

Objects and nothingness: Applicative-licensed nominal ellipsis

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1 Introduction

This talk focuses on Mandarin null object constructions, mainly those resembling (2):

- (1) (John looks at **his date** with deep affection.)

Bill ye xihuan e.

Bill also like

✓ Strict: 'Bill also likes [**John's date**].'

✗ Sloppy: '~~Bill also likes [**Bill's date**].~~'

(H.-J. G. Li 2002: 73)

- (2) John kanjian-le ta de mama. Mary ye kanjian-le e.

John see-PFV 3SG POSS mother Mary also see-PFV

✓ Strict: 'John_i saw **his_{i/k} mother**. Mary_j also saw [**his_{i/k} mother**].'

✓ Sloppy: 'John_i saw **his_i mother**. Mary_j also saw [**her_j mother**].'

(Huang 1992b: 64)

Y.-H. A. Li (2005, 2007, 2014), Aoun & Li (2008), and Li & Wei (2023) propose a *true empty category* (TEC) approach as laid out in (3).

(3) *TEC approach*

A TEC ...

- a. is a last resort that can only be introduced where no empty categories can be;
- b. has a D categorial feature and an uninterpretable Case feature;
- c. does not have any other syntactic feature, most crucially thematic features; and
- d. acquires its content via LF copying.

I present both empirical and theoretical challenges for TEC and propose a newly developed *applicative-licensed nominal ellipsis* (ALNE) approach (4).

(4) *Applicative-licensed nominal ellipsis*

Mary	ye	[_{ApplP}	[_{NP}	ta	de	mama]	[_{Appl^o}	∅ _[E]]	[_{VP}	kanjian-le]].
Mary	also			3SG	POSS	mother				see-PFV

Roadmap

- ii. Empirical foundation
- iii. Theoretical implementation of TEC and its challenges
- iv. New analysis
- v. Conclusion

2 Empirical foundation

2.1 Subject-object asymmetry

Only null objects but not null subjects allow indefinite/sloppy readings:

(5) *Indefinite reading*

a. *Null subject: ✗*

Ta kandao **yi ge keren** dian-le longxia. Wo (ye) kandao *(**yi ge**
3SG see one CLF guest order-PFV lobster 1SG also see one CLF
keren) (ye) dian-le longxia.
guest also order-PFV lobster

‘He saw that **a guest** ordered lobster. I (also) saw that **a guest** (also) ordered lobster.’

b. *Null object: ✓*

Ta kandao Zhangsan dailai-le **yi ge keren**. Wo (ye) kandao Lisi (ye)
3SG see Zhangsan bring-PFV one CLF guest 1SG also see Lisi also
dailai-le (**yi ge keren**).
bring-PFV one CLF guest

‘He saw that Zhangsan brought **a guest**. I (also) saw that Lisi (also) brought **a guest**.’

(Li & Wei 2023: 14)

(6) *Sloppy reading*

a. *Null subject*: ✗

Zhangsan [yinwei **ta de erzi** jiao-guo shuxue] hen gaoxing. Lisi [yinwei
Zhangsan because 3SG POSS son teach-EXP math very happy Lisi because
e jiao-guo yuyanxue] hen deyi.
teach-EXP linguistics very proud

‘Zhangsan_i is happy because **his_i son** has taught math. Lisi_j is proud because
[he_j/his_{i/*j} son] has taught linguistics.’

b. *Null object*: ✓

Zhangsan [yinwei wo jiao-guo **ta de erzi**] hen gaoxing. Lisi [yinwei
Zhangsan because 1SG teach-EXP 3SG POSS son very happy Lisi because
wo mei jiao-guo **e**] hen bu gaoxing.
1SG not.PFV teach-EXP very not happy.

‘Zhangsan_i is happy because I have taught **his_i son**. Lisi_j is not happy because I
have not taught **[him_j/his_{i/j} son]**.’

(Li & Wei 2023: 15, adapted)

2.2 Possible null objects

Null objects can be direct or indirect objects in a double object construction (DOC):

(7) a. *Null direct object:* ✓

Wo gei-le yi ge nanhai **yi zhang piao**. Ta gei-le yi ge nühai **e**.
1SG give-PFV one CLF boy one CLF ticket 3SG give-PFV one CLF girl
'I gave a boy **a ticket**. He gave a girl [**a ticket**].'

b. *Null indirect object:* ✓

Wo gei-le **yi ge nanhai** yi zhang piao. Ta gei-le **e** yi zhi bi.
1SG give-PFV one CLF boy one CLF ticket 3SG give-PFV one CLF pen
'I gave **a boy** a ticket. He gave [**a boy**] a pen.'

(Y.-H. A. Li 2014: 58)

2.3 Impossible null objects

2.3.1 Class 1: Objects in the presence of an additional argument

Unaccusative object Mandarin unaccusative verbs can take an additional experiencer argument which surfaces in the subject position:

(8) [experiencer Wang Mian] qi sui si-le [theme fuqin].

Wang Mian seven age die-PFV father

‘Wang Mian experienced his father’s death at the age of seven.’

Literal: ‘Wang Mian at the age of seven died his father.’

(Huang 2007: 8)

When an unaccusative has an experiencer subject, its object cannot be null:

(9) *Null unaccusative object: ✗*

Zhangsan si-le yi zhi mao. Lisi ye si-le (*e).

Zhangsan die-PFV one CLF cat Lisi also die-PFV

‘Zhangsan experienced **a cat’s** death. Lisi also experienced (*[**a cat’s**]) death.’

Literal: ‘Zhangsan died **a cat**. Lisi also died (*[**a cat**]).’ (Y.-H. A. Li 2014: 59)

Affective inner object Mandarin transitive verbs can take an additional affected argument (*outer object*) which surfaces between the verb and the object (*inner object*):

(10) Wo chi-le [outer ta] [inner san ge pingguo].

1SG eat-PFV 3SG three CLF apple

‘I ate three apples from him.’

Literal: ‘I ate him three apples.’

(Lu 2002: 317, adapted)

When a transitive has an affected outer object, its inner object cannot be null:

(11) *Null affective inner object: ✗*

Wo chi-le ta yi ge pingguo. Ta ye chi-le wo (*e).

1SG eat-PFV 3SG one CLF apple 3SG also eat-PFV 1SG

‘I ate **an apple from** him. He also ate (*[**an apple from**]) me.’

Literal: ‘I ate him **an apple**. He also ate me (*[**an apple**]).’

(Y.-H. A. Li 2014: 58)

2.3.2 Class 2: Objects in the presence of an additional predicate

Resultative object The construction of interest involves a causer subject as well as a causee object bearing the result of the causation:

- (12) [causer Na ping jiu] he-zui-le [causee John].
that bottle wine drink-drunk-PFV John

‘That bottle of wine made John drunk.’

Literal: ‘That bottle of wine drank drunk John.’

(J. Liu 2021: 115)

In this construction, the object cannot be null, as in (13).

(13) *Null resultative object: ✗*

Zhe ping jiu he-zui-le **hen duo ren.** (*Na ping jiu ye
this bottle wine drink-drunk-PFV very many person that bottle wine also
he-zui-le e.)
drink-drunk-PFV

‘This bottle of wine made **many people** drunk. (*That bottle of wine also made [**many people**] drunk.)’
(Li & Wei 2023: 8)

Object preceding a secondary predicate When followed by a secondary predicate, an object cannot be null:

(14) *Null object followed by a secondary predicate: ✗*

Ta kandao **yi ge haizi** hen keai. (*Wo kandao **e** hen huopo.)

3SG see one CLF child very cute 1SG see very lively

‘He saw **a child**, very cute. (*I saw [**a child**], very lively.)’ (Y.-H. A. Li 2014: 61)

2.3.3 Class 3: Nonreferential objects

Based on (15), Li & Wei (2023) claim that nonreferential DP (à la Landau 2021, 2023) objects cannot be null.

(15) a. *Null measure phrase: ✗*

Zhangsan gao-le **yi chi**. Lisi ye gao-le (*e).

Zhangsan tall-PFV one foot Lisi also tall-PFV

‘Zhangsan became **one foot** taller. Lisi also became (*[**one foot**]) taller.’

b. *Null name in naming verbs: ✗*

Wo jiao **Binbin**. (*Ta ye jiao e.)

1SG call Binbin 3SG also call

‘My name is **Binbin**. (*Their name is also [**Binbin**].)’

c. *Null predicate nominal: ✗*

Zhangsan chengwei **yingxiong**. (*Lisi ye chengwei e.)

Zhangsan become hero Lisi also become

‘Zhangsan became **a hero**. (*Lisi also became [**a hero**].)’

(Li & Wei 2023: 10–11)

I improve this generalization in section 3.1.

2.4 Section summary

(16) *Possible null objects*

- a. direct objects (in a DOC)
- b. indirect objects in a DOC

(17) *Impossible null objects*

- a. unaccusative objects
- b. affected inner objects
- c. resultative objects
- d. objects preceding a secondary predicate
- e. nonreferential objects

3 Theoretical implementation of TEC and its challenges

(18) *TEC approach*

A TEC ...

- a. is a last resort that can only be introduced where no empty categories can be (hence **the subject-object asymmetry**);
- b. has a D categorial feature and an uninterpretable Case feature (which is why **class 3** objects are impossible);
- c. does not have any other syntactic feature, most crucially thematic features (which is why **class 1 and 2** objects are impossible); and
- d. acquires its content via LF copying (e.g., [Chung, Ladusaw & McCloskey 1995](#)) (hence **the indefinite/sloppy readings**).

3.1 Generalization-level challenges

Class 3 objects are impossible not because they are nonreferential:

(19) *Possible null measure phrase*

Zhangsan he ni de shengao cha chaoguo-le **shi limi**. Lisi he
Zhangsan and 2SG POSS height difference exceed-PFV ten centimeter Lisi and
wo de shengao cha ye chaoguo-le **e**.
1SG POSS height difference also exceed-PFV

‘The height difference between Zhangsan and you exceeded **ten centimeters**. The height difference between Lisi and me also exceeded [**ten centimeters**].’

(20) *Possible null predicate nominal*

Zhangsan dang-guo **laoshi**. Lisi ye dang-guo **e**.
Zhangsan work.as-EXP teacher Lisi also work.as-EXP

‘Zhangsan has worked as **a teacher**. Lisi has also worked as [**a teacher**].’

Rather, their unacceptability comes from the verbs, some of which (e.g., ‘become’) have been independently argued to not allow null objects (21).

(21) *Null object of some stative verbs: ✗*

Zhe jia gongchang chengwei **guoqi**. (*Na jia gongchang ye
this CLF factory become state.owned.enterprise that CLF factory also
chengwei e.)
become
‘This factory became **a state-owned enterprise**. (*That factory also became [**a state-owned enterprise**].)’
(Zhang & Tang 2013: 50)

3.2 Theory-level challenges

Data overgeneration The current implementation of TEC predicts that all Case-licensed DP objects that do not assign a theta role or receive multiple theta roles can be null, but complications arise with:

- a subset of stative verbs, including (21) above and (22) below;
- prepositions (23); and
- object control verbs (24).

(22) *Null object of some stative verbs: ✗*

Zhe jia gongsi shuyu AQ. (*Na jia gongsi ye shuyu e.)
this CLF company belong.to Ah.Q that CLF company also belong.to
'This company belongs to **Ah Q**. (*That company also belongs to [**Ah Q**].)'

(Zhang & Tang 2013: 51)

(23) *Null object of prepositions: ✗*

Zhangsan tang zai ta de chuang shang. (*Lisi ye tang zai e (shang).)
Zhangsan lie at 3SG POSS bed on Lisi also lie at on
'Zhangsan_i lies on **his_i bed**. (*Lisi_j also lies on [**his_{i/j} bed**].)'

(24) *Null object of object control verbs: ✗*

Zhangsan bipo ta de haizi jie yan. (*Lisi ye bipo e jie yan.)
Zhangsan force self POSS child quit smoking Lisi also force quit smoking
'Zhangsan_i forces **his_i child** to quit smoking. (*Lisi_j also forces [**his_{i/j} child**] to quit smoking.)'

Derivational inefficiency A last resort approach, being transderivational, is against local economy (Collins 1996, Potts 2001).

4 New analysis

4.1 Applicative constructions

Mandarin has “object”-introducing applicatives, including *ba* (a.o.: Thompson 1973, Huang 1982, Sybesma 1992), *dui*, and *gei* (a.o.: Paul & Whitman 2010, Tsai 2018):

- (25) *Simple direct object: Ba*

Zhangsan ba Lisi pian-le.

Zhangsan BA Lisi cheat-PFV

‘Zhangsan cheated Lisi.’

- (26) *Direct object of psychological verbs: Dui*

Zhangsan dui Lisi hen danxin.

Zhangsan DUI Lisi very worry

‘Zhangsan worries about Lisi.’

- (27) *Indirect object: Gei*

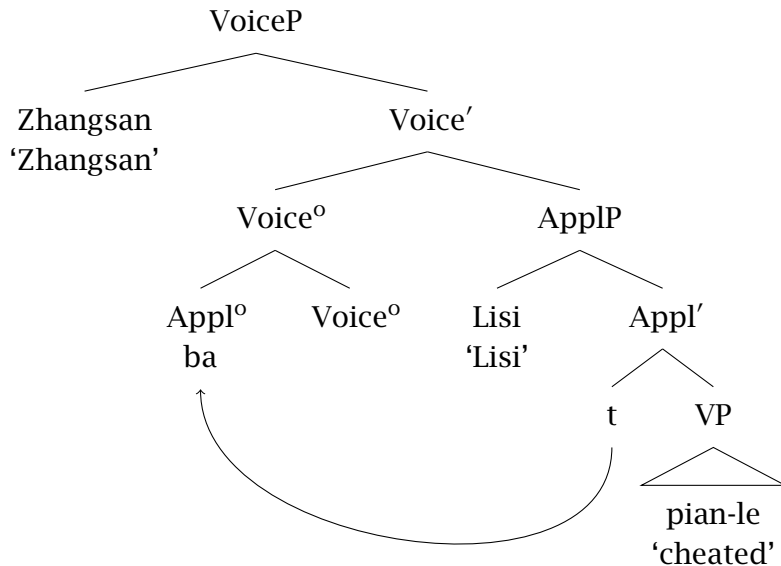
Zhangsan gei Lisi song-le yi kuai shoubiao.

Zhangsan GEI Lisi give.as.a.gift-PFV one CLF watch

‘Zhangsan gave a watch as a gift to Lisi.’

(28) sketches the structure that I assume for (25).

(28)



(cf. Huang 1992a, Sybesma 1992, Chen 2023)

Observation 1 Applicatives and their objects can be null, and when they are null, (indefinite and) sloppy readings are possible as in (29–31).

- (29) Zhangsan ba ta de haizi ma-le. Lisi ye e ma-le.
Zhangsan BA 3SG POSS child scold-PFV Lisi also scold-PFV
'Zhangsan_i scolded **his_i child**. Lisi_j also scolded [**his_{i/j} child**].'
- (30) Zhangsan dui ta de haizi hen danxin. Lisi ye e hen danxin.
Zhangsan DUI 3SG POSS child very worry Lisi also very worry
'Zhangsan_i worries about **his_i child**. Lisi_j also worries about [**his_{i/j} child**].'
- (31) Zhangsan gei ta de haizi song-le yi kuai shoubiao. Lisi ye e
Zhangsan GEI 3SG POSS child give.as.a.gift-PFV one CLF watch Lisi also
song-le yi kuai shoubiao.
give.as.a.gift-PFV one CLF watch
'Zhangsan_i gave a watch as a gift to **his_i child**. Lisi_j also gave a watch as a gift to
[**his_{i/j} child**].'

This is true even for predicates that can only introduce objects by applicatives:

- (32) Zhangsan dui ta de haizi hen shiwang. Lisi ye e hen shiwang.
Zhangsan DUI 3SG POSS child very disappointed Lisi also very disappointed
'Zhangsan_i is disappointed in **his_i child**. Lisi is also disappointed in [**his_{i/j} child**].'

Observation 2

- Unaccusative objects, affected inner objects, objects preceding a secondary predicate, and objects of prepositions do not allow applicatives.
- In simple transitive constructions, we observe a strong correlation between verbs that allow applicative objects and those that allow elided objects:

Verb	Applicative object	Elided object
<i>chi</i> 'eat'	✓	✓
<i>he</i> 'drink'	✓	✓
<i>ma</i> 'scold'	✓	✓
<i>ti</i> 'kick'	✓	✓
<i>chengwei</i> 'become'	✗	✗
<i>gao</i> '(become) tall'	✗	✗
<i>jiao</i> 'call'	✗	✗
<i>shuyu</i> 'belong'	✗	✗

Observation 3 There are no “subject”-introducing applicatives.

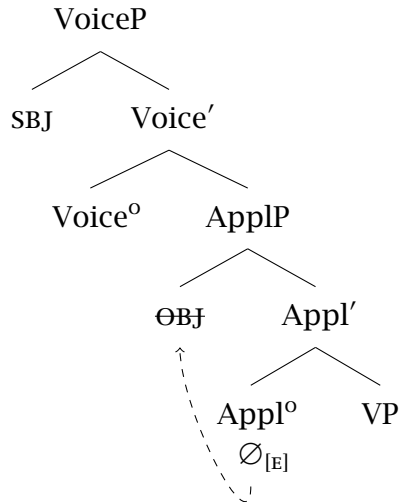
4.2 Applicative-licensed nominal ellipsis

I propose a new approach, which I dub *applicative-licensed nominal ellipsis* (33).

(33) *ALNE approach*

- a. Verbs can optionally select a phonologically null Appl^o, subject to the same selectional constraints on the overt applicatives.
- b. The Appl^o bears an E feature.
- c. The E feature deletes the specifier of the ApplP at PF, if it has a semantically identical antecedent.

(34)



4.3 Tying up loose ends

Recall that resultative construction (13) and object control verbs (24) do not allow null objects. However, their objects can co-occur with *ba* as in (35–36).

(35) *Resultative construction with ba*

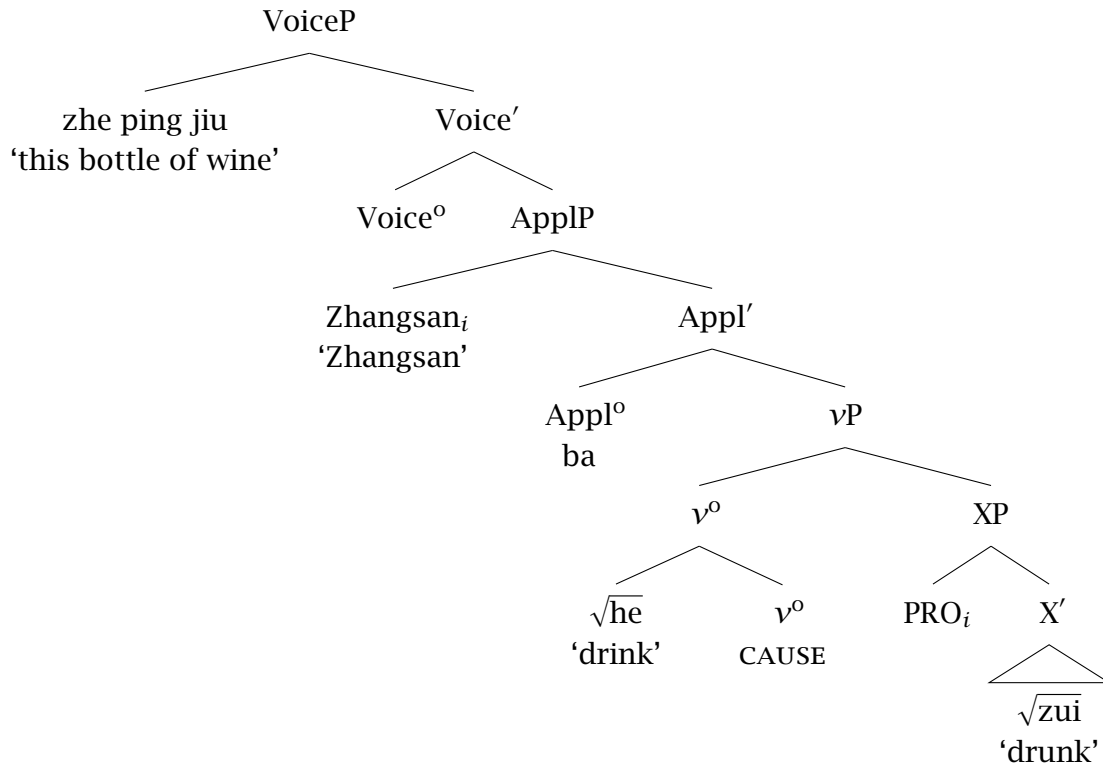
Zhe ping jiu ba Zhangsan he-zui-le.
this CLF wine BA Zhangsan drink-drunk-PFV
'This bottle of wine made Zhangsan drunk.'

(36) *Object control verb with ba*

Zhangsan ba ta de xuesheng bi tuixue le.
Zhangsan BA 3SG POSS student force drop.out.of.school PRF
'Zhangsan has forced his student to drop out of school.'

I assume the structure in (37) for (35).

(37)



(cf. J. Liu 2021, Chen 2023)

The generalization is that elided objects are not allowed when they need to bind a PRO.

5 Derivation and comparison

The predictions are summarized in the following two tables.

	Appl ^o	No PRO	ALNE prediction	Elided object
Direct object in a DOC			✓	✓
Indirect object in a DOC			✓	✓
Unaccusative object	*		✗	✗
Affective inner object	*		✗	✗
Object of some stative verbs	*		✗	✗
Object of prepositions	*		✗	✗
Object of object control verbs		*	✗	✗
Resultative object		*	✗	✗
Object preceding a secondary predicate	*	*	✗	✗

	Elided object	ALNE prediction	TEC prediction
Direct object in a DOC	✓	✓	✓
Indirect object in a DOC	✓	✓	✓
Unaccusative object	✗	✗	✗
Affective inner object	✗	✗	✗
Object of some stative verbs	✗	✗	✓
Object of prepositions	✗	✗	✓
Object of object control verbs	✗	✗	✓
Resultative object	✗	✗	✗
Object preceding a secondary predicate	✗	✗	✗

6 Conclusion

Takeaways

- Mandarin predicates do not trigger argument ellipsis; they introduce an applicative that does.
- If the ALNE analysis is on the right track, the ellipsis toolbox welcomes a new addition.