

"Sloppy" identity reading and sluicing-like constructions in Mandarin, Uyghur and Mongolian

Tommy Tsz-Ming Lee and Xue Bai

City University of Hong Kong; Dalian Minzu University

International Symposium on Silk Road Linguistics

May 30-31, 2024

at The Chinese University of Hong Kong

Table of Contents

- 1 Introduction
- 2 "Sloppy" reading in SCs
- 3 The c-command conditions
- 4 The mix sloppy reading
- 5 Conclusions

Introduction

- In this talk, we focus on an interpretive phenomenon found in ellipsis contexts.
- Sentences with ellipsis can be ambiguous between two readings if their antecedents contain an anaphoric expression.
 - "Sloppy" identity reading
 - Strict identity reading
- For example, VP-ellipsis in English:

(1) John scratched his arm and Mary **did so**, too. (Ross 1967, p.348)

a. "Sloppy" identity reading : Mary scratched her arms .

b. Strict identity reading : Mary scratched John's arms .

Introduction

- Rather than deriving "sloppy" identity reading can be derived, we survey the distribution of "sloppy" identity reading.
 - Precisely, we look at a type of constructions that involves deletion, namely, **sluicing-like constructions (SCs)**.
- (2) Ralph is going to invite somebody to the party, but they don't know [who].
 (Ross 1969, p.252)
- SCs involve a radically reduced embedded clausal structures, whose interpretation depends on materials in the antecedent clause.

Sluicing-like constructions

- SCs are found across languages, including Mandarin, Mongolian, and Uyghur.
- A Mandarin example:

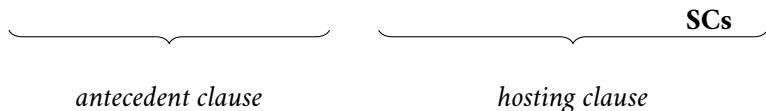
(3) 張三看到某人，但是我不知道 [是誰]。

Zhangsan kandao mouren, danshi wo bu zhidao [**shi shei**].

Zhangsan saw someone but I not know be who

'Zhangsan saw somebody, but I don't know who.'

(4) [Zhangsan kandao mouren] , [danshi wo bu zhidao **shi shei** .]



Sluicing-like constructions

- An on-going debate surrounding Mandarin SCs concerns **what types of silent elements** are responsible for the clausal interpretation.
- Existing proposals boil down to the debate over
 - **surface anaphor** (with elided structures) vs.
 - **deep anaphora** (without elided structures)
- The main difference concerns whether SCs involve syntactically accessible internal structures (Hankamer and Sag 1976).

Sluicing-like constructions

- Illustrations of the two prominent families of proposals:

(5) Surface anaphora

(Wang and Wu 2006; Wei 2009; Song and Yoshida 2017)

- SCs involve **an elided structure**, and [shei] is fronted before ellipsis.
- Step 1: ... **shi shei** [ta kandao shei] (movement)
Step 2: ... **shi shei** [ta kandao shei] (clausal ellipsis)

(6) Deep anaphora

(Wei 2004; Adams and Tomioka 2012; Y.-H. A. Li 2014; Li and Wei 2017, 2023)

- SCs involve **a non-elided structure**, whose subject is a null pronoun.
- ... **pro shi shei** ... Cf. **ta/na shi shei**

Sluicing-like constructions

- This talk contributes to the debate by examining the “sloppy” identity reading in Mandarin, Mongolian, and Uyghur.
 - Through a comparative perspective, we provide new evidence for a deep anaphora account of Mandarin SCs.
 - We also uncover that Uyghur SCs pattern with Mandarin, in contrast with Mongolian.

- The road map/argumentation
 - ① “Sloppy” reading is likewise attested in SCs in these languages.
 - ② But the availability of “sloppy” reading does not resolve the surface vs. deep anaphora issue.
 - ③ It is the distribution of “sloppy” reading that is informative.

Table of Contents

- 1 Introduction
- 2 "Sloppy" reading in SCs
- 3 The c-command conditions
- 4 The mix sloppy reading
- 5 Conclusions

"Sloppy" reading in SCs

- "Sloppy" reading in SCs

- (7) I know how to say I'm sorry, and Bill knows **how**, too. (Ross 1969, p.274)

"Sloppy" reading : Bill knows how to say he's sorry.

- Also in Mandarin, taken from Wei (2009, (6)):

- (8) 張三_i知道誰在批評他_i，但李四不知道 [是誰] 。

Zhangsan_i zhidao [shei zai piping ta_i], dan Lisi bu zhidao **shi shei**.
Zhangsan know who PROG criticize him but Lisi not know be who

"Sloppy" reading : 'Zhangsan knows who is criticizing him, but Lisi doesn't know who (is criticizing Lisi).'

"Sloppy" reading in SCs

- Bai (2023) reports similar patterns in Mongolian and Uyghur.

(9) Mongolian (p.144)

- a. Batu-Ø [öber-tegen yayun-du oyčura-γda-γsan]-iyan
 Batu-NOM self-DAT.REF.POSS what-DAT fire-PASS-PERF-REF.POSS
 mede-xü ügei,
 know-INF not

(Lit.) 'Batu doesn't know why self was fired,'

- b. getele Tana-Ø [yayun-du bol-χu]-yi ni mede-ne.
 but Tana-NOM what-DAT COP-INF-ACC PPC know-NPST

"Sloppy" reading : 'but Tana knows why (Tana was fired).'

- Note: Case markers can be omitted in some cases in Mongolian. We set aside these cases for simplicity.

"Sloppy" reading in SCs

(10) Uyghur (Bai 2023, p.275)

- a. Tursun-Ø [öz-i-ni nemä üčün iş-tin bošat-il-
Tursun-NOM self-3SG.POSS-GEN what POSTP thing-ABL fire-PASS-
ğan-liq]-i-ni bil-mä-ydu-Ø,
PERF.NOML-COMP-3SG.POSS-ACC know-NEG-NPST-3SG
(Lit.) 'Tursun doesn't know for what self was fired,'
- b. lekin Aygül-Ø [**nemä üčün ikän lik**]-i-ni
but Aygül-NOM what POSTP COP COMP-3SG.POSS-ACC
bil-idu-Ø.
know-NPST-3SG

"Sloppy" reading : 'but Aygül knows for what (Aygül was fired).'

- Note: Case markers (but not postpositions) are forbidden in SCs in Uyghur, in contrast with Mongolian.

"Sloppy" reading in SCs

- Some have taken the *availability of "sloppy" reading* as evidence for surface anaphora in SCs (e.g., Wang and Wu (2006); cf. Hankamer and Sag (1976)).
 - ... since it follows naturally from a movement+ellipsis analysis (where the pronoun is interpreted as a bound variable).
- A schematic illustration (Williams 1977):

- (11) a. "Sloppy" reading
 x knows who is criticizing x, but y doesn't know who ~~is criticizing~~ y.
- b. Strict reading
 x knows who is criticizing x, but y doesn't know who ~~is criticizing~~ x.

"Sloppy" reading in SCs

- This also appears to receive support from the observation that recovering a demonstrative in the SCs blocks "sloppy" reading.
 - ... since there is no "hidden" structure.

(12) 張三_i不知道他_i為什麼被罵，但李四知道 [那是為什麼] 。 (Wei 2004, p.266)

Zhangsan_i bu-zhidao [ta_i weishenme bei ma], dan Lisi zhidao
 Zhangsan not-know he why PASS scold but Lisi know
 [na shi weishenme].
 that be why

Strict reading only: 'Zhangsan didn't know why he was scolded, but Lisi knows why Zhangsan was scolded.'

"Sloppy" reading in SCs

- We observe the same in Mongolian and Uyghur.

(13) SCs with demonstratives lose "sloppy" reading

- a. getele Tana-Ø [tere yayun-du bol-u]-yi ni
 but Tana-NOM that what-DAT COP-INF-ACC PPC
 mede-ne.
 know-PST

Strict reading only : (Lit.) 'but Tana knows that is why.'

- b. lekin Aygül-Ø [u-niñ nemä üçün ikän lik]
 but Aygül-NOM that what POSTP COP COMP
 -i-ni bil-idu-Ø.
 -3SG.POSS-ACC know-NPST-3SG

Strict reading only : 'but Aygül knows that is for what.'

"Sloppy" reading in SCs

- However, this does not necessitate a surface anaphora analysis of SCs.
- If we go beyond demonstratives, it is well known that there are deep anaphora that also allows "sloppy" reading (Fiengo and May 1994; Hoji 1998, 2003; Culicover and Jackendoff 2005; Merchant 2013).

(14) Deep anaphora in English

- a. John touches his finger to his nose. [To Bill:] Now you **do it**.
 - b. John washed his car on that rainy day. Bill **did the same thing**.
 - c. Ralph ate his ice-cream with a spoon, and Seymour **did the same thing**.
- Thus, the availability of "sloppy" reading is *not* correlated with the presence of elided structures.

"Sloppy" reading in SCs

- In Mandarin, "sloppy" reading is retained with the counterpart of *do so*.

(15) 張三帶了他的朋友，李四也這麼做了。 (Wei and Li 2016, (33))

Zhangsan dailai-le ta-de pengyou; Lisi ye **zheme zuo**-le.

Zhangsan bring-LE he-DE friend Lisi also so do-LE

"Sloppy" reading: 'Zhangsan brought his friend; Lisi did so (brought Lisi's friend) as well.'

"Sloppy" reading in SCs

- Again, the same is observed in Mongolian (16a) and Uyghur (16b).

(16) "Sloppy" reading in *do-so* cases

- a. Mergen-Ø öber-ün joxiyal-iyān üje-be, bi-Ø basa
 Mergen-NOM self-GEN article-RELF.POSS read-PST I-NOM also
tege-jei.
 do.that-PST

"Sloppy" reading : 'Mergen read his article, I also did so (= read my article).'

- b. Murat-Ø öz-i-ni maqalä-si-ni kör-di-Ø,
 Murat-NOM self-3SG.POSS-GEN article-3SG.POSS-ACC see-PST-3SG,
 män-mu šundaq qil-di-m.
 I-also so do-PST-1SG

"Sloppy" reading : 'Murat read his article. I also did so (= read my article).'

"Sloppy" reading in SCs

- These observations neutralize the argument for surface anaphora.
- It might be that SCs involve a silent deep anaphora, i.e., a *pro*.
 - Recall:

(17) ... *pro* shi weishenme.

- And the blocking effects induced by demonstratives are due to independent constraints.
- The mere *availability* of "sloppy" reading is indecisive for determining the nature of anaphoric elements in these languages.
 - We have to look elsewhere.

Table of Contents

- ① Introduction
- ② "Sloppy" reading in SCs
- ③ The c-command conditions**
- ④ The mix sloppy reading
- ⑤ Conclusions

The c-command conditions

- Ross (1967) observes a condition on the availability of "sloppy" reading.
 - For an elliptic expression to have a "sloppy" reading, a pronoun relevant for the reading must be c-commanded by its antecedent.

(18) English VP ellipsis

- a. Sloppy John scratched his arm, and Mary **did** Δ too.
- b. *Sloppy [John's mother] scratched his arm, and Mary's mother **did** Δ too.

(19) English sluicing

- a. Sloppy John knows why he was scolded, and Mary knows **why** Δ , too.
- b. *Sloppy [John's mother] knows why he was scolded, and Mary's mother knows **why** Δ , too.
- The parallels suggest a uniform, ellipsis analysis (hence surface anaphora).

The c-command conditions

- In this regard, Wei (2009) makes a critical observation that a similar condition is in effect in Mandarin SCs.

(20) a. [張三_i 的母親] 不知道 他_i 為什麼被罵， (3b)

[Zhangsan -de muqin] bu zhidao [ta weishenme bei ma],
Zhangsan-POSS mother not know he why PASS scold
'Zhangsan's mother doesn't know why he was scolded,'

b. 但李四的母親知道 [是為什麼] 。
dan [Lisi-de muqin] zhidao [shi weishenme].
but Lisi-POSS mother know be why

Strict reading only: 'but Lisi's mother knows why (Zhangsan was scolded).'

- That "sloppy" reading is sensitive to structural relations receives a natural explanation from a surface anaphora account.
- This seems to offer substantial support to an ellipsis analysis (but see Li and Wei (2023) for a defense).

The c-command conditions

- However, if we extend the test to Mongolian and Uyghur, we find that the "sloppy" reading in the same configuration is not strictly ruled out.

(21) Mongolian

- a. [Mergen-ü eji ni] [tere yayun-du χariya-γda-γsan]-i
 Mergen-GEN mother 3SG.POSS 3SG what-DAT scold-PASS-PERF-ACC
 (ni) mede-xü ügei,
 3SG.POSS know-INF not
 'Mergen's mother doesn't know why he was scolded,'
- b. getele Bayatur-un eji ni [yayun-du bol-χu]-yi
 but Bayatur-GEN mother 3SG.POSS what-DAT COP-INF-ACC
 (ni) mede-ne.
 3SG.POSS know-NPST

"Sloppy" reading 7/9 : 'Bayatur's mother knows why (Bayatur got scolded).'

The c-command conditions

- Similarly, some Uyghur speakers also accept the "sloppy" reading.

(22) Uyghur

- a. [Murat-nin] ana-si] [u-nin] nemişqa til
 Murat-GEN mother-3SG.POSS 3SG-GEN why language
 işit-qan-liq]-i-ni bil-mä-ydu-Ø,
 hear-PERF.NOML-COMP-3SG.POSS-ACC know-NEG-NPST-3SG
 'Murat's mother doesn't know why he got scolded,'
- b. lekin Adil-nin ana-si [nemişqa ikän-lik]-i-ni
 but Adil-GEN mother-3SG.POSS why COP-COMP-3SG.POSS-ACC
 bil-idu-Ø.
 know-NPST-3SG

"Sloppy" reading 6/9 : 'but Adil's mother knows why (Adil got scolded).'

The c-command conditions

- Furthermore, the structural conditions are voided in non-genitive embedded contexts, e.g., **relative clauses**.
 - This holds true for all three languages.

- (23) a. 認識張三的人都不知道他為什麼辭職，
 [Renshi Zhangsan de ren] dou bu-zhidao [ta weishenme cizhi],
 know Zhangsan DE person all not-know he why resign
 'Those who know Zhangsan didn't know why he resigned,'
- b. 但認識李四的人都知道 [是為什麼]。
 dan renshi Lisi de ren dou zhidao [shi weishenme].
 but know Lisi DE person all know be why
 "Sloppy" reading : 'but those who know Lisi know why (Lisi resigned).'

The c-command conditions

(24) Mongolian

- a. [Mergen-i tani-day xümün] бүр [tere yayun-du
 Mergen-ACC know-HAB.ADN person all 3SG what-DAT
 ajil-iyan χaya-γsan]-i (ni) mede-xü ügei,
 job-REF.POSS throw.away-PERF-ACC 3SG.POSS know-INF not
 'People who know Mergen do not know why he quitted his job,'
- b. getele Bayatur-i tani-day xümün(-üd) ni бүр
 but Bayatur-ACC know-HAB.ADN person-PL 3SG.POSS all
 [yayun-du bol-χu]-yi (ni) mede-ne.
 what-DAT COP-INF-ACC 3SG.POSS know-NPST
 "Sloppy" reading 6/9 : 'but people who know Bayatur know why (Bayatur
 quitted his job).'

The c-command conditions

(25) Uyghur

- a. [Murat-ni tonu-ydiğan kişi-lär-nin] hämmä-si [u-nin]
 Murat-ACC know-NPST.ADN person-PL-GEN all-3SG.POSS 3SG-GEN
 nemişqa istepa bär-idiğan-liq] -i-ni
 why resign AUX-NPST.NOML-COMP -3SG.POSS-ACC
 bil-mä-ydu-Ø
 know-NEG-NPST-3SG
 'People who know Murat all do not know why he resigned,'

- b. lekin Adil-ni tonu-ydiğan kişi-lär-nin hämmä-si
 but Adil-ACC know-NPST.ADN person-PL-GEN all-3SG.POSS
 [nemişqa ikän-lik] -i-ni bil-idu-Ø.
 why COP-COMP -3SG.POSS-ACC know-NPST-3SG

"Sloppy" reading 6/9 : 'but people who know Adil all know why (Adil resigned).'

Interim summary

- In certain languages, the "sloppy" reading in SCs is sensitive to a c-command condition (e.g., English, and Japanese, see Takahashi (1994)).
- However, the condition does not hold consistently (i) **across languages**, and (ii) **across embedded contexts**.
 - This weakens the strength of the argument for a surface anaphora account (*contra* Wei (2009)).
- In contrast, the variations of the availability of the "sloppy" reading seem to suggest that the reading is pragmatically controlled, rather than syntactically controlled.
 - ... and thus may not be a reliable diagnostic for surface vs. deep anaphora.

Table of Contents

- 1 Introduction
- 2 "Sloppy" reading in SCs
- 3 The c-command conditions
- 4 The mix sloppy reading
- 5 Conclusions

The mix sloppy reading

- Another distinction between surface and deep anaphora concerns a more specific type of "sloppy" reading.
 - This reading arises in elliptical contexts (surface anaphora) when there are more than one pronoun in the antecedent clause (Fiengo and May 1994).

(26) Max said his mother saw him ; Oscar did Δ too.

- In addition to (i) the strict reading and (ii) the "sloppy" reading, there is (iii) a **mix identity reading**.
- Importantly, such a reading does not appear in cases with deep anaphora.
 - This also holds true in Japanese (Hoji 1998, 2003).

The mix sloppy reading

- **Surface anaphora** allow the mix "sloppy" reading.

(27) Max said his mother saw him ; Oscar did Δ too.

a. Strict:

Max₁ said his₁ mother saw him₁ ;
 Oscar₂ said his₁ mother saw him₁ .

b. Sloppy:

Max₁ said his₁ mother saw him₁ ;
 Oscar₂ said his₂ mother saw him₂ .

c. Mix:

Max₁ said his₁ mother saw him₁ ;
 Oscar₂ said his₂ mother saw him₁ .

- The mix reading can be derived if Δ is indeed an elided structure that contains all the relevant variables.

The mix sloppy reading

- **Deep anaphora** disallow the mix "sloppy" reading (Hoji 1998, 2003).

(28) John said that **his** roommate had hit **him**, and Bill **did the same thing**.

a. Strict:

John₁ said his₁ roommate had hit him₁, and
Bill said his₁ roommate had hit him₁.

b. Sloppy:

John₁ said his₁ roommate had hit him₁, and
Bill₂ said his₂ roommate had hit him₂.

c. *Mix:

John₁ said his₁ roommate had hit him₁, and
Bill₂ said his₂ roommate had hit him₁.

The mix sloppy reading

- We apply this test to Mandarin, Mongolian and Uyghur.
- The mix reading is not possible in Mandarin SCs.

- (29) a. 張三知道 他的 母親為什麼罵 他 ，
 Zhangsan zhidao ta-de muqin weishenme ma ta ,
 Zhangsan know his mother why scold him
 'Zhangsan know why his mother scolded him,'
- b. 但李四不知道 [是為什麼] 。
 dan Lisi bu-zhidao [**shi weishenme**].
 but Lisi not-know be why
 *Mix reading 'Lisi doesn't know why Lisi's mother scolded Zhangsan.'

- Note that the mix reading is reported to be possible in Mandarin VP ellipsis/*shi*-ellipsis (H.-J. G. Li 2002; Li and Wei 2014).
- This provides initial evidence for a deep anaphora account.

The mix sloppy reading

- Despite some variations, Uyghur SCs tend to disallow the mix reading.

- (30) a. Murat-Ø [ana- si-nin] u-ni nemišqa
 Murat-NOM mother-3SG.POSS-GEN 3SG-ACC why
 tilla-ğan-liq] -i-ni bil-idu-Ø,
 scold-PERF.NOML-COMP 3SG.POSS-ACC know-NPST-3SG
 'Murat knows why his mother scolded him,'
- b. lekin Adil-Ø [nemišqa ikän-lik] -i-ni
 but Adil-NOM why COP-COMP -3SG.POSS-ACC
 bil-mä-ydu-Ø.
 know-NEG-NPST-3SG
- Mix reading 2/9 : 'but Adil doesn't know why Adil's mother scolded Murat.'

The mix sloppy reading

- Interestingly, Mongolian SCs display a different pattern.

- (31) a. Mergen-Ø [tegün-ü] eji ni yayun-du tegün-i
 Mergen-NOM 3SG-GEN mother 3SG.POSS what-DAT 3SG-ACC
 χariya-ju bai-χu]-yi (ni) mede-ne,
 scold-ADVL AUX-INF-ACC 3SG.POSS know-NPST
 'Mergen knows why his mother scolded him,'
- b. getele Bayatur-Ø [yayun-du bol-χu]-yi (ni) mede-xü
 but Bayatur-NOM what-DAT COP-INF-ACC 3SG.POSS know-INF
 ügei.
 not
- Mix reading 7/9 : 'but Bayatur doesn't know why Bayatur's mother
 scolded Mergen.'

The mix sloppy reading

- As such, the availability of the mix "sloppy" reading divides the SCs in the three languages into two groups.
 - */? Mix reading: **Mandarin** and **Uyghur** → Deep anaphora
 - ^{OK} Mix reading: **Mongolian** → Surface anaphora
- The validity of this test can be strengthened by a correlation with the **(anti-)case-matching effects** in Uyghur and Mongolian.

The mix sloppy reading

- Bai (2023) reports that Uyghur SCs consistently resist case marking on *wh*-expressions, whereas Mongolian SCs allow case marking on them.
- To see the anti-case-matching effects in Uyghur SCs:

(32) (Ayxan is fond of a kind of fruit,) (p.267)

lekin män-Ø [qaysi-xil mewä (-*gä) ikän lik] -i-ni
 but 1SG-NOM which-CL fruit-DAT COP COMP -3SG.POSS-ACC
 bil-mä-y-män.

know-NEG-NPST-1SG

'but I don't know which kind of fruit.'

- **Case matching effects** in SCs have been taken as evidence for a movement analysis out of an elided structure.
- **Anti-case-matching effects** suggest the opposite, non-elided account.

The mix sloppy reading

- If this interpretation of (anti-)case-matching effects is on the right track,
 - **SCs in Uyghur involve deep anaphora**, supported by
*Mix reading ↔ anti-case-matching effects
 - **SCs in Monogolian involve surface anaphora**, supported by
Mix reading ↔ case-matching effects
- Mandarin, a language that lack overt morphological case, receives no independent evidence for or against surface/deep anaohora from case marking in SCs.
- But the correlations observed in Mongolian and Uyghur substantially strengthen the validity of the mix reading diagnostic.

Table of Contents

- 1 Introduction
- 2 "Sloppy" reading in SCs
- 3 The c-command conditions
- 4 The mix sloppy reading
- 5 Conclusions**

Conclusions

- Sluicing-like constructions have attracted much attention in the literature.
- We tried to contribute to the debate w.r.t. the nature of the anaphoric element in SCs.
- We did so by examining “sloppy” identity reading in SCs in Mandarin, Mongolian, and Uyghur.
- From a comparative perspective, we dismiss as reliable diagnostics of surface vs. deep anaphora
 - (i) the mere availability of “sloppy” reading (*contra* Wang and Wu (2006));
 - (ii) the c-command condition on “sloppy” reading (*contra* Wei (2009)).
- However, we reveal a promising area pertaining to mix “sloppy” reading as a reliable test, and its correlation with the (anti-)case-matching effects.
 - SCs in Mandarin and Uyghur involve deep anaphora;
 - SCs in Mongolian involve surface anaphora.

References I

- Adams, Perng Wang, and Satoshi Tomioka. 2012. “Sluicing in Mandarin Chinese: An instance of pseudo-sluicing.” In *Sluicing: Cross-linguistic perspectives*, edited by Jason Merchant and Andrew Simpson, 219–247. Oxford University Press.
- Bai, Xue. 2023. “An Exploration of Multiple Sluicing from a Cross-linguistic Perspective.” PhD diss., Tohoku University.
- Culicover, Peter W, and Ray Jackendoff. 2005. *Simpler Syntax*. Oxford University Press.
- Fiengo, Robert, and Robert May. 1994. *Indices and identity*. Cambridge, Massachusetts: MIT Press.
- Hankamer, Jorge, and Ivan Sag. 1976. “Deep and surface anaphora.” *Linguistic Inquiry* 7 (3): 391–428.

References II

- Hoji, Hajime. 1998. "Null Object and Sloppy Identity in Japanese." *Linguistic Inquiry* 29 (1): 127–152.
- Hoji, Hajime. 2003. "Surface and Deep Anaphora, Sloppy Identity, and Experiments in Syntax." In *Anaphora: A Reference Guide*, edited by Andrew Barss, 172–236. Malden, Massachusetts: Oxford University Press.
- Li, Hui-Ju Grace. 2002. "Ellipsis Constructions in Chinese." PhD diss., University of Southern California.
- Li, Yen-Hui Audrey. 2014. "Born empty." *Lingua* 151:43–68.
- Li, Yen-Hui Audrey, and Ting-Chi Wei. 2014. "Ellipsis." In *The Handbook of Chinese Linguistics*, edited by C.-T. James Huang, Yen-hui Audrey Li, and Andrew Simpson, 275–310. John Wiley & Sons.

References III

- Li, Yen-Hui Audrey, and Ting-Chi Wei. 2017. “Sluicing, sprouting and missing objects.” *Studies in Chinese Linguistics* 38 (2): 63–92.
- Li, Yen-Hui Audrey, and Ting-Chi Wei. 2023. “Sluicing and predicate ellipsis.” In *The Oxford Research Encyclopedia of Linguistics*, 1–28. Oxford: Oxford University Press.
- Merchant, Jason. 2013. “Voice and Ellipsis.” *Linguistic Inquiry* 44 (1): 77–108.
- Ross, John. 1967. “Constraints on variables in syntax.” Ph.D. dissertation, Massachusetts Institute of Technology.
- Ross, John. 1969. “Auxiliaries as main verbs.” In *Studies in Philosophical Linguistics, Series One*. Evanston, Illinois: Great Expectations Press.

References IV

- Song, Wei, and Masaya Yoshida. 2017. "Ellipsis or Pro -Form : Reconstruction Effects of Sluicing in Mandarin Chinese." In *Proceedings of 34th West Coast Conference on Formal Linguistics*, edited by Aaron Kaplan, 481–489. Somerville, MA: Cascadilla Proceedings Project.
- Takahashi, Daiko. 1994. "Minimality in movement." PhD diss., University of Connecticut.
- Wang, Chyan-an Arthur, and Hsiao-hung Iris Wu. 2006. "Sluicing and Focus Movement in wh-in-situ Languages." *University of Pennsylvania Working Papers in Linguistics* 12 (1): 375–387.
- Wei, Ting-Chi. 2004. "Predication and sluicing in Mandarin Chinese." PhD diss., National Kaohsiung Normal University.
- Wei, Ting-Chi. 2009. "Some notes on sloppy identity in Mandarin Chinese." *Concentric: Studies in Linguistics* 35:259–306.

References V

Wei, Ting-Chi, and Yen-Hui Audrey Li. 2016. "How to *do so* in Mandarin Chinese." *Journal of East Asian Linguistics* 25:183–212.

Williams, Edwin. 1977. "Discourse and Logical Form." *Linguistic Inquiry* 8:101–139.