive meanings to two distinct structures (and vice versa)? Since the two constructions are thematically identical, one may intuitively propose that the two possessive constructions share a single underlying structure related by syntactic agreement or movement. However, I will show below that there are several problems for such proposal.

Literature Review

We have seen that the two constructions of clausal possession contrast sharply with each other as regards not only verbal morphology, but also case-marking on, and A'-extraction of, the possessor. In other words, they have distinct surface representations. Given UTAH (Baker 1988), which states that identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-structure, it is very tempting to assume that the surface morphosyntactic differences are regulated by syntactic operations on a underlyingly identical structure (cf. Freeze 1992; Kayne 1993, 2000). Consider the fact that adverbs can appear between the possessor and the possesee in the *aiza-an* possessive construction:

(11) Aiza-an saikin **laupaku** asu.
 be_{Exist}-LV 1SG.NOM now dog
 'I have a dog now.'

(12) Aiza-an saikin asu **laupaku.**
 be_{Exist}-LV 1SG.NOM dog now
 'I have a dog now.'

In contrast, the fact that clausal material such as adverbs cannot intervene between the possessor and the possesee in the bare *aiza* possessive construction suggests that the possessor and the possesee are inside the same DP:

(13) *Aiza inak **laupaku** asu.
 be_{Exist} 1SG.GEN now dog

(14) Aiza inak asu **laupaku.**
 be_{Exist} 1SG.GEN dog now
 'I have a dog now.'

Consequently, one might propose that the possessor in the *aiza-an* variant starts out inside the possesee DP and undergoes possessor raising out of the possessed DP into the nominative position:

(15) v_{Exist} DP_{Possessor} [DP _____{Possessor} [D [PossP _____{Possessor} [POSS NP_{Possessee}]]]]

However, what motivates such possessor raising is unclear given that the possessor can receive at once its thematic interpretation and genitive case inside the possessed DP. One may instead claim that the locative voice morpheme reflects an agreement relation where the possessor DP raised out of the possessed DP to value the C head's topic feature (Chen 2017, 2021; Erlewine et al. 2017; inter alia). Yet such account fails to explain why agreement and raising as such is generally prohibited:

(16) a. M-aun a Taupas mas (inak) acipul.
 AV-eat NOM Taupas OBL 1SG.GEN corn
 'Taupas is eating (my) corn now.'

 b. *M-aun saikin_i (mas) Taupas (mas) [_____i acipul].
 AV-eat 1SG.NOM OBL Taupas OBL corn

- (17) a. Kaun-un-in a (inak) acipul mas Taupas.
 eat-PV-PFV NOM 1SG.GEN corn OBL Taupas
 ‘Taupas has eaten my/the corn.’
- b. *Kaun-un-in saikin_i (mas) Taupas (mas) [_____i acipul].
 eat-PV-PFV 1SG.NOM OBL Taupas OBL corn
- (18) a. Na-sabah-an a (inak) lumah mas Taupas.
 IRR-sleep-LV NOM 1SG.GEN room OBL Taupas
 ‘Taupas will sleep in my/the room.’
- b. *Na-sabah-an saikin_i (mas) Taupas sia [_____i lumah].
 IRR-sleep-LV 1SG.NOM OBL Taupas P room

The examples also show that the failure of the possessor raising into the nominative position cannot be due to an intervention effect caused by the oblique external argument, since in non-actor voice clauses the internal argument, regardless of its various thematic roles, can raise past the oblique actor DP into the nominative position, triggering different voice markings (i.e., PV, LV, and CV) which, under the tentative agreement/movement analysis, reflect the agreement relationship between the internal argument and the C head.³ Therefore, the agreement/movement approach to the two possessive constructions is at best ad hoc and construction-specific; the surface morphosyntactic contrast between the two constructions cannot be a mere consequence of distinct agreement relationships and movement operations. In other words, the two constructions do not share an underlyingly identical representation; neither of the two constructions is the derivational counterpart to the other. This raises the question to be addressed in the next section: how does an identical possessive interpretation map to two distinct syntactic representations (and vice versa) in Isbukun Bunun?

The Proposed Analysis

I propose that the above-mentioned *too-many-structures* problem in Isbukun Bunun clausal possession is better analyzed in line with Myler (2016), couched in *Distributed Morphology* (DM; Halle & Marantz 1993), with several architectural assumptions. First, external arguments, rather than introduced by the lexical verb, are introduced into the syntax by a series of functional heads along the extended projection of the verb (Kratzer 1996, McGinnis 2001, Pyllkänen 2008, Wood & Marantz 2017, inter alia). These functional heads are of three types with respect to whether they take a (DP) specifier:

(19) *Three types of functional heads* (Kastner 2016, 2020):

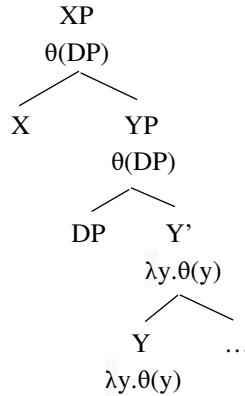
- H_[+D] requires a DP specifier.
- H_[-D] bans a (DP) specifier.
- Underspecified H_[∅] places no syntactic restrictions on the presence/absence of a (DP) specifier.

Second, these syntactic heads may have a particular range of meanings, including a null (expletive) meaning, depending on the syntactic context at the semantic interface (Wood & Marantz 2017). When a syntactic head is expletive, it pushes up the tree the semantic relations composed thus far (Schäfer 2008, Wood 2015, Kastner 2016). Third, contra UTAH, thematic roles are not syntactic features assigned in certain positions; rather, they are (parts of) the meanings of syntactic heads subject to contextual allophony at the semantic interface, where *delayed saturation*, in contrast to *instant saturation*, may come about if a thematic role in a

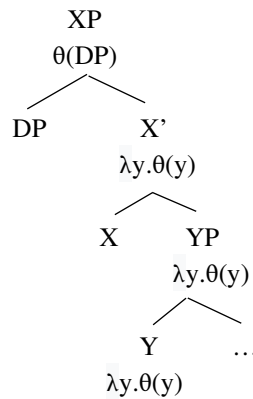
³ See also Wu’s (2013: 580, footnote 15) analysis where the VSO word order in non-actor voice clauses is derived by remnant vP-fronting after the internal argument in the vP raises past the external argument.

lower position is not syntactically represented (Marantz 2013, Wood 2015, Myler 2016, Wood & Marantz 2017, Kastner 2020, Tyler 2020, inter alia). Therefore, a DP may be syntactically an argument of X, as it is merged in Spec-XP; but semantically the DP is an argument of head Y in the lower thematic position:

(20) *Instant saturation*



(21) *Delayed saturation*



Given the theoretical assumptions above, recall the reasons against an agreement/movement approach to the two possessive constructions:

(22) *Against an agreement/movement approach*

- a. There is no motivation for possessor raising: the possessor DP can receive at once its thematic reading and oblique case inside the possessed DP.
- b. Possessor raising out of a possessed DP is generally prohibited in the language.

Based on the (morpho)syntactic differences between the two constructions (i.e., the (non)existence of the locative voice morpheme, the nominative versus oblique case marking on the possessor DP, and the A'-extraction asymmetry), I propose that *the possessor in the two constructions is introduced into structurally distinct positions*:

(23) *Introducing the possessor:*

- a. inside the possessive DP in the bare *aiza* construction.
- b. outside the possessive DP, in Spec-AppIP, in the *aiza-an* construction.

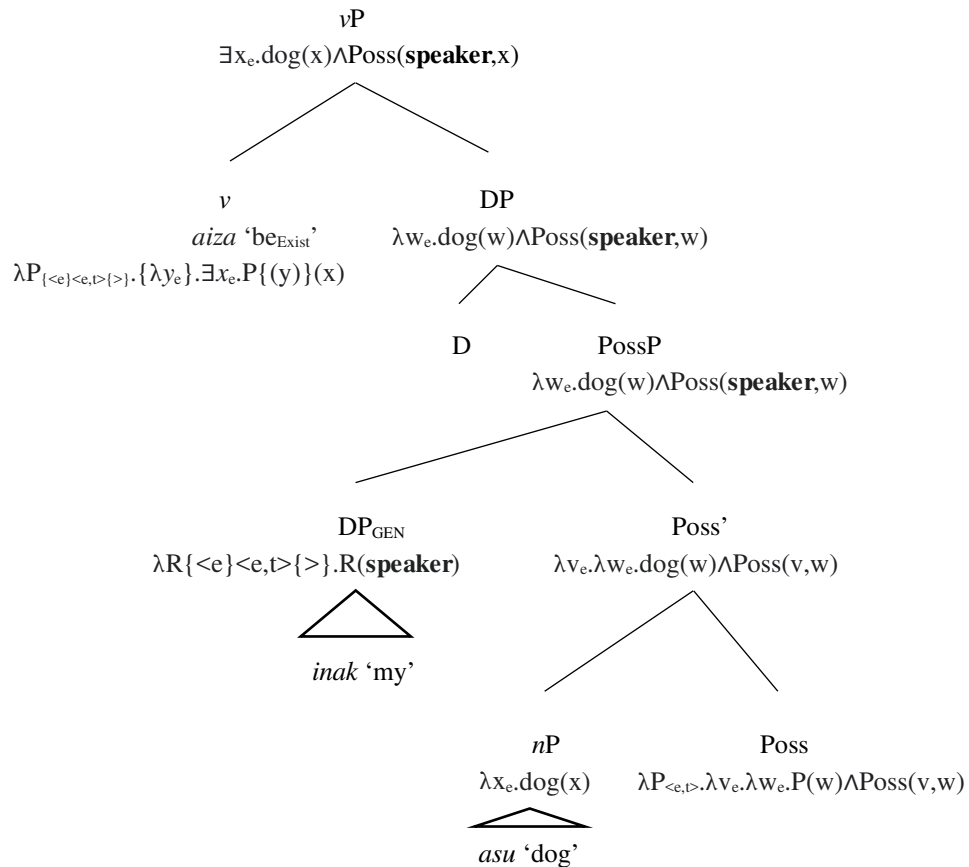
The derivations of the two clausal possessives then can be analyzed as composed of the following semantic pieces:

(24) *Semantic pieces of clausal possession*

- a. [inak] ↔ **speaker_e**
- b. [asu] ↔ $\lambda x_e.\text{dog}(x)$
- c. [Poss] ↔ $\lambda P_{\langle e,t \rangle}.\lambda v_e.\lambda w_e.P(w) \wedge \text{Poss}(v,w)$
- d. [Appl] ↔ $\lambda x.x$
- e. [aiza] ↔ $\lambda P\{\langle e \rangle \langle e,t \rangle \langle \rangle\}.\{\lambda y_e\}.\exists x_e.P\{y\}(x)$

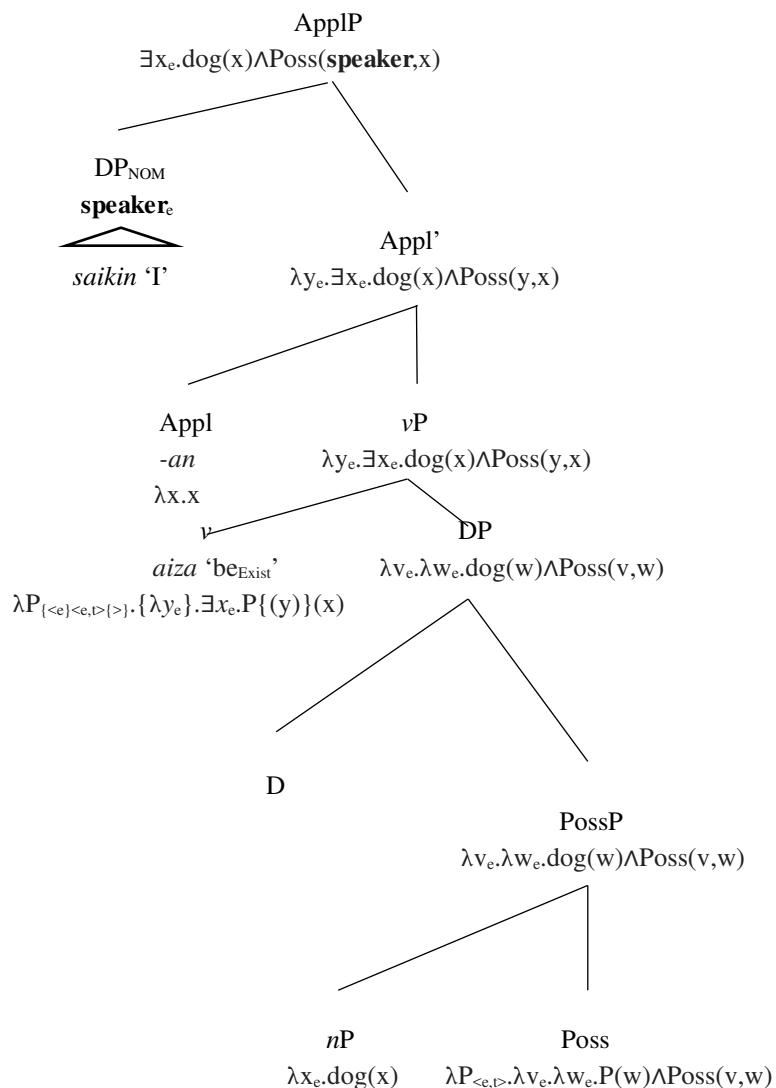
Given the semantic pieces laid out, the derivation of the bare *aiza* construction is illustrated as follows. First, Poss takes the *nP*'s denotation as its argument. Second, the genitive DP then picks up the resulting denotation as its argument, generating a function from a set of individual-eventuality pairs to propositions that are true provided that the individual is a dog owned by the speaker in that eventuality. Third, the *v*'s existential semantics then comes in to take the function as its argument and closes over the individual variable corresponding to the dog. As the existential *v* makes no direct semantic contribution, the *vP* then denotes the set of eventualities where there is a dog owned by the speaker:

- (25) Aiza inak asu.
 be_{Exist} 1SG.GEN dog
 'I have a dog.'



In contrast, the derivation of the *aiza-an* construction involves a Poss head that does not require a specifier, and an expletive Appl, which is null in interpretation.⁴ Consequently, the possessed DP results in the same denotation as what Poss' denoted in the bare *aiza* construction. In the same fashion, the *v*'s existential semantics yields the existential closure of the entity variable corresponding to the dog, with the denotation passed up to *v*P, which then denotes the set of individual-eventuality pairs where there is a dog owned by that individual in that eventuality. The expletive Appl then comes in and passes up the denotation that subsequently composes with the denotation of the introduced nominative DP. Crucially, this nominative DP takes the denotation of Appl' as its semantic argument, yielding the same denotation as that of the *aiza* construction: the set of eventualities where there is a dog owned by the speaker.

- (26) Aiza-an saikin asu.
 be_{Exist}-LV 1SG.NOM dog
 'I have a dog.'

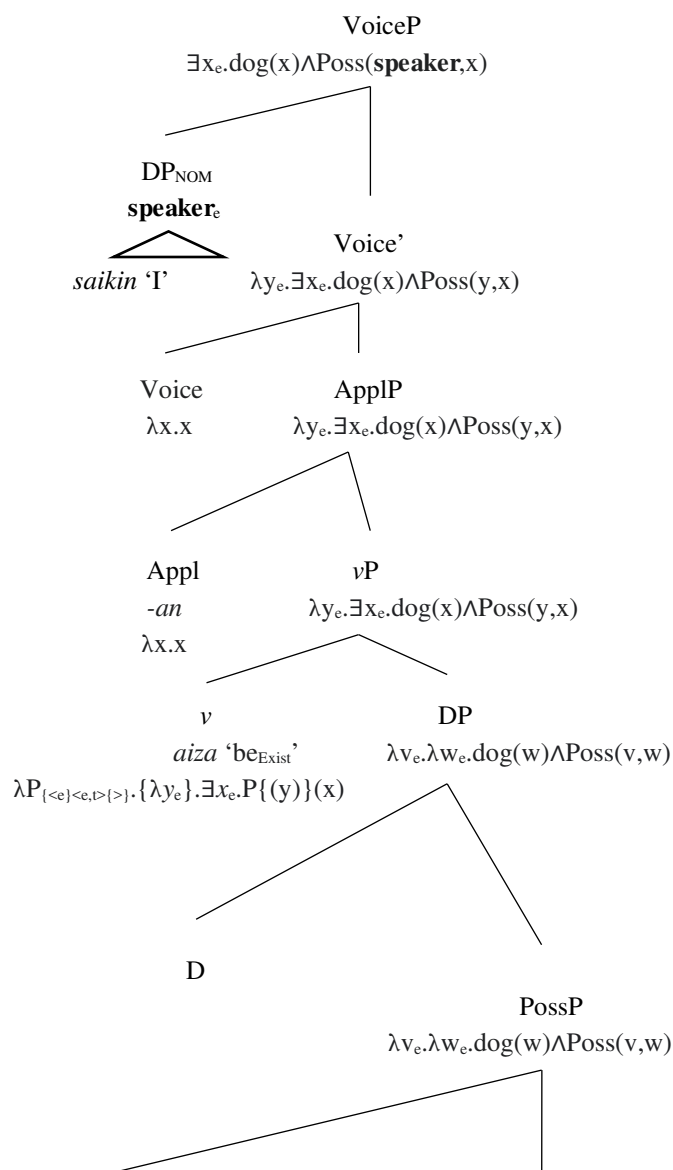


⁴ It could also be the case that the Poss head in both types of clausal possessives place no restriction on whether a DP specifier is required. That is, the Poss head takes a DP specifier in the bare *aiza* variant but none in the *aiza-an* counterpart. Which of the scenarios is the actual case does not affect the proposed analysis.

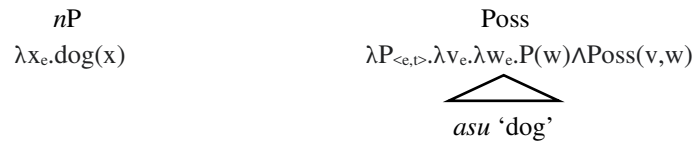
\wedge
asu 'dog'

I remain agnostic about whether the possessed DP in the *aiza* variant and the possessor DP in the *aiza-an* variant raise into Spec-VoiceP, as this does not bear relevance to the current discussion. Since both clausal possessives are structurally existential in nature, the Voice head should be semantically null as well. Regardless of what occupies Spec-VoiceP, be it an expletive *pro* (cf. Wu 2009), the possessed DP, or the possessor DP, the resulting denotation is the same.⁵ Therefore, I am open as to which of the scenarios is the actual case. Note, however, that it is also possible that the expletive Appl in the *aiza-an* construction does not require a DP specifier or is underspecified as per such restriction. In such case, the resulting denotation is the same, because the denotation is percolated further up to the expletive Voice' and claimed by the possessor DP merged in Spec-VoiceP.

(27)



⁵ Alternatively, the expletive Voice head may ban a DP specifier in the first place.



Conclusion

This paper has investigated clausal possession in Isbukun Bunun, which involves two distinct structures with one single thematic interpretation. It has been shown that, although thematically identical, the two distinct structures are not derived via agreement/movement from a single underlying structure. To best capture the (morpho)syntactic patterns within and beyond the phenomenon, the *too-many-structures* problem is best analyzed as involving distinct underlying structures with expletive heads and delayed saturation of thematic relations at work at the (morpho)syntax-semantics interface. Given the current analysis, the morphosyntactic differences between the two possessive constructions, though built upon the same lexical verb, naturally follows.

First, the (non)existence of the locative voice morpheme signals distinct underlying structures of the two constructions: the *aiza-an* construction involves an expletive Appl head and a Poss head that does not require a specifier; whereas the bare *aiza* construction contains a Poss that demands a DP specifier and does not involve any applicative structure. This accords with the consensus that locative voice clauses in the Philippine-type voice system involve applicative representations (Mithun 1994, Chang 1997, Aldridge 2004, Rackowski & Richards 2005, Nie 2019, 2020, inter alia).⁶ Second, the case-marking distinction on the possessor receives a natural explanation as well. Since the possessor in the *aiza-an* clause is the applied argument (rather than merged and genitive-marked inside the possessed DP), it receives nominative case just like applied arguments normally do in the Philippine-type voice system (Bell 1976, 1983; Pearson 2001; Travis 2001; Rackowski 2002; Aldridge 2004, 2012; Nie 2019, 2020). Third, the A'-extraction asymmetry between the two possessive constructions appears unsurprising: as the possessor DP in the *aiza-an* clause is the "voiced" argument, it can undergo A'-extraction (in contrast to the possessor inside the possessed DP), fitting in with the extraction pattern in languages of the Philippine voice system. The current analysis therefore accounts at once for the (morpho)syntax-semantics mapping in the two possessive constructions (along with their morphosyntactic differences).

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References

Aldridge, Edith. 2004. Ergativity and word order in Austronesian languages. PhD thesis, Cornell University. <https://doi.org/10.1093/oxfordhb/9780198739371.013.23>

⁶ See Chen (2021), however, for an opposing view.

- . 2012. Antipassive and ergativity in Tagalog. *Lingua* 122.3: 192–203. <https://doi.org/10.1016/j.lingua.2011.10.012>
- . 2016. \emptyset -feature competition: A unified approach to the Austronesian extraction restriction. In Jessica Kantarovich, Tran Truong & Orest Xherija (eds.), *Proceedings of the 52nd meeting of the Chicago Linguistic Society*.
- Baker, Mark. 1988. *Incorporation: A theory of grammatical function changing*. Chicago, IL: University of Chicago Press.
- Bell, Sarah. 1976. *Cebuano subjects in two frameworks*. Cambridge, MA: MIT dissertation.
- . 1983. Advancements and ascensions in Cebuano. In David M. Perlmutter (ed.), *Studies in Relational Grammar 1*, 143–218. Chicago, IL: The University of Chicago Press.
- Chang, Yung-li. 1997. An outline of Seediq grammar (in Chinese). Manuscript.
- Chen, Victoria. 2017. Philippine-type “voice” affixes as A’-agreement markers: Evidence from causatives and ditransitives. In *Proceedings of the 23rd Annual Meeting of the Austronesian Formal Linguistics Association (AFLA 23)*. Canberra: Asia-Pacific Linguistics.
- . 2021. Tagalog voice revisited: Insights from binding. In *Proceedings of WCCFL 38*
- Erlewine, Michael Yoshitaka, Theodore Levin and Coppe van Urk. 2017. Ergativity and Austronesian-type voice system. In Jessica Coon, Diane Massam, and Lisa Travis (eds.), *Oxford Handbook of Ergativity*, 373–396. Oxford: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780198739371.013.16>
- Freeze, Ray. 1992. Existentials and other locatives. *Language* 68: 553–595. <https://doi.org/10.2307/415794>
- Halle, Morris and Marantz, Alec. 1993. Distributed Morphology and the pieces of inflection. In Kenneth Hale and Samuel Jay Keyser (eds.), *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, 111–176. Cambridge MA: MIT Press.
- Kastner, Itamar. 2016. Form and meaning in the Hebrew verb. PhD diss., New York University.
- . 2020. Voice at the interfaces: The syntax, semantics and morphology of the Hebrew verb. *Open Generative Syntax* 8. Berlin: Language Science Press.
- Kayne, Richard. 1993. Toward a modular theory of auxiliary selection. Reprinted in Kayne, Richard (2000), *Parameters and Universals*, 107–130. Oxford: Oxford University Press. <https://doi.org/10.1111/j.1467-9582.1993.tb00837.x>
- . 2000. *Parameters and Universals*. Oxford: Oxford University Press.
- Keenan, Edward and Bernard Comrie. 1977. Noun phrase accessibility and Universal Grammar. *Linguistic Inquiry* 8: 63–99.

Kratzer, Angelika. 1996. Severing the external argument from its verb. In Johan Rooryck and Laurie Zaring (eds.), *Phrase Structure and the Lexicon*, 109–137. Dordrecht: Kluwer. https://doi.org/10.1007/978-94-015-8617-7_5

Kroeger, Paul. 1991. *Phrase structure and grammatical relations in Tagalog*. Stanford, CA: Stanford University dissertation.

Marantz, Alec. 2013. *Class lectures: Handouts from the Seminar on Argument Structure*, Fall 2013. New York University.

Mithun, Marianne. 1994. The implications of ergativity for a Philippine voice system. In Barbara Fox and Paul Hopper (eds.), *Voice: Form and function*, 247–277. Philadelphia: John Benjamins. <https://doi.org/10.1075/tsl.27.11mit>

McGinnis, Martha. 2001. Variation in the phase structure of applicatives. *Linguistic Variation Yearbook 1*: 105–146. Amsterdam: John Benjamins. <https://doi.org/10.1075/livy.1.06mcg>

Myler, Neil. 2016. *Building and Interpreting Possession Sentences*. Cambridge, MA: MIT Press. <https://doi.org/10.7551/mitpress/9780262034913.001.0001>

Nie, Yining. 2019. Raising applicatives and possessors in Tagalog. *Glossa: A Journal of General Linguistics* 4(1). 139. <https://doi.org/10.5334/gjgl.941>

———. 2020. *Licensing arguments*. PhD diss., New York University.

Partee, Barbara. 1999. Weak NPs in HAVE sentences. In J. Gerbrandy, M. Marx, M. de Rijke, and Y. Venema (eds.), *JFAK, a Liber Amicorum for Johan van Benthem on the Occasion of His 50th Birthday*, 39–57. Amsterdam: University of Amsterdam, Amsterdam.

Paul, Ileana. 2000. *Malagasy clause structure*. Montreal: McGill University dissertation.

———. 2002. An explanation of extraction asymmetries in Malagasy. *Linguistic Variation Yearbook 2*: 99–122. <https://doi.org/10.1075/livy.2.06pau>

Pearson, Matthew. 2001. *The clause structure of Malagasy: A minimalist approach*. Los Angeles, CA: UCLA dissertation.

Pylkkänen, Liina. 2008. *Introducing Arguments*. Cambridge, MA: MIT Press. <https://doi.org/10.7551/mitpress/9780262162548.001.0001>

Rackowski, Andrea. 2002. *The structure of Tagalog: specificity, voice, and the distribution of arguments*. Cambridge, MA: MIT dissertation.

Rackowski, Andrea and Norvin Richards. 2005. Phase edge and extraction: A Tagalog case study. *Linguistic Inquiry* 36: 565–599. <https://doi.org/10.1162/002438905774464368>

- Schäfer, Florian. 2008. *The Syntax of (Anti-)Causatives*. Philadelphia: John Benjamins.
<https://doi.org/10.1075/la.126>
- Szabolcsi, Anna. 1981. The possessive construction in Hungarian: a configurational category in a non-configurational language. *Acta Linguistica Academiae Scientiarum Hungaricae* 31: 261–289.
- . 1994. The noun phrase. In Kiefer, Ferenc and Katalin E. Kiss (eds.), *The Syntactic Structure of Hungarian*, 179–274. San Diego, CA: Academic Press.
- Travis, Lisa. 2001. Derived objects in Malagasy. In William D. Davies & Stanley Dubinsky (eds.), *Objects and other Subjects: Grammatical Functions, Functional Categories and Configurationality*, 123–155. Dordrecht: Kluwer Academic Publishers. https://doi.org/10.1007/978-94-010-0991-1_6
- Tyler, Matthew. 2020. Argument structure and argument-marking in Choctaw. Yale University PhD Thesis.
- Wood, Jim. 2015. *Icelandic Morphosyntax and Argument Structure*. Dordrecht: Springer.
<https://doi.org/10.1007/978-3-319-09138-9>
- Wood, Jim, and Alec Marantz. 2017. The interpretation of external arguments. In Roberta D’Alessandro, Irene Franco, and Ángel J. Gallego (eds.), *The Verbal Domain*, 255–278. Oxford: Oxford University Press.
<https://doi.org/10.1093/oso/9780198767886.003.0011>
- Wu, Hsiao-hung Iris. 2009. Existential constructions in Isbukun Bunun. *Oceanic Linguistics* 48.2: 364–378.
<https://doi.org/10.1353/ol.0.0052>
- . 2013. Restructuring and clause structure in Isbukun Bunun. *Oceanic Linguistics* 52.1: 69–85.
<https://doi.org/10.1353/ol.2013.0000>
- Zeitoun, Elizabeth. 2000. Notes on a possessive construction in the Formosan languages. In Videa DeGuzman and Byron Bender (eds.), *Grammatical Analysis: Morphology, Syntax and Semantics* 241–257. Hawaii: University of Hawaii Press.
- Zeitoun, Elizabeth, Lillian Huang, Marie Yeh and Anna Chang. 1999. Existential, possessive and locative constructions in the Formosan languages. *Oceanic Linguistics* 38.1: 1–42. <https://doi.org/10.2307/3623391>