Predicative possessives in Budai Rukai*

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1 Introduction

- Across world's languages, predicative possessives are expressed by different syntactic strategies (Heine 1997, Stassen 2009, Myler 2014, 2016, a.o.).
 - (1) a. English

I have a sister.

b. Yucatec (Mayan, Freeze 1992:577)

yaan huntul ciimin ti? in-paapa.

COP one horse P my-father

'My father has a horse.' (= A horse is with my father.)

c. Central Amis (Formosan, Zeitoun et al. 1999:3)

ira ku paysu nira. exist NOM money 3SG.GEN

'He has money.' (= His money exists.)

- Most Formosan languages (Austronesian; Taiwan) employ the strategy 'X's Y exists' for predicative possessives, including Budai Rukai (Zeitoun 2000). The predicate is also used in existentials and locatives (Zeitoun 2023, Zeitoun et al. 1999, a.o.).
 - (2) a. Y<a>kay ku tawpungu=li. <AV.REAL>exist NOM dog=1SG.GEN 'I have a dog.'
 - b. Y<a>kay ku tawpungu. <AV.REAL>exist NOM dog

'There is a dog.'

c. Y<a>kay **nakwane** ku tawpungu.

<AV.REAL>exist **1SG.OBL** NOM dog

'The dog is with me.'

- Interestingly, when the possessum is internally complex with a genitive inside it, the possessor is oblique. The possessive construction is then identical to the locative construction on the surface.
 - (3) Y<a>kay **nakwane** ku hungu ki Lrupilriane. <AV.REAL>exist **1SG.OBL** NOM book GEN Lrupilriane possessive reading: 'I have Lrupilriane's book.' locative reading: 'Lrupilriane's book is here with me.'

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¹Lrupilriane was an author in Budai Rukai, and he did publish a book talking about Rukai names.

• Goals:

- to investigate the possessive constructions in Budai Rukai, in terms of the grammatical relations of possessors and possessums (Section 3-6)
- to examine the structure of locative-like predicative possessives, in comparison with locatives (Section 7-10)

• Claims:

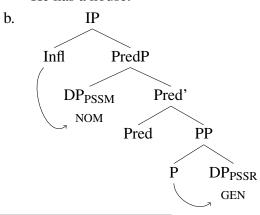
- Both genitive and oblique predicative possessors behave as grammatical subjects, whereas nominative possessums are inert in Budai Rukai.
- This prima facie mismatch between case and grammatical relations is resolved by A-movement and copies. While the lower copy of the predicative possessor is pronounced in the base position, the higher copy shows the subject properties and also feeds later subject-restricted A'-movement.
- Two Appls of different flavors (following Georgala et al. 2008, Georgala 2012) are proposed to account for genitive and oblique predicative possessors in Budai Rukai. A new structural possibility is thus provided for the construction of 'X's Y exists', different from Huang 2013 and Myler 2014, 2016.

2 Theoretical backgrounds

• Theoretically, two main proposals can be found: the locative approach (Huang 2013) and the expletive approach (Myler 2014, 2016).

2.1 Locative approach

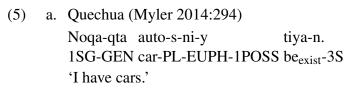
- Following Freeze 1992, Huang 2013 proposes a locative syntax for 'X's Y exists' in Mayrinax Atayal (Formosan). The possessum is regarded as the grammatical subject, while the possessor is regarded as the object of the preposition. The predicate 'exist' is regarded as a preposition.²
- In terms of case-marking, the possessum is assigned nominative (absolutive) by Infl, while the possessor is assigned inherent genitive by the preposition (= 'exist') and undergoes cliticization onto the possessum in morphology.
 - (4) a. Mayrinax Atayal (Huang 2013:42) Kiya a imuwang=niya. exist IND.ABS house=3SG.GEN 'He has a house.'

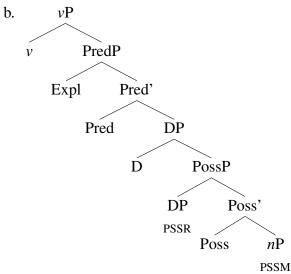


²The tree structure presented here in (4b) is a bit different from Huang's tree, where more projections of the preposition are positied but no PredP is seen. For the ease of expository convenniece, PredP (Bowers 2001) is adopted here and less P-related structure is presented.

2.2 Expletive approach

• Myler 2014, 2016 propose an expletive syntax for 'X's Y exists' in Quechua. The possessor is contained in a DP headed by the possessum, and the DP serves as a predicate of an expletive subject.





- Main difference between two proposals: The possessum is expected to be the grammatical subject in the locative approach, whereas neither the possessum or the possessor is expected to be the grammatical subject in the expletive approach.
- **Highlight of Budai Rukai**: It is the predicative possessor that serves as the grammatical subject in Budai Rukai, not the possessum or an expletive subject as expected in these two approaches.

3 Possessors pronounced in PossP

- Argument: Predicative possessors are pronounced in PossP and form a constituent with possessums, thus like regular DP possessors but unlike clausal subjects on the surface.
- **Genitive marking**: The predicative possessor is genitive-marked, like the regular possessor but not like the nominative clausal subject.
 - (6) a. Y<a>kay ku tawpungu=li. <AV.REAL>exist NOM dog=1SG.GEN 'I have a dog.'
 - b. Wa-pacay ku tawpungu=li.

 AV.REAL-die NOM dog=1SG.GEN
 'My dog died.'
 - c. Wa-lrumadh=aku ki tawpungu. AV.REAL-hit=1SG.NOM OBL dog 'I hit Lavurase.'

- **Contextual allomorphy**: Budai Rukai shows contextual allomorphy for kinship terms. The predicative possessor shows the allomorphy like the regular possessor.
 - (7) Inablienable possession (kinship)

	father	mother	older sibling	younger sibling	book
1S	ama	ina	kaka	agi=li	hungu=li
2S	t-ama=su	t-ina=su	t-aka	agi	hungu=su
3S	t-ama=ini	t-ina=ini	t-aka=ini	agi=ini	hungu=ini
1P.IN	t-ama=ta	t-ina=ta	t-aka=ta	agi=ta	hungu=ta
1P.EX	t-ama=nay	t-ina=nay	t-aka=nay	agi=nay	hungu=nay
2P	t-ama=numi	t-ina=numi	t-aka=numi	agi=numi	hungu=numi
3P	t-ama=lini	t-ina=lini	t-aka=lini	agi=lini	hungu=lini

- (8) a. Wa-kela-nga ka t-aka-Ø.

 AV.REAL-come-PFV NOM T-older.sibling-2SG.GEN

 'Your older sibling has come.'
 - b. Y<a>kay ku t-aka-Ø? <AV.REAL>exist NOM T-older.sibling-2SG.GEN 'Do you have an older sibling?'
- Word order: The predicative possessor is required to follow the possessum, like the regular possessor but unlike the clausal subject which can either precede or follow the object.
 - (9) a. Y<a>kay [✗ki Lavurase] [ku tawpungu] [✓ki Lavurase]. <AV.REAL>exist [✗GEN Lavurase] [NOM dog] [✓GEN Lavurase] Intended: 'Lavurase has a dog.'
 - b. Wa-a<lea>leale [x ki Lavurase] [ku tawpungu] [x ki Lavurase].

 AV.REAL-<RED>bark [GEN Lavurase] [NOM dog] [GEN Lavurase]

 Intended: 'Lavurase's dog is barking.'
 - c. Wa-lrumay [ku Lavurase] [ki tawpungu] [ku Lavurase]. AV.REAL-hit [NOM Lavurase] [OBL dog] [NOM Lavurase] 'Lavurase hit the dog.'
- **Cliticization**: The pronominal predicative possessor remains with the possessum, like the regular possessor but unlike the clausal subject which cliticizes onto the verb.
 - (10) a. Y<a>kay ku tawpungu=li. <AV.REAL>exist NOM dog=1SG.GEN 'I have a dog.'
 - b. *Y<a>kay=**yaku** ku tawpungu. <AV.REAL>exist=**1SG.NOM** NOM dog 'I have a dog.'
 - (11) a. Wa-pacay ku tawpungu=li. AV.REAL-die NOM dog=1SG.GEN 'My dog died.'
 - b. Wa-lrumadh=aku ki tawpungu. AV.REAL-hit=1SG.NOM OBL dog 'I hit Lavurase.'

4 Possessors as grammatical subjects

• <u>Argument</u>: Although contained in the DP headed by the possessum like regular possessors, predicative possessors function as grammatical subjects, syntactically differing from regular possessors.

4.1 Controlled PRO

- The predicative possessor can serve as controlled PRO, which shows its status as a grammatical subject.
 - (12) a. Ma-dalam=aku [ka-sipelrenge **PRO**]. AV.STAT.REAL-like=1SG.NOM [STAT-sleep **PRO**] 'I like to sleep.'
 - b. Ma-dalam=aku [lrabwale **PRO**].

 AV.STAT.REAL-like=1SG.NOM [run **PRO**]

 'I like to run.'
 - c. Ma-dalam=aku [ikay ku tawpungu **PRO**]. AV.STAT.REAL-like=1SG.NOM [exist NOM dog **PRO**] 'I like to have a dog.'
- Note that the predicate here takes a control structure rather than restructuring; for example, the structure can host clausal negation.
 - (13) a. Ma-dalam=aku [kai ka-sipelrenge PRO].

 AV.STAT.REAL-like=1SG.NOM [NEG STAT-sleep PRO]

 'I like not to sleep.'
 - b. Ma-dalam=aku [kai ikay ku tawpungu PRO]. AV.STAT.REAL-like=1SG.NOM [NEG exist NOM dog PRO] 'I like to not have a dog.'
- However, the regular possessor cannot serve as controlled PRO.
 - (14) *Ma-dalam=aku [lrabwale ku tawpungu=**PRO**].

 AV.STAT.REAL-like=1SG.NOM [run NOM dog=**PRO**]

 Intended 'I like for my dog to run.'

4.2 Quantifier float

- Quantifiers in Budai Rukai typically appear in a post-nominal position, as seen in topicalization where a constituent is topicalized.
 - (15) a. Ka taraalupu **makanaelre**, wa-lapu ku tawpungu. NOM hunter **all** AV.REAL-keep OBL dog 'All the hunters keep a dog.'
 - b. *makanaelre ka taraalupu, wa-lapu ku tawpungu.
 all NOM hunter AV.REAL-keep OBL dog 'All the hunters keep a dog.'

- Grammatical subjects but not grammatical objects can license floating quantifiers in non-adjacent positions. Quantifiers can be adjacent to the modified arguments, but can only be non-adjacent for subjects but not objects.
 - (16) a. Wa-senay **makanaelre** ka la-sinsi (\checkmark) i-gaku (\checkmark). AV.REAL-sing **all** NOM PL-teacher (**all**) LOC-school (**all**) 'All the teachers sang at school.'
 - b. Kay sinsi, wa-lrumay **makanaelre** ki la-panudhu (i-gaku (i-ga
- The predicative possessor patterns with the grammatical subject in licensing quantifier float, whereas the regular possessor cannot.³
 - (17) a. Wa-lapu **makanaelre** ku tawpungu **ka taraalupu**. AV.REAL-keep **all** OBL dog **NOM hunter** 'All the hunters keep a dog.'
 - b. Y<a>kay **makanaelre** ku tawpungu **ki taraalupu**. <AV.REAL>exist **all** NOM dog **GEN hunter** 'All the hunters have a dog.'
 '*The hunter has all the dogs.'
 - c. M-u<a>bere makanaelre ka tawpungu ki taraalupu.
 M-<AV.REAL>escape all NOM dog GEN hunter

 '*The dog of all the hunters escaped.'

 'All the dogs of the hunter escaped.'

4.3 Topicalization

- In Budai Rukai, the grammatical subject but not the grammatical object can be topicalized in AV (= active voice).
 - (18) a. **Ka Lavurase**, wa-lrumay ki tawpungu. **NOM Lavurase** AV.REAL-hit OBL dog 'Lavurase hit the dog.'
 - b. *Ki/KA tawpungu, wa-Irumay ka Lavurase.

 OBL/NOM dog AV.REAL-hit NOM Lavurase

 'Lavurase hit the dog.'
- The predicative possessor can be topicalized without a pronoun in-situ or a resumptive pronoun, whereas the regular possessor cannot (see also Huang 2013 for Mayrinax Atayal). This may indicate that the regular possessor occurs with a hanging topic.
 - (19) a. Ka Lavurase, y<a>kay ku daane(=ini). NOM Lavurase, <AV.REAL>exist NOM house(=3SG.GEN) 'Lavurase has a house.'
 - b. Ka Lavurase, m-u<a>kulrudru ka daane*(=ini).

 NOM Lavurase M-<AV.REAL>fall NOM house*(=3SG.GEN)

 'Lavurase's house fell.'

³The point here is that possessors in possessives can have a non-adjacent quantifier, but it's not clear why the adjacent quantifier for the possessum is not available.

4.4 Wh-movement

- Like most Formosan languages (Aldridge 2002, Tsai 2023), the fronted interrogative is a *wh*-predicate and the rest of the clause is headless relativization in Budai Rukai (C.-F. Chen 1999).
- The grammatical subject but not the grammatical object can undergo *wh*-movement with an AV verb. The grammatical object can only undergo *wh*-movement through an OV verb (object voice).
 - (20) a. Aneane [ka wa-lrumay ki tawpungu]? who [NOM AV.REAL-hit OBL dog] 'Who hit the dog?' (= The one that hit the dog is who?)
 - b. *Manemane [ka wa-lrumay ka Lavurase]? what [NOM AV.REAL-hit NOM Lavurase] 'What did Lavurase hit?'
 - c. Manemane [ka **lrumay** ki Lavurase]? what [NOM **OV.hit** GEN Lavurase] 'What did Lavurase hit?'
- The predicative possessor can undergo *wh*-movement with an AV verb, whereas the regular possessor cannot (see also Huang 2013 for Mayrinax Atayal).
 - (21) a. Aneane [ku y<a>kay ku daane]? who [NOM <**AV.REAL**>**exist** NOM house] 'Who has a house?'
 - b. *Aneane [ku m-u<a>kadrulru ku danne]? who [NOM M-<AV.REAL>fall NOM house] 'Whose house fell?'

4.5 Relativization

- The grammatical subject but not the grammatical object can be relativized with an AV verb. The grammatical object can be relativized only through an OV verb.
 - (22) a. M-u<a>bere ka [wa-lrumay ki tawpungu ka] lasu. M-<AV.REAL>escape NOM [AV.REAL-hit OBL dog REL] man 'The man that hit the dog escaped.'
 - b. *M-u<a>bere ku [wa-lrumay ka Lavurase ka] tawpungu.
 M-<AV.REAL>escape NOM [AV.REAL-hit NOM Lavurase REL] dog
 'The dog that Lavurase hit escaped.'
 - c. M-u<a>bere ka [Irumay ki Lavurase ka] tawpungu.
 M-<AV.REAL>escape NOM [OV.hit GEN Lavurase REL] dog
 'The dog that Lavurase hit escaped.'
- The predicative possessor can be relativized with an AV verb, whereas the regular possessor cannot.
 - (23) a. Sa-paysu-ane ku lasu [ku **y**<**a**>**kay** ku daane]. have(.a.lot)-money-NMLZ NOM man [REL <**AV.REAL**>**exist** NOM house] 'The man that has a house is wealthy.'
 - b. *Ma-lisi-lisi ka lasu [ka **m-u**<**a**>**kadrulru** ku daane]. AV.STAT.REAL-RED-angry NOM man [REL <**AV.REAL**>**fall** NOM house] 'The man whose house fell is angry.'

4.6 Quantifier binding

- The quantificational grammatical subject can bind into the grammatical object, while the quantificational grammatical object cannot bind into the grammatical subject. Note that word order is not at work here.
 - (24) a. Ma-dalame [sana ka sinsi_i] [ki panudhu=ini_i].

 AV.STAT.REAL-like [every KA teacher] [OBL student=3SG.GEN]

 'Every teacher_i likes his_i students.'
 - b. Ma-dalame [ki panudhu=ini_i] [sana ka sinsi_i]. AV.STAT.REAL-like [OBL student=3SG.GEN] [every KA teacher] 'Every teacher_i likes his_i students.'
 - (25) a. Ma-dalame [kay sinsi=ini $_{*i/k}$] [sana ka panudhu $_i$]. AV.STAT.REAL-like [this teacher=3SG.GEN] [every KA student] 'His $_{*i/k}$ teacher likes every student $_i$.'
 - b. Ma-dalame [sana ka panudhu_i] [kay sinsi=ini $_{*i/k}$] AV.STAT.REAL-like [every KA student] [this teacher=3SG.GEN] 'His $_{*i/k}$ teacher likes every student_i.'
- The quantificational possessum cannot bind into the predicative possessor. This thus speaks against Huang's locative approach where the possessum is higher than the possessor.
 - (26) *Y<a>kay [sana ka lalake_i] [ki t-ina=ini_i]. <AV.REAL>exist [every KA child] [GEN T-mother=3SG.GEN] 'His_i mother has every child_i.'

4.7 Interim summary

- As shown in the table, the predicative possessor syntactically behaves as the grammatical subject but unlike the regular possessor.
 - (27) Comparison of the syntactic behavior⁴

	grammatical	predicative	regular
	subject	possessor	possessor
controlled PRO	✓	√	X
quantifier float	✓	\checkmark	×
topicalization in AV	✓	\checkmark	×
<i>wh</i> -movement in AV	✓	\checkmark	×
relativization in AV	✓	\checkmark	X

- The subject properties of the predicative possessor thus cannot be captured by the locative approach (where the possessum is the subject) or expletive approach (where the expletive is the subject).
- In addition, the possessum cannot bind into the predicative possessor, which cannot be captured by the locative approach, where the possessum c-commands the possessor.

⁴For topicalization of the regular possessor, it is labeled ungrammatical if we don't take hanging topics into consideration.

5 Possessums as inert arguments

• <u>Argument</u>: Possessums in possessives are not grammatical subjects nor grammatical objects, but inert arguments with nominative case.

5.1 Controlled PRO

- Despite the nominative marking, the possessum cannot be controlled PRO, which suggests it doesn't serve as a grammatical subject.
 - (28) a. *Ma-dalame ka tawpungu [ikay **PRO**=li].

 AV.STAT.REAL-like NOM dog [exist **PRO**=1SG.GEN]

 'That dog likes to be mine / be owned by me.'
 - b. *Ma-lrase ka ngiaw [ikay **PRO** ki Lavurase]. AV.STAT.REAL-hate NOM cat [exist **PRO** GEN Lavurase] 'That cat hates to be Lavurase's / be owned by Lavurase.'

5.2 Topicalization

- The possessum or the possessor-possessum DP cannot be topicalized.
 - (29) a. *Ku daane, y<a>kay ki Lavurase. NOM house <AV.REAL>exist GEN Lavurase 'A house, Lavurase has one.'
 - b. ??Ku daane ki Lavurase, y<a>kay.NOM house GEN Lavurase <AV.REAL>exist 'Lavurase has a house.'
- The definite possessum cannot be topicalized either, suggesting no (in)definite effect at play here for topicalization.
 - (30) a. Y<a>kay ku miyaiya kay ku laimay ki Lavurase. <AV.REAL>exist NOM like this REL clothes GEN Lavurase 'Lavurase has this kind of clothes.'
 - b. *Ku miyaiya kay ku laimay, y<a>kay ki Lavurase. NOM like this REL clothes <AV.REAL>exist GEN Lavurase 'This kind of clothes, Lavurase has one.'
- This differs from the regular possessor, where the possessor-possessum DP can be topicalized as a whole.
 - (31) Ka daane ki Lavurase, m-u<a>kulrudru. NOM house GEN Lavurase M-<AV.REAL>fall 'Lavurase's house, it fell.'

5.3 Wh-movement

• The possessum cannot undergo *wh*-movement, either with an AV verb or an OV verb, different from the grammatical subject and the grammatical object. The only way to have a possessum interrogative is through the in-situ strategy.

- (32) a. *Manemane [ku y<a>kay=su]? what [NOM <AV.REAL>exist=2SG.GEN] 'What do you have?'
 - b. *Manemane [ku ikay=su]? what [NOM OV.exist=2SG.GEN]

'What do you have?'

c. Y<a>kay ku manemane=su? <AV.REAL>exist NOM what=2SG.GEN 'What do you have?'

5.4 Relativization

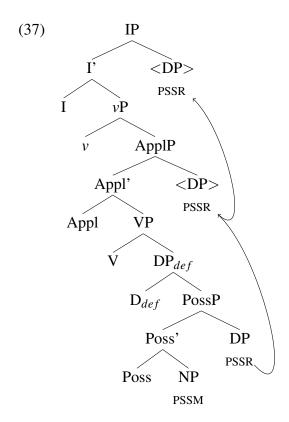
- The possessor cannot be relativized, either with an AV verb or an OV verb, different from the grammatical subject and the grammatical object.
 - (33) a. *M-u<a>kadrulu-nga ku [y<a>kay ki Lavurase ku] daane. M-<AV.REAL>fall-PFV NOM [<AV.REAL>exist GEN Lavurase REL] house 'The house that Lavurase has fell.'
 - b. *M-u<a>kadrulu-nga ku [ikay ki Lavurase ku] daane. M-<AV.REAL>fall-PFV NOM [OV.exist GEN Lavurase REL] house 'The house that Lavurase has fell.'

5.5 Case and demonstratives

- The nominative case remains in the non-finite control structure, which suggests the nominative case on possessums does not originate from finite Infl and may be default (see Legate 2008).
 - (34) Ma-dalam=aku [ikay ku /*ki tawpungu **PRO**]. AV.STAT.REAL-like=1SG.NOM [exist NOM / OBL dog **PRO**] Intended: 'I like to have a dog.'
- Note that the nominative is default within this language, as seen in topicalization.
 - (35) a. Y<a>kay ku tawpungu **ki Lavurase**. <AV.REAL>exist NOM dog **GEN Lavurase** 'Lavurase has a dog.'
 - b. **Ka Lavurase**, y<a>kay ku tawpungu. **NOM Lavurase** <AV.REAL>exist NOM dog 'Lavuras has a dog.'
- In addition, while the regular demonstrative can be placed for the possessum, the semantics appears not to work, suggesting that the DP layer is defective. Instead, a periphrastic strategy is used for the demonstrative reading.
 - (36) a. ?#Y<a>kay kay laimay ki Lavurase. <AV.REAL>exist **this** clothes GEN Lavurase Intended: 'Lavurase has this clothes.'
 - b. Y<a>kay ku [miyaiya kay ku] laimay ki Lavurase. <AV.REAL>exist NOM [like this REL] clothes GEN Lavurase 'Lavurase has this kind of clothes.' (Lit. Lavurase has clothes which is like this.)

6 Analysis for 'X's Y exists' in Budai Rukai

- To summarize, (a) the predicative possessor is pronounced in PossP like the regular possessor, but (b) it behaves as the grammatical subject; (c) the possessum appears as an inert argument.
- As the predicative possessor is inside the possessum, we thus follow Myler 2014, 2016 in adopting a complex DP where the possessor is introduced in PossP.
- However, instead of PredP in Myler 2014, 2016, an athematic applicative (see Deal 2013, Georgala et al. 2008, Georgala 2012) is present and allows the possessor to move across Spec, ApplP to Spec, IP. This ApplP is only present in predicative possessives but not in intransitives.
- With A-movement, the lower copy is pronounced and assigned genitive in the base position, while the higher copy shows the grammatical subject properties and feeds subject-restricted A'-movement.
- The possessum is realized with a default nominative case, and the DP layer is defective.



7 Locative-like predicative possessives: An overview

• Many languages have predicative possessives realized through locatives, as found in different language families (see also the Mayan example in (1b)).

(38) a. Russian (Indo-European) b. Finnish (Uralic)

u menja byla sestra.

at 1SG.GEN COP sister.NOM

'I have a sister.' (Freeze 1992:577)

b. Finnish (Uralic)

Liisa-lla on mies.

Lisa-ADESSIVE COP man

'Lisa has a husband.' (ibid)

- Even within the Rukai language, Mantauran Rukai can also resort to the locative construction for the possessive reading, where the possessor is realized just like the oblique location.
 - (39) Mantauran Rukai (Formosan)
 - a. Om-iki paiso-**li**.
 DYN.FIN-exist money-**1SG.GEN**'I have money.' (Zeitoun 2007:352)
 - b. Om-iki-iae paiso.
 DYN.FIN-exist-1SG.OBL money
 'I have money.' (Zeitoun 2007:352)
 - c. Om-iki-iae varange-li lroolai 'apece.
 DYN.FIN-exist-1SG.OBL belly-1SG.GEN child DYN.SUBJ.sleep
 'The baby sleeps on my belly.' (Zeitoun 2007:352)
- Budai Rukai, on the other hand, does not have this alternation in simple clauses.
 - (40) a. Y<a>kay ku hungu=li.
 <AV.REAL>exist NOM book=1SG.GEN
 'I have a book.'
 b. Y<a>kay [✓ nakwane] ku hungu [✓ nakwane].
 <AV.REAL>exist [✓ 1SG.OBL] NOM book [✓ 1SG.OBL]

<a href="mailto:AV.REAL>exist [\sqrt{1SG.OBL}] NOM book [\sqrt{1SG.OBL}] locative reading: 'The book is here with me.' possessive reading: '*I have a book.'

- However, when the possessum contains a genitive inside it, the predicative possessor surfaces as oblique but not genitive. The surface form then is identical to locatives.
 - (41) a. Y<a>kay [\(\sim \text{nakwane} \) ku hungu ki Lrupilriane [\(\sim \text{nakwane} \)]. <AV.REAL>exist [\(\sim \text{1SG.OBL} \)] NOM book GEN Lrupilriane [\(\sim \text{1SG.OBL} \)] possessive reading: 'I have Lrupilriane's book.' locative reading: 'Lrupilriane's book is here with me.'
 - b. *Y<a>kay ku hungu ki Lrupilriane=li. <AV.REAL>exist NOM book GEN Lrupilriane=1SG.GEN 'I have Lrupilriane's book.'
 - c. *Y<a>kay ku hungu=li ki Lrupilriane. <AV.REAL>exist NOM book=1SG.GEN GEN Lrupilriane 'I have Lrupilriane's book.'

- Although the genitive and oblique case markings are syncretic as *ki* for full nouns, the oblique possessor can still be evidenced by its variable positions.
 - (42) Y<a>kay [✗ki Lavurase] [ku tawpungu] [✓ki Lavurase]. <AV.REAL>exist [✗GEN Lavurase] [NOM dog] [✓GEN Lavurase] Intended: 'Lavurase has a dog.'
 - (43) Y<a>kay [/ ki Lavurase] [ku hungu ki Lrupilriane] [/ ki Lavurase]. <av.real>exist [/ OBL Lavurase] [NOM book GEN Lrupilriane] [/ OBL Lavurase] 'Lavurase has Lrupilriane's book.'
- Goal: to investigate whether the oblique possessor behaves as the oblique location, namely whether locative-like possessives are identical to locatives in structures or not
- **Highlight**: Although the possessives are expressed as locatives on the surface in Budai Rukai, the oblique possessor patterns with the genitive possessor in being the grammatical subject. Thus, the oblique possessor behaves on a par with the nominative theme in locatives instead of the oblique location.
 - (44) baseline
 - a. Y<a>kay ku tawpungu=li. <REAL>exist NOM dog=1SG.GEN 'I have a dog.'
 - b. Y<a>kay **nakwane** ku hungu ki Lrupilriane. <REAL>exist **1SG.OBL** NOM book GEN Lrupilriane 'I have Lupilriane's book.'
 - c. Y<a>kay **nakwane** ku tawpungu. <REAL>exist **1SG.OBL** NOM dog 'The dog is with me.'
 - (45) comparison (grammatical subjects boldfaced)

type	construction
possessives (default)	Predicate + [possessum.NOM]=[possessor.GEN]
possessives (locative-like)	Predicate + [possessor.OBL] + [possessum.NOM]
locatives	Predicate + [location.OBL] + [theme.NOM]

8 Oblique possessors as grammatical subjects

• <u>Argument</u>: The oblique possessor patterns with the genitive possessor, behaving as the grammatical subject. The oblique possessor thus patterns with the nominative theme rather than the oblique location in locatives.

8.1 Controlled PRO

- The genitive possessor and oblique possessor can be controlled PRO, behaving as the grammatical subject.
 - (46) a. Ma-lras=aku [kai ikay ku tawpungu **PRO**_{GEN}].

 AV.STAT.REAL-hate=1SG.NOM [NEG exist NOM dog **PRO**_{GEN}]

 'I hate to not have a dog.'
 - b. Ma-lras=aku [kai ikay ku hungu ki Lrupilriane **PRO**_{OBL}]. AV.STAT.REAL-hate=1SG.NOM [NEG exist NOM book GEN Lrupilriane **PRO**_{OBL}]. 'I hate to not have Lrupilriane's book.'

- In locatives, the oblique location cannot be controlled PRO; instead the nominative theme can. This shows that the nominative theme but not the oblique location is the grammatical subject.
 - (47) a. *Ma-lras=aku [kai ikay ku tawpungu **PRO**_{OBL}].

 AV.STAT.REAL-hate=1SG.NOM [NEG exist NOM dog **PRO**_{OBL}]

 Intended: 'I hate for the dog to be not with me.'
 - b. Ma-lras=aku [kai ikay ki daane **PRO**_{NOM}]. AV.STAT.REAL-hate=1SG.NOM [NEG exist OBL house **PRO**_{NOM}] 'I hate to not be/live in the house.'

8.2 Topicalization

- The genitive possessor and the oblique possessor can be topicalized, like the grammatical subject.
 - (48) a. Ka Lavurase, y<a>kay ku tawpungu. NOM Lavurase <AV.REAL>exist NOM dog 'Lavurase has a dog.'
 - b. Ka Lavurase, y<a>kay ku hungu ki Lrupilriane. NOM Lavurase <AV.REAL>exist NOM book GEN Lrupilriane 'Lavurase has Lrupilriane's book.'
- The oblique location cannot be topicalized; instead, the theme can. This shows that the nominative theme but not the oblique location is the grammatical subject.
 - (49) a. *Ka Lavurase, y<a>kay ku tawpungu. NOM Lavurase <AV.REAL>exist NOM dog Intended: 'Lavurase, the dog is with him.'
 - b. Ku tawpungu, y<a>kay ki Lavurase. NOM dog <AV.REAL>exist OBL Lavurase 'The dog, it is with Lavurase.'

8.3 Wh-movement

- The genitive possessor and the oblique possessor can undergo *wh*-movement with an AV verb, like the grammatical subject.
 - (50) a. Aneane [ku y<a>kay ku tawpungu]? who [NOM <AV.REAL>exist NOM dog] 'Who has a dog?'
 - b. Aneane [ku y<a>kay ku hungu ki Lrupilriane]? who [NOM <AV.REAL>exist NOM book GEN Lrupilriane] 'Who has Lrupilriane's book?'
- The oblique location cannot undergo *wh*-movement with an AV verb; instead the theme can. This shows that the nominative theme but not the oblique location is the grammatical subject.
 - (51) a. *Aneane [ku y<a>kay ku tawpungu]? who [NOM <AV.REAL>exist NOM dog]
 Intended: 'Who is the dog with?'
 - b. Manemane [ku y<a>kay ki Lavurase]? what [NOM <AV.REAL>exist OBL Lavurase] 'What is with Lavurase?'

8.4 Relativization

- The genitive possessor and oblique possessor can be relativized with an AV verb, like the grammatical subject.
 - (52) a. Mwabere ku lasu [ku y<a>kay ku tawpungu]. escaped NOM man [REL <AV.REAL>exist NOM dog] 'The man that has a dog escaped.'
 - b. Kudra [y<a>kay ku hungu ki Lrupilriane ku] lasu ay, mwabere. that [<AV.REAL>exist NOM book GEN Lrupilriane REL] man TOP escaped 'That man who has Lrupilriane's book escaped.'5
- The oblique location cannot be relativized with an AV verb; instead the theme can. This shows that the nominative theme but not the oblique location is the grammatical subject.
 - (53) a. *Mwabere ku lasu [ku y<a>kay ku tawpungu]. escaped NOM man [REL <AV.REAL>exist NOM dog] 'The man who the dog was with escaped.'
 - b. Mwabere ku tawpungu [ku y<a>kay ki Lavurase.] escaped NOM dog [REL <AV.REAL>exist OBL Lavurase] 'The dog that was with Lavurase escaped.'

8.5 Predictions: Binding

- **Prediction**: If the oblique possessor functions as the grammatical subject, it is expected to command the possessum and have the binding effects.
- The quantificational oblique possessor can bind into the pronoun inside the possessum with a co-varying reading.
 - (54) Y<a>kay [ku kabange=ini $_i$] [sana ka panudhu $_i$]. <AV.REAL>exist [NOM schoolbag=3SG.GEN $_i$] [every KA student $_i$] 'Every student $_i$ has his $_i$ schoolbag.'
- The pronominal oblique possessor induces a Condition C violation on the co-referred R-expression in the possessum.
 - (55) Y<a>kay [ku sasingi ki Lavurase_i] [iniane_{*i/k}]. <AV.REAL>exist [NOM photo GEN Lavurase_i] [3SG.OBL_{*i/k}] 'He_{*i/k} has Lavurase_i's photo.'

8.6 Interim summary

• As shown, the oblique possessor patterns with the genitive possessor and nominative theme but differ from the oblique location. The oblique possessor deos not equal the oblique location.

(56) Comparison of the syntactic behavior

	genitive	oblique	oblique	nominative
	possessor	possessor	location	theme
controlled PRO	√	√	×	√
topicalization in AV	✓	✓	×	✓
wh-movement in AV	✓	✓	×	✓
relativization in AV	✓	✓	×	✓

⁵My consultant doesn't like the non-topicalized version. Whether it is due to the processing or syntactic problem is not unclear.

• Moreover, the oblique possessor is shown to bind the possessum, which speaks against Huang's locative approach to predicative possessives even though the surface looks like locatives.

9 Oblique possessor different from genitive possessor

9.1 Occurrence of the oblique possessor

- **Argument**: The oblique predicative possessor surfaces when another genitive is present on the same head.
- **Genitive possessor**: The oblique possessor surfaces when the possessum has a genitive possessor inside it, either a full noun or a pronoun.
 - (57) a. Y<a>kay [/ nakwane] [ku hungu ki Lrupilriane] [/ nakwane]. <AV.REAL>exist [/ 1SG.OBL] [NOM book GEN Lrupilriane] [/ 1SG.OBL] 'I have Lrupilriane's book.'
 - b. Y<a>kay [ki Lavurase] [ku hungu ki Lrupilriane] [ki Lavurase]. <av.real>exist [OBL Lavurase] [NOM book GEN Lrupilriane] [OBL Lavurase] 'Lavurase has Lrupilriane's book.'
 - (58) a. Y<a>kay [✓ muswane] [ku sawsi=li] [✓ muswane]. <AV.REAL>exist [✓ 2SG.OBL] [NOM key=1SG.GEN] [✓ 2SG.OBL] 'You have my keys.'
 - b. Y<a>kay [✓ ki Lavurase] [ku sawsi=li] [✓ ki Lavurase]. <AV.REAL>exist [✓ OBL Lavurase] [NOM key=1SG.GEN] [✓ OBL Lavurase] 'Lavurase has my keys.'
- **Genitive agent**: Moreover, when the possessum has a head-internal relativized clause with a genitive agent inside it, the possessor also surfaces as oblique.
 - (59) a. Ki-a-bengelray ka Muni. get-AV.REAL-flower NOM Muni 'Muni picked some flowers.'
 - b. Sangw-a-lreme [ka ki-bengelray ki Muni]. SANGW-AV.REAL-fragrant [NOM OV.get-flower GEN Muni] 'The flowers that Muni picked are fragrant.'
 - (60) a. Y<a>kay **nakwane** [ku ki-bengelray ki Muni]. <AV.REAL>exist **1SG.OBL** [NOM OV.get-flower GEN Muni] 'I have the flowers that Muni picked.'
 - b. *Y<a>kay [ku ki-bengelray ki Muni]=li. <AV.REAL>exist [NOM OV.get-flower GEN Muni]=1SG.GEN 'I have the flowers that Muni picked.'
 - c. *Y<a>kay [ku ki-bengelray=li ki Muni]. <AV.REAL>exist [NOM OV.get-flower=1SG.GEN GEN Muni] 'I have the flowers that Muni picked.'
- On the contrary, when the possessum contains a head-external relativized clause (where the agent is also realized as genitive), the predicative possessor is genitive.
 - (61) a. Wa-langay ku bengelray ka Muni. AV.REAL-buy OBL flower NOM Muni 'Muni bought (some) flowers.'

- b. Sangw-a-Ireme ka bengelray [ka langay ki Muni]. SANGW-AV.REAL-fragrant NOM flower [REL OV.buy GEN Muni] 'The flowers that Muni bought are fragrant.'
- (62) a. Y<a>kay ku bengelray=li [ku langay ki Muni]. <AV.REAL>exist NOM flower=1SG.GEN [REL OV.buy GEN Muni] 'I have the flowers that Muni bought.'

9.2 Oblique as syntactic not morphological

- <u>Argument</u>: The oblique predicative possessor is not merely a morphological reflex due to anther present genitive on the same head (such as a ban on two genitives in a row), but it occupies a syntactic position outside the possessum.
- **GEN-GEN**: With different constituencies and interpretations, two genitives can surface in a row, namely in the case where the possessor is internally complex.
 - (63) a. Y<a>kay [ku hungu ki panudhu] **nakwane**. <REAL>exist [NOM book GEN student] **1SG.OBL** 'I have a student's book.'
 - b. Y<a>kay ku hungu [ki panudhu=li]. <REAL>exist NOM book [GEN student=1SG.GEN] 'My student has a book.'
- **Non-adjacency**: With a temporal adverb between two genitives, the predicative possessor cannot surface as genitive. The lack of the influence of morphological concatenation suggests it is less likely a morphological operation (see Embick 2015).
 - (64) *Y<a>kay [ku ki-bengelray ki Muni kuiya]=li. <REAL>exist [NOM get-flower GEN Muni yesterday]=1SG.GEN 'I have the flowers that Muni picked yesterday.'
- Variable positions: The oblique possessor can either precede or follow the possessum, whereas the genitive possessor cannot. This indicates that the oblique possessor may be outside the possessum and thus does not follow the typical possessor order within the nominal domain.
 - (65) a. Y<a>kay [✗ki Lavurase] [ku tawpungu] [✓ki Lavurase]. <REAL>exist [✗GEN Lavurase] [NOM dog] [✓GEN Lavurase] Intended: 'Lavurase has a dog.'
 - b. Y<a>kay [✓ki Lavurase] [ku hungu ki Lrupilriane] [✓ki Lavurase]. <av.real>exist [✓OBL Lavurase] [NOM book GEN Lrupilriane] [✓OBL Lavurase] 'Lavurase has Lrupilriane's book.'
- Ellipsis: When the possessum is elided, the genitive possessor can only be topicalized but not stranded, whereas the the oblique possessor can be topicalized or stranded.
 - (66) a. Kadrwa ku hungu=li, ay ka Lavurase, y<a>kay.

 AV.NEG.exist NOM book=1SG.GEN but NOM Lavurase <AV.REAL>exist
 'I don't have a book, but Lavurase does.'
 - b. #Kadrwa ku hungu=li, ay y<a>kay ki Lavurase. AV.NEG.exist NOM book=1SG.GEN but <AV.REAL>exist GEN Lavurase Intended: 'I don't have a book, but Lavurase does.'

(67) a. Kadrwa nakwane ku hungu ki Lrupilriane, ay ka Lavurase, AV.NEG.exist 1SG.OBL NOM book GEN Lrupilriane but NOM Lavurase y<a>kay.

<AV.REAL>exist

'I don't have Lrupilriane's book, but Lavurase does.'

Kadrwa nakwane ku hungu ki Lrupilriane, ay y<a>kay
 AV.NEG.exist 1SG.OBL NOM book GEN Lrupilriane but <AV.REAL>exist ki Lavurase.

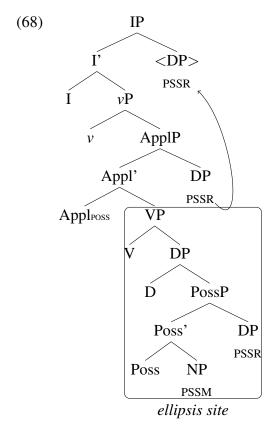
OBL Lavurase

Intended: 'I don't have Lrupilriane's, but Lavurase does.'

• If the ellipsis site is thought of as VP, this indicates that the oblique possessor but not the genitive possessor may be outside the possessum, thus not affected by the ellipsis site.

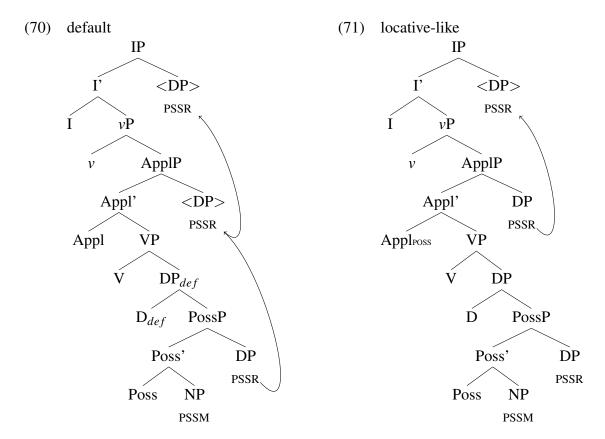
10 Analysis for the locative-like possessives

- To summarize, (a) the oblique predicative possessor, though it looks like the oblique location, behaves as the grammatical subject, thus patterning with the genitive possessor, but (b) the oblique possessor is still different from the genitive one in occupying a position out of the possessum.
- We follow the above proposed structure for 'X's Y exsits', but have instead a thematic Appl which has the possession flavor and introduces an argument with a possessor theta role in Spec,ApplP.
- As the oblique possessor is out of the possessum, it is predicted to have variable positions (like arguments in the verbal clause) and not to be affected by lower ellipsis.
- The possessum is realized with a default nominative case.



11 Proposal: Two Appls of different flavors

- It is proposed that the default and the locative-like possessives have a generally similar structure, both involved with an ApplP.
- However, two applicatives differ in flavor of being thematic or athematic (Georgala et al. 2008, Georgala 2012):
 - In the default predicative possessives, Appl is athematic (see also Deal 2013). It raises the possessor DP to its specifier, followed by movement to Spec,IP. Note this ApplP is only present in predicative possessives but not in intransitives as possessor raising is generally not seen.
 - In the locative-like predicative possessives, Appl is thematic and has a possession flavor. It introduces a possessor and assigns it oblique.
- With two Appls of different flavors, we can see (a) that the genitive and oblique predicative possessors both behave as grammatical subjects because the highest copies move to the grammatical subject position, but (b) that they still differ in variable positions and ellipsis as the lowest copies are introduced in different positions.
 - (69) a. Y<a>kay ku hungu=li. <AV.REAL>exist NOM book=1SG.GEN 'I have a book.'
 - b. Y<a>kay [ku hungu ki panudhu] nakwane. <AV.REAL>exist [NOM book GEN student] 1SG.OBL 'I have a student's book.'



12 Conclusion

12.1 Summary

- We showed that both genitive and oblique predicative possessors behave as grammatical subjects, whereas nominative possessums are inert in 'X's Y exists' in Budai Rukai.
- We argued that while the lower copy of the predicative possessor is pronounced in the base position, the higher copy shows the subject properties and also feeds later subject-restricted A'-movement. The division of labor of copies thus makes the relationships between case and grammatical relations opaque, as compared to transitives and locatives.
- We proposed two Appls of different flavors to account for the genitive and oblique predicative possessors, providing a new structural possibility for the construction of 'X's Y exists'.

12.2 Discussions

- <u>Semantics</u>: While the thematic Appl can contribute to the possession semantics, what semantic function can the athematic bear?
- <u>Distribution</u>: Why are (possessive) ApplPs only licensed in predicative possessives and are not found in other clauses for a more general phenomenon of possessor raising?
- <u>Selection</u>: In the analysis of predicative possessives, a possessed DP not a simple DP is required as the complement of V. Is the possessed DP selected also by Appl (as the predicate 'exist' in locatives do not select a possessed DP in particular)?

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