# Revisiting Chinese P: is it a necessary category?

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- Introduction
- 2 Framework
- Oata

4 Conclusion

#### Outline

- Introduction
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- O Data
- Conclusion

#### Introduction

#### Question

Is P a necessary category in Chinese?

#### Answer

No. There isn't sufficient PLD contrast to cue a separate category P.

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#### Framework

A neo-emergentist approach to features and categories.

The (full) inventory of substantive FFs is not UG-given but emergent.

- UG provides FF template
- PLD skews FF postulation based on language-specific salience
- 3rd factors govern the process

#### Crucially

- FFs regulate systematic contrasts that cannot be explained by solely semantic or phonological considerations.
- Since contrasts vary across languages, FF inventory and category contents also vary.

(Biberauer 2016)

#### Framework

#### Two 3rd factors relevant here:

- Feature Economy (FE): postulate as few formal features as possible to account for the input.
- Maximize Minimal Means (MMM): a minimax search algorithm which minimizes feature postulation but makes maximal use of available features. (Biberauer 2016: 8, Roberts to appear: 95)

3rd factors are domain-general learning biases leading towards optimal use of cognitive resources.

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### Reported P items in Chinese

The following lexical items are often classified as P:

- Postpositions: shàng "on", xià "under", lǐ "in", wài "out", etc.
- Prepositions: cóng "from", xiàng "to", zài "at", bǎ "DISPOSAL", etc.

There are many more items, but their syntactic distributions generally fall in the above two classes.

I will argue: although these are translated into English as P elements, their categorial status in Chinese is not P.

### Huang, Li & Li's (2009) arguments

#### Chinese "PostPs" are in fact NPs because:

- 1 They are head-final like NPs.
- (1) a. chéng wài (Mandarin) city outside "the outside of the city" (≠outside the city)
  - b. qiáo xià
     bridge underneath
     "the underneath of the bridge" (≠under the bridge)
  - shān Ii mountain inside
     "the inside of the mountain" (≠in the mountain)
- (2) chéng-mén "city-gate", qiáo-dūn "bridge-pier", shān-jiǎo "mountain-foot"

# Huang, Li & Li's (2009) arguments

- 2 They can be used as subjects/objects like NPs.
- (3) a. Chéng-wài hěn bú-cuò. city-outside very not-bad "The city's outside is very nice."
  - b. Dí-jūn hōng-zhà qiáo-xià.
     enemy-army explode-explode bridge-under
     "The enemies exploded the underneath of the bridge."
- (4) a. **Chéng-mén** hěn dà. city-gate very bit "The city gate is very big."
  - b. Dí-jūn hōng-zhà qiáo-dūn.
     enemy-army explode-explode bridge-pier
     "The enemies exploded the piers of the bridge."

## Huang, Li & Li's (2009) arguments

- They usually can't denote location alone (like NP).
- (5) a. Tā \*( zài ) chéng-wài zhù. he be at city-outside live "He lives outside the city."
  - xiăo-yā \*( zài ) qiáo-xià yóu-shuĭ.
     small-duck be at bridge-under swim-water
     "The small duck swims under the bridge."
- (6) a. Tāmen \*( zài ) **chéng-mén** xiāng-huì. they be at city-gate each other-meet "They meet each other at the city gate."
  - b. Dírén \*( zài ) qiáo-dūn mái léi.
     enemy be at bridge-pier bury mine
     "The enemies bury mines at the piers of the bridge."

### Summary 1

HL&L: the postnominal elements semantically resembling postpositions are nouns in Chinese.

→Since the "postpositions" morphosyntactically behave like nouns, there is no PLD cue to formalize a separate category.

## Djamouri, Paul & Whitman's (2013) counterarguments

- The "postpositions" require complements (like P).
- They are incompatible with the relational linker de (unlike N).
- (7) a. Shū zài \*( zhuōzi ) **shàng**. ("postposition") book be at table on "The book is on \*(the table)."
  - b. zhuōzi (\* de ) **shàng**table REL on
    "on the table/\*the table's on"
- (8) a. Shū zài **shàng-miàn**. book be at upper-face "The book is on the top."
  - b. zhuōzi de **shàng-miàn** table REL upper-face "the table's top"

(noun)

### Contra DP&W (2013)

- The complement requirement is a prosodic effect.
  - Modern Chinese favors constituents with even number syllables.
- (9) a. ?? Shū zài shàng. book be at top "The book is on the table."
  - Shèng-shū zài shàng.
     holy-book be at top
     "The holy book is on the top."
- (10) a. Huáng-tiān zài **shàng**, hòu-tǔ zài **xià**. yellow-sky be at top thick-earth be at bottom "The sky is on the top; the earth is at the bottom."
  - b. Jiārén zài lǐ, qīnqī zài wài.
     family be at inside relatives be at outside
     "Family members are inside; relatives are outside."

## Contra DP&W (2013)

- 2 The unacceptability of *de* is a register effect.
  - Monosyllabic location nouns (high-register) vs. de (low-register).
  - Register has grammatical significance in Chinese (Feng 2012).
- (11) a. zhuōzi \*de shàng table REL top "the top of the table"
  - b. zhuōzi zhī shàng table REL top "the top of the table"
- (12) a. dà-qiáo \*de xià big-bridge REL underneath "the underneath of the bridge"
  - b. dà-qiáo zhī xià
     big-bridge REL underneath
     "the underneath of the bridge"

- (13) a. jiàoshì \*de wài
  classroom REL outside
  "the outside of the classroom"
  - b. jiàoshì zhī wài classroom REL outside "the outside of the classroom"

### Contra DP&W (2013)

Vice versa, disyllabic location nouns (low-register) are incompaticle with zhī.

- (14) a. zhuōzi de shàng-miàn table REL upper-face "the top of the table"
  - b. zhuōzi \*zhī shàng-miàn table REL upper-face "the top of the table"
- (15) a. dà-qiáo de xià-fāng big-bridge REL lower-direction "the underneath of the bridge"
  - b. dà-qiáo \*zhī xià-fāng
     big-bridge REL lower-direction
     "the underneath of the bridge"

- (16) a. jiàoshì de wài-biān classroom REL outer-side "the outside of the classroom"
  - b. jiàoshì \*zhī wài-biān classroom REL outer-side "the outside of the classroom"

### Summary 2

DP&W's (2013) counterarguments are not valid. I stay with HL&L's (2009) conclusion that Chinese "postpositions" are nouns.

→They express locational meanings, but this does not entail formalized [Loc] or [P] feature.

# "Prepositions" in Chinese

The basic distribution of "prepositions" is shown below.

- The "PrepP" always precedes the main verb.
- (17) a. Tā cóng nán-fāng lái. he from south-direction come "He comes from the south."
  - b. Wŏ bă tāng hē le.l DISP soup drink SFP "I ate the soup."
  - c. Fànrén xiàng chá-lǐ xià le dú.
     criminal to tea-inside put down PFV poison
     "The criminal put down poison into the tea."

### "Prepositions" in Chinese

#### The "prepositions" all have verbal origin in history.

- (18) a. **cóng**, suí-xíng yě. (2c. BC) cong follow-go sfp "Cóng means 'to folow'."
  - b. Bă jiǔ lín fēng. (11c. AD)
     hold alcohol face wind "(I) hold the alcohol and face the wind."
  - c. Jiàn jiàn **xiàng** jǐ. (3c. AD) see sword face self "He saw the sword was facing him."

# "Prepositions" in Chinese

#### And they still have verbal uses today.

- (19) a. Tā **cóng** guò jūn. he follow EXP army "He once joined the army."
  - Tā jìnlái bă le xǔduō mēi.
     he recently flirt PFV many girls
     "Recently he flirted with many girls."
  - Kuíhuā xiàng zhe tàiyáng.
     sunflower face PROG sun
     "The sunflower is facing the sun."

# "Prepositions" are verbal

I argue these "prepositions" are [V] rather than [P], because

- they have verbal uses both diachronically and synchronically,
- they always precede the main verb, which is unexpected if they head PPs (Chinese VP is head-initial).
- →The contrast is [V]-internal rather than between [V] and another lexical category.

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- they always precede the main verb, which is unexpected if they head PPs (Chinese VP is head-initial).
- →The contrast is [V]-internal rather than between [V] and another lexical category.

Considering they are originally purely verbal, their diachronic semantic bleaching (grammaticalization) should go up the verbal extended projection (cf. Roberts & Roussou 2003).

→After grammaticalization, they become light verbs rather than prepositions.

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#### Conclusion

#### In Chinese

- the "postpositions" are location nouns,
- the "prepositions" are light verbs.

Since they well fit into the binary (N-V) categorial contrast, there is no need to postulate a third lexical category P.

Interaction of three factors: a category-poor UG, a Chinese-specific PLD, the 3rd factors FE and MMM.

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