

# Argument Extraction Restrictions Do Not Constrain Sluicing

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## 1. Introduction

Sluicing, which refers to clausal ellipsis that strands a *wh*-phrase, appears to be constrained by certain syntactic properties. For instance, Chung (2013) observes that sluices and their antecedents must have the same argument structure (1); similarly, Merchant (2013) shows that sluices must have the same voice specification as their antecedent (2).

- (1) Ungrammatical argument structure mismatches (adapted from Chung 2013:3)
  - a. \* They sent a silly message, but it's unclear who <they sent a silly message>.
  - b. \* They sent someone a silly message, but it's unclear to who <they sent a silly message>.
- (2) Ungrammatical voice mismatches (Merchant 2013:1)
  - a. \* Joe was murdered, but we don't know who <murdered Joe>.
  - b. \* Someone murdered Joe, but we don't know by who <Joe was murdered>.

These data, among others, have been used to support a syntactic identity condition on ellipsis, where the sluice and its antecedent must be syntactically isomorphic to some degree. One standard formulation of syntactic identity is a head-based identity condition, as formalized in (3).

- (3) *Syntactic identity condition* (Merchant 2013, formalized by Chung 2013)  
The heads in the verbal spine of the elided constituent must be syntactically identical to the corresponding heads in the antecedent.

However, not all syntactic properties constrain sluicing in this way. Constraints on  $\bar{A}$ -movement known as “islands”, a term that encompasses restrictions on movement from adjunct clauses, relative clauses, coordinate structures, and others, famously fail to restrict sluicing possibilities (Ross 1969; Chung et al. 1995; Merchant 2001), as demonstrated for English adjunct clause islands in (4).

- (4) English adjunct clause island
  - a. \* Who will John leave [if Lucy dances with  $t_i$ ]?
  - b. John will leave if Lucy dances with someone, but I can't remember who.

The data in (4) are unexpected if strict syntactic identity holds between the antecedent and the sluice, since such a structure should prevent extraction of the *wh*-remnant. As such, the syntactic identity condition in (3) cannot be as straightforward as it seems: we need to revise either our view of  $\bar{A}$ -movement restrictions under ellipsis, or our view of isomorphism under ellipsis.

In this paper, I consider the interaction between sluicing and argument extraction restrictions, such as ergative extraction constraints, which blend properties of voice/argument structure and island restrictions. Argument extraction restrictions are constraints on  $\bar{A}$ -movement, like islands, yet they are often

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obviated by manipulating voice and clause structure; for this reason, their interaction with sluicing sheds critical light on the nature of identity under ellipsis. Do they constrain ellipsis like voice/argument structure, supporting a syntactic identity condition, or do they fail to constrain ellipsis like islands, warranting a revision to syntactic identity? Here, I show that argument extraction restrictions uniformly fail to constrain sluicing cross-linguistically (5), thus behaving more like islands.

(5) **Sluicing-Extraction Generalization (SEG):**

If a language has a sluicing construction and a restriction on argument extraction, that restriction will not constrain sluicing.

I present the results from a cross-linguistic survey of ten languages (and language families) showing that a range of argument extraction restrictions fail to constrain sluicing, including ergative extraction restrictions, pivot-only restrictions, and oblique extraction restrictions.

While these examples have previously received language-specific treatments (e.g., Chung 2013; Ranero 2021), the cross-linguistic uniformity of the SEG indicates that something broader is at play. I argue that the SEG warrants a departure from syntactic identity under ellipsis; instead, the SEG can be captured by adopting a semantic identity approach, such as the LF-copying analysis of ellipsis (Chung et al. 1995; Fortin 2011), where *wh*-remnants of sluices do not undergo  $\bar{A}$ -movement and instead are co-construed with an available correlate at LF. On this approach, the lack of  $\bar{A}$ -movement explains why argument extraction restrictions and islands do not constrain sluicing, providing a unified account for these two phenomena. Furthermore, I show that a semantic identity condition can rule out certain voice mismatches but not others (cf. Merchant 2013), weakening one of the classic arguments in favor of a syntactic identity condition.

## 2. The Sluicing-Extraction Generalization

This section presents the core empirical claim of the paper: there is no known argument extraction restriction that constrains sluicing. This generalization is based on a survey of the sluicing literature, with the prerequisites that a language must have (i) a demonstrated sluicing construction (as opposed to pseudosluicing, for example; see Merchant 2001); and (ii) a demonstrated argument extraction restriction. There are six resulting languages where this phenomenon is testable: Nukuoro (Polynesian), Kaqchikel (Mayan), Nupe (Benue-Congo), Malagasy, Chamorro, and Aklanon (Malayo-Polynesian). These six sampled languages are presented in Table 1, along with their sources.

	Language	Source
Testable languages	Nukuoro	Drummond (to appear)
	Kaqchikel	Ranero (2021)
	Malagasy	Potsdam (2007)
	Nupe	Mendes & Kandybowicz (2021)
	Chamorro	Chung (2006, 2013)
	Aklanon	Zach Wellstood (p.c.)

**Table 1:** Languages surveyed for the SEG

For these six languages, I walk through four classes of restrictions that fail to constrain sluicing: ergative extraction restrictions, pivot-only restrictions,  $\nu$ P extraction restrictions, and oblique extraction restrictions. First, I show the restriction itself, demonstrating that extraction of some argument (e.g., ergative, oblique) is only possible with a particular clause structure. I then provide an example where the antecedent contains a clause structure that is typically incompatible with argument extraction, and then place the relevant argument as the *wh*-remnant of the sluice. These examples are uniformly grammatical, suggesting that these extraction restrictions are not restricting sluicing possibilities.

## 2.1. Ergative extraction restrictions

We will begin with restrictions on the  $\bar{A}$ -movement of ergative arguments in Nukuoro (Polynesian Outlier; Drummond to appear) and Kaqchikel (Mayan; Ranero 2021). In these languages, ergatives may not  $\bar{A}$ -move from active voice clauses; however, sluices may have ergative *wh*-remnants following active voice antecedents, suggesting that ergative extraction restrictions do not constrain sluicing.

In Nukuoro, ergative arguments are unable to undergo unmarked  $\bar{A}$ -movement (6a). Instead, the verb must appear with a verbal suffix *-(C)ia* plus an optional post-verbal particle *ina*, morphology which also appears in passive constructions (6b).<sup>1</sup> Throughout this section, the extracted element is underlined while the relevant piece of clause structure (e.g., voice marking) is bolded.

- (6) a. \*Go ai ne **doolohi** de gaagoo?  
 FOC who PFV **chase** DET chicken  
 ‘Who chased the chicken?’ (A)
- b. Go ai ne **dolohia** (**ina**) de gaagoo?  
 FOC who PFV **chase.CIA** **INA** DET chicken  
 ‘Who chased the chicken?’ (A)

Similarly, in Kaqchikel, ergative arguments are unable to  $\bar{A}$ -move from active voice clauses (7a). To extract an ergative argument, the verb must appear with Agent Focus (AF) morphology, a type of voice that only appears in ergative extraction contexts (7b).

- (7) a. \*Achike x-Ø-u-tij nu-way?  
 who COM-B3S-A3S-eat A 1S-tortilla  
 Intended: ‘Who ate my tortillas?’
- b. Achike x-Ø-tj-o nu-way?  
 who COM-B3S-eat-AF A 1S-tortilla  
 ‘Who ate my tortillas?’ (Ranero 2021: 50)

These ergative extraction restrictions in Nukuoro and Kaqchikel do not restrict sluicing possibilities: sluicing with an ergative *wh*-remnant is possible even when the antecedent contains active voice, as shown in (8) and (9).

- (8) Dahi dangada ne **tugi** au, gai au e dee iloo be go ai.  
 one person PFV **hit** me but I NPST NEG know C FOC who  
 ‘Somebody hit me, but I don’t know who <hit me>.’ (Drummond to appear:6)
- (9) Yin x-Ø-in-tz’ët chi jun ixöq **x-Ø-u-chöy** la che’ la’. Man  
 1S COM-B3S-A1S-see COMP one woman COM-B3S-A3S-cut DEM tree DEM NEG  
 x-Ø-in-tz’ët ta jab’ël achike ixöq.  
 COM-B3S-A1S-see NEG well what woman  
 ‘I saw that a woman cut that tree. I didn’t see clearly which woman <cut that tree>.’ (Ranero 2021:72)

## 2.2. Pivot-only restrictions

In languages that have Philippine-type voice systems, pivot-only (or “subject-only”) extraction restrictions do not constrain sluicing. This type of interaction can be observed in Malagasy (Austronesian; Potsdam 2007) and Aklanon (Malayo-Polynesian; Zach Wellstood, p.c.). The same behavior may also

<sup>1</sup> I follow Leipzig glossing conventions, and maintain original glossing for cited examples. Non-standard abbreviations include: A = set A agreement; AF = Agent Focus voice; AP = antipassive voice; AT = actor topic voice; B = set B agreement; C = complementizer; COM = completive; DIR = directional; INC = inchoative aspect; PERF = perfective; PREP = preposition; PRT = particle; S = singular agreement; STAT = stative; TT = theme topic voice.

hold for Tagalog (Malayo-Polynesian), whose sluicing patterns are described by Kaufman & Paul (2006) and Borise (2016), though it is not confirmed that these constructions involve true clausal ellipsis.

Philippine-type voice systems use voice-like verbal morphology to indicate the role of the DP in pivot position. Many of these languages also show a pivot-only extraction restriction, whereby only pivot arguments may undergo  $\bar{A}$ -movement, shown in (10) for Malagasy and (11) for Aklanon.<sup>2</sup>

(10) Malagasy extraction restriction

a. iza no **mividy** ny osy?  
who PRT **buy.AT** the goat  
'Who is buying the goat?'

b. \*iza no **vidina** ny osy?  
who PRT **buy.TT** the goat  
Intended: 'Who is buying the goat?'

(Potsdam 2007: 581–583)

(11) Aklanon extraction restriction

a. náno ro **ha-ká?**on ni Huwán?  
what TOP **PV.PFV-eat** UNM Juan  
'What did Juan eat?'

b. \*náno ro **nag-ká?**on ni Huwán?  
what TOP **AV.PFV-eat** UNM Juan  
Intended: 'What did Juan eat?'

(Wellstood, p.c.)

Under sluicing, however, the extraction of non-pivot arguments does not appear to constrain ellipsis, as shown in (12) for Malagasy and (13) for Aklanon. In the Aklanon example, the extraction of *?it díndij* 'a wall' typically requires locative voice, but is licit under sluicing with an agent voice antecedent.

(12) **nandoko** zavatra i Bao fa hadinoko hoe inona.

**paint.AT** thing Bao but forget.TT.1SG COMP what  
'Bao painted something but I forget what <Bao painted>.'

(Potsdam 2007: 584)

(13) **nag-pínta** ?imáw ?it díndij, pero halipát akó kuj díndij ?it náno.

**AV.PFV-paint** 3SG.TOP UNM wall but forget 1SG.TOP COMP wall UNM what  
'He painted on a wall, but I forget what wall <he painted on>.'

(Zach Wellstood, p.c.)

### 2.3. *vP* extraction restrictions

Next, let us consider two different restrictions on extraction out of *vP* in Nupe (Benue-Congo; Mendes & Kandybowicz 2021) and Kaqchikel (Mayan; Ranero 2021). Nupe shows an extraction restriction in perfect clauses, where any material contained within the *vP* cannot be extracted (Kandybowicz 2009). Material at the edge of the *vP* domain, like subjects, may freely extract from perfect clauses (14a). Extraction of lower material, such as objects and low adjuncts, is impossible (14b-d).

(14) a. Zě á eci pa o?  
who **PRF** yam pound.PST FOC  
'Who has pounded the yam?'

b. \*Ké Musa á pa o?  
what Musa **PRF** pound.PST FOC  
Intended: 'What has Musa pounded?'

c. \*Bà-bo Musa á le o?  
where-LOC Musa **PRF** sleep.PST FOC  
Intended: 'Where has Musa slept?'

(Mendes & Kandybowicz 2021:7)

<sup>2</sup> I have reproduced these examples with their original glossing from Potsdam (2007), where AT 'agent topic' is equivalent to 'agent voice', and TT 'theme topic' is equivalent to 'patient voice'.

Extraction of these elements from perfect clauses is, however, permitted under sluicing, as shown in (15). I only provide the object extraction data here, though the same facts hold of low adjunct extraction from perfect clauses under ellipsis.

- (15) a. Musa á ejan ndoci pa.  
Musa **PRF** thing certain pound.PST  
'Musa has pounded something.'
- b. Ké o?  
what FOC  
'What <has Musa pounded>?' (Mendes & Kandybowicz 2021:10)

Kaqchikel shows a restriction on extraction out of Agent Focus clauses: in clauses with Agent Focus voice, internal arguments (16a) and adjuncts (16b) are inaccessible for  $\bar{A}$ -movement.

- (16) a. \*Achike x-Ø-tj-**o** ma Juan?  
what COM-B3S-eat-**AF** CLF Juan  
Intended: 'What did Juan eat?'
- b. \*Ankuchi x-Ø-loq'-**o** (wi) ri kotz'i'j?  
where COM-B3S-buy-**AF** FP DET flower  
Intended: 'Where did s/he buy the flowers?' (Ranero 2021:51)

Under sluicing, however, the extraction of these elements is possible even when the antecedent uses Agent Focus voice, as shown for objects in (17). The same facts hold of adjunct extraction.

- (17) a. Xa xe ri ma Juan x-Ø-loq'-**o** kotz'i'j.  
EMPH only DET CLF Juan COM-B3S-buy-**AF** flower  
'Only Juan bought flowers.'
- b. Kan qitzij? Ta-b'ij pe chwe achike kotz'i'j!  
INT truth IMP-say DIR PREP.A1S.RN what flower  
'Really? Tell me which flowers <only Juan bought>!' (Ranero 2021:73)

#### 2.4. Oblique extraction restrictions

Finally, restrictions on the  $\bar{A}$ -movement of oblique arguments, such as antipassive objects, do not constrain sluicing. This interaction is exemplified by Chamorro (Malayo-Polynesian), as described by Chung (2006, 2013). In Chamorro antipassive clauses, where the verb is formally intransitive and the theme is oblique, the oblique argument of an antipassive cannot undergo *wh*-movement.

- (18) a. \*Hâfa na klâsi-n mǎnnuk **mam**-omoksai gui'?'  
what L sort-L chicken **AGR.AP**-raise.PROG he  
Intended: 'What sort of chickens is he raising?'
- b. \*Hâyi **mang**-guaiya hao?  
who? **AGR.AP**-love you  
Intended: 'Who do you love?' (Chung 2013:35)

However, the oblique argument of an antipassive is able to serve as the *wh*-remnant of a sluice, as shown in (19), showing that oblique extraction restrictions do not restrict sluicing possibilities.

- (19) a. **Mam**-omoksai mǎnnuk, lao ti ta tungu' hâfa na klâsi.  
**AGR.AP**-raise chicken but not **AGR** know what L sort  
'He is raising chickens, but we don't know what kind <he is raising>.' (Chung 2006:78)
- b. **Mang**-guaiya si Julia, lao ti hu tungu' hâyi.  
**AGR.AP**-love UNM Julia but not **AGR** know who  
'Julia loves (someone), but I don't know who <Julia loves>.' (Chung 2013:35)

## 2.5. Interim summary

In short, argument extraction restrictions of various kinds fail to constrain sluicing; at present, there appear to be no counterexamples to the SEG. This generalization is unexpected under a syntactic identity account, considering that argument extraction restrictions place strict requirements on voice and/or argument structure.

Observing the cross-linguistic behavior of argument extraction restrictions is important for two reasons. First, the data that I have presented here have previously received language-specific treatments (e.g., Chung 2006; Ranero 2021); here, I show that these restrictions behave more uniformly than has been previously acknowledged, which paves the way for a cross-linguistic explanation. Second, the behavior of  $\bar{A}$ -movement under ellipsis often focuses on movement out of islands, which has been debated for over 50 years. By looking at  $\bar{A}$ -movement restrictions other than islands, we may be able to learn new information about the interaction between movement and ellipsis. For example, the availability of “short sources” has been used to explain why island effects seem to disappear under sluicing (e.g., Barros 2014; Barros et al. 2014). An example of a short source, which consists of a subpart of the antecedent smaller than the island boundary, is provided in (20).

(20) They hired a guy who speaks a Balkan language, but I don’t know which <he speaks>.

Unlike islands, it is very difficult—perhaps even impossible—to construct short sources for argument extraction contexts. The full source in examples like (21) is already the shortest possible source.<sup>3</sup>

(21) Dahi dangada ne tugi au, gai au e dee iloo be go ai <ne tugi au>.  
 one person PFV hit me but I NPST NEG know C FOC who PFV hit me  
 ‘Someone hit me, but I don’t know who <hit me>.’

As a result, short sources cannot be the only explanation for why  $\bar{A}$ -movement restrictions seem to disappear under sluicing. We must look elsewhere for an account of the SEG data presented above, and in doing so, we may come to a fuller understanding of islands under sluicing as well.

## 3. Implications for syntactic identity

The SEG requires us to reconsider a traditional head-based syntactic identity condition: voice mismatches under argument extraction restrictions need another explanation. There are two avenues that we could take. On the one hand, we could weaken syntactic identity to allow mismatches in exactly those environments where argument extraction restrictions apply (e.g., featural non-distinctness; Ranero 2021). Alternatively, we could eliminate syntactic identity altogether, instead adopting a fully semantic identity condition (e.g., LF-copying; Chung et al. 1995). While both of these routes have their challenges, I argue that eliminating syntactic identity may capture the SEG with fewer stipulations, and can be extended to capture ungrammatical voice mismatches as well.<sup>4</sup>

### 3.1. Weakened syntactic identity

To rule out some voice mismatches but not others, Ranero proposes a weakened syntactic identity condition, which evaluates non-distinctness rather than strict identity. The non-distinctness condition maintains that a head in the antecedent will match with any non-distinct head in the ellipsis site—that

<sup>3</sup> Aside from short sources, another possible source for examples like (21) is a so-called “copular source”, where the ellipsis site contains an expletive and a copula. All of the authors cited in this section have argued against the availability of copular sources (i.e., pseudosluicing) in their respective languages.

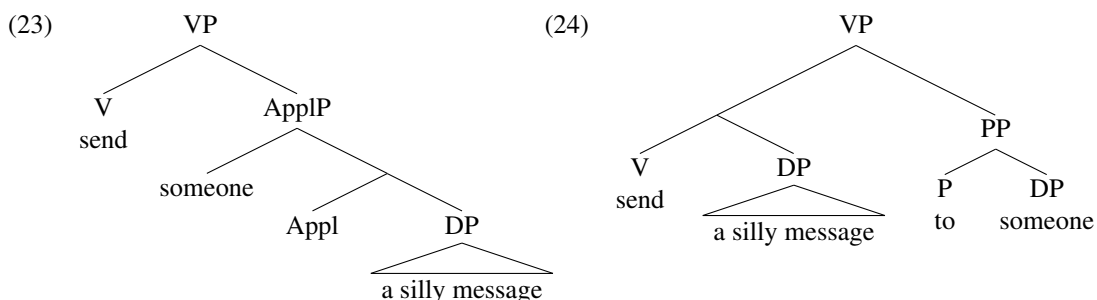
<sup>4</sup> Alternatively, syntactic identity could be maintained if extraction restrictions are *salvaged by deletion* (e.g., Mendes 2020): ungrammaticality of argument extraction would arise at spell-out, which could be avoided if ellipsis applied prior to spell-out. While Drummond (to appear) suggests this analysis can be applied to argument extraction restrictions, Ranero (2021:102–122) provides several arguments against a salvation account for Kaqchikel. For this reason, I explore a different analysis of the SEG here.

is, an identical head or the *absence* of a corresponding head. In other words, if a head is present in one clause but not the other, it does not count as a mismatch for the purposes of syntactic isomorphism.

This condition alone does not capture the behavior of ergative extraction restrictions under ellipsis: Ranero also proposes a particular theory of ergative extraction constructions in Kaqchikel as *lacking Voice altogether*. On his view, ergative extraction in Kaqchikel involves Exfoliation (i.e., deletion) of the VoiceP layer, and the AF morpheme realizes *v* when adjacent to Aspect (i.e., when Voice is missing). Thus, AF counts as “non-distinct” for any Voice specification, because Voice is simply absent.

Though this account captures the Kaqchikel pattern, it may be empirically and theoretically undesirable to account for the SEG and structural mismatches. First, a weakened identity condition may be *too permissive* about the presence or absence of structure. A non-distinctness account rules in any cases where structure is present in one clause but not the other; this falsely rules in argument structure mismatches like (22), where the antecedent contains an applicative structure while the sluice contains a prepositional phrase, since Appl<sup>0</sup> and P<sup>0</sup> have no corresponding heads in the other structure.

- (22) \* They sent someone a silly message, but it’s unclear to who(m) <they sent a silly message>. (adapted from Chung 2013:3)



Second, a weakened identity condition only works if we adopt an Exfoliation account of argument extraction restrictions, which is highly specific to Kaqchikel; it is not clear that this account can capture the same pattern in other languages covered by the SEG. In Nukuoro, for instance, ergative extraction contexts don’t seem to lack Voice: these verbs show more morphology than bare active verbs, namely the suffix *-(C)ia* and a separate particle *ina*, which is identical to the morphology found in passive Voice contexts. It seems highly counterintuitive to propose that *-(C)ia + ina* realizes both passive Voice and the absence of a Voice head, while a null affix is the specified realization of active Voice. More broadly, given that there is no argument extraction restriction which constrains sluicing, it seems unlikely that a language-specific analysis will suffice to capture the breadth of the SEG.

Finally, a weakened identity analysis makes no connection between the behavior of argument extraction and island extraction under sluicing. For this reason, Ranero (2021) must invoke a different account for the behavior of islands under sluicing, namely a salvation by deletion account (e.g., Mendes 2020), since islands do not adhere to the non-distinctness condition. Given the similarities between islands and argument extraction restrictions, an explanation that accounts for both types of restrictions using the same machinery is preferred over explanations that treat these phenomena separately.

### 3.2. No syntactic identity

Syntactic approaches do not easily capture the general behavior of movement restrictions under sluicing. A purely semantic identity condition may do a better job of accounting for the SEG. Here, I use the LF-copying approach (Chao 1987; Lobeck 1995; Chung et al. 1995; Fortin 2011) as an example of a purely semantic condition. I show that LF-copying accounts for the SEG in the same way as islands, explaining the unified behavior of  $\bar{A}$ -extraction restrictions under sluicing; I also demonstrate that LF-copying can account for the ungrammaticality of voice mismatches under sluicing.

On an LF-copying approach, the *wh*-remnant of a sluice is base-generated in Spec,CP, and the “elided” IP is simply a null element in the syntax, represented by the variable *e* (25a). The syntactic

constituent of the antecedent IP is copied into the empty IP at LF (25b). The indefinite and the *wh*-element then undergo “merger” (represented here by <sup>x</sup>), allowing them to be co-constructed (25c).

- (25) a. Someone danced, but I don’t know [<sub>CP</sub> who [<sub>IP</sub> e ]].  
 b. Someone danced, but I don’t know [<sub>CP</sub> who [<sub>IP</sub> someone danced ]].  
 c. Someone danced, but I don’t know [<sub>CP</sub> who<sup>x</sup> [<sub>IP</sub> someone<sup>x</sup> danced ]].

I present the original implementation of LF-copying here, primarily for simplicity; however, see Fortin (2011) for a Minimalist update of the framework, including how to capture ostensibly syntactic matching effects on this view, such as case-matching and P-stranding effects.

Crucially, the availability of an unbound variable in the antecedent IP (i.e., an appropriate correlate) is the only condition for a licit sluice, and the derivation of sluicing involves no  $\bar{A}$ -movement of the remnant. As such, this account naturally explains why islands are not obeyed under ellipsis: no island-violating movement has actually occurred.

- (26) John will leave if Lucy dances with someone, but I can’t remember **who**<sup>x</sup> [<sub>IP</sub> John will leave [<sub>CP</sub> if Lucy dances with **someone**<sup>x</sup> ]].

The same is true of argument extraction restrictions: as long as there is an indefinite correlate in the antecedent, movement restrictions will have no effect on the grammaticality of sluicing. No  $\bar{A}$ -movement has taken place in the narrow syntax, meaning that the restriction has not been violated.

- (27) Dahi dangada ne tugi au, gai au e dee iloo be go **ai**<sup>x</sup> [<sub>IP</sub> **dahi dangada**<sup>x</sup> ne tugi au].  
 one person PFV hit me but I NPST NEG know C FOC who one person PFV hit me  
 ‘Somebody hit me, but I don’t know who.’

In what follows, I show that a semantic account can also successfully capture why “true” voice mismatches—those that are unrelated to extraction restrictions—are typically ungrammatical. Recall, for instance, that active-passive mismatches are ruled out in English (28); Ranero (2021) also notes that antipassive-active mismatches are ruled out in Kaqchikel (29).

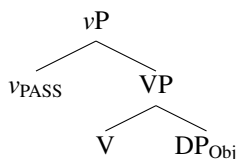
- (28) No active-passive voice mismatches in English (Merchant 2013:1)  
 a. \* Joe was murdered, but we don’t know who <murdered Joe>.  
 b. \* Someone murdered Joe, but we don’t know by who <Joe was murdered>.
- (29) No antipassive-active voice mismatches in Kaqchikel (Ranero 2021:70)  
 a. \* Yin **x-i-loq’-on**=pe pa k’ayib’äl. Ta-wla achike <**x-Ø-in-löq’**=pe>!  
 1 SG **COM-B1S-buy-AP**=DIR PREP market IMP-guess what **COM-B3S-A1S-buy**=DIR  
 ‘I bought at the market. Guess what <I bought at the market>!’

Under LF-copying, the sluices in (28a) and (29) can be ruled out if the antecedents fail to introduce a correlate that can associate with the *wh*-remnant.<sup>5</sup> In other words, English passives and Kaqchikel antipassives do not introduce an implicit (null) argument in subject and object position, respectively.<sup>6</sup>

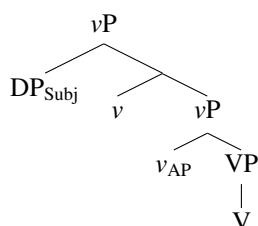
<sup>5</sup> The sluice in (28b), which has an active voice antecedent, is ruled out by general pied-piping and preposition stranding restrictions; see Fortin (2011) for an LF-copying account of these phenomena.

<sup>6</sup> Here I depart from Merchant (2013), who assumes that agents of English passives are syntactically present. See Bhatt & Pancheva (2017) for an overview of implicit agents in English passives.

## (30) English passive



## (31) Kaqchikel antipassive



Interestingly, this behavior of passives and antipassives under sluicing is not universal across languages. In Nukuoro, an agent *wh*-remnant of a sluice may have a passive antecedent (32a), which is not possible in English; in Chamorro, antipassive objects may serve as *wh*-remnants with active antecedents (32b), which is not possible in Kaqchikel.

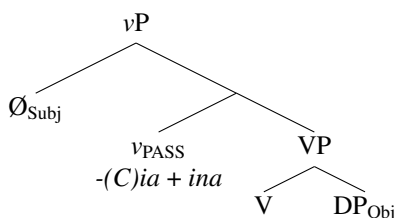
- (32) a. Soni gu **boogia ina** mai, gai au e dee iloo be go ai.  
 Johnny INC **catch.CIA INA** DIR but 1SG NPST NEG know C FOC who  
 ‘Johnny was caught, but I don’t know who.’
- b. **Mang-guaiya si** Julia, lao ti hu tungu’ hãyi.  
 AGR.AP-love UNM Julia but not AGR know who  
 ‘Julia loves (someone), but I don’t know who.’ (Chung 2013:35)

I attribute this contrast to the ability of these structures to introduce an implicit argument which can serve as an appropriate correlate. Chung (2013) argues that antipassive constructions in Chamorro have implicit objects (e.g., Baker 1988), which can optionally be modified by an overt PP argument (33b).

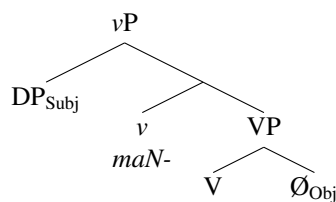
- (33) a. Mang-guaiya si Julia  $\emptyset_{DP}$ .  
 AGR.AP-love UNM Julia  
 ‘Julia loves (someone).’
- b. Mang-guaiya hao [ $\emptyset_{DP}$  [PP as Pedro]].  
 AGR.AP-love you OBL Pedro  
 ‘You love Pedro.’

I suggest that the same is true of Nukuoro constructions with *-(C)ia*: they introduce an implicit subject argument, a claim which has been made for the analogous construction in Tongan (Otsuka 2012). The proposed structures of Nukuoro passives and Chamorro antipassives are provided in (34) and (35).

## (34) Nukuoro passive



## (35) Chamorro antipassive



Under sluicing, these implicit arguments in Chamorro and Nukuoro provide an available correlate for the *wh*-remnant, which are not available in English passives and Kaqchikel antipassives. In short, while ungrammatical voice mismatches have been taken as evidence for syntactic identity, they can also be ruled out under a theory that requires an available indefinite correlate at LF.

## 4. Conclusion and implications

Empirically, I have shown that  $\bar{A}$ -movement cross-linguistically shows fewer restrictions under ellipsis—not just for islands, but also for argument extraction restrictions. While it is possible to account for this generalization by appealing to language-specific properties (e.g., Chung 2006; Ranero 2021; Mendes & Kandybowicz 2021), the generality of the SEG suggests that we may want to account for this behavior in a more unified way. I have put forth one such unified account, which eliminates a syntactic identity condition in favor of a semantic one. I outlined how one approach, namely LF-copying (Chung et al. 1995), can capture the lack of movement restrictions under sluicing across the board by proposing that sluicing does not involve *wh*-movement and only requires the presence of an available (indefinite) correlate in the antecedent. This account makes testable predictions about the (non-)existence of implicit arguments in voice constructions cross-linguistically, which should correlate with the ability to sluice on those arguments.

Finally, this type of work demonstrates the value of detailed cross-linguistic documentation and analysis. Research focused specifically on argument extraction restrictions under sluicing has previously been limited to Kaqchikel (Ranero 2021) and Nupe (Mendes & Kandybowicz 2021); exploring this behavior in more languages, including diagnostics to differentiate sluicing from pseudosluicing, is crucial to understanding ellipsis and extraction restrictions, as well as  $\bar{A}$ -movement more broadly.

## References

- Barros, Matt (2014). *Sluicing and identity in ellipsis*. Ph.D. thesis, Rutgers University.
- Barros, Matt, Patrick Elliott & Gary Thoms (2014). There is no island repair. Unpublished manuscript.
- Bhatt, Rajesh & Roumyana Pancheva (2017). Implicit arguments. Everaert, Martin & Henk C. van Riemsdijk (eds.), *The Wiley Blackwell Companion to Syntax*, Wiley and Sons, Hoboken, NJ, 558–588.
- Borise, Lena (2016). Sluicing in Tagalog: Strategies and implications. *Proceedings of AFLA 22*, Asia-Pacific Linguistics, Canberra, 15–30.
- Chao, Wynn (1987). *On Ellipsis*. Ph.D. thesis, University of Massachusetts, Amherst.
- Chung, Sandra (2006). Sluicing and the lexicon: The point of no return. Cover, Rebecca & Yuni Kim (eds.), *Proceedings of BLS 31*, Berkeley Linguistics Society, Berkeley, CA, 73–91.
- Chung, Sandra (2013). Syntactic identity in sluicing: How much and why. *Linguistic Inquiry* 44:1, 1–44.
- Chung, Sandra, William A. Ladusaw & James McCloskey (1995). Sluicing and Logical Form. *Natural Language Semantics* 3:3, 239–282.
- Drummond, Emily (to appear). Maintaining syntactic identity under sluicing: Pseudoclefts and voice (mis)matches. *Proceedings of WCCFL 39*.
- Fortin, Catherine (2011). We need LF-copying: A few good reasons why. Washburn, Mary Byram, Katherine McKinney-Bock, Erika Varis, Ann Sawyer & Barbara Tomaszewicz (eds.), *Proceedings of the 28th West Coast Conference on Formal Linguistics*, Cascadilla Proceedings Project, Somerville, MA, 87–95.
- Kandybowicz, Jason (2009). Embracing edges: Syntactic and phono-syntactic edge sensitivity in Nupe. *Natural Language & Linguistic Theory* 27:2, 305–344.
- Kaufman, Daniel & Ileana Paul (2006). Sluicing in Tagalog. Paper presented at the 8th Austronesian Formal Linguistics Association (AFLA8), National Tsing Hua University, Taiwan.
- Lobeck, Anne (1995). *Ellipsis: Functional Heads, Licensing and Identification*. Oxford University Press, New York.
- Mendes, Gesoel (2020). *Investigations on salvation and non-salvation by deletion*. Ph.D. thesis, University of Maryland, College Park.
- Mendes, Gesoel & Jason Kandybowicz (2021). Salvation by deletion in Nupe. *Linguistic Inquiry* 1–47.
- Merchant, Jason (2001). *The syntax of silence: sluicing, islands, and the theory of ellipsis*. Oxford University Press, Oxford.
- Merchant, Jason (2013). Voice and ellipsis. *Linguistic Inquiry* 44:1, 77–108.
- Otsuka, Yuko (2012). Passive morphemes in a passive-less language? *UCLA Working Papers in Linguistics* 17:36, 316–324.
- Potsdam, Eric (2007). Malagasy sluicing and its consequences for the identity requirement on ellipsis. *Natural Language & Linguistic Theory* 25, 577–613.
- Ranero, Rodrigo (2021). *Identity conditions on ellipsis*. Ph.D. thesis, University of Maryland, College Park.
- Ross, John Robert (1969). Guess who? Binnick, Robert I., Alice Davison, Georgia M. Green & Jerry L. Morgan (eds.), *Chicago Linguistics Society*, Chicago, Illinois, 252–286.

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