Some Remarks on Isbukun Bunun Clausal Possession and Austronesian Morphosyntax

This paper revisits clausal possession in Isbukun Bunun, which involves two distinct structures with one single thematic interpretation. The paper shows 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 syntactic heads that are semantically null, and delayed saturation of thematic relations at the (morpho)syntax-semantics interface. The proposed analysis not only stands with the view that the morpheme *-an* in clausal possession is a locative voice marker, but also predicts that expletive heads and delayed saturation play integral roles in the (morpho)syntax-semantics of Austronesian languages, as corroborated by clausal possession (Isbukun Bunun), possessor raising (Tagalog and Taoshang Atayal), and restructuring (Mayrinax Atayal).

1 Introduction

In Isbukun Bunun there are 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.'

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:

_

¹ Unless otherwise noted, all the Isbukun Bunun data cited in this paper were collected, in the summer of 2011, 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.

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

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 nominative in the *aiza-an* construction, but genitive in the bare *aiza* construction.

- (5) a. Aiza inak uvaaz.

 be_{Exist} 1SG.GEN child

 'I have a child.'

 b. *Aiza saikin uvaaz.

 be_{Exist} 1SG.NOM child
- (6) a. Aiza-an saikin uvaaz.

 be_{Exist}-LV 1SG.NOM child

 'I have a child.'

 b. *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, but not in the bare *aiza* construction:

(7) a. Sima aiza-an uvaaz.

who beExist-LV child

'Who has a child?'

b. *Sima aiza uvaaz.

who beExist 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, section 2 will show that there are several problems for such proposal. Instead, a formal analysis in line with Myler (2016) is offered in Section 3, which better captures the morphosyntactic properties of the phenomenon. Section 4 further discusses the implications of the analysis in section 3 regarding, first, the status of the locative voice marker -an in clausal possession; and second, expletive syntactic heads (Schäfer 2008, Wood 2015, Kastner 2016, Wood & Marantz 2017) and delayed saturation of thematic roles (Marantz 2013, Wood 2015, Myler 2016, Wood & Marantz 2017, Kastner 2020, Tyler 2020, inter

alia) in the Austronesian (morpho)syntax-semantics, as displayed by possessor raising in Tagalog and Taoshang Atayal, and restructuring in Mayrinax Atayal. Section 5 concludes the paper.

2 Against an agreement/movement approach

We have seen in the last section 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 possesse in the *aiza-an* possessive construction:

(8) a.	Aiza-an	saikin	laupa	ıku asu.	
	be_{Exist} -LV	1SG.NOM	now	dog	
	'I have a dog	g now.'			
b.	Aiza-an	saikin	asu	laupaku.	
	be_{Exist} -LV	1SG.NOM	dog	now	
	'I have a dog now.'				

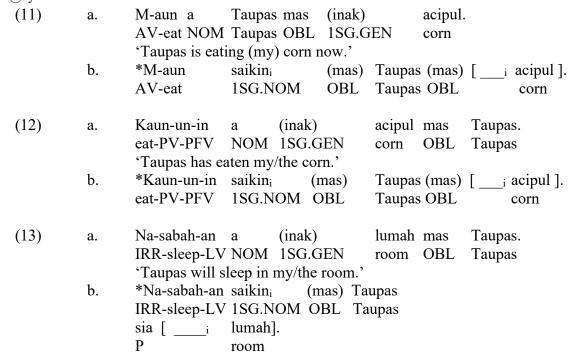
In contrast, the fact that clausal material such as adverbs cannot intervene between the possessor and the possessee in the bare *aiza* possessive construction suggests that the possessor and the possessee are inside the same DP:

(9) a.	*Aiza	inak	laupa	ku asu.
	be_{Exist}	1SG.GEN	now	dog
b.	Aiza	inak	asu	laupaku.
	be_{Exist}	1SG.GEN	dog	now
	'I have	e a dog now.'	_	

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

(10)
$$\nu_{\text{Exist}} \text{ DP}_{\text{Possessor}} \left[\text{DP} __{\text{Possessor}} \left[\text{ D} \left[\text{PossP} __{\text{Possessor}} \left[\text{Poss} \text{ NP}_{\text{Possessee}} \right] \right] \right]$$

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:



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?

3 Building and interpreting the aiza/aiz-an clausal possession

In this section I show that the *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, Pylkkänen 2008, Wood & Marantz 2017, inter alia). These functional heads are of three types with respect to whether they take a (DP) specifier:

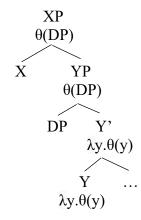
-

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

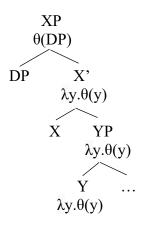
- (14) Three types of functional heads (cf. Kastner 2016, 2020; Wood & Marantz 2017; Nie 2020):
 - a. $H_{[+D]}$ requires a DP specifier.
 - b. $H_{[-D]}$ bans a (DP) specifier.
 - c. Underspecified $H_{[\emptyset]}$ places no syntactic restrictions on the presence/absence of a (DP) specifier.

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 allosemy at the semantic interface, where delayed saturation, in contrast to instant saturation, may come about if a thematic role in a 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:

(15) *Instant saturation*



(16) Delayed saturation



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

- (17) 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*:

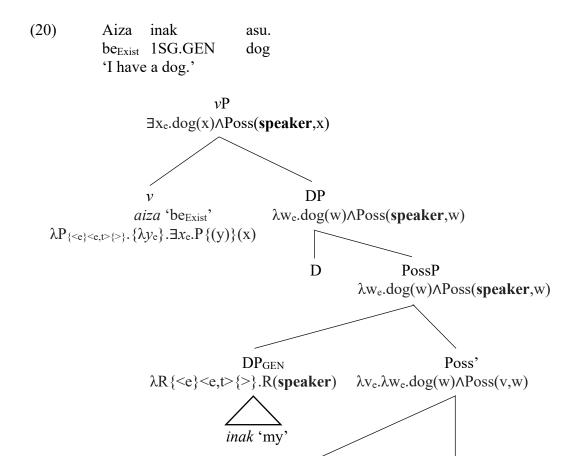
- (18) *Introducing the possessor:*
 - a. inside the possessive DP in the bare *aiza* construction.
 - b. outside the possessive DP, in Spec-ApplP, in the *aiza-an* construction.

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

(19) Semantic pieces of clausal possession

a. $[inak] \leftrightarrow speaker_e$ b. $[asu] \leftrightarrow \lambda x_e.dog(x)$ c. $[Poss] \leftrightarrow \lambda P_{\langle e,t \rangle}.\lambda v_e.\lambda w_e.P(w) \land Poss(v,w)$ d. $[Appl] \leftrightarrow \lambda x.x$ e. $[aiza] \leftrightarrow \lambda P\{\langle e \} \langle e,t \rangle \{ \} .\{ \lambda v_e \}. \exists x_e.P\{(v)\}(x)$

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.



nP

 $\lambda x_e.dog(x)$

Poss

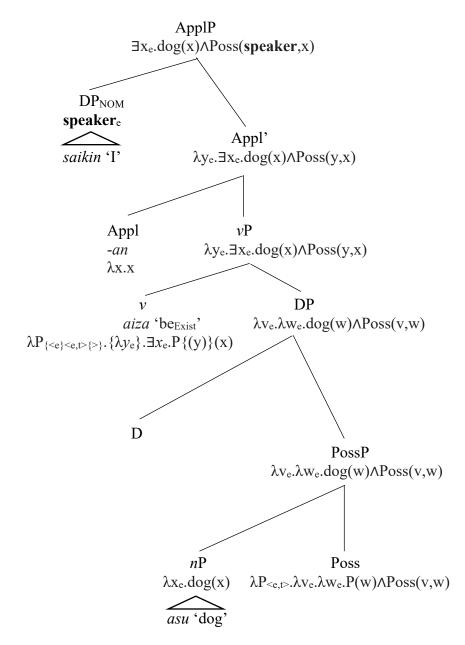
 $\lambda P_{e,t} \cdot \lambda v_e \cdot \lambda w_e \cdot P(w) \wedge Poss(v,w)$

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. Consequently, the possessed DP results in the same denotation as what Poss' denoted in the bare *aiza* construction. In the same fashion, the ν 's existential semantics yields the existential closure of the entity variable corresponding to the dog, with the denotation passed up to ν 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.

-

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.

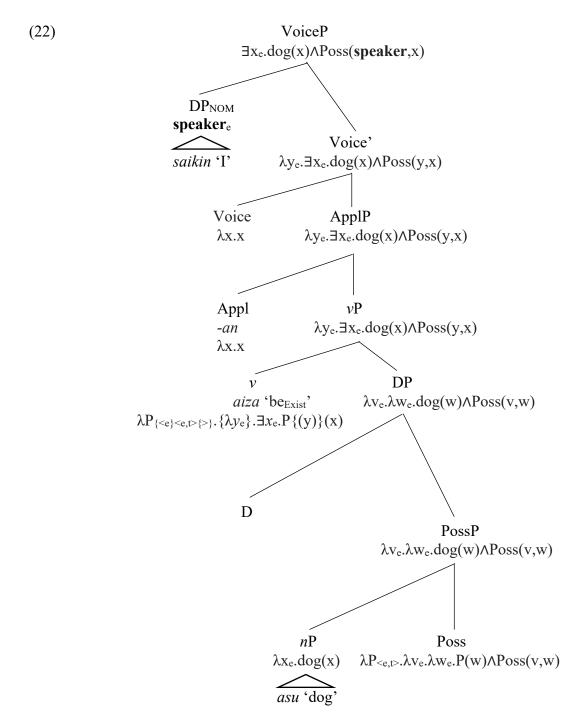
 $\begin{array}{cccc} \text{(21)} & \text{Aiza-an} & \text{saikin} & \text{asu.} \\ & \text{be}_{\text{Exist}}\text{-LV} & \text{1SG.NOM} & \text{dog} \\ & \text{`I have a dog.'} \end{array}$



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

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

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.



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). 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 analysis presented here not only accounts at once for the (morpho)syntax-semantics mapping in the two possessive constructions (along with their morphosyntactic differences), but also has some implications for the Austronesian morphosyntax, to be discussed in the next section.

4 Further discussion

4.1 The locative voice marker -an in clausal possession

Like Isbukun Bunun, Paran Seediq, another Formosan language, has a possessive construction that involves an existential verb with the *-an* morpheme and a nominative possessor:

- (23) Paran Seediq (Zeitoun et al. 1999: 17-18)
 a. Niq-an-ku kingan laqi.
 be_{Exist}-LV-1SG.NOM one child
 'I have a child.'
 - b. *Niq-an-mu kingan laqi. be_{Exist}-LV-1SG.GEN one child

The status of the suffix -an in possessive constructions has long been under debate. Change (1997) argues that the suffix is not the locative voice marker, but has been grammaticalized, together with the lexical verb niq, into an existential verb. Zeitoun (2000), on the other hand, holds an opposing view. In this regard, this paper sheds new lights on which of the two stances is on the right track. Specifically, this paper stands with Zeitoun, as Chang's claim fails to show how an identical possessive relation can be derived from a single underlying structure that ends up with two surface morphosyntactic representations. Moreover, the grammaticalization account misses important morphosyntactic generalizations. It not only fails to show that the locative voice morpheme, like in other locative voice clauses, signals a distinct underlying structure from that of the existential/possessive clauses without such morpheme, but also misses the fact that the casemarking distinction on the possessor follows the same pattern of "(non-)voiced" arguments in languages of the Philippine voice system: nominative-marked only when "voiced." Besides, the grammaticalization approach does not factor in the fact that the possessor, being A'-extracted if

_

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

and only if the verb picks up the suffix -an, accords with the restriction on A'-extraction. Therefore, in terms of explanatory adequacy, treating the suffix -an as the locative voice marker is more elegant than taking it as a fossilized element of the existential verb.

4.2 Expletive Appl heads, delayed saturation, and the locative voice

One of the key assumptions adopted for the (morpho)syntax-semantics of the two clausal possessives in Isbukun Bunun is that syntactic heads may be expletive in interpretation, subject to the syntactic context at the semantic interface. In such case the syntactic head passes up the syntactic tree the semantic relation composed thus far. In the analysis of the two clausal possessives in Isbukun Bunun, such head is the Appl head in the *aiza-an* construction. Since the Appl itself is null in meaning, the argument that merges in Spec-ApplP gets the possessor denotation passed up from the lower thematic domain to Appl'. In this regard, two significant points are worth noting here. First, the two clausal possessives in Isbukun Bunun (and perhaps in Paran Seediq too) mirror those in Cochabamba Quechua, which too involves the (non)existence of an expletive Appl (Myler 2016). Therefore, Isbukun Bunun lends further empirical support for the existence of semantically null heads.⁷

Cochabamba Quechua (Myler 2016: 182) (24)Noqa-qta auto-s-ni-y tiya-n. (BE) a. 1SG-GEN car-PL-EUPH-1SG.POSS be_{Exist}-3SUBJ 'I have cars.' (lit. 'There are cars of mine.') Noqa-qta auto-s tiya-pu-wa-n. (BE-APPL) b. car-PL be_{Exist}-APPL-1OBJ-SUBJ 1SG-GEN

Second, the expletive Appl in the *aiza-an* clausal possessive in Isbukun Bunun echoes with the semantically null "raising applicative (RaisAppl)" head in Nie (2019, 2020), following Georgala (2012), Deal (2013), Massam (2015), among others. Nie proposes that there is a semantically null RaisAppl head below Voice, and above high ApplP (in the case of circumstantial voice) or ν P (in the case of locative voice).

(25) a. Circumstantial voice

Voice [RaisApplP RaisAppl [ApplP Appl [vP v ...]]]

b. Locative voice

Voice [RaisApplP RaisAppl [vP v [ApplP Appl ...]]]

The RaisAppl head plays a crucial role in licensing arguments that cannot be licensed in the lower structure. Specifically, in non-actor voice, an argument introduced in the lower structure can raise into Spec-RaisApplP to be licensed by the highest Voice head (via Agree); and the RaisAppl head itself can license (via Agree) the argument closest to it in the lower structure. Consequently, except the two that get licensed respectively by the highest Voice head and the RaisAppl, any other arguments introduced in the lower structure cannot be licensed, because in languages of the Philippine voice system, only the highest Voice and the highest Appl (= RaisAppl) in the structure

⁷ The derivations of the two clausal possessives in Isbukun Bunun and Cochabamba Quechua are for the most part identical except for case marking on the possessor. In Cochabamba Quechua, the possessor stays genitive in both variants of clausal possessives. See Myler (2016) for a detailed analysis of Cochabamba Quechua.

are argument licensers. Nie's analysis not only accounts for the fact that applied arguments must be "voiced"; but also explains why applicatives in languages of the Philippine voice system cannot be recursively stacked.

What is relevant to the present discussion, though, is that under Nie's analysis, high and low applied arguments raise to the same Spec-RaisAppl position, with circumstantial and locative markers spelled out as two allomorphs of the same RaisAppl head:

(26) Spell-out for RaisAppl
a. RaisAppl
$$\leftrightarrow$$
 LV / $v[\varphi]$
b. RaisAppl \leftrightarrow CV (elsewhere)

This coincides with what happens in Isbukun Bunun: in the aiza-an construction there is a semantically null Appl above vP, with the Appl head, adjacent to the v head, spelled out as the locative voice marker -an. This way it seems that the expletive Appl in the aiza-an clausal possessive and the RaisAppl in Nie's analysis are one of the same head: they both are semantically null and hierarchically identical in the structure, with the only difference being that the possessor in the aiza-an clausal possessive, unlike applied arguments in normal circumstantial/locative voice clauses, is merged, rather than moved, into the expletive Spec-ApplP. In this regard, clausal possessives in Isbukun Bunun provide strong empirical evidence for Nie's proposal in showing that, instead of being purposefully postulated only for a single morphosyntactic phenomenon, the expletive Appl head plays a crucial role in the morphosyntax of languages of the Philippine voice system.

Another central assumption adopted for the analysis of clausal possessives in Isbukun Bunun is delayed saturation: a thematic role in a lower position can be syntactically represented in a higher position. In the aiza-an possessive construction, for instance, the denotation of Poss' is not syntactically represented until the possessor DP is introduced into the specifier of the expletive ApplP. This raises two questions, however. The first is whether delayed saturation comes about beyond clausal possessives. If, as discussed above, the expletive Appl head is integral to the Austronesian morphosyntax at large, we should expect delayed saturation in the works beyond clausal possessives. The second question concerns the expletive Appl's position in the structure. As Wood & Marantz (2017) point out, since the existential verb aiza makes no semantic contribution, it is also possible that in the aiza-an clausal possessive, the expletive Appl merges below v, like a low Appl head.

[27]
$$[vP \ v_{Exist} \ [ApplP \ DP_{Possessor} \ [Appl_{Expletive} \ [DP \ D \ [PossP \ Poss \ nP \]]]]]$$

Recall, however, that clausal material such as adverbs can appear between the possessor and the possessee in the *aiza-an* possessive construction, but not in the bare *aiza* possessive construction. This is evidence for analyzing the expletive Appl as merging above v.

Remember also that possessor raising is generally prohibited, even in locative voice clauses:

(29)	a.	M-aun a AV-eat NOM 'Taupas is eat	Taupas	OBL	1SG.G		acipul. corn	
	b.	*M-aun AV-eat	saikin _i	,	(mas)	_		[i acipul].
(30)	a.	Kaun-un-in eat-PV-PFV 'Taupas has e	NOM		EN		mas OBL	Taupas. Taupas
	b.	*Kaun-un-in eat-PV-PFV	saikin _i	(r	nas)	_	(mas) OBL	[i acipul]. corn
(31)	a.	Na-sabah-an IRR-sleep-LV 'Taupas will s	NOM	1SG.G	EN			Taupas. Taupas
	b.	*Na-sabah-an IRR-sleep-LV sia [i P	saikin _i / 1SG.N	(m OM O	nas) Ta	-		

Nevertheless, if in theory the expletive Appl can merge below v, then we should expect it to behave morphosyntactically like a low Appl head when the verb has semantic content. Specifically, there should be locative voice clauses that involve an accusative or oblique possessed DP, a nominative, "voiced" possessor, and if the verb is transitive, a genitive agent (at least when the possessed DP is not inside a PP (cf. (31)), which might induce locality restrictions, in whatever definition, on possessor raising).

If we can find such data, then the answers to the two questions are both positive. Although I do not have relevant Isbukun Bunun data at hand, the prediction is borne out at least in Tagalog and Taoshang Atayal:

- (33) Tagalog (Nie 2019: 11-12)
 - a. G<in>upit-an ko ng buhok kahapon <PFV>snip-LV 1SG.GEN GEN hair yesterday ang bata.

 NOM child
 'I cut the child's hair.'
 - b. B<in>asag-an ko ng bintana <PFV>shatter-LV 1SG.GEN GEN window ang bahay. NOM house
 - 'I shattered some window(s) of the house.'
 - c. In-ubus-an ko ng pera
 PFV-use.up-LV 1SG.GEN GEN money
 ang lolo ko.
 NOM grandfather 1SG.GEN
 'I used up my grandfather's money.'
- (34) Taoshang Atayal (Chen 2007: 72-77)
 - a. Phq-an bzih kakay ni Rimuy qu Tali. break-LV another leg GEN Rimuy NOM Tali 'Rimuy broke one of Tali's legs."
 - b. Wal-nya nbe-an cyugal yuyut qwaw qu Tali. PST-3SG.GEN drink-LV three bottle wine NOM Tali 'He drank three bottles of Tali's wine.
 - c. Wal niq-an ni Tali qutux kluban mami qu Rimuy. PST eat-LV GEN Tali one pot rice NOM Rimuy 'Tali ate one pot of Rimuy's rice.'
 - d. Wal qriq-an cyugal yuyut qwaw ni Tali qu Temu PST steal-LV three bottle wine GEN Tali NOM Temu 'Tali stole three bottles of Temu's wine.'
 - e. Zngat-an qwaw ni Temu qu Tali. rob-LV wine GEN Temu NOM Tali 'Temu robbed Tali's wine.'
 - f. Wal-nya ras-an laqi qu Tali.
 PST-3SG.GEN take-LV child NOM Tali
 'He took Tali's child.'

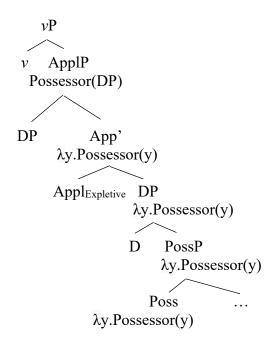
In these examples, the denotation of the Poss head is percolated all the way up to App' and saturated by the DP introduced in Spec-AppP. Like other nominative DPs in locative voice clauses, the possessor DP then raises to Spec-RaisApplP, above ν P, to be nominative-valued by Voice via Agree, in line with Nie's analysis.⁸ Also recall that in such case, the highest Appl, RaisAppl, is

_

⁸ According to Chen (2007), the possessors in the Taoshang Atayal examples are somehow "affected" by the events denoted by the ν P. As previous studies have shown, such interpretation is only possible when the "affectee" is understood as the possessor of the internal argument (Chen 2007, Pylkkänen 2008). Nie (2019), however, finds that the Tagalog examples are not subject to any affectedness condition. As Wood & Marantz (2017) point out, such

adjacent to v and therefore, as in Nie's theory, spelled out as the locative voice marker -an in both languages.

(35) *Delayed saturation of the possessor*



Taken together, empirical findings from Isbukun Bunun, Tagalog, and Taoshang Atayal show again that expletive syntactic heads and delayed saturation are integral to the understanding of the morphosyntax and syntax-semantics interface in Austronesian languages.

Another potential case that may involves delayed saturation regards restructuring, a complex predicate construction where two lexical domains display mono-clausal behavior, as diagnosed, for instance, by the availability of otherwise clause-bound operations. For example, scrambling in Mayrinax Atayal is restricted to the local clause:

(36) *Scrambling in simple actor voice clauses* (Chen 2010: 7)

- a. T<um>uting cu bawaq i Yumin. <AV>beat ACC pig NOM Yumin 'Yumin is beating pigs.'
- b. T<um>uting i Yumin cu bawaq. <AV>beat NOM Yumin ACC pig 'Yumin is beating pigs.'

affectee reading is distinct from the tier of thematic interpretive roles like beneficiary, possessor, agent, among others (see also Bosse et al. 2012), I will thus leave this contrast between the two languages for further research.

> (37)Scrambling in restructuring (Chen 2010: 7) M-nagru t<um>unting cu bawaq i Yumin. a. AV-finish LNK <AV>beat ACC NOM Yumin pig 'Yumin is finishing beating pigs.' t<um>unting i M-nagru b. Yumincu bawaq. AV-finish LNK <AV>beat NOM Yumin ACC pig 'Yumin is finishing beating pigs.' (38)Scrambling limited to the local domain in complex clauses (Chen 2010: 7) S<um>iwal Tali t<um>uting Γi <AV>allow NOM Tali **COMP** <AV>beat ACC Yumin]. bawaq i NOM Yumin pig 'Tali allows Yumin to beat pigs.' b. S<um>iwal Tali t<um>uting i i Γi <AV>allow NOM Tali **COMP** <AV>beat **NOM** Yumin cu bawaq]. Yumin ACC pig 'Tali allows Yumin to beat pigs.' c. *S<um>iwal [i t<um>uting i Tali cu <AV>allow <AV>beat NOM Tali **COMP ACC** bawaq i Yumin]. NOM Yumin pig d. *S<um>iwal [i t<um>uting Yumin <AV>allow <AV>beat **COMP** NOM Yumin Tali cu bawaq]. ACC NOM Tali pig *S<um>iwal i Tali bawaq e. cu <AV>allow ACC NOM Tali pig Γi t<um>uting i Yumin]. **COMP** <AV>beat NOM Yumin f. *S<um>iwal i Tali Yumin <AV>allow NOM Tali NOM Yumin Γi t<um>uting bawaq]. cu **COMP** <AV>beat ACC pig

Other diagnostics such as case assignment, A'-extraction, embedded voice distinction, as well as the (un)availability of embedded negation, aspect, and tense specification, also provide evidence of restructuring as mono-clausal, as opposed to non-restructuring complex clauses. These syntactic properties of restructuring are widely observed in Austronesian languages; readers are referred to Chen (2010) for a thorough discussion of Mayrinax Atyal restructuring, and Wurmbrand (2015) and Wurmbrand & Shimamura (2017), among many others, for a detailed crosslinguistic investigation.

What the current discussion concerns as per restructuring, though, is the thematic interpretation of the external argument. Specifically, it has been shown that Mayrinax Atayal restructuring does not involve control or raising; instead, the embedded structure is a reduced

VoiceP without an external argument. ⁹ In a raising structuring the agentive DP would be introduced in the embedded Spec-VoiceP, where it would saturate the embedded agentive denotation, and then raise to the matrix Spec-VoiceP, receiving the matrix agentive reading. In a control structure, on the other hand, the agentive DP would saturate the matrix agentive denotation and be coindexed with the embedded agentive PRO. In a restructuring clause, however, the one and only agentive DP bears both the matrix and the embedded agentive readings.

```
(39)
a. Restructuring

DPAgent1/Agent2 [VoiceAgent1 [vP v [VoiceP VoiceAgent2 [vP v DPTheme]]]]
b. Raising

DPAgent1/Agent2 [VoiceAgent1 [vP v [VoiceP ___Agent2 VoiceAgent2 [vP v DPTheme]]]]
c. Control

DPi/Agent1 [VoiceAgent1 [vP v [VoiceP PROi/Agent2 VoiceAgent2 [vP v DPTheme]]]]
```

The question then is how two agentive thematic roles end up saturated by a single DP. The answer may follow from the same line of analysis. That is, the embedded Voice in restructuring bans a (DP) specifier, and the unsaturated embedded agentive denotation is passed all the way up to the matrix Voice', with the single external argument in the matrix Spec-VoiceP saturating both agentive roles: the matrix and the embedded. This way, we have another instance of delayed saturation at the Austronesian syntax-semantic interface.

5 Conclusion

This paper has revisited 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. The proposed analysis not only stands with Zeitoun's (2000) claim that the morpheme *-an* in clausal possession is a locative voice marker, but also supports Myler's (2016) theory of clausal possession and Nie's (2019, 2020) proposal for the morphosyntax of Austronesian argument structure. Most importantly, as corroborated by clausal possession (Isbukun Bunun), possessor raising (Tagalog and Taoshang Atayal), and restructuring (Mayrinax Atayal), this paper has shown that expletive heads and delayed saturation play integral roles in the (morpho)syntax-semantics of Austronesian languages.

_

⁹ See Chen (2010) for evidence from imperatives and case assignment supporting this argument.

References

- Aldridge, Edith. 2004. Ergativity and word order in Austronesian languages. PhD thesis, Cornell University.
- ——. 2012. Antipassive and ergativity in Tagalog. Lingua 122.3: 192–203.
- ——. 2016. Ø-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.
- Bosse, Solveig, Benjamin Bruening, and Masahiro Yamada. 2012. Affected experiencers. *Natural Language & Linguistic Theory* 30.4: 1185–1230.
- Chang, Yung-li. 1997. An outline of Seediq grammar (in Chinese). Manuscript.
- Chen, Sih-Wei. 2007. *Applicative Constructions in Atayal*. Hsinchu: National Tsing Hua University master's thesis.
- Chen, Tingchun. 2010. Restructuring in Mayrinax Atayal. B. Arts Honours Thesis. Montréal: McGill University.
- 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* Deal, Amy Rose. 2013. Possessor Raising. *Linguistic Inquiry* 44.3: 391–432.
- Erlewine, Michael Yoshitaka, Theodore Levin and Coppe van Urk. 2017. In Jessica Coon, Diane Massam, and Lisa Travis (eds.), *Oxford Handbook of Ergativity*, 373–396. Oxford: Oxford University Press.
- Freeze, Ray. 1992. Existentials and other locatives. Language 68: 553–595.
- Georgala, Efthymia. 2012. Applicatives in their structural and thematic function: A minimalist account of multitransitivity. Ithaca, NY: Cornell University dissertation.
- 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.——. 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.
- Kroeger, Paul. 1991. Phrase structure and grammatical relations in Tagalog. Stanford, CA:

- Kuo-Chiao Lin
- Learning Center | Kang Chiao International School
- kuochiao.lin@nyu.edu
 - Stanford University dissertation.
- Marantz, Alec. 2013. Class lectures: Handouts from the *Seminar on Argument Structure*, Fall 2013. New York University.
- Massam, Diane. 2015. Applicatives as secondary predicates. In Amber Camp, Yuko Otsuka, Claire Stabile and Nozomi Tanaka (eds.), *Proceedings of AFLA 25*, 185–199. Canberra: Asia-Pacific Linguistics.
- 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.
- McGinnis, Martha. 2001. Variation in the phase structure of applicatives. *Linguistic Variation Yearbook* 1: 105–146. Amsterdam: John Benjamins.
- Myler, Neil. 2016. Building and Interpreting Possession Sentences. Cambridge, MA: MIT Press.
- Nie, Yining. 2019. Raising applicatives and possessors in Tagalog. *Glossa: A Journal of General Linguistics* 4(1). 139.
- ——. 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 Benthen 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.
- 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.
- 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.
- Schäfer, Florian. 2008. The Syntax of (Anti-) Causatives. Philadelphia: John Benjamins.
- Szabolcsi, Anna. 1981. The possessive construction in Hungarian: a configurational category in a non-configurational language. *Acta Linguistica Academiae Scientarum 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.
- Tyler, Matthew. 2020. Argument structure and argument-marking in Choctaw. Yale University PhD Thesis.
- Wood, Jim. 2015. Icelandic Morphosyntax and Argument Structure. Dordrecht: Springer.
- 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.
- Wu, Hsiao-hung Iris. 2009. Existential constructions in Isbukun Bunun. *Oceanic Linguistics* 48.2: 364–378.

- ———. 2013. Restructuring and clause structure in Isbukun Bunun. *Oceanic Linguistics* 52.1: 69–85.
- Wurmbrand, Susi. 2015. Restructuring cross-linguistically. In Thuy Bui and Deniz Özyıldız (eds.), Proceedings of the North Eastern Linguistics Society Annual Meeting 45, 227–240. Amherst: University of Massachusetts, GLSA.
- Wurmbrand, Susi and Koji Shimamura. 2017. The features of the voice domain: actives, passives, and restructuring. In Roberta D'Alessandro, Irene Franco, and Ángel J. Gallego (eds.), *The Verbal Domain*, 179–204. Oxford: Oxford University Press.
- 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.