BOOK OF ABSTRACTS

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Keynote speakers
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KEYNOTE SPEAKERS

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Chinese bilingual lexicography in the vortex of the AI-revolution

The apperance and immediate acclaim of LLM-based AI-applications, especially in view of (i) their easy accessibility for the wide public, and (ii) their quick proliferation, offering a choice of alternatives, has triggered a lot of experimental work in the field of lexicography in recent years. A good number of studies have been published in the past two or three years, discussing the arguments *pro* and *contra* the usefulness and effectiveness of the well-known AI tools (especially the various incarnations of ChatGPT) in current lexicography. Interestingly, different authors have come to very different conclusions regarding the aptness of these tools in dictionary writing, see, a.o., the very skeptical Rundell (2023), the very convinced and enthusiastic Schryver (2023) ("ChatGPT is far more superior "), the more balanced, but moderately optimistic Lew (2024) ("entries generated by ChatGPT are virtually indistinguishable in terms of quality from those written by highly trained human lexicographers ") and Lew et al. (2024), or the very carefully designed but crucially inconclusive testing by Phoodai & Rikk (2023). Chen et al. (2024) specifically tested ChatGPT for its lexicographic capabilities on Chinese phraseological expressions, and concluded that AI is just not quite *there* yet, but "a symbiotic collaboration where AI does the preliminary work, allowing humans to focus on editing, improving, and validating content" is a realistic scenario.

Having been in charge of the compilation of the pair of Chinese-Hungarian and Hungarian-Chinese bilingual dictionaries in the past 10 years (by a team of considerable size), and having experienced the difficulties of creating dictionary entries in the traditional, philological fashion, with the assistance of large corpora, I have naturally grown interested in the potential and the capabilities of the new AI tools, and decided to do my own testing, for the particular task of producing trial entries for bilingual Chinese dictionaries. Although this testing is far from completed yet, I will nevertheless share my own findings in this presentation, comparing the outputs of a small sample of LLM-based applications -- at the end of which you will see and hear me step back from the statement I made to our dictionary team members on the occasion of submitting the finalized XML-files of the Hungarian-Chinese dictionary to the publisher just a few months ago, in which I envisaged that our dictionary may have been the last such product compiled primarily based on human intelligence, and that the new AI-tools (or toys?) could soon be able to reproduce our 10 years' worth of work in a matter of a few minutes.

References

Bartos, H. & I. Hamar (eds.-in-chief) 2019. *Kínai-magyar szótár I-II.* [Chinese-Hungarian Dictionary, vol. 1-2]. Akadémiai K. & ELTE Confucius Institute, Budapest.

Bartos, H., I. Hamar, M. Pap (eds.-in-chief) 2024. *Magyar-kínai szótár I-II.* [Hungarian-Chinese Dictionary, vol. 1-2]. Akadémiai K. & ELTE Confucius Institute, Budapest.

Chen, L., H.-L. Dao, D.-T. Thành Do-Hurinville. 2024. AI empowerment: Where are we in the automation of lexicography? A metaphraseographic study. In: Inoue, A. et al. (eds.) *Asian Lexicography - Merging cutting-edge and established approaches. AsiaLex 2024 Proceedings*, Tokyo. 90-98.

Lew, R. 2024. Dictionaries and lexicography in the AI era. *Humanities And Social Sciences Communications* 11:426. https://doi.org/10.1057/s41599-024-02889-7

Lew, R., B. Ptasznik, S. Wolfer. 2024. The effectiveness of ChatGPT as a lexical tool for English, compared with a bilingual dictionary and a monolingual learner's dictionary. *Humanities And Social Sciences Communications* 11:1324. https://doi.org/10.1057/s41599-024-03775-y

Phoodai, Ch. & R. Rikk. 2023. Exploring the Capabilities of ChatGPT for Lexicographical Purposes: A Comparison with Oxford Advanced Learner's Dictionary within the Microstructural Framework. In: *2023: Electronic lexicography in the 21st century. Proceedings of eLex 2023 conference.* https://elex.link/ojs/index.php/elex/article/view/35/21

Rundell, M. 2023. Automating the Creation of Dictionaries: Are We Nearly There? In: *Proceedings of the 16th International Conference of the Asian Association for Lexicography: "Lexicography, Artificial Intelligence, and Dictionary Users".* Seoul: Yonsei University, 1–9.

Schryver, G.-M. de. 2023. Generative AI and Lexicography: The Current State of the Art Using ChatGPT. *International Journal of Lexicography 36*: 355–387. https://doi.org/10.1093/ijl/ecad021

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The Growth of Children's Syntax

In this talk I argue that interactional and pointing capacities constitute the biological basis of our linguistic intelligence, and that interactional and pointing capacities are regulated by our recursive mind. I further claim that children are born with interactional and pointing capacities which constitute the biological basis for the development of syntactic projections labeled as CP and VP, which emerge at their later stage of language development. Evidence will be given to show that children have a recursive (syntactic) mind before speech, and that pointing by children may be analyzed into complex structures which correspond to the decomposed VP that represents the event structure, and that vocalization may be tied to the CP domain of syntactic structures that are related to the addresser and addressee interaction. Further evidence will be given to show that children's acquisition of syntax is determined by a biological program which regulates its growth from the two opposing ends of syntactic structures, i.e., CP and VP. It is shown that children at the single-word stage could use nouns, verbs and interjections, which may be taken as evidence instantiating their acquisition of VP and CP respectively, and that children at the two-word stage begin to combine sentence-final particles with VP elements, whereas IP elements such as aspect markers and modal auxiliaries appear later at the multi-word stage. These facts show that VP and CP emerge earlier than IP in children's language development, as predicted by the Bidirectional Growth Model of Child language acquisition (Hu 2016).

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形式语义学与汉语句法研究

脱胎于逻辑学的形式语义学立志于阐释自然语言中蕴含的逻辑语义，在变幻莫测的言语表征背后寻找清晰明了的逻辑骨架。然而抽象的逻辑定义严格精确，以它为标杆打捞起来的语言现象并不全面。相对于传统语法研究的面面俱到，现代形式语义研究的特点是突出重点，选择一些有重大价值的题目深入钻研，比如指称、真值、量化和焦点等问题，这就突破了传统汉语研究的视野，依靠理论驱动了对汉语的重新发现。

本讲座从形式语义学的视角，探索汉语语言现象的语义允准机制，深入剖析非典型宾语句、汉语特殊疑问词的非疑问用法、无空位的定语从句、话题句、驴子句、句尾"了"的语义、语义类型驱动的句子结构分析等问题。基于丰富的语言事实，讲座旨在探讨形式语义学在汉语研究中的广泛应用与面临的挑战，阐释运用形式语义学进行汉语研究的独特思路与范式，为语言学研究贡献新的观察角度与深刻洞见。

Formal semantics and Chinese grammar

Rooted in modern logic, formal semantics aims to explicate logical meanings inherent in natural language and to uncover clear, coherent logical structures beneath its fluid and often unpredictable surface forms. However, the highly abstract and precise definitions of logic do not always capture the full range of linguistic phenomena. Accordingly, in contrast to the comprehensive scope of traditional grammatical research, contemporary formal semantics emphasizes depth over breadth, focusing on selective, theoretically significant topics such as reference, truth, quantification, and focus. This approach has expanded the horizons of traditional research on the Chinese language and has led to new empirical discoveries driven by theoretical inquiry.

This talk explores the mechanism of semantic licensing in Chinese through the lens of formal semantics. It provides in-depth analyses of a select set of phenomena, including non-canonical object constructions, non-interrogative uses of *wh*-words, gapless relative clauses, topic constructions, donkey sentences, the sentence-final particle *le*, and type-driven structural analysis. Drawing on a rich body of empirical data, this talk demonstrates the broad applicability of formal semantic methods to the study of Chinese and examines the potential challenges. The distinct approach and paradigm that formal semantics brings to Chinese linguistics will be articulated to offer new perspectives and deeper insights for general linguistic research.

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Integrating AI Technologies in Chinese Discourse Analysis: With Implications for Chinese as a Second Language

As in other fields of social sciences and humanities, qualitative and quantitative approaches to linguistic analysis are often viewed as fundamentally distinct, if not opposing. For example, corpus linguistics is explicitly oriented toward the analysis of large datasets, whereas conversation analysis prioritizes micro-level, single-case investigations. Proponents of each approach rigorously defend their methodologies, and for good reason. However, reconciling these paradigms presents significant challenges, given their underlying epistemological principles and the technological barriers that complicate integration.

In this talk, I demonstrate how AI tools can serve as a bridge between these methodological divides. Specifically, I illustrate how technologies such as video data processing, speech-to-text conversion, machine translation, and visualization software can facilitate detailed qualitative analysis of Chinese in multiple areas (e.g. lexico-grammar, pragmatics, multimodal interaction, and translation) while simultaneously enabling large-scale investigation. This integrated approach has the potential to yield insights that might not otherwise be accessible.

Furthermore, from an instructional technology perspective, incorporating AI-assisted multimodal analysis into Chinese L2 teaching can provide students with novel ways to engage with and master authentic Chinese materials, improving L2 pedagogical effectiveness.

PLENARY SESSION

A comparative study of applicative constructions in Mandarin Chinese and Vietnamese

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Applicative constructions in Asian languages are typically of the benefactive type, with applicative markers often deriving from the verb GIVE. These markers usually appear after the main verb, forming a compound verbal structure, e.g., the pattern V-*gěi* in Mandarin Chinese and the patterns V-*te kureru/yaru/ageru* in Japanese, which introduce a beneficiary argument, thereby increasing the syntactic valency of the main verb by one. See the examples below. Comparative studies on applicative constructions (benefactive constructions) in Japanese and other Asian languages have been relatively extensive (Shibatani, 1994, 1996; Pardeshi, 1998; Tomioka & Kim, 2017; Sawada, 2014/2024). However, research on comparative analyses of applicative constructions in Mandarin Chinese and the neighboring languages remains insufficient. This study, within a typological framework, aims to compare the applicative construction V-*gěi* in Mandarin Chinese with its corresponding counterparts in Vietnamese.

The grammatical functions of GIVE, i.e., *gěi* in Mandarin and *cho* in Vietnamese, exhibit multifunctionality. Both *gěi* and *cho* function as main verbs, expressing the meaning GIVE and forming a double-object construction. They can also form dative structures, taking the pattern V+DO+GIVE$_{(Prep)}$+IO, or serve as auxiliary verbs following the main verb to form applicative constructions of the pattern V+GIVE$_{(Aux)}$+IO+DO, as illustrated in (1-2).

Mandarin

(1) Zhāng Sān shāo-gěi-le   tā   yī-gè   bāofu
    Zhang San take-GIVE-PFV 3SG one-CL baggage
    'Zhang San took him a baggage.'

Vietnamese (Nguyễn, 1976: 924)

(2) Ông   thư-ký   đưa (cho) cô   y-tá   cái   quạt.
    CLF.M secretary hand GIVE CLF.F nurse CLF   fan
    'The clerk handed the nurse the fan.'

Regarding *cho*, which immediately follows a main verb in Vietnamese, traditional research has considered it a preposition or postposition (Matisoff, 1991; Ngo, 2020). However, based on its structural parallelism with Chinese applicative alternations, this study argues that *cho* should be reinterpreted as an auxiliary verb rather than an adposition. This change of a lexical verb into an auxiliary is a case of grammaticalization.

The correspondence among these three structures above suggests that Mandarin Chinese and Vietnamese share commonalities in applicative expressions. However, they also exhibit differences in the omission of syntactic constituents and passivization operations. This study will conduct a comparative analysis of GIVE-type applicative constructions in Mandarin and Vietnamese, aiming to demonstrate the existence of applicative constructions in Vietnamese from a comparative perspective. Such a comparative study of these two languages, which belong to different language families, can offer a deeper insight into the structure of the respective languages in general and the applicative constructions in particular.

Selected references:

Ngo, B. (2020). *Vietnamese: An essential grammar*. Routledge.
Sawada, J. (2024). A Typology of Benefactive Verb Constructions in Japanese: A Cross-Linguistic Perspective. *GENGO KENKYU*, 85-136.
Shibatani, M. (1994). Benefactive constructions: A Japanese-Korean comparative perspective. *Japanese/Korean Linguistics*, *4*, 39-74.

A Labeling Analysis of Apparent NP-Ellipsis in Chinese and Japanese

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In this paper, based on complex NP data in Chinese, we elaborate on Labeling Algorithm (LA) (Chomsky 2008; 2015) towards the distinction between LA for syntax-phonology interface and that for syntax-semantics interface and how the phonological covertness affects the labeling at the syntax-phonology interface. It has been observed that relative clauses (RCs) in Mandarin can license NP-Ellipsis (NPE), while TP complement of a pure complex NP (PCNP) cannot (Saito, Lin and Murasugi 2008 (SLM); Miyamoto 2014). We newly observe that the head noun can be null in PCNP when DE is also absent.

(1) *[Wo mai de   bi]   bi   [ni   mai *(de) <bi>] geng gui*
    I   buy DE   pen   than   you   buy   DE pen more expensive
    'The pen I bought is more expensive than the one you bought.'
(2) *[Huaqi-Yinhang   pochan   de]   xiaoxi bi*
    Citibank   bankrupt   DE   news   than
    [Meiguo-Yinhang   pochan (*de)] [<xiaoxi>] geng ling   shichang zhenjing.
    Bank of America bankrupt DE   news more make market shock

'The news that CB went bankrupt shocks the market more than <the news> that BOA did.'

Thus, the updated generalization is that: (i) the covert head noun with overt DE is possible in RCs but not in PCNP, and (ii) the covert head noun without overt DE is possible in PCNP but not in RCs. To explain this discrepancy, we argue that RC and PCNP in Mandarin have different underlying structures: DE in (3a) is located in a D-head, with the RC filling its Spec and the head noun is located inside its complement position (Miyamoto, 2014); DE in (3b) in PCNP is not a D-head, but a part of the complement clause selected by the head noun.

(3) a. $[_{DP} [_{TP}$ you bought t] $[_{D}$ DE] $[...pen_{...}]]$ b. $[_{NP} [_{TP}$ BOA went bankrupt DE] $[_{NP}$ news]]

Following SLM proposing that ellipsis of a complement position requires a filled specifier position, ellipsis of the DP complement is possible in (3a), while in (3b) the RC (TP) does not fill SpecDP and hence fails to license the ellipsis of *news*. This explains generalization (i).

As for generalization (ii), building on LA, we propose that in PCNP, what appears to be NPE without DE in fact involves a covert head noun corresponding to *one* in English, and DE is an anti-labeling device (Saito, 2016) which prohibits the attached TP to project. We further assume with Tian (2024) that a head losing its phonological features in syntax is weak when it comes to labeling, and hence the covert head noun *one* is weak. That an element attached by the anti-labeling device DE does not project, combined with the weakness of the null head noun, leads to the label {TP-DE~AntiL~, ~NP~weak} at the syntax-phonology interface. As both cannot serve as the label of the constituent, this structure results in ungrammaticality. As a remedy, DE should be phonologically deleted so that the label of {TP~DE,~ NP} is fixed as TP. At the syntax-semantics interface, different from the syntax-phonology interface (Takita 2020, Maeda 2021), DE is still present and the head noun *one*

is not weak, thus LA can label {TP-DE_{Anti.L}, NP} as NP by virtue of TP-DE not projecting.This explains how PNCP allows the covert head noun without overt DE. On the other hand, in the RC structure in (3a), DE as a D head merges with CP that includes the head noun. Thus, even when the head noun is covert, DE can straightforwardly project as a D head without undergoing phonological deletion. This accounts for the generalization (i) that the covert head noun without overt DE does not appear in RCs.

With the assumption that the prenominal form of the verb is an anti-labeling device in Japanese (Saito, 2016), we can extend the analysis to the ungrammaticality of PCNP with covert head noun (4). This is because the label of the constituent {[...*yakeru*_{Anti.L}], ~~NP~~_{weak}}, where neither projects, cannot be fixed.

(4) *[[Sakana-ga   yakeru] nioi]-wa   [niku-ga   yakeru] [e]- yori ii.
        fish-NOM   grill   smell-TOP   meat-NOM   grill   than good
     'The smell of fish grilling is better than the smell/one of meat grilling.'

Selected Reference:
Tian, Q. 2024. Phonological Features: Another Crucial Factor in the Labeling Algorithm, *SAGE Open* 14

A Study of Modal Negatives in the Shantou Southern Min dialect

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Southern Min is particularly rich in negatives, but in-depth study on its syntax and semantics are sparse, especially those focusing on the Shantou dialect. Unlike Mandarin, Southern Min often fuses the negator with the modal or aspect marker to form either a compound negator or a fused lexical item consisting of the negative (see e.g. Li (1971), Saillard (1992), Teng (1992), Zhou & Ouyang (1998), Tang (1999), Lin H. L. (2004), Wu (2009), Lien (2013, 2015), Xu (2007), Yang H. L. (2012), Qang (2015), Hu (2019), Chen (2020), Liao and Wang (2022)). This paper provides some observation on the semantics of modal negatives in Shantou Southern Min (henceforth Shantou dialect). Like other Southern Min dialects, the negation system of Shantou dialect is complex, which is evident in the large array of negative particles or negative markers, as shown below.

Mono-/bi-morphemic forms	Compound forms
boi³⁵�White, mo⁵³孬, mãi²¹³勿愛, m³⁵唔, mui²¹³, miang⁵³免/meŋ⁵³甭	bo⁵⁵⁻¹¹-piaŋ²¹³無變, m³⁵⁻²¹ hãu²¹³唔好

To test the use of the above negative forms, natural data were collected from native speakers of Shantou Southern Min from three age groups, viz., 25-40, 41-55, and above 56, including both male and female. The first set of data was natural data collected through interviews. The second set of data was collected via pre-designed questionnaires which involve three tasks: (i) paraphrasing the Shantou negatives into Mandarin expressions; (ii) paraphrasing the Mandarin negative sentences into Shantou negative sentences; and (iii) verifying interpretation of individual Shantou negative forms for their modal force. From our study, these negative modals are found to distribute among the modal types as shown below.

Negative modals	Types of modality	Negative modals	Types of modality	Negative modals	Types of modality
boi³⁵㎡	Dynamic, Epistemic	mui²¹³	Dynamic	mãi²¹³勿愛	Deontic, Bouletic
bo⁵⁵⁻¹¹-piaŋ²¹³無變	Dynamic, Epistemic	m³⁵唔	Deontic, Bouletic	boi³⁵㎡	Epistemic
m35-21 hãu213 唔好	Deontic, Bouletic	miang⁵³免	Deontic	meŋ⁵³甭	Deontic
mo⁵³孬	Epistemic				

The range of meanings expressible by modality varies along two basic semantic dimensions of strong and weak, referred to as the modal "force" and defined under the concepts of necessity and possibility (see e.g. Kratzer 1977, Klinedinst 2007, Rullmann et al 2007) of modal logic. The relevant modal strengths are taken as universal and existential quantification over sets of accessible worlds. Under such an assumption, we argue that the complexity of the negation system in the Shantou dialect is attributed to its high sensitivity towards modal sub-types, viz., epistemic, dynamic, deontic, and bouletic (ee e.g. Palmer 1990), and modal force (see e.g., Portner 2009, Matthewson 2010, 2018, Grano 2024), viz., strong and weak. This leads to an array of individual modal negatives defined according to their modal sub-types and modal force, namely strong, neutral and weak.

A Tripartite Structure for Middle Chinese *Zěnme**

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Background Modern Mandarin Chinese *zěnme* exhibits a cross-linguistic phenomenon known as "*how-why* alternations" (cf. Tsai 2008, a.o.). For example, *zěnme* preceding grammatical constituents such as auxiliaries is construed as causal *how* 'how come', as exemplified in (1a), whereas *zěnme* following them is construed as instrumental/method *how*, see (1b). On the other hand, *gànmá* is construed as 'do what' in sentence-final position as in (2a). However, *gànmá* has also undergone grammaticalization and is used as causal *how* 'how come', see (2b) (cf. Tsai 2012).

(1)　　a.　*Tāmen **zěnme** huì　chǔlǐ　zhè　jiàn　shì?*　b.　*Tāmen huì*

　　　　　***zěnme** chǔlǐ　zhè　jiàn　shì?*

　　　　　they　**how**　<u>will</u>　handle this　CL　　matter　　　they　<u>will</u>

　　　　　how　handle this　CL　　matter

　　　　　'**How come** they will handle this matter?'　　'**How** will they handle this

matter?'

(2)　　a.　*Nǐ　zài　gànmá?*　b.　*Nǐ　gànmá　kū?*

　　　　　you　PROG　**do.what**　　　　you　**how come**　cry

　　　　　'What are you doing?'　　　'**How come** you cry?'

Observation Interestingly, Middle Chinese (MC) *zěnme* simultaneously exhibits the properties of *how-why* alternations and grammaticalization of 'do what' into 'how come'. In *Laoqida*《老乞大》and *Piao Tongshi*《朴通事》, Early and Late Middle Chinese textbooks, sentence-final (SF) *zěnme* was exclusively construed as 'do what', see (3a), similar to (2a). Some instances of SF *zěnme* were replaced with *zuò shénme* with the same construal in a later version of *Laoqida*, see (3b), indicating the historical link between *zěnme* and *zuò shénme*. Instrumental/method *zěnme* was located exclusively in the pre-VP position with no constituents intervening between *zěnme* and VP, see (4), similar to (1b). In contrast, causal *zěnme* always preceded, if any, auxiliaries such as *nénggòu* or *gǎn*, see (5), and grammatical particles such as *cái*, or *jiù*, similar to (1a).

(3)　　a.　*Xué　tā　Hàn'ér wénshū**zěnme**?*　b.　*Xué　tā*　　　　　***zuò***
guānhuà

***shénme**?*

　　　　　learn　their　Chinesetexts　**do.what**　　　　learn　their　　　　　**do**
what

　　　　　'**What** are you learning the Chinese texts **for**?'　　'**What** are you learning
Mandarin **for**?

　　　　　(From《刪改本老乞大》1483)　　　　　　　(From《老乞大新釋》

1761)

(4)　　*Nǐ　dǎ　shí　**zěnme** dǎ?*　(5)　***Zěnme** nénggòu*　*jiāngù*
láozhuàng ne?

　　　　you　make　when　**how**　make　　**how**　<u>can</u>

strong.and.sturdy　　　　　　　　　　　　　　　　　　　　　SFP

'**How** do you make it when you have to?'　　'**How　come** it's　strong　and

sturdy?'

　　　　(From《刪改本朴通事》1483)　　　　　(From《朴通事新釋》1765)

Analysis These properties can be captured by a tripartite structure given in (6). The availability of intervening constituents between *zěnme* and VP, see (5), indicates that MC causal *zěnme* is located in a relatively high functional projection, Cau(sative)P, for its "height of interpretation" in Tsai's (2008) sense. The causal *how* (5) and SF 'do what' (3a) construals of MC *zěnme* indicates that grammaticalization of 'do what' into causal *how* as in Modern Mandarin Chinese (2) has been a recurrent phenomenon across time. The alternations

between SF *zěnme* and *zuò shénme* with the identical construal, see (3), indicate that SF *zěnme* is a VP, similar to Lü's (1985) analysis of *zěnme*. Instrumental/method (4) *zěnme* should be higher than VP but lower than auxiliaries.

(6) [_{CauP} *zěnme* … *nénggòu* … [_{vP} *zěnme* [_{VP} *zěnme*]]]] (MC)
        Causal *how*   can   Instr./method *how*   *do what*

Conclusion This work describes the syntactic environments of three construals of Middle Chinese *zěnme* discovered in *Laoqida* and *Piao Tongshi*. This work provides a tripartite structure for *zěnme*'s three construals, by extending Lü's (1985) analysis of *zěnme* and Tsai's (2008 et seq.) cartographic analysis to Middle Chinese and identifying syntactic delimiters for each construal.

Selected References Lü, S. 1985. *Pronouns in Modern Chinese* [Jìndài Hànyǔ zhǐdàicí]. Shanghai: Xuelin Press. **Tsai, W. T. D.** 2008. Left periphery and how-why alternations. *Journal of East Asian Linguistics*, 17, 83-115. **Tsai, W. T. D.** 2012. *Ruhe* vs. *Heru*: A Comparative Study of Spoken Language and Written Language in Chinese. *Essays on linguistics*, 46, 144-161.

A UID-based rational account of coherence relation expression in Mandarin Chinese

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This corpus study presents a novel application of a rational account of language production, Uniform Information Density (UID), to the marking of coherence relations in Mandarin Chinese, specifically through conjunctions. Illustrated in (1) and (2), from CCL corpus (2003), are cases of double conjunction marking (DM), where either one or even both two conjunctions can be omitted, resulting in a case of single conjunction marking (SM) or no marking (implicit).

> 1. 精神分裂症型患者的妄想**虽然**具体内容多种多样，**但**其基本模式都差不多。
> **Although** the specific contents of delusions of schizophrenic patients are diverse, **but** their basic patterns are all similar.
> 2. 今年过年的时候，**因为**我也在美国，**所以**你来美国开演唱会的时候，我有去参加。
> During the Chinese New Year this year, **because** I was also in the US, **so** when you came to the US to hold a concert, I attended.

The UID principle (Levy and Jaeger, 2006) highlights that people structure language production (e.g., syntactic planning by including or excluding conjunctions) to maximize the uniformity of information density across utterances, thereby optimizing the effect and efficiency of communication. For a comprehensive view, we also take into account cognitive bias (causal vs. concessive) (Sanders, 2005) and potential medium effects (written vs. spoken).

Unlike the few studies on coherence relations, we approach UID from two perspectives: (1) *relational information*, such as implicit causality verbs predicting an upcoming causal relation (Asr and Demberg, 2012), antonyms or parallelism implying contractiveness (Crible and Demberg, 2020), lexicalized information such as semantic opposites across the P and Q of a concessive relation, and adverbs that express more directly the relational meaning, eg., *jiu 'then', que 'however', hai 'still'*; (2) *information density profile of the context*, namely, the complexity of semantic, syntactic, and pragmatic information encoded in the relation.

Our hypotheses are:
1. UID, operationalized through the two perspectives above, is the overarching principle restricting conjunction occurrence in coherence construction.
2. Cognitive bias is a secondary factor: while UID is maintained, causal relations present a lesser degree of explicitness (i.e., less DM cases), and require fewer relational signals.
3. Medium effects are present: information profile of both relations appear less complex in spoken than in written discourse, due to the real-time production pressure imposed by the dynamic nature of speech.

A descriptive analysis of 1,200 explicit instances marked by *yinwei/youyu 'because'*, *suoyi 'so'* and *suiran/jinguan 'although'*, *danshi 'but'* reveals that DM usage is more frequent in spoken discourse and concessive relations, partially supporting hypotheses 2&3. In-depth coding and analysis are in progress to thoroughly test these hypotheses. Preliminary observations indicate that lexical chains often contribute to the inference or interpretation of specific relations: those encoding conceptual associates in causal contexts while conceptual conflicts in concessive context. However, such lexical link appears more dominant in concessive than causal contexts, implying causality being default assumption. Further validation of hypotheses and extensive discussions will be presented based on final results.

Selected references:

Jaeger, T., & Levy, R. (2006). Speakers optimize information density through syntactic reduction. *Advances in neural information processing systems*, 19.

"After all, we are Chinese": identity expression through deixis in conversations with Chinese immigrants

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This study explores how Chinese immigrants express their identities through the use of deixis in conversational narratives. Deixis, as a linguistic phenomenon, relies on contextual cues such as person (e.g., "we," "you"), time (e.g., "now," "then"), and space (e.g., "here," "there", "go", "come"), to anchor speakers and listeners within a shared framework of understanding (Levinson, 1983; Hanks, 1992). By analyzing conversational data from Chinese immigrants, this research investigates how deictic forms are employed to establish relationships between linguistic expressions and extralinguistic realities (De Fina, 2003: 52). Specifically, spatial and temporal deixis primarily anchor or distance individuals from specific places and moments in their lives. In contrast, pronominal deixis establishes a connection between language and the world (De Fina, 2003: 2) and reveals the speaker's attitudes toward their surroundings through various conversational strategies.

This study is part of the ECCO-Italy project framework (Education of Children of Chinese Origin in Italy), which aims to explore the identity issues faced by children of Chinese origin in Italy. As such, this research focuses on interviews conducted with parents, particularly those with younger children. This is because younger children often struggle to articulate identity-related issues; meanwhile, the identity of first- or second-generation immigrant parents can, to some extent, influence their children's sense of identity.

The present study addresses two key questions: 1) What linguistic strategies do migrants use to express their identity? 2) Do children and parents share the same sense of identity? To answer these questions, we analyzed data derived from the aforementioned interviews. A qualitative analysis methodology was primarily adopted, as it provides valuable insights into self-representation within specific contexts.

The findings reveal that deixis serves as a powerful tool for identity expression. For example, the frequent use of the pronoun "we" (我们 *women*) in phrases such as "After all, we are Chinese" emphasizes a collective identity rooted in shared cultural heritage. Meanwhile, "they" (他们 *tamen*) is often used to refer to "Italians," even in instances where it overlaps with other uses of "they," such as when referring to "children." Temporal deixis, such as "now" (现在 *xianzai*) versus "back then" (那个时候 *neige shihou*), highlights the immigrants' dual positioning between their past experiences in China and their present life in the host country. Similarly, spatial deixis, including terms like "here" (这边 *zhebian*) and "there" (那边 *nabian*), along with verbs such as "return" (回 *hui*) and "go" (去 *qu*), further illustrates the immigrants' negotiation of belonging across geographical and cultural boundaries.

References

De Fina, A. (2003). *Identity in narrative. A study of immigrant discourse*, John Benjamins, Amsterdam.
Hanks, W. F. (1992). The indexical ground of deictic reference. In *Rethinking Context: Language as an Interactive Phenomenon* (pp. 43-76). Cambridge University Press, Cambridge.
Levinson, S. C. (1983). *Pragmatics.* Cambridge University Press, Cambridge.

An investigation of the modal verb *yɛn⁴²i¹* 'be willing to' in Northeastern Mandarin as a marker for the habitual category

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Abstract: In Sinitic languages, Lamarre (2007, 2009) identifies that modal verbs such as *huì* 'be able to', *yào* 'want to', *ài* 'love to' in Standard Mandarin, along with the sentence-final particle word *ne* in Shaanxi, can signify the habitual category. Fan (2017) suggests that Southern Chinese dialects prefer PRE-VP (verb phrase) grammatical habitual markers (including modal verbs and adverbs), while Northern Chinese tends to utilize sentence-final particles. However, in Northeastern Mandarin, the modal verb *yɛn⁴²i¹* exhibits a distinct form compared to other Northern Chinese subgroups, preferring to appear in a PRE-VP position to denote the habitual category, containing concepts of high frequency, circumstantial necessity, habitual nature, and stative property, as illustrated in examples (1) to (3).

(1)   Harbin dialect (Northeastern Mandarin, Sinitic)   **HIGH FREQUENCY**

tʰa⁴⁴	yɛn⁴²i¹	tu²⁴	su⁴⁴
3SG	be.willing.to	read	book

'He often reads books.'

(2)   Changchun dialect (Northeastern Mandarin, Sinitic) **CIRCUMSTANTIAL NECESSITY**

tuŋ⁴⁴tʰiɛn⁴⁴	tsɤ⁴⁴	yɛn⁴²i¹	fei⁴²	iou²⁴
winter	car	be.willing.to	consume	fuel

'The car will consume fuel in winter.'

(3)   Jilin dialect (Northeastern Mandarin, Sinitic)   **HABITUAL NATURE**

tuŋ⁴⁴pei²¹⁴in²⁴	yɛn⁴²i¹	tsʅŋ⁴⁴	ta⁴²mi²¹⁴
Manchurian	be.willing.to	eat	rice

'The Manchurian eat rice.'

In this research, we propose a grammatical path for the modal verb *yɛn⁴²i¹* 'be willing to' in Northeastern Mandarin, transitioning from a modal verb to a habitual category marker, which can be delineated as BE WILLING TO > INTEND > PREDICTION > PROBABILITY > HABITUAL, indicating a close association between the habitual category and dynamic modality.

Keywords: *yɛn⁴²i¹* 'be willing to'; modal verb; habitual category; Northeastern Mandarin

References:
Chappell, Hilary and Alain Peyraube. 2016. Modality and mood in Sinitic. In Jan Nuyts and Johan van der Auwera eds., *The Oxford Handbook of Modality and Mood.* Oxford: Oxford University Press. pp. 296-329.
Fan, Xiaolei. 2017. Jiyu hanyu fangyan de guanchang fanchou yanjiu 'A study of the habitual-generic category with the evidence from Chinese dialects'. *Contemporary Linguistics* 19, 4: 561-590.
Lamarre, Christine. 2007. The marking of habitual events in Mandarin Chinese. In Li Zhang, Yutaka Furukawa, Ying Ren, and Sachiko Shimoji eds., *The Studies of Modern-Mandarin Grammar in Japan.* Beijing: Beijing Language and Culture University Press. pp. 101-124 .
Palmer, Frank R. 2001. *Mood and Modality.* Cambridge: Cambridge University Press.

Anti-additive particles in Mandarin Chinese: the cases of *jiù* and *zhǐ*

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This paper (i) compares two anti-additive particles in Mandarin Chinese, *jiù* and *zhǐ*, with their counterparts in English and (ii) discusses the meaning of anti-additivity.

As illustrated in (1) and (2), both *zhǐ* and *jiù* can be used in a way similar to English particles like *only*, *just*, *merely*, *purely*, *solely*, etc., conveying the meaning of exclusiveness. According to Coppock and Beaver (2014), exclusiveness involves (i) an at-issue upper bound in addressing a relevant Current Question (expressible with *at most*), and (ii) a taken-for- granted lower bound (expressible with *at least*). Under this view, (1) and (2) mean that (i) he at most ate some apples and (ii) he at least ate some apples.

1. tā zhǐ   chī-le   píng-guǒ
2. tā jiù   chī-le   píng-guǒ
   he ONLY eat-PFT apple(s) 'He only / just ate apples.'
   he ONLY eat-PFT apple(s) 'He only / just ate apples.'

Chinese particles *zhǐ* and *jiù* go beyond this generalization of exclusiveness in at least two aspects. First, both *zhǐ* and *jiù* are compatible with an overt presence of *zuì-duō* ('at most') (see (3) and (4)), challenging the view that there is a taken-for-granted lower bound.

3. tā zuì-duō zhǐ   chī-le   píng-guǒ
4. tā zuì-duō jiù   chī-le   píng-guǒ
   he at-most ONLY eat-PFT apple(s) 'He at most ate apples.'
   he at-most ONLY eat-PFT apple(s) 'He at most ate apples.'

Second, Chinese *jiù* cannot be compatible with negation (see (6), cf. (5)), challenging the view that this kind of particle necessarily makes meaning contribution truth-conditionally. The co-occurrence of *zuì-duō*, *jiù*, and *zhǐ* in (7) suggests a division of labor among them.

5. tā bù   zhǐ   chī-le   píng-guǒ
6. * tā bù jiù   chī-le   píng-guǒ
   he NEG ONLY eat-PFT apple(s) 'He not only / just ate apples.'
   he NEG ONLY eat-PFT apple(s) Intended: 'He not only / just ate apples.'

7. tā zuì-duō jiù   zhǐ   chī-le   píng-guǒ
   he at-most ONLY ONLY eat-PFT
   apple(s) 'He at most ate apples.'

I propose that (i) particles like Chinese *zhǐ* and *jiù* (as well as English *only*) work in a way opposite to additive particles like *more*, *moreover*, etc., conveying the meaning of anti-additivity (expressible with *not* (*any*) *more/other than*), and (ii) the base for (anti-)additivity can be at the level of truth conditions, discourse organization, or speech acts (see also Zhang and Ling 2017's analysis of *jiù*). I also address the variation of (anti-)additivity.

References

Coppock, Elizabeth, and David I Beaver. 2014. Principles of the exclusive muddle. *Journal of Semantics* 31:371–432. https://doi.org/10.1093/jos/fft007.
Zhang, Linmin, and Jia Ling. 2017. Mandarin chinese particle *jiù*: A current question restrictor. Talk at *the 11th International Workshop on Theoretical East Asian Linguistics*.

Apical vowels in Southwestern Mandarin: an EMA study

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Introduction: This study investigates the acoustic and articulatory properties of apical vowels in Southwestern Mandarin (SWM) using electromagnetic articulography (EMA). While apical vowels may be impressionistically similar across Mandarin dialects, evidence suggests they can be articulatorily distinct. We examine potential articulatory and acoustic differences between two SWM varieties: one that maintains the alveolar-retroflex sibilant contrast (Type A) and one that has lost this contrast (Type B).

Method: We analyzed data from seven native speakers (aged 20-29): five speakers (S01-S05) who distinguish alveolar from retroflex sibilants and two speakers (P01-P02) who do not. Using an NDI wave system for EMA, we recorded three target words: *si* [sɿ], *shi* [ʂʅ], and *pi* [pʰi]. Each token was repeated six times in randomized order, yielding 126 total tokens.

Results: Our analysis revealed four key findings: (1) Type A speakers show distinct tongue configurations for apical vowels, with *si* showing a more dental/alveolar tongue tip position and *shi* showing a more alveolo-palatal position. Type B speakers show similar tongue configurations for both vowels. Both varieties show less tongue movement for apical vowels compared to [i]. (2) GAMMs analysis of EMA sensor trajectories show significant differences between *shi* across varieties in the horizontal dimension for Tongue Tip, Tongue Blade, and Tongue Dorsum. (3) Acoustically, Type A shows significantly higher F2 for *shi* versus *si*, while Type B shows no significant F2 difference. (4) Type B exhibits an articulatory-acoustic mismatch: significant articulatory differences appear in horizontal Tongue Tip and Tongue Blade positions despite no significant formant differences.

Discussion: Our Type A findings align with previous research on Standard Chinese apical vowels, showing higher F2 for *shi* and confirming that apical vowels share place features with preceding sibilants (Zee & Lee, 2001; Lee-Kim, 2014). However, the significant articulatory differences found in Type B, despite acoustic and perceptual similarity, suggest a more complex relationship between articulation and acoustics in apical vowel production than previously understood.

Selected references

E. Zee, & W.-S. Lee, An acoustical analysis of the vowels in Beijing Mandarin. *In Seventh European Conference on Speech Communication and Technology*, 2001

S.-I. Lee-Kim, Revisiting Mandarin "apical vowels": An articulatory and acoustic study. *Journal of the International Phonetic Association*, vol. 44(3), pp, 261-282, 2014

Bilingual and multilingual manuscript dictionaries of Chinese: the challenges of digitalization and analysis

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The advancement of technologies applied to texts has provoked, in the last years, the swift enlargement of the scientific discipline of digital humanities. Among the several directions of research and the numerous activities which fall into this discipline, the enhancement of the digitalization is one of the most fertile for subsequent scientific research.

Manuscripts are a very promising object for digitalization, inasmuch as it may yield previously understudied texts to new consideration. The task of accomplishment of the digital recognition of a manuscript, in the view of the publication of a critical version or of a database, may turn out to be very demanding: the handwritten text, fraught with inconsistencies and errors, compel the editor to ponder on the message the author wanted to deliver at any line, to devise the aptest way to input it into the machine and to train the OCR to recognize it.

In European libraries there exists a surprisingly high number of manuscripts dictionaries and texts of the 17th and 18th centuries, which have not been devoted relevant scientific attention yet. In particular, critical editions which undertook the task of digitalization (at least for the goal of publication) are very rare (for instance W. South Coblin's edition of Varo's *Glossary of the Mandarin language*, published in 2006 in the Monumenta Serica Monograph Series).

The project ChEDiL (Chinese-European Dictionaries: Lexicographical Manuscripts for the Historical Study of Exchanges between China and Europe), funded by the French Research Agency, aims to create a searchable database of a high number of manuscripts and to publish some critical editions of them.

The present contribution has the goal of showing the strong effort of work needed to elaborate the very first pages of Chinese-Spanish and Chinese-Latin dictionaries. In fact, every entry has a Chinese character, a form of Romanization and a Neo-Latin or ancient Spanish translation. While the Chinese characters usually are written quite understandably, the Romanization might be more difficult to decodify, as both the source pronunciation (the Chinese dialect chosen as source) and the target pronunciation (the European vernacular in which the word is supposed to be pronounced) have to be recognized. Moreover, the Romanization and the translations follows peculiar rules for the employment of diacritics and other forms of abbreviation and annotation. In order to decide how to train the OCR, an intense exchange of views between linguists (phonologists, grammarians) of Chinese, experts of (Neo-)Latin and Spanish with experts of Digital Humanities has been necessary.

The accuracy of the transcription and digitization is a key point in the analysis of these dictionaries, which may prove to be essential sources for the study of the Chinese language of the period, both from a lexical and phonological point of view. They are also important sources for the study of metalanguage, since the prefaces and the entries of the dictionaries are rich in grammatical or general metalinguistic signs and information. This paper attempts to highlight these points through concrete examples found in the first transcriptions and digitization of Chinese-Latin and Chinese-Spanish dictionaries carried out within the framework of this project.

Cantonese Attitudes and Influencing Factors among Non-Local Tertiary Students in Hong Kong

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As the lingua franca in Hong Kong, language attitudes towards Cantonese among local Hongkongers have been extensively discussed (e.g., Cao 2024; Lai 2001, 2012; Pennington 1994, etc.). Researchers have recently focused their attention on the mobile population in Hong Kong, including cross-border primary/secondary school students and Asian international tertiary students (Gardner & Lau, 2018; Liang et al., 2024). Nonetheless, Cantonese attitudes within the mobile population of Hong Kong remain insufficiently explored, hindering our full understanding of Hong Kong's multilingual society. Non-local tertiary students demonstrated high mobility and were selected for the quantitative study. Following Gardner and Lambert's (1972) framework, this study examined integrative and instrumental attitudes toward Cantonese among 185 students (mean age=23.19, SD=4.07) from Mainland China, Taiwan, Macau, Malaysia, Singapore, and Indonesia, enrolled at eight government-funded universities. Self-reported attitudes were generally positive on a 4-point scale (integrative: M=3.15, SD=0.42; instrumental: M=3.11, SD=0.41). Statistical analyses included T-tests, Pearson correlations, and simple and multivariable linear regression models. Previous studies merely listed and examined limited factors affecting the Cantonese attitudes of Hong Kong's mobile population (e.g., Liang et al., 2024). This study explores additional factors influencing these attitudes, mainly on three aspects: identity, socioeconomic conditions, and language proficiency.

Firstly, the self-identification of Hongkongers (r=0.40, p<0.001) significantly influences language attitudes, with regression analysis confirming a positive impact (b=0.19, p<0.001). Furthermore, socioeconomic conditions emerged as a significant factor. Participants living in Hong Kong reported significantly higher overall language attitudes than those residing elsewhere (3.15 vs. 2.91, p=0.005). Cohabitation with local Hongkongers was associated with stronger instrumental attitudes (3.25 vs. 3.07, p=0.010). More frequent Cantonese interactions correlated positively with Cantonese attitudes (r=0.36, p<0.001), with regression analysis confirming its predictive impact (b=0.25, p<0.001). Also, humanities/social sciences students show significantly higher language attitudes compared to their peers in other fields (3.20 vs. 3.06, p=0.019). Additionally, we found a significant positive correlation between the language attitudes and students' current self-perceived competence in Cantonese (r=0.39, p<0.001). Individuals whose home dialect includes Cantonese (3.37 vs. 3.09, p<0.001), and those who have taken Cantonese classes (3.19 vs. 2.97, p<0.001), tend to exhibit significantly higher language attitudes compared to the others. These findings highlight how these factors shape the perceptions of non-local students of Cantonese, contributing to a broader understanding of language attitudes in Hong Kong's multilingual environment. They may offer insights into language learning and usage, especially among non-local students.

Main Reference

Liang, Zhifang, Jing Huang, and Chunni Zhao. 2024. 'Language Attitudes and Fluid Identities: Perceptions from Shenzhen-Hong Kong Cross-Border Students'.
Gardner, Robert C., and Wallace E. Lambert. 1972. *Attitudes and Motivation in Second-Language Learning*.

Causative and Applicative in Northwestern Chinese: the case of Tangwang

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The Tangwang language, like several other Gansu-Qinghai Chinese dialects, features two verbal suffixes, both reanalyzed from the verb *ki* 'to give', with which they remain homophonous. One suffix functions as a causative marker, while the other serves as an applicative. The Tangwang sentence in (1) illustrates both the causative suffix *-ki* and the applicative suffix *-ki* following the same verb in an identical context, leading to two entirely different interpretations: (1.i) and (1.ii).

(1) 那　　祖比德哈　　　饭哈　　　做给寨

nə　　tsʉpitə-xa　　fɛ̃-xa　　tsʉ-ki-tʂɛ

3SG　Tsʉpitə-OBJ　meal-OBJ　make-CAUS/APPL-IPFV

i. 'He makes Tsupitə prepare the meal.'
ii. 'He prepares the meal for Tsupitə.'

The analysis explores how the causative suffix *-ki* transforms intransitive, transitive, and nominal predicates into causative, increasing their valency and enabling the introduction of new arguments, such as causers or causees. In contrast, the applicative *-ki* primarily promotes a beneficiary to object-argument status but can also promote other adjunct components to object status. The paper further emphasizes that in some specific contexts these two suffixes display different distributional patterns, refuting their interpretation as polyfunctional variants of a single suffix. It is notably the case within a verb-object incorporation sequence where the incorporated object and both suffixes merge with the lexical verb to form a unified complex verb, functioning as a single morphosyntactic unit. As illustrated in examples (2a) and (2b), while the causative marker *-ki* is inserted between the verb and the incorporated-object, the applicative marker *-ki* follows the incorporated object.

(2) a.　我　　那哈　　　做给饭寨

wɤ　　nə-xa　　tsʉ-ki-fɛ̃-tʂɛ

1SG　3SG-OBJ　do-CAUS-meal-IPFV　　　'I let him prepare the meal.'

b.　我　　那哈　　　做饭给寨

wɤ　　nə-xa　　tsʉ-fɛ̃-ki-tʂɛ

1SG　3SG-OBJ　do-meal-APPL-IPFV　　　'I prepare the meal for him.'

Finally, the origins of these suffixes are investigated, linking their separate development to two distinct internal Sinitic markers: a preverbal *-ki* functioning as the causative affix and a postverbal *-ki* as the applicative affix. The apparent conflation of these markers into a postverbal position in Tangwang and other neighboring Northwestern Mandarin dialects is attributed to configuration pressures driven by the language's strong OV restructuring, influenced by contact with Altaic languages.

References:
Chappell, Hilary. 2024. Syncretism of applicative and causative in Northern Sinitic languages. In: Dao Huy-Linh, Do-Hurinville, Danh-Thành and Peti, Daniel (eds.). *L'applicatif dans les langues. Regard typologique*, Paris: Editions de la Société de linguistique de Paris, 7-39.
Creissels, Denis and Zúñiga, Fernando. 2024. Applicative and related constructions: Results and perspectives. In Zúñiga, Fernando and Creissels, Denis (eds.). *Applicative constructions in the world's languages*, Berlin/Boston: De Gruyter, 1045-1075.
Djamouri, Redouane. 2015. Object positioning in Tangwang. In: Cao, Djamouri, Peyraube, (eds.). *Languages in Contact in North China – Historical and Synchronic Studies*. Paris, EHESS-CRLAO, 251-276. (Collection des Cahiers de Linguistique Asie Orientale; 13).

Zhào Lǜyuán 赵绿原. 2024. 青海甘沟话由「给」标记的增宾结构机器扩展结构 [Applicative and Related Extended Constructions Marked by Gei 给 'Give' in the Gangou Dialect of Chinese in Qinghai Province]. *Mínzú Yǔwén* 3:68-84.

Classifier choice facilitates contrastive inference about reference: Evidence from an eye-tracking study on Mandarin Chinese

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Contrastive inference plays a central role in the pragmatics of communication: listeners often use subtle linguistic cues to anticipate speakers' intended referents when alternatives are available in context. Most studies on contrastive inference have focused on modifiers such as adjectives, e.g., the tall glass vs. the short glass. (Sedivy, 2003; Engelhardt et al., 2006). In this study, we extend the investigation of contrastive inference to a new domain—Mandarin Chinese classifiers.

Chinese classifiers, though governed by conventional semantic information, exhibit variation in use (Zhang, 2007; Gao and Malt, 2009). While general classifiers (GCLs) like zhi and ge apply broadly to animals and non-animals (including humans) respectively, specific classifiers (SCLs) such as tiao encode more specific meanings, such as "longness" and therefore combine with fewer nouns. This variation prompts the question of whether Mandarin listeners exploit classifier choice to infer referents via contrastive reasoning, i.e., anticipating the speaker's intended referent earlier when the classifier excludes the competing referent.

We conducted a visual-world eye-tracking experiment with 40 native Mandarin speakers. Participants listened to classifier-noun phrases while viewing two images on a screen and clicked on the referent matching the audio. Target nouns were compatible with both general and specific classifiers (e.g., gou 'dog' with zhi and tiao), while competitor nouns were compatible with only one. The experiment featured four conditions varying whether the classifier uniquely identified the target (see Table 1).

Condition	Target	Competitor	Audio
a	Dog(+GCL & +SCL)	Cat(+GCL)	one SCL N
b	Dog(+GCL & +SCL)	Rope(+SCL)	one GCL N
c	Dog(+GCL & +SCL)	Rope(+SCL)	one SCL N
d	Dog(+GCL & +SCL)	Cat(+GCL)	one GCL N

Table 1: Experimental Conditions. +GCL & +SCL means the target, e.g. dog, can combine both a GCL zhi and a SCL tiao, while +GCL or +SCL means that the competitor can only combine with a GCL or a SCL that the target takes (e.g. Cat+GCL means the competitor Cat can only combine with the GCL *zhi* and the rope with the SCL *tiao*).

Gaze data were analyzed using logistic mixed-effects regression models with random intercepts for participants and items. Results indicate that participants effectively used classifier information for rapid disambiguation. The results revealed a significant main effect of Condition. The likelihood of fixating on the target increased in Condition a and b (β_a = 0.204; β_b = 0.061, $p < .001$); while Condition c and d showed a decreased likelihood relative to the grand mean (βc = −0.063; β_d = −0.20, $p < .001$).

Our findings provide evidence that classifier choice in Mandarin Chinese supports contrastive inference during real-time language comprehension. Specifically, the results indicate that listeners are able to exploit classifier variation to anticipate intended referents prior to noun onset, thereby facilitating referential disambiguation.

References

Engelhardt, P. E., Bailey, K. G., and Ferreira, F. (2006). Do speakers and listeners observe the gricean maxim of quantity? Journal of memory and language, 54(4):554–573.

Gao, M. Y. and Malt, B. C. (2009). Mental representation and cognitive consequences of chinese individual classifiers. Language and Cognitive Processes, 24(7-8):1124–1179.

Sedivy, J. C. (2003). Pragmatic versus form-based accounts of referential contrast: Evidence for effects of informativity expectations. Journal of psycholinguistic research, 32:3–23.

Zhang, H. (2007). Numeral classifiers in mandarin chinese. Journal of East Asian Linguistics, 16(1):43–59.

Cleaning events in L2 Chinese: Analyzing the production of L1 Italian learners

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This paper focuses on the expression of 'cleaning' events by L1 Italian learners of L2 Chinese. Resultative compounds (RCs) pose significant challenges for learners of L2/FL Chinese, due to their morpho-syntactic and semantic complexity. RCs are particularly challenging for L1 Italian learners because of the significant typological differences between Chinese and Italian: according to Talmy's [1] typology, Chinese is a satellite-framed language, while Italian is a verb-framed language. RCs in Chinese are highly productive and varied, whereas Italian only allows prepositional RCs in unmarked sentences [2:53], and AP resultatives (as Eng. *wipe the table clean*) are very limited since they "are subject to a rule of semantic interpretation by which the primary predicate must be interpreted as focusing on the endpoint of the activity it denotes".

The research involved 162 L1 Italian university students (beginner, intermediate, advanced) and 33 Chinese native speakers as a control group. Participants completed a written video description task. Data were analyzed using a non-parametric Conditional Inference Tree test to identify differences and correlations. The results show that native speakers mainly use change-of-state (CoS) RCs (e.g. 擦干净 *cā-gānjìng* 'wipe-clean') or resultative phrases (e.g. 拖得干干净净 *tuō de gāngānjìngjìng* 'mop DE clean'); they also use resultatives containing a phase complement (e.g. 擦完 *cā-wán* 'wipe-finish'), while their use of manner verbs (e.g. 整理 *zhěnglǐ* 'put in order') is limited. In contrast, learners mainly use manner verbs indicating 'cleaning' (implied-fulfillment verbs, [1]), as e.g. 洗 *xǐ* 'wash', or 打扫 *dǎsǎo* 'sweep', focusing on the action rather than on the result ('clean'). This may be attributed to L1 transfer: verbs like *lavare* 'wash', which convey a lexicalized implicature —i.e., the attainment of the implied goal (see [1])— suffice on their own, having a "disposition toward removal" (see [4:14] on English), and are often used in these contexts in Italian. In contrast, implied-fulfillment verbs in Chinese do not convey a lexicalized implicature, i.e., the attainment of the implied goal, unlike English or Italian; in fact, these verbs can also appear with a resultative V_2 that contradicts the result implied by V_1 (see [1]), as 洗脏 *xǐ-zāng* 'wash-dirty' (cf. Eng. *wash dirty). Sometimes learners also use only the V2 (result) as a causative verb (e.g. 干净桌子 *gānjìng zhuōzi* 'clean the table'). In this case too, L1 transfer may play a role: Italian has a generic result verb *pulire* 'clean', which encompasses a wide variety of conceptually distinct actions [3]. However, in Chinese, the action of cleaning cannot be described without specifying the performed action, as in 擦干净 *cā-gānjìng* 'wipe-clean'. In some cases, learners use adjectives to describe the result state, as 桌子很干净 *zhuōzi hěn gānjìng* 'table very clean, the table is very clean'.

Overall, the limited use of CoS RCs by learners suggests that understanding the constructional mechanisms of these RCs requires time, and that they are acquired later. This is arguably due to the role of the typological distance between the two languages and the different strategies used to express this kind of events. Our data show that, as language proficiency improves, the production of CoS RCs also increases: advanced learners produce significantly more CoS RCs.

References: [1] Talmy, L. 2000. Toward a Cognitive semantics: Typology and process in concept structuring, Vol. 2. Cambridge, MA: MIT press. [2] Napoli, D. J. 1992. Secondary Resultative Predicates in Italian. *Journal of Linguistics*, 28(1), 53-90. [3] Cominetti, F. & Panunzi, A. 2020. Just a Matter of Manner? Modeling Action Verb Semantics in an Inter-

Linguistic Perspective. *Testi e linguaggi*, 14: 217-241. **[4]** Washio, R. 1997. Resultatives, Compositionality and Language Variation. *Journal of East Asian Linguistics* 6,

Coda Insertion in Xuanzang's Transliteration of Sanskrit Loanwords

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Background: Loanword phonology of Chinese has primarily focused on Modern languages, leaving a critical gap in our understanding of Middle Chinese. Xuanzang introduced many new transliterations to accurately reflect the perception of the original Sanskrit words based on Middle Chinese phonology during its transition from Early to Late period. To investigate historical adaptation patterns, this study analyzes Xuanzang's transliterations containing coda insertions.

Data and Analysis: The corpus consists of 707 transliteration words extracted from Xuanzang's work, excluding mantra-based words and ambiguous entries such as place names from *Datang Xiyu Ji*. As shown in (1), **codas are inserted i) between consonant clusters; and ii) after light syllables.** In (1a), *krī-* is adapted as *kjət li*, where *-rī-* is adapted as *li* but *k-* as *kjət*. What is inserted to break the cluster is not only a vowel but also an extra coda, whose place feature is the same as the second segment in the cluster. In (1b-c), codas are inserted on light syllables. Stressed light syllable *-ka-* is adapted as *kjap* in (1b), while unstressed light syllable following the stressed heavy syllable *-la-* is adapted as *lak* in (1c). Similar to the coda of the inserted rime, the inserted codas share the same place feature with the following consonants.

(1) Three types of coda epenthesis in Xuanzang's transliteration

a. Vowel-coda rime in cluster	b. Coda in stressed syllable	c. Coda in unstressed syllable
krīta $k_1 r\bar{\imath}_2 ta_3$	*kapila* $ka_1 pi_2 la_3$	*pipīlaka* $pi_1 p\bar{\imath}_2 la_3 ka_4$
$k\boldsymbol{j\partial t}_1 \boldsymbol{li}_2 ta_3$	$kja\boldsymbol{p}_1 \boldsymbol{pi}_2 la_3$	$pi_1 pit_2 la\boldsymbol{k}_3 kja_4$
讫 ₁ 利 ₂ 多 ₃	劫 ₁ 比 ₂ 罗 ₃	比 ₁ 毕 ₂ 洛 ₃ 迦 ₄

Considering that only 15% of Xuanzang's translations involve coda insertion, I argue that **the three types of coda insertion do not reflect phonology, but the phonetic and metrical perception of the source language**. When breaking consonant clusters, Xuanzang favors close syllables (75/94) over open ones (19/94) and plosive codas (74/75) over nasal ones (1/75). Vowels are shorter in closed syllables (Maddieson 1985), which may explain this preference, as close syllables approximate the original Sanskrit pronunciation in terms of vowel duration. The 53 cases of codas insertion in stressed light syllables like (1b) may be to repair syllable length (Gordon, *et al.* 2010), supporting the historical fact that Vedic lexical accent has transitioned to stress-predicted rules in Classical period. For the 39 cases like (1c), remnants of pitch accent *svarita* may have influenced the perception of certain words, leading to coda insertion in light syllables following stressed heavy syllables.

Conclusion: My findings reveal two adaptation strategies: (1) close syllables inserted to break Sanskrit consonant clusters; and (2) codas inserted to better represent Sanskrit metric patterns, preserving either the length of stressed light syllables, or the remnants of pitch accent *svarita* on light syllables following stressed heavy syllables. In both patterns, codas acquire place features from the following consonant. These patterns bridge gaps in loanword phonology in historical Chinese, calling for deeper research in different historical periods on work of more translators.

Color Embodiment in Semantics of Abstract Concepts: Correlating Semantic Similarities with Perceptual Color Proximity in Chinese Color-Derived Metaphorical Lexemes

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This study investigates the relationship between the semantic similarities and perceptual color proximity of metaphorical lexemes derived from the Chinese basic color terms *hóng* 红 'red', *huáng* 黄 'yellow', *lán* 蓝 'blue', and *lǜ* 绿 'green'. It explores how color perception aligns with the semantics of abstract concepts, contributing to embodied cognition theories and sensory grounded metaphorical meanings. For each lexeme of 60 lexemes selected, image data and semantic data were collected. For image data, 100 images were retrieved from Baidu Image and preprocessed for perceptual uniformity, then converted to JzAzBz color space. Seventeen visual features (e.g., lightness, hue, saturation, diversity) were extracted and standardized to compute perceptual similarity matrix. For text data, Semantic data were drawn from a 10% sample of the Chinese Corpora Internet (CCI 3.0), a 1,000 GB web corpus. After *jieba* segmentation, a FastText model was trained (vector size=300, window=5, epochs=10) to derive word embeddings and compute a semantic similarity matrix. To evaluate the alignment between semantic and perceptual structures, we computed Pearson and Spearman correlations between pairwise similarity values derived from a FastText model and perceptual features. Pearson and Spearman correlations between semantic and perceptual similarity matrices were 0.14 (p = 3.35e-09) and 0.0817 (p = 5.84e-04), respectively. These results indicate a statistically significant alignment between metaphorical color terms' distribution in semantic and perceptual spaces, supporting the perceptual grounding of abstract color metaphors. To further investigate the semantic and perceptual relationships of these lexemes, hierarchical aggregate cluster analysis was applied. For each lexeme, this study extracted 100 sentences from the CCI3.0 corpus and collected 100 images via Baidu Image, constructing a dataset of 6,000 sentences and 6,000 corresponding images. The sentences were semi-automatically annotated with 100 contextual features and analyzed using Behavioral Profile (BP) analysis, with HAC applied to group lexemes with similar usage patterns. The perceptual features obtained will then be used in HAC clustering to analyze the perceptual color proximity of lexemes. The preliminary findings reveal a significant alignment between semantic similarities and perceptual color proximity in images. Lexemes grouped into the same clusters based on semantic features were consistently grouped into the same clusters based on perceptual features. For instance, the lexemes *bèi lǜ* 被绿 'be cheated on' and *huáng le* 黄了 'fail to achieve' were grouped together in both semantic and visual clusters, reflecting shared negative associations and similar muted, desaturated color characteristics. These results provide strong evidence that semantic clusters align with perceptual clusters, supporting that lexemes with similar usage patterns often share comparable perceptual color proximity. This research underscores the role of sensory experiences, particularly color perception, in structuring abstract conceptualizations and highlights the cultural and linguistic specificity of Chinese metaphors. It further validates the JzAzBz color space as an effective tool for linguistic research, offering a robust framework for exploring the sensory grounding of abstract meanings.

"Describing" or "Specifying"? - The Encoding of Interrogative Pronouns in Southern Chinese Dialects

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Interrogative pronouns vary in specificity: *which* is the most specific, followed by *who*, and *what* is the least specific (Kiss 1993). A "which" question indicates a set of options requiring a specific choice, while a "what" question, such as "what you have read in the newspaper," seeks a description rather than a specific option. *What* and *which* are the two fundamental interrogative pronouns (Karttunen 1977), with *who* interpreted as either "what person" or "which person" depending on context. Thus, interrogative pronouns can be classified into describing and specifying types, aligning with Idiatov's (2007) distinction between non-selective and selective types.

Standard Mandarin employs three independent pronouns: "what" (*shenme* 什麼), "which" (*na* 哪), and "who" (*shui* 誰). In contrast, southern Chinese dialects display notable "mismatch" patterns in encoding these pronouns, such as using specifying elements to form "what" questions or describing elements for "which" questions. For instance, some dialects permit "what" questions to use elements meaning "which," such as *nayang* 哪樣 in the Kunming dialect (Southwestern Mandarin), while others allow "which" questions to use elements referring to "what," as seen in *hedeng* 何等 in the Qidong dialect (Wu). These mismatch cases are not random; applying the "describing-specifying" criterion offers a fresh perspective on the encoding patterns of interrogative pronouns in southern dialects. Utilizing Chinese dialect word maps for "what," "which," and "who" (Cao 2008), this study aims to illustrate the distribution of these patterns and explain how the interrogative pronoun systems in southern dialects varies by incorporating elements from later historical periods.

The study identifies six encoding patterns for "what," "which," and "who" in southern Chinese dialects. The most prevalent pattern employs descriptive interrogative words for "what" and specifying words for "which" and "who," reflecting the highest "concept-form" alignment. The morphemes in this pattern often derive from a later historical layer, indicating an update from older forms. In contrast, Wu and Min dialects retain an earlier pattern where all three pronouns are expressed using descriptive-based words from earlier historical periods. This earlier pattern is primarily found along the southeastern coast and the Yangzi River. However, this old pattern is occasionally interrupted by the prevalent pattern, demonstrating how later developments have disrupted the continuity of the old system. In the southern regions of Southwest Mandarin, an innovative pattern has emerged, using specifying interrogative words for all three concepts, with *na* 哪 generalized as the dominant interrogative morpheme.

By comparing the interrogative pronoun systems of Old Chinese and Chinese dialects from the perspective of "describing-specifying", more topics related to the historical evolution of Chinese interrogative pronouns can be further discussed.

Reference

Cao Zhiyun, eds. 2008, *Atlas of Chinese Dialects: Grammar Volume*, Commercial Press.

Idiatov, D. 2007. *A Typology of Non-Selective Interrogative Pronominals*. Doctoral dissertation, University of Antwerp.

Karttunen, L. 1977. Syntax and semantics of questions. *Linguistics and philosophy*, 1, 3-44.

Kiss, K. É. 1993. Wh-movement and specificity. *Natural Language & Linguistic Theory*, 11, 85-120.

Embodiment in Posture-based Novel Usages: Evidence from LLMs

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Introduction Li & Thompson (1981) identified thirteen verbs of posture (posVs) in Mandarin Chinese, including *zuò* 坐 'sit', *zhàn* 站 'stand', *dūn* 蹲 'squat', *xiē* 歇 'rest', *guì* 跪 'kneel', *tǎng* 躺 'lie', *tíng* 停 'stop', *shuì* 睡 'sleep', *pā* 趴 'crouch', *yǐ* 倚 'lean', *fú* 浮 'float', *zhù* 住 'have residence', *piāo* 漂 'drift'. Some of these verbs have emerged with newly generated 'novel lexical usages', with the rise of the internet and social media, such as *Sina Weibo*, in recent decades. This paper explores the tendencies of change and unchange in lexical usages from the perspective of embodiment theories based on empirical evidence from the latest large language model (LLM).

Materials and Methodology Instead of relying on traditional dictionaries, this study obtains the novel lexical usages of posVs automatically by employing the latest transformer-based LLM, *Llama-3* (Dubey et al., 2024). It first collects authentic posts containing the target words from *Sina Weibo* over the past decade (2014-2023). Then, it trains contextualized word embeddings extracted from a self-constructed corpus with 100,000 sentences of each word appearing at different time periods. It then analyzes the diachronic word vectors by utilizing a k-means algorithm supervised by Density-Peaks Clustering (Sun & Platoš, 2023), an adaptive clustering method that automatically generates meaning clusters based on the cosine similarity between vectors. Finally, it decomposes clustering results into a low-dimensional subspace using principal component analysis (Halko et al., 2011) and detects high-frequency usage patterns through n-grams-based collocation analysis. The above tasks allow us to visualize and automatically identify the emerging meanings and new usage patterns of posVs in the database.

Results and Conclusion The automatic detection of novel usages with the LLM identifies the posVs that generate new meanings during the past decade: 蹲 'squat_squat for sth.', 站 'stand_ support', 跪 'kneel_kneel for sth._give in', 躺 'lie_rest', 漂 'drift_drifter'. All the emerging novel usages of posVs are characterized as abstract and non-postural in the context. Take *dūn* 蹲 as an example: it acquires a new transitive meaning, 'earnestly waiting for sth.', as in the online usage 蹲蹲高清视频。'Squat for HD video'. The example does not involve real action of squatting but uses the posV to describe a mental state associated with the external posture, which is a clear manifestation of embodied cognition. The embodiment theory suggests that the sensorimotor system plays a crucial role in language usage and processing (Glenberg & Kaschak 2002). Newman (2009) further proposed three cognitive domains of posVs that involve different degrees of embodiment: spatio-temporal domain, force dynamics domain, and socio-cultural domain. In the spatio-temporal domain, all verbal usages involve strong spatial-temporal images in human conceptualization. For the force dynamics domain, the verbs require varied degrees of bodily control, from highly kinetic posVs, such as 跪 'kneel' and 蹲 'squat', to less kinetic posVs, such as 躺 'lie' and 漂 'drift'. This polarized trend of force dynamics is also related to the varied functions of the socio-cultural domain, in which the greater exertion of physical power the posV involves, the stronger emotional effect it may be associated with. In sum, this research applies the most advanced method in LLMs to analyze the novel usages of posture verbs, which highlights the integration of AI technology and cognitive linguistics research, in support of the theory of embodied cognition and language use.

Event Referentiality and Temporality: A Case of the *Shi-de* Cleft Construction

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Background: The Mandarin *shi-de* cleft construction has been long argued to describe past events when the particle *de* occurs in a pre-object position. Mainstream analyses regard the particle *de* as a TAM marker (Paris 1991, Simpson and Wu 2002, Paul and Whitman 2008, etc.) to account for the past event reading. However, a comprehensive examination of the linguistic data suggests that *de* does not function as a genuine TAM marker since it does not express any TAM category stably or independently, and this construction can describe future events in certain cases (Xia 2023, 2024). Furthermore, the *shi-de* construction has also been claimed to denote a definite event that is either the unique VP event in the evaluation situation or anaphoric to a previously mentioned VP event in the discourse (Sugimura 1999, Hole 2011). This study offers a unified explanation to the interpretational and referential properties of the event described by this constriction.

Assumptions: (i) The *shi-de* cleft construction contains a component of event definiteness in the verbal domain: a covert definite determiner D_{verbal} (which is overtly manifested in some languages, e.g., Ga (Renans 2016, 2021)). Similar to nominal definite determiners, D_{verbal} takes a resource situation pronoun s_r as its argument (Schwarz 2009, Renans 2016), and presupposes the existence of the VP event in s_r. (ii) Futurity is generally indicated by an overt or covert future modal in Mandarin. (iii) Events are spatiotemporal individuals (Davidson 1969), and they are "transitory and unique" in time (Baker and Travis 1997).

Analysis: (i) The default non-future event reading of this construction results from the existential presupposition of the definite event determiner: the VP event must exist (i.e., being completely or partially realized) in s_r, which is bound by the topic situation s_0 by default, as illustrated in (1a). (ii) If s_r is bound by a future modal that universally quantifies over an ontic modal base, a potential presupposition failure may occur, as the existence of the VP event is not assured in every possible world of the ontic base, as illustrated in (1b). (iii) When the existential presupposition is satisfied (via conditionals, modal subordination, etc.) and an accessible referent for the definite expression exists in s_r, the risk of presupposition failure is eliminated, allowing this construction to describe a future event, as predicted by the current analysis. (iv) If s_r is assigned a future value by the assignment function rather than being bound, the evaluation of the focused part (i.e., a predicate on the VP event) fails in s_0, since the event does not exist in s_0, as illustrated in (1c). Therefore, the temporal interpretational restriction of the event and the exceptions can be naturally explained by the referential properties of the event (i.e., event definiteness).

(1) a. s_0 shi...focus [[D $s_r = s_0$] VP]   (default non-future event reading)
    b. ? s_0 $Modal_{future}$ [s_i shi ... focus [[D $s_r = s_i$] VP]] (future reading, potential presupposition failure)
    c. # s_0 shi ... focus [[D $s_r = g(7)$] VP], $s_0 < g(7)$ (future reading, evaluation failure)

Cross-linguistic evidence: Such a correlation between event referentiality and temporality is not a language-specific stipulation. For example, Baker and Travis (1997) claim that in Mohawk, the mood morphology, traditionally viewed as marking future or factual events, actually marks the event definiteness/specificity: the *future* morpheme indicates event indefiniteness/non-specificity, while the *factual* or *past* morpheme indicates event specificity. This is unsurprising given that (i) events are spatiotemporal entities, and (ii) the past is realized and fixed while the future is open.

Selected References [1] Baker, M., & Travis, L. (1997). Mood as verbal definiteness in a "Tenseless" language. *Natural Language Semantics*. [2] Renans, A. (2021). Definite descriptions of events: progressive interpretation in Ga (Kwa). *Linguistics and Philosophy*. [3] Xia, X., (2024). Event Definiteness, Temporal Interpretations and Exhaustivity Inference: A Study on Mandarin Shi-de Construction. PhD diss. CUHK

Exploring sound symbolism: Do food names reflect texture and size? An empirical study using Cantonese

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The debate over sound symbolism versus arbitrariness is central in linguistics. While previous research has primarily focused on Western languages, this study extends the inquiry to Cantonese, investigating whether sound symbolism is conventional in this tonal language. We examine the relationship between phonetic features of food brand names—consonants, vowels, and tones—and their associated shapes, sizes, and textures.

An experiment with 50 native Hong Kong Cantonese speakers was conducted in 2024-25, comprising three tasks: (i) Food Renaming, (ii) Image Matching, and (iii) Name Evaluation. These tasks were designed to reveal preferred phonetic features, assess phonetic texture links, and evaluate perceptions of texture and size based on hypothetical names. Results showed that participants preferred names with /m/, /l/, and back vowels for soft foods, and /t/, /d/, and front vowels for crispy foods. Higher tones were consistently used for smaller portions. The matching and evaluation tasks further reinforced the association between phonetics and food attributes.

These findings suggest that sound symbolism is present in Cantonese, mirroring patterns observed in Western languages (Klink, 2000; Jurafsky, 2014). This supports the idea that phonetic symbolism may have universal aspects across languages. The study contributes to the ongoing debate between naturalism and conventionalism in linguistics and offers insights for fields such as marketing and psychology, illustrating how phonetic elements can influence consumer perceptions of food products.

Keywords Cantonese; Food Names; Phonetic Features; Sound Symbolism; Texture and Size

Selected references
1. Jurafsky, D. (2014). *The Language of Food: A Linguist Reads the Menu*. New York, NY: W. W. Norton & Company.
2. Ohala, J. (1984). An Ethological Perspective on Common Cross-Language Utilization of F0 of Voice. *Phonetica* 41. 1-16.

Exploring Interactional Functions of Zero Anaphora in Mandarin Conversation

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Zero anaphora, a common referential option in Mandarin, has been extensively studied in written language, with relatively less attention paid to its role in naturally occurring social interactions (e.g., Liu & Chen 2011). However, everyday conversational interaction ("talk-in-interaction") represents the fundamental mode of language use, and the dynamic utilization of zero anaphora in authentic daily communication warrants closer examination (Ono & Thompson 2019). This study addresses this gap by analyzing the interactional functions and motivations behind zero anaphora in Mandarin conversation, using data from the Chinese Telephone Conversations Corpus (CallFriend) (Canavan & Zipperlen, 1996). The dataset comprises five hours of dialogue from native Chinese speakers in mainland China, totaling approximately 80,000 words.

Employing conversation analysis, the findings reveal that Mandarin speakers systematically use zero anaphora to achieve specific interactional functions: (i) marking the current turn constructional unit (TCU) as a second saying to align with the recipient, (ii) displaying the ongoing TCU as a supplementary or secondary action to make the intended referent recognizable to the recipient, (iii) resuming the prior TCU after a parenthetical insert to signal the speaker's intent to continue the discussion, (iv) marking maximum topic continuity or cohesion, and (v) avoiding a choice among alternative reference forms and the stance the speaker would take with that selection.

The use of zero anaphora is closely tied to epistemic status, interactional principles, and pragmatic principles. Speakers tend to use zero anaphora when implying equality of epistemic access to the referent situation (Heritage 2012). The use of zero anaphora is also influenced by the concurrence of the preferences for minimization and recipient design (Sacks & Schegloff 1979). Lastly, speakers opt for an informationally poorer and often more minimal referential form-zero anaphor-in line with the I[nformativeness]-principle (Huang.Y 1991). These motivations are interdependent, collectively shaping the dynamics of communication. This study highlights the role of zero anaphora in structuring conversational interaction among Mandarin speakers.

References

Liu Lijin & Chen Chongyu. 2011. Pragmatic cognitive patterns in the study of zero anaphora in Chinese Conversations. *Foreign Languages and Their Teaching* (6), 1-5.

Canavan, A. & Zipperlen,G. 1996. CALLFRIEND Farsi. *Linguistic Data Consortium*, Philadelphia.

Heritage, John. 2012. Epistemics in action: Action formation and territories of knowledge. *Research on Language and Social Interaction* 45, 1-29.

Huang, Yan. 1991. A neo-Gricean pragmatic theory of anaphora. *Journal of Linguistics*, 27(2), 301-335.

Ono, Tsuyoshi & Sandra A. Thompson. 2019. The indeterminacy and fluidity of reference in everyday conversation. Paper presented at the 16th International Pragmatics Conference, Hong Kong.

Sacks, Harvey & Emanuel A. Schegloff. 1979. Two preferences in the organization of reference to persons in conversation and their interaction. In George Psathas (ed.), *Everyday Language: Studies in Ethnomethodology*, 15-21. New York: Irvington.

From Motion to Speech Act: The discourse function of *luai-kʰə* in Ji'an Gan Chinese

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This research investigates the lexicalized use of the motion verb combination *luai-kʰə* (来去, lit. 'to come and go') in Ji'an Gan Chinese (cf. Li 2024). In its fused form, this construction evolves beyond its literal motion semantics to fulfill a range of grammatical functions, ranging from expressing modality, either intention or planning, to futurity, as well as introducing two primary speech acts: commissives, as illustrated in (1), and directives, as in (2).

(1) *haŋ₃₂₄ luai₂₁₃kʰə₃₃ sau₃₃ tʰi₃₂₄₋₂₄ha₅₅.*
    1SG COME.GO   sweep   ground
    'I'm going to (=let me) sweep the floor.'
(2) *hen₃₂₄   luai₃₂₄kʰə₃₃   ɕiɛ₅₅   ia₅₅.*
    2SG   COME.GO   rest   a.moment.
    'Let's take a break.'

We argue that *luai-kʰə* ultimately guarantees the activation of both discourse participants- the speaker and the hearer. In a hearer-oriented directive, as shown in (2), it introduces the speaker's role and shifts the interpretation of a second-person subject from "You take a break" to the inclusive "Let's take a break." In a speaker-oriented commissive, as shown in (1), this hearer role is activated by the use of *luai-kʰə*, thereby pragmatically creating a negotiating space between the two actively involved interlocutors.

Crucially, we identify an intriguing mismatch between *luai-kʰə*'s low syntactic position and its high interpretation: Although *luai-kʰə* is pronounced in a low structural position at the edge of *v*P, it demonstrates a high interpretation involving the participants of a speech act. This functional elevation can be further evidenced by the observation that sentences with *luai-kʰə* are restricted in the root environments, as defined by Emonds (1970), which Miyagawa (2012, 2017) associates with the existence of a syntactic layer for speech acts.

To address this form-function discrepancy, following Miyagawa (2022)'s analysis of the Japanese politeness marker *-mas*, we provide a feature-based movement analysis. We propose that *luai-kʰə* carries a complex bundle of two uninterpretable person agreement features: one targeting the speaker and one the hearer. It moves step by step from its base position at the edge of *v*P, where it gains its modal meaning, then ascends to the T node, where it derives a temporal interpretation and subsequently moves to the C-head. It does not stop here. To value check its person features, *luai-kʰə* further moves up to the intermediate projection between the CP and the projection for the discourse participants, namely, the Illo(cution)P, where the illocutionary force is interpreted and one of the person agreement features is valued. It then moves further up to the S(peaker)A(ddressee)P, where the roles of speaker and hearer are encoded, and the remaining feature is checked.

Selected References:
Emonds, J. E. 1970. *Root and structure-preserving transformations*. Doctoral dissertation, Massachusetts Institute of Technology.
Miyagawa, S. 2022. *Syntax in the Treetops*. MIT Press.

Interactive Prosodic Encoding of Tone, Sentence Type and Focus in L2 Mandarin: A Phonetic Study on Italian Learners

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Research on L2 Mandarin pronunciation has traditionally focused on isolated lexical tone production, often neglecting the interaction between tone and intonation within intonational phrases [1]. This study addresses this gap by investigating prosodic difficulties faced by L2 Mandarin Italian learners, whose native language lacks lexical tones. It investigates the pitch production of rising and falling tones within minimal intonational units – disyllabic phrases – across all full tone combinations, two sentence types (statements and echo questions), and two contrastive focus positions – initial and final syllables. Participants (n=10, hereinafter IT) were university students from various academic years, further grouped by proficiency (upper- and lower-) and musicality. Proficiency was assessed through tone identification and production tasks with mono- and disyllabic words in isolation, while musicality was self-evaluated via the MSI-IT questionnaire [2]. Mandarin speakers (n=10, hereinafter CH) with Putonghua Shuiping Ceshi (PSC) level 1-B certification served as a control group. Data were collected through recordings of paired readings of 130 dialogues, including 64 target intonational phrases. Generalized Additive Mixed-effects Models (GAMMs) and GAM trees were employed for data analysis. The results show notable differences in how CH and IT groups encode sentence type and contrastive focus in the target phrases. For instance, phrase-final falling tones exhibited distinct F0 contour patterns for both groups based on Sentence Type (**p>.001** in both cases). In fact, one key difference lies in how echo questions are encoded, both in on-focus and in post-focus syllables' productions: while CH mainly rely on F0 register and slope – consistent with findings on rising tone production and previous literature – IT tend to manipulate the tone contour, transforming falling patterns into boundary-tone-like rises (see Figg. 1-2).
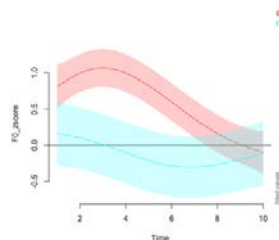

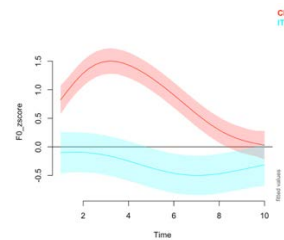Fig. 1: *Post-focus falling tone productions*

Fig. 2: *On-focus falling tone productions*

Findings highlight the challenges Italian learners of Mandarin face when producing tones within intonational phrases, which differ from those observed in isolated tone production. In most target phrases, IT tone production diverged significantly from that of CH, potentially impacting both lexical and intonational information. Proficiency predicted intonation accuracy, but some difficulties persisted at advanced levels, while musicality had no consistent impact.

Selected References

[1] Yang, C. (2016). *The acquisition of L2 Mandarin prosody: From experimental studies to pedagogical practice*. Amsterdam: John Benjamins. **[2] Santangelo, M., Persici, V., Caricati, L., Corsano, P., Gordon, R. L., & Majorano, M. (2024)**. The adaptation and validation of the Goldsmiths Musical Sophistication Index (Gold-MSI) in Italian: The Gold-MSI-IT. *Psychology of Music, 52*(4), 385–401.

Interpreting Possibility in 5th-Century Vinaya Translations:
A Comparison of *néng* 能 and *kān* 堪

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Néng 能 and *kān* 堪 are two commonly used modal markers for 'possibility'. While the modal function of *néng* originated in Old Chinese (OC) and has been widely discussed regarding its grammaticalization source (Peyraube 2000, Li 2001, Zhu 2008, Wu 2018, Meisterernst 2024), the modal function of *kān* developed later in Early Middle Chinese (EMC) and has received little scholarly attention. Despite their frequent categorization under the umbrella of 'possibility', their differences remain underexplored. Current studies tend to examine either semantic or syntactic features of individual modals (Duan 2002, Zhu 2008, Zhang 2010, Tang 2010, etc.). Detailed comparisons between these two seemingly synonymous modals are limited in the literature.

The four full *Vinayas* (Buddhist disciplinary texts) translated into Chinese in the 5th century — *Sìfēn-lǜ* 四分律 (*Dharmaguptaka Vinaya), Shísòng-lǜ* 十誦律 (*Daśabhāṇavāra Vinaya*), *Míshāsài-bù héxī wǔfēn-lù* 彌沙塞部和醯五分律 (*Mahīśāsaka Vinaya*) , and *Móhē sēngqí lǜ* 摩訶僧祇律 (*Mahāsāṃghika Vinaya*) — provide a valuable corpus for investigating modal markers. These texts frequently discuss whether certain behaviors "can" or "cannot" be performed by monastic members, making both *néng* and *kān* frequently used. Rich narratives contained in Vinaya texts also provide abundant context for analysis. Moreover, the syntactic and lexical flexibility of Buddhist translations often facilitates the early emergence of innovative linguistic features (Barchi 2024). These texts thus serve as valuable sources for tracing linguistic changes in Middle Chinese.

An analysis of these texts reveals both semantic and syntactic distinctions between *néng* and *kān*. Semantically, *néng* is more multifunctional, expressing epistemic possibility in addition to dynamic and circumstantial possibility, while *kān* is restricted to dynamic and circumstantial uses. Syntactically, the key difference lies in negation structures and the collocation patterns with other modals. *Néng* allows both external and internal negation: (a) [NEG + *néng* +VP] (¬◊: 'unable to do something') and (b) [*néng* + NEG +VP] (◊¬: 'able to not do something'), whereas *kān* is only compatible with external negation (¬◊): [NEG + *kān* + VP]. Additionally, *néng* co-occurs with a wider range of modals, such as *kě* 可 ('can'), *dé* 得 ('possible; can') *yīng* 應 ('should'), and *yí* 宜 ('suitable for', expressing a weaker 'should'), but *kān* only collocates with *néng* and *kě*.

Kinship Terms and Their Anthropological Implications in Hui Chinese

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Huī Chinese 徽語 is a group of under-researched and endangered Sinitic languages spoken in Central China, spreading from Southern Anhui to Western Zhejiang and Northern Jiangxi Province (Lu 2018). Although recent years have seen a surging body of literature on grammars of Hui varieties of Chinese, studies on kinship terminology of Hui Chinese are scarce, both from a typological and from an anthropological point of view, due to a lack of attention for Hui Chinese in general, and to the deeply rooted lexicographical tradition of studies on Chinese kinship vocabulary: research on Chinese kinship terms conventionally prioritizes written archaic records to authentic spoken linguistic data, and Mandarin usually serves as a template for collecting kinship data from other varieties, overlooking the substantial divergence between other groups of Sinitic languages and standard Mandarin. For instance, a flawed assumption is made in the categorization of ego's father's sisters *gū* 姑 and ego's mother's sisters *yí* 姨, that no age distinction is made between them, which may hold generally true in northern Mandarin varieties, but may not apply in southern nor the central Chinese varieties (Liu 1997). Besides, research on Chinese kinship terms, albeit rich in numbers, can be said to be self-contained and emic in nature, thus lacking a systemic framework couched in the framework of semantic typology and anthropology.

In an attempt to address this research gap, this study sets out to provide a linguistic and anthropological account of major kinship terms in ten Hui varieties, based on secondary data, linguistic elicitation, and spontaneous data following the practice of River and Grafton (1926) in anthropo-linguistic research, in which informants are asked about their genealogy via self-introduction and/or narration, and/or a life cycle ritual that s/he has attended, e.g. a funeral or a wedding ceremony to deliver a diagrammatic genealogy of the kinship system. The kinship terms in our study comprise three generations of kinsman/kinswoman, and we take into consideration the differences in generation, paternal/maternal, gender, relative age, consanguineal/affinal, which are proved to be crucial parameters in previous studies on Chinese kinship terms, including grandparents, parents, uncles, aunts, siblings, siblings-in-law, cousins, children, and children-in-law. In doing so, we first aim to unravel the forms, lexical sources and morphological coding for kinship terminology via gender, generation, age, affinal/consanguineal difference: since kinship terms are included as basic lexical items in the 215-word list by Swadesh (1955), they are resistant to borrowing and hence reflect much of the genealogical affiliation of the language. In addition, we also endeavor to uncover forms of relational ties as reflected in such kinship terminology such as marriage, descent, patrilineality and residence. For example, we observe that differently from all major Sinitic varieties, the paternal grandfather is termed as *(lǎo)cháo* (老)朝 in almost all Hui varieties (Table 1), which may be hypothesized to be related to a feudal official title used in the Ming Dynasty, reflecting prioritization of feudal bureaucracy.

Data points	Father's father	Source
Tangkou	*tɕia⁵⁵*	(Liu 2013)
Tunxi	*lə$ʔ^{24-5}$-tɕion⁴⁴*	(Lu 2018)
Shexian	*l$ɤ^{35}$-tɕʰiɤ⁵⁵*	(Chen 2013)
Wuyuan	*tsʰɔ¹¹tsʰɔ¹¹*	(Hirata 1998)
Jixi	*tɕʰie⁴⁴*	(Hirata 1998)

Table 1: Kin Terms for Father's Father

In sum, kinship terms serve as a good entry point for investigating the genealogical positioning of Hui as compared with Northern and Southern Sinitic languages, as well as genetic relationship among the much diversified Hui varieties themselves, and they can thus bring to light the role of language contact with northern and southern Sinitic languages in the formation of Hui Chinese throughout history via migration and possibly intermarriage. Anthropologically, the Hui people in the Hui region follow a patriarchal clan system, since

major waves of the nobility of Central Plains of China moved southward towards the Hui Region in the Han, Tang, and Ming periods (Ren 2002). In this region, nucleus families commonly dwell together with their clans based on patrilineality (Tang 1991). Our study may further confirm the effect of such patriarchal clan system as reflected in kinship terms in Hui Chinese too.

References

Chen, Li. 2013. *Anhui Shexian Daguyun Fangyan* 安徽歙縣大穀運方言 [Survey of Daguyun Dialect in Shexian, Anhui Province]. CASS Series of National Conditions Investigation & Research. Beijing: China Local Records Publishing.

Hirata, Shoji, ed. 1998. 徽州方言研究 *Huizhou fangyan yanjiu* [Research on the Huizhou dialect]. Tokyo: Kobun.

Liu, Danqing. 1997. Hongloumeng Yilei Chengwei de Yuyi Leixing Yanjiu 紅樓夢姨類稱謂的語義類型研究. *Zhongguo Yuwen* 1997(4): 268-276.

Liu, Xiangbo. 2013. *Anhui Huangshan Tangkou Fangyan* 安徽黃山湯口方言 [Survey of Tangkou Dialect in Huangshan, Anhui Province]. CASS Series of National Conditions Investigation & Research. Beijing: China Local Records Publishing.

Lu, Wen. 2018. *Aspects of the Grammar of Tunxi Hui: A Transitional Sinitic Language*. Ph.D. thesis, The University of Hong Kong, Hong Kong, China.

Rivers. W. H. R. and S.E. Grafton. 1926. *Psychology and Ethnology*. London.

Ren, Zhiqiang. 2002. *Huizhou Zongzu Yanjiu Zongshu* 徽州宗族研究綜述 [Review on Studies on Hui Clans]. *Huixue* [Studies on Hui] (2). Hefei: Anhui University Press.

Swadesh, Morris. 1955. Towards greater accuracy in lexicostatistic dating. International journal of American linguistics, 21(2):121–137.

Tang, Lixing. 1991. Mingqing Huizhou de Jiating yu Zongzu Jiegou 明清徽州的家庭與宗族結構 [Families and Clan Systems in the Ming and Qing Dynasty of China]. *Lishi Yanjiu* 1991 (1).

L3 Acquisition of Chinese Adjective Placement: English *vs.* Romance Speakers

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This study investigates the acquisition of Chinese attributive adjective placement in Chinese as a Third Language (L3), focusing on two key factors: adjective types and syntactic priming effects. A total of forty-five participants were recruited and divided into three groups of fifteen. Two of these groups consisted of beginner L3 Chinese learners with mirror-image language backgrounds, while the third group comprised native Chinese speakers. The L3 Chinese learners were further categorized into two subgroups: one with L1 English, L2 Spanish or French, and L3 Chinese, and the other with L1 Spanish or French, L2 English, and L3 Chinese. To assess their acquisition of Chinese adjective placement, participants completed two oral production tasks using both novel and familiar Chinese words.

Two key findings emerged from this study. First, no significant differences were observed in adjective usage across different types of Chinese adjectives, suggesting that adult learners possess a universal semantic understanding of these categories. Their extensive linguistic and world knowledge (Weicker & Schulz, 2021) likely enables them to process various adjective types consistently. Although no significant differences were found within each language group, notable variations emerged between the three language groups for each adjective type. These findings suggest that when faced with subtle syntactic structures, L3 learners tend to rely more on the implicit grammatical knowledge of their L1 (L1 transfer theories; Hermas, 2010; Na Ranong & Leung, 2009) rather than the explicitly acquired knowledge of their L2 (L2 Status Factor Hypothesis; Bardel & Sanchez, 2017; Sanchez & Bardel, 2017). Second, the findings revealed a significant interaction between participants' language backgrounds and priming orders. While all L3 Chinese learners demonstrated some degree of adaptation to priming, the extent of this influence varied between the two mirror-image groups. Native English speakers exhibited greater stability across different priming conditions, reflecting a strong L1 influence that aligns closely with Chinese adjective syntax. In contrast, native Spanish or French speakers were more susceptible to syntactic priming effects, frequently adjusting their adjective placement in response to priming orders. These findings align with previous research on structural priming, which indicates that individuals tend to replicate the syntactic patterns of recently processed sentences (Santesteban et al., 2010). Additionally, cross-linguistic syntactic priming research (Hartsuiker et al., 2004) supports the notion that bilinguals can share syntactic representations across languages, influencing the transferability of syntactic structures in L3 acquisition.

Keywords: adjective placement, mirror-image groups, third language, Chinese

Language contact and typological insights into bare classifier and lone classifier phrases in Baihe Pinghua

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This study investigates bare classifier phrases ("CL + N") and lone classifier phrases ("CL") in Baihe Pinghua, a Southern Pinghua dialect spoken in Baihe Town, Hengzhou City, Nanning City, Guangxi. It explores their typological characteristics within the Sinitic language family and their potential connections to Kra-Dai languages in southern China.

In Baihe Pinghua, bare classifier phrases can appear in both preverbal and postverbal positions, conveying either definite or indefinite meanings. The four main structural patterns are:

[preverbal + definite] (**隻蛤蟆**脫了 'the frog has run away');

[preverbal + indefinite] (**[ni⁴⁴]**_CL.PL_人死了，就放落棺材 'Some people died and were placed in coffins.');

[postverbal + definite] (隻狗 [ŋɔu²¹]_'shake'_**條木根** 'The dog shook the tree');

[postverbal + indefinite] (他吹**隻洋號** 'He blows a horn').

A lone classifier, defined as a classifier occurring without a noun or modifiers such as numerals or demonstratives (de Sousa 2015), is also a prominent feature in Baihe Pinghua. Lone classifiers are used when both speaker and listener understand the referent, and they can occur before or after the verb. Examples include:

[preverbal + definite]: [kɐ⁴⁴]_DEM_兩條裙，**條**貴 [ni⁴⁴]_little_ 'These two dresses: this one is a bit more expensive'

[postverbal + definite]: [a⁴⁴]_DEM_兩部車，我鍾意**部** 'These two cars, I like this one'.

Lone classifiers are also common in distributive constructions, such as **個分隻** 'Each person gets one (fruit)'.

To investigate the typological features of "CL + N" and "CL" phrases, we compared Baihe Pinghua with other Sinitic languages spoken in Guangdong and Guangxi. Our preliminary findings indicate that certain usages, such as preverbal indefinite "CL + N" phrases and lone classifier phrases, are attested in Cantonese and Hakka dialects spoken in Guangxi (e.g., Guigang Cantonese, Nanning Cantonese, and Guigang Hakka) but are absent in their counterparts in Guangdong. More significantly, the patterns identified in Baihe Pinghua show a strong resemblance to those observed in Kra-Dai languages, such as Northern Zhuang spoken in Wuming District, Nanning City (Sio & Sybesma 2008).

These findings lead us to question whether the distinctive usage of lone classifier phrases in certain Pinghua varieties can be attributed to language contact with Zhuang. This issue will be further explored in the third section, where we aim to offer new insights into the origins of these constructions and their broader implications for typological and contact linguistics.

Reference
de Sousa, Hilário. 2015. "Language contact in Nanning: Nanning Pinghua and Nanning Cantonese". In Hilary Chappell (ed.). Diversity in Sinitic Languages: 157–189. Oxford: Oxford University Press.
Sio, Joanna Ut-seong & Rint Sybesma (2008) The nominal phrase in Northern Zhuang: a descriptive study. *Bulletin of Chinese Linguistics* 3(1): 175-225.

Language contact between Hmong-Mien Languages and Southern Sinitic languages: A Case Study of Rucheng (Hunan, China)

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This paper investigates language contact between Sinitic and non-Sinitic languages in Rucheng 汝城县 (Hunan Province, China). Rucheng County is located in the southeast of Hunan Province, bordering Jiangxi and Guangdong. The Rucheng language, a Sinitic variety whose classification remains controversial (cf. Bao & Yan 1986; Chen 2002; Zeng 2006; Coblin 2018), is predominantly spoken throughout the county, while some Hakka varieties are also used in areas distant from the county seat.

Rucheng is inhabited not only by Han people but also by many ethnic minority residents, mainly Yao and She. Today, the Yao and She communities have completely abandoned the Mien and She (Hmong) languages once spoken by their ancestors, and now speak either Rucheng or Hakka. Nevertheless, some traces of these now-extinct Hmong-Mien languages—especially Mien—can still be found in the Rucheng and Hakka varieties spoken by these communities.

The Yao people, who account for about 17% of the total population, are widely distributed across the county. Their presence in Rucheng dates back at least to the Ming dynasty. Their ancestors, primarily immigrants from northern Guangdong, continued to speak Mien until at least the Qing dynasty, before gradually shifting to Rucheng and Hakka.

This study focuses on the influence of Mien on the Sinitic languages spoken in Rucheng. By comparing Mien with data from our fieldwork on the Rucheng dialect and two Hakka varieties—Yanshou 延寿话 and Dongling 东岭话—spoken today by the Yao, we have found that traces of Mien can be detected in these Sinitic languages, particularly in the Rucheng dialect. These remnants appear in various domains, including phonology, morphology, and vocabulary.

Take, for example, the evolution of the phonological system of Rucheng. By comparing it with the reconstruction of Middle Chinese, we found that some phonological changes (e.g., the development of the ancient *tr-* (知) initial in Rucheng) do not appear to result from internal phonetic evolution. Rather, they suggest that the Rucheng language spoken today may have evolved from a Sinitic dialect whose phonological system was reinterpreted by earlier non-Sinitic inhabitants—speakers of Mien.

Selected References:
Coblin, W. South. 2018. Neo-Hakka Paleo-Hakka and Early Southern Highlands Chinese. *Yuyan yanjiu jikan* 語言研究集刊 [Bulletin of Linguistic Studies]. 21 (Special number in honor of Jerry Norman.). Shanghai: Shanghai cishu chubanshe. pp. 175-238.
Mao, Zongwu (毛宗武). 2004.*Yaozu Mianyu Fangyan Yanjiu* 瑶族勉语方言研究 [A study on the Mien languages of Yao people].Beijing: Minzu Chubanshe. 2004.
Liu Hongyong 刘鸿勇. 2016. *Yuebei Ruyuan Guoshan Yao mianyu yanjiu* 粤北乳源过山瑶勉语研究 [A study on the Mien of Ruyuan Guoshan Yao in Nothern Guangdong]. Beijing: Wenhua yishu chubanshe.

Mandarin Denials: Non-canonical *Nali* and *Shenme*

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Background: Non-canonical *wh*-items are *wh*-words that deviate from their standard interrogative or quantificational meanings. They lose their lexical meanings while being endowed with a speaker-oriented attitude, conveying specific speech acts such as denial or disapproval. This study looks into two such items in Mandarin: *nali* 'where' and *shenme* 'what.' Both are commonly used in a refutatory context to express a disagreement with a prior utterance, performing an act of denial.

(1) *Zhangsan* **nali** *qu guo Yidali?!* (2) **Shenme** *Zhangsan qu guo Yidali?!*

    Zhangsan where go ASP Italy   what   Zhangsan go ASP Italy
'There is no way Zhangsan has been 'It is not the case that Zhangsan has been to Italy!'

Observation Although previous literature proposes similar syntactic analysis for these two non-canonical *wh*-items (Pan 2015; Yang 2015), our data reveal key distinctions. First, *nali* can license negative polarity items (NPIs) such as the indefinite *wh*-word *shei* 'who' or *renheren* 'anybody,' aligning with the observation in Hsieh (2001). Conversely, *shenme* in (4) cannot license NPIs.

(Context: A said that Zhangsan liked Xiaomei. B is denying this.)
(3) *Zhangsan* **nali** *xihuan guo Xiaomei/ shei/ renheren?! Hushuobadao!*
  Zhangsan where like ASP Xiaomei/ who/ anybody nonsense
  'There is no way that Zhangsan liked Xiaomei/ anybody! Nonsense!'

(4) **Shenme** *Zhangsan xihuan guo Xiaomei/ *shei/ *renheren?!* *Hushuobadao!*
  what Zhangsan like ASP Xiaomei/ who/ anybody nonsense
  'It is not the case that Zhangsan liked Xiaomei! Nonsense!'

Second, we examine the scopal relation of *nali* and *shenme* with high adverbs, such as evaluative *xinghao* 'fortunately.' It is observed that only *shenme* could scope over the evaluative adverb to perform a denial. (Context: A said "*Xinghao ta mei shou shang.*" 'Fortunately, he didn't get hurt.' to which B denied:)

(5) *Ta* **nali** *(*xinghao) mei shou shang?! Ta shou duan le ne!*
  3SG where fortunately NEG get hurt 3SG arm break ASP SFP
  Int: 'There is no way he fortunately didn't get hurt! His arm is broken!'

(6) **Shenme** *xinghao ta mei shou shang?! Ta shou duan le ne!*
  what fortunately 3SG NEG get hurt 3SG arm break ASP SFP
  'It is not the case that he fortunately didn't get hurt! His arm is broken!'

Furthermore, when accompanied by scalar focus particles such as *lian…dou* 'even…all,' we observe that *nali* only operates on the prejacent while leaving the scalar presupposition intact. In contrast, *shenme* could target the scalar presupposition (i.e., that the mayor attending the party is more unlikely than others) to deny it, as in (8).

(7) **Nali** *lian shizhang dou qu le paidui?!Ta genben mei qu /#Zongtong ye qu le*
  where even mayor all go ASP party 3SG at-all NEG go president also go ASP
 'There is no way even the mayor went to the party!
 ᵒᵏHe didn't attend at all. / #The president also attended it.'

(8) **Shenme** *lian shizhang dou qu le paidui?!Ta genben mei qu /Zongtong ye qu le*
  what even mayor all go ASP party 3SG at-all NEG go president also go ASP

'It is not the case that even the mayor went to the party!
∘ᵏHe didn't attend at all. / ∘ᵏThe president also attended it.'

Analysis We propose separate syntactic analyses for these two non-canonical *wh*-items. *Nali* is posited to function as a Common Ground (CG) management operator (cf. Repp, 2013), situated in the Evidential Phrase (EviP). This accounts for its inability to scope over high adverbs while implicating evidence against the truth value of a prior utterance. Semantically, *nali* conveys the opposite truth value of a proposition, making it a valid NPI licensor. In contrast, *shenme* serves as a metalinguistic negation marker (Yang, 2021), located beyond CP, presumably within the Speech Act Phrase (SAP). This higher syntactic position enables it to scope over evaluative adverbs and operate on quotative content with various clausal types.

Selected references: Hsieh, M. L. (2001). Form and meaning: Negation and question in Chinese. University of Southern California. Yang, B. C. Y. (2021). Two types of peripheral adjunct WHATs. *Concentric*, *47*(1), 61-92.

Mandarin-Speaking Children's Comprehension of Verb-Copying Sentences

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This study investigates how Mandarin-speaking children comprehend the verb-copying sentences (i.e., 动词复制句), where the verb has a non-adjacent copy to conform to language-specific syntactic requirements (Cheng, 2007; Huang, 1984). We focus on structural constraints in the interpretation when resultatives are involved: While simple resultative compounds (e.g., 他骑累了马) allow both subject-/object-result readings (either "他累了" or "马累了"), verb-copying sentences (e.g., 他骑马骑累了) restrict the interpretation, favouring the subject-result reading unless object definiteness/lexical semantics override it (e.g., 他煮饭煮糊了). In contrast, BA-constructions and resultative *de*-clauses only allow object-result readings (e.g., 他把马骑累了 & 他骑得马很累) and completely block the subject-result reading (e.g., #他把饭吃饱了/#他吃得饭很饱).

Through a picture-selection task with 58 children (6;2 to 8;11, mean = 7;7), the study found that the children primarily chose the subject-result reading for verb-copying sentences (*88.13%, t(446) = 24.918, p < .001*) and the object-result reading for BA sentence (*75.89%, t(223) = -23.915, p < .001*), and no within-group age effect was detected. This suggests an awareness of how the structural differences influence the interpretation of the resultatives. However, their performance still lagged behind adults (verb-copying: *94.64%* subject-result reading, between-group comparison: *t(428.66) = -2.802, p = 0.005, d = 0.217*; BA: *100%* object-result reading, between-group comparison*: t(223) = 4.280, p < .001, d = 0.335*). In addition, younger children (<8 years) struggled with basic resultative *de*-clause, suggesting protracted development of resultative understanding.

Critically, while children demonstrated syntactic sensitivity, their non-adult-like performance highlights the prolonged maturation of syntactic knowledge. The dissociation between verb-copying and BA and between resultative *de*-clause and verb compounds (the latter ones acquired earlier; Deng, 2019; Yang, 2015) also implies distinct developmental trajectories for different syntactic operations. These findings align with neurolinguistic evidence of extended syntactic pathway development (Friederici, 2017).

References
Cheng, L. L.-S. (2007). Verb copying in Mandarin Chinese. In N. Corver & J. Nunes (Eds.), *Linguistik Aktuell/Linguistics Today* (pp. 151-174). John Benjamins Publishers.
Deng, X. (2019). The Acquisition of Resultative Verb Compounds in Mandarin Chinese. *Journal of Chinese Linguistics*, 47(1), 42–81.
Friederici, A. D. (2017). *Language in Our Brain: The Origins of a Uniquely Human Capacity*. MIT Press.
Huang, C.-T. J. (1984). Phrase structure, lexical integrity, and Chinese compounds. *Journal of the Chinese Language Teachers Association, 19*, 53-78.
Yang, X. L. (2015). Acquisition of Bèi 被 and Bǎ 把, L1. In R. Sybesma (Ed.), *Encyclopedia of Chinese Language and Linguistics*. Brill.

Motivating a bipartite analysis for Mandarin focus-sensitive particle *ye*

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Background. Two readings of Mandarin *ye*-sentences have been observed in previous studies, which treat *ye* in (1) and (2) as different items encoding additive and scalar meanings respectively (Yang 2025, *a.o.*). However, they are not mutually exclusive, since a sentence with a scalar meaning always has an additive meaning, not vice versa (cf. Liao & Jheng 2025). Considering this and further observations, **a proposal with only one item *ye* is desirable**.

1. Additive sentence (with additive meaning only):
   Zhangsan   lai   Aomen, [Lisi]$_F$ ye   lai   Aomen.
   Zhangsan   come.to Macau   Lisi   YE   come.to Macau.
   'Zhangsan comes to Macau, Lisi also comes to Macau.'
2. Scalar sentence (with both additive and scalar meaning):
   *Zhangsan   lai   Aomen, lian   [**Lisi**]$_F$ ye   lai   Aomen.*
   Zhangsan   come.to Macau   even   Lisi   YE   com.to   Macau
   'Zhangsan comes to Macau, even Lisi (also) comes to Macau.'

Observations of additive and scalar sentences. Additive and scalar sentences share two crucial properties that cannot be explained under a polysemous analysis of *ye*: (i) the same mechanism for deriving an additive meaning; (ii) the same restriction on this additive meaning (contextual additivity, presupposition failure, distinctness requirement).

Proposal. Following the spirit of Quek & Hirsch (2017) and Sun (2021), we propose a bipartite analysis of additive and scalar sentences. The commonalities between the two kinds of sentences are attributed to the underlying Foc-Q-construction, with different features on Q and different patterns of Agree responsible for the differences.

3. a.   The underlying structure of additive sentences:
   $[_{FocP} [_{Foc'} Foc_{[iaddi()]} [_{vP}...[_{QP} Q_{[uaddi(+)]} XP_F]...]]]$
            Agree➡$[_{FocP} [_{Foc'} Foc_{[iaddi(+)]}=ye [_{vP}...[_{QP} Q_{[uaddi(+)]} XP_F]...]]]$
   b.   The underlying structure of scalar sentences:
   $[_{FocP} [_{Foc'} Foc_{[iaddi(+)]} [_{vP}...[_{QP} Q_{[uaddi(), iscal(+)]} XP_F]...]]]$
            Agree➡$[_{FocP} [_{QP} Q_{[uaddi(+), iscal(+)]} XP_F]_i [_{Foc'} Foc_{[iaddi(+)]}=ye [_{vP}...t_{QP}...]]]$

In (3a), Foc and Q Agree *in-situ* with Foc realizing *ye* after Spell-Out and Q being silent. In (3b), Q carries an additional feature [iSCAL(+)]. It bundles with the unvalued [uADDI()] that requires Q to move and Agree with Foc (under a valuation-driven model of Agree, see Bošković 2007, etc.). After Spell-Out, Foc realizes as *ye*, and Q can realize as *lian* and relate to the suprasegmental strengthening effects on focus. *Lian* is essentially a scalar operator (Shyu 2016).

Discussion. Our proposal deviates from Q&H and Sun in that obligatory movement in scalar sentences is moving-element-driven, rather than [EPP]-driven, hence avoids the look-ahead problem. Therefore, it is theoretically more minimal for movement resulting from interactions between feature valuation and third-factor conditions.

Selected references. Bošković Ž. 2007. On the locality and motivation of Move and Agree. *LI 38.*/ **Liao W. R. & Jheng, W. S.** 2025. A tale of two EVENs. *NLLT.*/ **Quek Y. & Hirsch A.** 2017. Severing focus form and meaning in Standard Colloquial Singapore English. *Proceedings of NELS 47.*/ **Shyu, S.** 2016. Minimizers and EVEN. *Linguistics 54.*/ **Sun Y.** 2021. A bipartite analysis of *zhiyou* 'only' in Mandarin Chinese. *JEAL 30.*/ **Yang Z.** 2025. Three *yě*s in Mandarin. *IJChL 12.*

Name-Based Referential Analysis of the 'Adverb + Bare Noun' Structure

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The usage of bare noun modified by adverbs, exemplified by *hen shunu* 'very lady-like' and *hen Zhongguo* 'very China-like', constitutes a marginal yet persistent phenomenon in Chinese. Three main analytical perspectives have been proposed: **(1) Category shift**, in which nouns function as or convert into adjectives; **(2) Ellipsis,** where the structure is derived from omitted elements such as *you* 'to have'; and **(3) Extrinsic properties**, a perspective this paper supports. With respect to the reference type of bare nouns, this paper proposes that bare nominal constituents in this structure refer to a non-referential, uninstantiated *name*, interpreted as the extrinsic properties of that kind. Finally, a cross-linguistic comparison examines the degree adverb as a range assigner and the constraints leading to low productivity.

Data and Phenomena : The parallel examples in Chinese, English, French, and Vietnamese in (1)–(4) share several features. First, the noun is modified by an extreme-degree adverb (e.g., *very*), while mild-degree adverbs (e.g., *a little*) are rare. Second, the nominal component includes both proper nouns (1) and common nouns (2)–(4). Third, the noun resists quantification and modification, allowing only subkind expressions (4). Fourth, the noun cannot be anaphorically referred to by a pronoun; for instance, in (2), the two clauses lack coherence, indicating the noun is *non-referential*. Lastly, the structure mainly appears in the predicate position of simple sentences or title, serving as the natural prosodic focus.

1. Zhè jiā zhōngcāntīng **hěn Shànghǎi**. '*This Chinese restarurant is very Shanghai.* '

   This Chinese restaurant is **very [Shanghai]**$_i$. #It$_i$ is a modern city in southeastern China.

Thằng	này	**rất**	**trâu**	
				(Vietnamese)
guy	this	**very**	**buffalo**	

   '*This guy is very buffalo. <lit> This guy is very strong/tough/formidable/endurable.*'

vous	avez	été	**très**	**professeur**	**de**	**morale**	
							(French)
you	have	been	**very**	**teacher**	**of**	**ethics**	

   '*You have been very teacher of ethics-like.*'   Lauwers (2014)

Analysis: *Proper names* and *common nouns* share the same distribution in this structure. Based on Searle's cluster theory, kind-denoting common nouns represent category names within an encyclopedic system. As predicates lacking *temporal* and *spatial* specification, they correspond to associated extrinsic properties. The extreme degree adverb, as a *functional marker*, triggers an adjectival interpretation, enabling the expression of various properties. This analysis also aligns with [+name] as a syntactic feature.

Constraints: The low productivity is subject to **(1)Morphologically**, the language must lack explicit adjectival markers. Chinese and Vietnamese have no general adjective markers, while English has suffixes (-*y* ,-ish). This block the 'very child' due to the existence of 'childish', whereas 'lady' cannot take -*y*, allowing 'very lady'. For the same reason, Chinese proper names can appear in this structure, but English place names cannot due to existing adjectival forms (e.g., China/Chinese). **(2) Prosodically**, this structure requires placement in the sentence's prominent stress position, and the use of high-degree adverb is typically accompanied by enhanced prosodic prominence. **(3) Pragmatically**, the noun has conventionalized typical features familiar to interlocutors, with no single adjective corresponding   to   it.

Conclusion: Analyzing the 'Adverb + Bare Noun' structure through ***name*** avoids the assumption for underlying structural assumptions such as category conversion or ellipsis. The introduce of ***extrinsic properties*** as an extension of common nouns provides insights for bare noun analysis, explaining the sources of **non-referentiality** and enriched **meanings** observed in this construction.

Negation Placement and Modal Shifting: Investigating the Epistemic and Deontic Readings of *yīnggāi bù in* Modern Standard Chinese

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This paper aims to discuss, from a typological perspective, the distinctive traits of the Chinese necessity modal *yīnggāi* 'should' in its interaction with the internal negation *bù* 'not'.

The *Negation Placement Strategies (NPS)* have been identified as a cross-linguistic valid tool to provide a specific reading for negated modal forms (De Haan, 1997) and, regarding Modern Standard Chinese, some attempts have been made to investigate whether NPS can effectively trigger a unique reading of the polysemous modal *yīnggāi*, as in *yīnggāi bù*. Tsang (1981) argued that the shift from external negation (*bù yīnggāi*) to internal negation (*yīnggāi bù*) often triggers a semantic shift from deontic to epistemic necessity. While this claim was challenged by Wang (2003), the issue warrants further investigation, possibly by examining a wider range of examples and considering the features shown by *yīnggāi* with reference to the lexical features of the modalized verb (Yin, 2019), the sentence temporal orientation and factuality (Peng, 2007).

This paper shows the results of a first low scale study conducted on 206 records retrieved from CCL, using the keyword *yīnggāi bù*. Each token has been classified based on agentivity, stativity, temporal orientation, (counter)factuality. The results suggest that *yīnggāi bù* can acquire both an epistemic and a deontic reading. However, in the considered dataset, the epistemic are less numerous in embedded position (n. 11: 8% of epistemic tokens; n. 10:15% of deontic tokens), but more numerous than the deontic in matrix position (respectively, n. 129: 69,73% and n. 56: 30,27% of all matrix tokens). The epistemic tokens also present quite homogenous features, as they are all non-agentive and mostly stative (n. 126: 98%), while for the deontic ones these features are mixed (stative tokens n. 42: 75%, non-agentive n. 40: 71%). Finally, only the epistemic tokens can also acquire a future orientation (n. 35: 27%), as in (1a), aside also occurring with a past and present orientation (respectively, n. 5: 4% and n. 89: 69%), while the deontic ones are prevalently referred to universal law embracing all temporal domains, as in (1b), with only one occurrence with a past orientation and counterfactual meaning.

1. a.   Jīnnián chāoguò yīqiān wàn yuán yīnggāi bù chéng wèntí.
         this year exceed ten million yuan should not become problem
         'Exceeding ten million *yuan* this year should not be a problem.'
    b.   Zhèngfǔ tiáokòng hé guòqù yīnggāi bù yíyàng.
         government regulation with past should not same
         'Government regulation should not be the same as in the past.'

Though these results highlight the prevalence of the epistemic reading of *yīnggāi bù*, they also emphasize the need to enlarge the dataset in order to outline the parameters that trigger the deontic reading of this modal configuration.

Keywords: Modality, Negation Placement, Deontic, Epistemic

Selected references: De Haan, F. 1997. *The Interaction of Modality and Negation: A Typological Study.* New York: Garland Press. · Peng Lizhen 彭利贞. 2007. *Xiandai Hanyu qingtai yanjiu* 现代汉语情态研究 (Modality in Modern Standard Chinese). Beijing: Zhongguo Shehui Kexue Chubanshe. · Tsang, Chui L. 1981. *A Semantic Study of Modal Auxiliary Verbs in Chinese*. Ph.D. Thesis. Standford University. · Wang, Shaoling. 2003. *Prediction? Prescription? An analysis of Chinese and English modalities: a comparative approach.* Ph.D. Thesis. University of Hawaii. · Yin Xinyue 尹新月. 2019. "Yinxiang 'yinggai' qingtai yiyi fenhua de yinsu" 影响"应该"情态意义的分化的因素.
(Environments which affect the semantic categorization of *yinggai*). *Journal of Taiwan Urban Vocational College*, 221: 203-205.

Nominalization-relativization syncretism in Archaic Chinese: Usage and Areal Typology

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In Archaic Chinese, the nominalization strategy with *suo* (所) shows syntactic characteristics of nouns. As illustrated in (1) to (4), the constructions occur frequently in the subject and object positions and can function both as the head and the modifier in nominal phrases.

(1) Subject: ***suo*** *huo duo yi* [NMLZ gain plenty PAT] 'what I gained is plenty'
(2) Object: *wu zhi **suo** guo yi* [1SG know NMLZ mistake ASP] 'I have known what was mistaken'
(3) Head: *ren zhi **suo** yu* [people GEN NMLZ want] 'what people want'
(4) Modifier: ***suo*** *yong bi* [NMLZ use gift] 'the gift used'

The nominalization-relativization syncretism has evoked debates on the classification of *suo*-constructions, with the opinions varying from "attributive clauses" (Li 1924/2007: 216–217) or "relative clauses" (Zhao & Zhang 2022) to the argument for "nominal phrases" (Zhu 1983).

Through examining historical corpus data from the 5th century BCE to the 1st century CE, we propose a pathway, in which *suo*-constructions functionally extended from nominal phrases towards clauses. Among the nominal modification strategies, we observe a significant increase of using *suo*-constructions. Consider 2.92% in the pre-Qin Dynasty era against 16.8% in the Western Han Dynasty era. Beyond frequencies, a larger structural evolution also concerns changes in the "subject" marking and the use of temporal words in the constructions.

The nominalizer *suo* extended its use from a general noun meaning "location" to a relativizer in object relative clauses. Similar development patterns are attested in other Sino-Tibetan languages, in which nominalization constructions have developed from "non-nominalization-based relative clauses" through the reanalysis of nominal structure and the grammaticalization of the nominalizer (LaPolla 2008). From a broader areal perspective, we further explore the structural variations of relative clauses across the Bodic, Kiranti and Qiangic branches of Sino-Tibetan, and neighboring languages of the Altaic complex—Turkic, Mongolic and Koreanic.

We theoretically challenge the view that relativization is "no more than modification use of nominalization" (Shibatani 2019), based on the observation of shift in finiteness. In languages where the internal structure and syntactic distribution of nominalizations are identical to nouns, the relativization follows the pattern [noun + noun]. When nominalizations can take tense-aspect-mood marking, the structure of some nominalization-based relative clauses is closer to that of non-nominalization-based finite relative clauses. In Archaic Chinese, the nominalization for nominal modification has become more clause-like, and the same tendency has extended to other clausal use of nominalizations in the Altaicized Northwest Mandarin contact varieties. The reanalysis of nominalizations can ultimately result in the functional extension of nominalizers to tense-aspect-mood markers (DeLancey 2011) and the shared forms between all types of subordinate clauses, such as in the Altaic typological complex.

References

DeLancey, S. (2011). Finite structures from clausal nominalization in Tibeto-Burman. In *Nominalization in Asian Languages: Diachronic and typological perspectives*, 343–360. John Benjamins; **LaPolla, R. (2008)**. Relative clause structures in the Rawang language. *Language and Linguistics* 9(4). 797–812; **Li, J. 黎锦熙. (1924/2007)**. 新著国语文法. 长沙: 湖

南教育出版社; **Shibatani, M. (2019)**. What is nominalization? Towards the theoretical foundations of nominalization. In *Nominalization in Languages of the Americas*, 15–167. John Benjamins; **Zhao, C., & Zhang, F. (2022)**. Relative clauses in Archaic Chinese. *Journal of Chinese Linguistics* 50. 385–418; **Zhu, D. 朱德熙. (1983)**. 自指和转指——汉语名词化标记"的，者，所，之"的语法功能和语义功能. 方言 1. 16–31.

Number mismatch in the Universal Quantification?
On the "One-Cl-N *dou* V- *saːi*" in the Guangzhou Yue dialect

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In natural languages, universal quantification can be realized in various ways, e.g., with determiners, adverbs, or verbal affixes. Different quantifiers impose specific requirements on the Number features of the nouns they quantify. For example, in English:

(1) a. They all came. b. *He all came.   (2) a. Every student came. b. *Every students came.

However, in the Guangzhou Yue dialect, there is an expression related to universal quantification that appears to violate the Quantifier-Noun Agreement:

(3) 我　一-粒-药　都　食-嗮。　　　　　(4)* 我　都　食-嗮　一-粒-药。

   ŋɔː¹³˙ jɐt⁵-lɐp⁵-jœːk⁵˙ dou⁵⁵ sik²-saːi³³　　ŋɔː¹³ dou⁵⁵ sik²-saːi³³　jɐt⁵-lɐp⁵-jœːk⁵

   1SG one-Cl.-pill　　all　eat-SAAI　1SG　all　eat-SAAI　one-Cl.-pill

   'I have finished all the pills.'

(3) involves the adverbial *dou*⁵⁵ and the verbal affix *saːi*³³, both can give rise to a universal interpretation (P. Lee 2012) and typically require the associated elements to be plural or divisible. It appears incompatible for these two elements to co-occur with the topicalized object NP indicating a quantity of "one," which is singular; yet, the sentence is, in fact, grammatical. There are two ways to address this problem: revisit the singular-plural property of 'One-Cl-N' in Cantonese or redefine the agreement conditions for *dou*⁵⁵ and *saːi*³³. This paper adopts the former approach, proposing that the "One-Cl-N" structure in the Guangzhou Yue dialect can achieve a plurality reading while appearing in the singular form.

For a divisible 'One-Cl-N', such as when the classifier is 'Containers'(Yip & Matthews 2000), it can occupy both topic and verbal complement positions:

(5) a. 我　一-樽-药　　　　都 食-嗮。 b.我　食-嗮　一-樽-药。

   ŋɔː¹³ jɐt⁵-tsɐn⁵⁵-jœːk⁵ dou⁵⁵sik²-saːi³³˙　ŋɔː¹³ sik²-saːi³³　jɐt⁵-tsɐn⁵⁵-jœːk⁵

   1SG one-Cl.bottle-pill all eat-SAAI.　1SG eat-SAAI one-Cl.bottle-pill

   'I have finished the whole bottle of pills.'

Here, the numeral "one" is equivalent to the meaning of "whole." It undergoes movement from the [Spec, NumP] to [Spec, DP] to receive a [+referential] interpretation:

(6) [$_{DP}$ *jɐt* [$_{NumP}$ *jɐt* [$_{ClP}$ [$_{Cl'}$ *tsɐn* [$_{NP}$ *jœːk*]]]]]

For the non-divisible NP, the "One-Cl-N" must be restricted in the topic position (cf. 3 & 4). Additionally, we assume that the classifier in the constituent may involve classifier-reduplication, indicating the semantics of abundant plurality, which is often associated with universal quantification in Sinitic languages (Zhang 2013). Cl merges with NP and projects the functional ClP; to generate plural interpretation, NumP is projected. Num⁰ copies the Cl⁰ and probe Cl⁰ to join Num⁰, when D merges with NumP, the reduplicated "Cl-Cl" further moves to the D⁰ (Sui & Hu 2019). As for the numeral "One", it corresponds to the meaning of "whole" and hence also moves to the [Spec, DP] to modify the reduplicated "Cl-Cl", indicating the entire set of items being quantified. The reason why "One-Cl-N" is restricted to the topic position is that the reduplicated "Cl-Cl" has a [+TOP] feature (Liu 1995):

(7) [$_{DP}$ *jɐt* [$_{D'}$ *lɐplɐp* [$_{NumP}$ *jɐt* [$_{Num'}$ *lɐplɐp* [$_{ClP}$ [$_{Cl'}$ *lɐp* [$_{NP}$ *jœːk*]]]]]]]

Then, why the superficial structure is not "One-Cl-Cl-N"? This might be due to a haplology of classifier, which can be supported by the historical data from three corpora of early Cantonese.

Old Chinese Derivational Morphology: a glimpse through scribal practices in Warring States Chǔ 楚 Excavated Texts

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Although many Old Chinese reconstructions associated with the so-called "New School" (*xīn pài* 新派) — Sagart (1999), Pan Wuyun (2000), Zhengzhang Shangfang (2003), Schuessler (2007, 2009), and Baxter and Sagart (2014) — acknowledge the presence of ancient derivational morphology in Old Chinese (13th–2nd century BCE), these reconstruction efforts have seldom engaged with paleographic evidence, leaving many questions open. To what extent, if at all, did the early Chinese script reflect morphological derivations? Can the wealth of paleographic data from newly discovered excavated texts of the Warring States Period (*Zhànguó* 戰國 453–221 BCE) provide new insights for research on Old Chinese morphology? This talk aims to propose a new analysis of certain cases of "specialized character usage" (*zhuān zào zì* 專造字) and "division of labor between allographs" (*yìtǐ fēngōng* 異體分工) in relation to ancient reading alternations linked to morphological derivation. Using illustrative examples from excavated Chǔ bamboo texts, I will argue that early scribes sometimes employed specific strategies—such as alternation between *tōngjiǎzì* 通假字, *yìtǐzì* 異體字, and *běnzì* 本字—to mark the correct reading (e.g. the presence of morphological affixes) of a word entry when disambiguation was needed in a text. Integrating paleographic evidence with recent advances in Old Chinese phonology and morphology is crucial for refining text readings and supporting linguistic reconstructions of Old Chinese.

E.g. Graphic variation of *qīn* 親 in Anhui University (AD) and Shanghai Museum (SB) *Cáo Mò zhī zhèn* 曹沫之陳 manuscripts. The *tōngjiǎzì xīn* 新, reconstructed with pre-initial *s- in BS (2014), consistently marks the transitive usage.

AD 30：君女（如）�丳**（親）**衔（率）

SB 27：君女（如）�丳**（親）**衔（率）

*C.qur *na ***[tsʰ]i[n]** *s-rut-s
Lord LNK personally lead
If the Lord personally leads [the troops]

AD 42：大郢（國）新**（親）**之

SB 16：大國新**（親）**之

*lˤat-s *[C.q]ʷˤək ***[s.]tsʰi[n]-s** *tə
Big state be.close.CAUS DEM
The Great States will treat us as kins

References

Baxter, William H., and Laurent Sagart. 2014. *Old Chinese: A New Reconstruction*. Oxford: Oxford University Press.

Hu, Chirui. 2016. 'From Implicity to Explicity: Grammar Changes Induced by Lexical Changes'. In *New Aspects of Classical Chinese Grammar*, edited by Barbara Meistererernst, 75–104. Berlin: Harrassowitz Verlag.

Lín, Sùqīng 林素清. 2013. 'Tán Zhànguó Wénzì de Tèshū Xínggòu—Chéngjì Yǔ Chuàngxīn 談戰國文字的特殊形構 — 承繼與創新'. In *Dìsì Jiè Guójì Hànxué Huìyì Lùnwénjí - Chūtǔ Cáiliào Yǔ Xīn Shìyě* 第四屆國際漢學會議論文集 - 出土材料與新視野, edited by Lǐ Zōngkūn 李宗焜, 501–23. Taibei: Zhōngyāng Yánjiūyuàn 中央研究院.

Perception of Mandarin tones by advanced L2 Japanese learners: from acoustic to lexical processing

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Extensive research has highlighted the perceptual challenges posed by Mandarin tones for L2 learners. While studies primarily applying acoustic approaches, such as identification and discrimination tasks, have demonstrated improvements in L2 learners' Mandarin tone perception following training (eg., Wang et al., 1999), recent findings have yielded mixed results regarding the use of tonal information in lexical access. Some studies indicate that advanced learners, despite excelling at tone perception in acoustic tasks, may not effectively employ tonal information during word recognition (e.g., Han & Tsukada, 2020), while others suggest the opposite (e.g., Zou et al., 2016). This discrepancy in findings necessitates further investigation into whether advanced L2 learners of Mandarin can effectively utilize tonal information in lexicon.

To this end, this study aims to investigate whether advanced Japanese learners of Mandarin can achieve native-like processing of Mandarin tones, both acoustically and lexically. Participants undertook an AXB discrimination task to assess their acoustic perception of six Mandarin tone pairs (T1-T2, T1-T3, T1-T4, T2-T3, T2-T4). To examine lexical processing, a lexical decision task was employed. Participants were presented with disyllabic words and non-words and asked to determine whether they were real words. This included 12 bidirectional tone pairs, such as T1➔T2 "dongtian" [tʊŋ1tʰjɛn1] ("winter") paired with the corresponding non-word [tʊŋ2tʰjɛn1].

The GLMM analysis revealed that advanced L2 Japanese learners performed comparably to native Mandarin speakers in the AXB discrimination task. However, in the lexical decision task, their accuracy was significantly lower than that of native speakers across all tone pairs except for T3➔T1. These findings suggest that although advanced L2 learners are able to accurately perceive Mandarin tones at the acoustic level, this ability does not necessarily translate into successful lexical encoding of tonal information, or that their lexical encoding of tones remains limited. Notably, advanced L2 Japanese learners performed as well as native speakers on the T3➔T1 tone pair but not on the T1➔T3 pair, which means they were good at recognizing real words with T3 from the non-word with T1 but not the other around. This asymmetric pattern might be attributed to T3 being treated as a norm, while T1 might be perceived as more distinct but not the vice versa.

References

Han, J., & Tsukada, K. "Lexical representation of Mandarin tones by non-tonal second-language learners," *Journal of the Acoustical Society of America*, vol. 148, EL46, 2020.

Wang, Y. , Spence, M. M., Jongman, A. & Sereno., J. A. 1999. "Training American listeners to perceive Mandarin tones," *Journal of the Acoustical Society of America*, vol. 106, no. 6, 3649-3658.

Zou, T., Chen, Y., & Caspers, J. 2016. "The developmental trajectories of attention distribution and segment-tone integration in Dutch learners of Mandarin tones," *Bilingualism: Language and Cognition*, 1-13.

Prenominal modification in Northern Tujia

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This project expands on prior work by Lu et al. (2019) to provide a comprehensive description of prenominal modification in Northern Tujia (henceforth Tujia), a Tibeto-Burman isolate. Particular focus is given to the linker *-nie* and its concurrent distribution with nominalizer *-ɕi*. Data comes from fieldwork conducted in summer 2024 in Dianfang Township, Hunan Province, China.

Data. One primary function of *-nie* is as a genitive marker; with pronominal possessors, it is optionally dropped (1). Additionally, *-nie* marks prenominal adjectives (2), noun "complement" clauses (3), and external relative clauses (4).

1. ŋa   (-nie)   ata   (2)   asɨ-nie   / asɨ-nie-ɕi   / *?asɨ-ɕi   za
    1SG.OBL (-GEN)   big.sister   white-LNK / white-LNK-NOM / white-NOM chicken
    'my big sister'   'white chicken(s)'

3. ni   xalie pʰu-nie   / pʰu-nie-ɕi / pʰu-ɕi   sa   ŋa xausɨ
    2SG dog buy-LNK / buy-LNK-NOM / buy-NOM news 1SG know
     'I know the news that you bought a dog.'

4. anie-ko   je   lie-nie   / lie-nie-ɕi   / *?lie-ɕi   mo aseikʰuli
     mother-ERG food give-LNK   / give-LNK-NOM / give-NOM cat white
     'the cat that Mother gave food to is white'

In the environments in (2)-(4), *-nie* optionally occurs with clausal nominalizer *-ɕi* with no apparent change in meaning; in certain contexts, as in (3), it may be dropped if *-ɕi* is present.

Discussion. The descriptive data indicate that *-nie* is associated with prenominal modification in Tujia, but that its obligatoriness is modulated by the kind of modifier and the presence of *-ɕi*. With relative clauses (RCs), the semantic role of the RC head is an additional modulating factor. For instance, patients of the verb are preferentially relativized with head-internal RCs, which must end in *-ɕi* (5a). Even when the RC is changed to prenominal, *-nie* is optional (5b).

5. a. ko-ko   kai tɕʰiepi *pʰi-po-nie   / pʰi-po-nie-ɕi   / pʰi-po-ɕi
        3SG-ERG DEM bowl   *break-STAT-LNK / break-STAT-LNK-NOM / break-STAT-NOM
        'the bowl that s/he broke'

    b. ko-ko   kai   pʰi-po(-nie)-ɕi   tɕʰiepi
        3SG-ERG   DEM break-STAT(-LNK)-NOM bowl
        'the bowl that s/he broke'

Linkers like *-nie* are attested in a range of language families, from Mandarin (Lin 2010) to Bantu (van de Velde 2013), and carry a range of names: *connective, relator, associative, particle*, and so on. The presence of the nominalizer in Tujia nominal modifiers is typologically unsurprising, as nominalization is a broadly applicable morphosyntactic mechanism in Tibeto-Burman languages (Shibatani 2019; DeLancey 2002). However, the particular interplay of linker and nominalizer in Tujia is somewhat unique. Data from less-documented languages such as Tujia may thus add to our understanding of functional linkers and nominal modification cross-linguistically.

References

DeLancey, Scott. 2002. Relativization and nominalization in Bodic. In *Proceedings of BLS 28*. ‖ Lin, Yi-An. 2010. The de-marked modification structure in Mandarin Chinese. In *Proceedings of NACCL-22 & IACL-18*. ‖ Lu, Man, Jeroen van de Weijer, & Zhengguang Liu. 2019. Nominalization and relativization in Tujia. *Linguistics of the Tibeto-Burman Area*. ‖ Shibatani, Masayoshi. 2019. What is nominalization? towards the theoretical foundations of nominalization. ‖ van de Velde, Mark. 2013. The Bantu connective construction. ‖ Xu, Shixuan, Meiyan Lu, & Hongyan Hu. 2017. Tujia. In *The Sino-Tibetan languages*.

Recent findings on the history and geographic distribution of the *ér* suffix in Chinese

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This discussion presents an update of recent findings on the history and geographic distribution of the *ér* 兒 suffix forms found in Chinese dialects (Sinitic languages). Pronunciations and meanings of the *ér* suffix vary greatly across dialects where it is found. Differing syllable structures and a range of subtleties in the meaning of the morpheme are observed across China's linguistic landscape. Appearing most commonly in Mandarin and Jìn dialects, different pronunciations for the affix and various associated usages are nevertheless found widely across most Chinese dialect regions. An easily discerned distinction of types is evident between the northern retroflex pronunciations of the *ér* suffix and the nasal pronunciations of the southern dialects. But where the *ér* has evolved to a pure vowel, the differences are hidden in vocalic variety, obscuring a clear north-south boundary between the forms found in the dialects. The obscurity of the *ér* suffix is most pronounced in cases where its only remaining trace is in distinctive tonal patterns. Yet traces of the morphology are still discerned concurrent with the tone changes. Notwithstanding its often apparently vague colloquial nature, the vitality of the suffix persists in the dialects to a greater or lessor degree. For example, in the changed tone of Guǎngzhou it is a vibrant and essential lexical element; while the suffix has grown optional or greatly weakened in other dialects, as appears to be the case in Běijīng.

The present discussion will make use of the Beijing dialect's rhotacized syllables, which reflect the suffix, to serve as a frame of reference for the exploration of the pronunciations and morphological meanings and usage of the *ér* suffix found within a data base we are compiling that collects a wide variety of dialect forms and examples. We find that a common historical origin for the *ér* suffix and it morphological nature can be seen in concrete and meaningful functions that are shared across the dialects, even despite the many types of phonological forms the affix can take.

Though the *ér* suffix and its various permutations is essentially non-existent in written historical texts, our comparative exploration of the suffix across the Chinese languages reflects many interesting and useful details about the history of colloquial forms of Chinese, including details of the evolutionary paths of the spoken dialects, and the relationships between them.

Resultatives, Information Structure, and Argument Realization: A Corpus Analysis

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Resultative verb compounds (RVCs) present significant challenges for L2/FL Chinese learners (Yu 2003; Zhang 2014), due to both their semantic and syntactic features. Further complexity, and consequently potential acquisitional difficulties, arise from the fact that RVCs, like many other constructions, interact significantly with information structure, whereby elements of the utterance are organized according to whether they constitute presupposed/topical/known information (which tends to occur earlier in the sentence) or focal/new information—i.e., elements that "cannot be taken for granted at the time of speech" (Lambrecht 1994), which tend to occur later in the sentence. Corpus data reveal that multiple argument realization patterns (Levin and Rappaport Hovav 2005) are available for RVCs, including preverbal patients/objects or the 把 *bǎ* construction, depending on whether the focus is, e.g., on the patient, or on the result of the action (which may be, e.g., a resultant state, object, or location):

1. 老 爸 把 红 包 放 在 了 门 口 的 地 上 。 (BCC BLCU corpus)
   lǎo.bà bǎ   hóngbāo   fàng-zài-le   ménkǒu   de   dì-shang
   dad   BA   hongbao   put-be.at-PFV   door   SP   floor-on
   'Dad put the *hongbao* on the floor in front of the door.'

In (1), the patient the V1 放 *fàng* 'put,' i.e., 红包 *hóngbāo*, occurs preverbally (introduced by 把 *bǎ*), leaving the focal position free to host the resultant location, i.e., the locative object of V2 在 *zài*, 门口的地上 *ménkǒu de dì-shang* 'on the floor in front of the door.'

After providing a theoretical overview of argument realizations (alternations and inversions), and information structure, this study presents preliminary results from two corpus studies. The first study is descriptive in nature, and provides qualitative and quantitative observations of possible argument realization patterns in Chinese RVCs. The analysis is based on natural language data drawn from the BCC BLCU corpus and identifies specific patterns, particularly APV, PAV, PV, and 把/将 PV. The second is a preliminary investigation based on a learner corpus comprising data from 130 L1 Italian university students (at beginner, intermediate, and advanced levels) as well as a control group of Chinese native speakers. Elicitation materials, including videos, were designed to feature a variety of actions that require RVCs to be expressed, such as putting, moving, and hanging items. The research aims to identify the argument realization patterns produced by participants, as well as any errors, overuse, and underuse. Factors such as proficiency level, native vs. non-native status, and other potential correlations were also considered.

Keywords: resultatives, argument alternations, information structure, corpus studies

Selected references:
Lambrecht, K. 1994. *Information Structure and Sentence Form: Topic, Focus, and the Mental Representations of Discourse Referents*. Cambridge: Cambridge University Press.
Levin, B, and M. R. Hovav. 2005. *Argument Realization*. Cambridge University Press.
Yu, M. 2003. "Chinese Morphology: An Exploratory Study of Second Language Learners' Acquisition of Compounds." *Studies in English Literature and Linguistics* 29 (2): 1–35.
Zhang, J. 2014. "A Learner Corpus Study of L2 Lexical Development of Chinese Resultative Verb Compounds." *Journal of the Chinese Language Teachers Association* 49 (3): 1–24.

Revisiting Chinese Passives: A Corpus-Based Study of the *Bèi-Gěi* Alternation

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Passive sentences have long been a topic of interest among grammarians and are even regarded as levers to promote the construction of language theory (Lu 2004) in the field of generative grammar, as exemplified by Chomsky's work. Within the framework of probabilistic grammar (Bresnan 2007; Szmrecsanyi 2013) and variationist (socio)linguistics (Tagliamonte 2012), the alternation of Chinese passive constructions has yet to be fully analyzed to capture the implicit probabilistic knowledge of language users. To address this gap, a multifactorial analysis of the Chinese *bèi* (被) and *gěi* (给) passive alternation (1–2) was conducted using 4,777 tokens from the *Chinese Web Corpus* (zhTenTen17).

(1) zhTenTen17 (Simplified) chinadevelopment.com.cn   marker=*bèi*

[这	名	弃	婴]NP1	**被**	[福利院]NP2	接	走	了。
zhè	*míng*	*qì*	*yīng*	***bèi***	*fúlìyuàn*	*jiē*	*zǒu*	*le*
this	CLF	abandoned	baby	PASS	welfare	pick	up	PFV

"This abandoned baby was picked up by the welfare home."

(2) zhTenTen17 (Traditional) 2home.com.tw   marker=*gěi*

[兔子	耳朵]NP1	**给**	撕	断	了。
tùzi	*ěrduo*	***gěi***	*sī*	*duàn*	*le*
rabbit	ear	PASS	tear	RES	PFV

"The rabbit's ears were torn off."

Drawing inspiration from the literature on passive constructions in Chinese, we manually annotated all tokens for 17 language-internal (semantic and syntactic) and language-external (text type and variety) factors. The results of mixed-effects logistic regression show that six predictors consistently influence the choice between *bèi* and *gěi* passives, a pattern that can be explained by cognitive mechanisms and the motivations underlying grammaticalization. In contrast, two predictors demonstrate fluid effects across language varieties, while four predictors exhibit fluid effects across long and short passives. This analysis confirms the complexity of linguistic conditioning on both Chinese long and short passive constructions across language varieties, thereby establishing a valuable foundation for future research in Chinese passive constructions.

Keywords: Mandarin Chinese; *bèi* and *gěi* passives; long and short passives; language varieties; corpus-based study; logistic regression

References

Bresnan, Joan. 2007. Is syntactic knowledge probabilistic? Experiments with the English dative alternation. In Sam Featherston & Wolfgang Sternefeld (eds.), *Roots: Linguistics in Search of its Evidential Base*, 75–96. Berlin, New York: Mouton de Gruyter.

Lu, Jianming. 2004. 有关被动句的几个问题 [Some issues of passive sentences of Mandarin Chinese]. *Chinese Linguistics* (02). 9–15+95.

Szmrecsanyi, Benedikt. 2013. Diachronic Probabilistic Grammar. *English Language and Linguistics* 19. 41–68.

Tagliamonte, Sali A. 2012. *Variationist Sociolinguistics: Change, Observation, Interpretation*. Malden & Oxford: Wiley-Blackwell.

Revisiting the polysemy of 'two' in Northwest and Southwest China: New evidence from Linxia and Chongqing

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This study reexamines the phenomenon where the numeral 'two' (*liangge/lia*) in Chinese dialects of Northwest and Southwest China functions as a comitative marker, instrumental case marker, and coordinating conjunction. For instance, in Dingxi Mandarin spoken in Gansu, *liaŋ⁵⁵ ko³⁵* serves as the numeral 'two', a comitative case marker, and a coordinating conjunction for noun phrases:

(1) [pʰiŋ³⁵ ko⁰   liaŋ⁵⁵ ko³⁵   ɕiaŋ⁵⁵ tɕiao⁵⁵]   wo⁵⁵   tou⁵⁵   ɕi⁵⁵ xuan⁰.
    Apple   and   banana   1SG   all   like
    'I like [apples and bananas].'

Dwyer (1992) and Peyraube (2017) attribute this pattern to language contact in the Gansu-Qinghai Sprachbund, potentially involving Mongolic languages such as Santa. Zhou (2022) proposes it as a regional innovation, but Chan (2022, 2025) report similar patterns in both Gansu-Qinghai and Hunan-Hubei, challenging the innovation hypothesis.

We conducted field research in Chongqing and Gansu between December 2024 and January 2025, focusing on 8 dialect points in Chongqing and 11 in Linxia. In Gansu, 28 Santa-Mandarin speakers from Linxia displayed the polysemous pattern of *liangge/lia*, as did 23 Tujia-Mandarin speakers in Chongqing. Notably, *liangge/lia* in these Chinese dialects, *nie* in Tujia, and *ghuala* in Santa serve as the numeral 'two', a comitative marker, and an instrumental marker. This observation supports Chan's (2025) assertion that the polysemy in Southwest and Northwest China results from language contact with Tujia and Mongolic languages respectively.

This paper discusses the process of contact-induced grammaticalization of *liangge/lia*, triggered by the imperfect learning of Chinese by Tujia and Santa speakers, providing further insights into the linguistic dynamics observed. Our findings reveal that older Tujia and Santa informants are more likely to accept the polysemous *liangge/lia,* whereas younger Han informants do not.

Keywords: Chinese Dialects; Numeral 'Two'; Language Contact; Santa; Tujia

Selected references
Chan, Kin-wing Kevin. 2025. *Coordinating conjunctions in Sinitic languages*. Singapore: Springer Nature.
Dwyer, Arienne. 1992. Altaic elements in the Linxia dialect: Contact-induced change on the Yellow-River Plateau, *Journal of Chinese Linguistics* 20-1: 160-178.
Zhou, Chenlei. 2022. From 'two' to a comitative-instrumental case marker: A regional innovation in the Gansu-Qinghai linguistic area. *Language and Linguistics* 23: 349-369.

Semantic features based on large language models represent Chinese language interpretation mechanism in an eye-tracking reading task

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Language acts as the medium for information transfer in human society, through which meaning is continuously generated, conveyed, and interpreted. Chinese especially relies more on strong semantic or pragmatic cues since context provides the necessary information to permit successful interpretation. The evolution of large language models (LLMs) put it more challenging and provide insights that meanings, rather than structures, might primarily organize and convey the information. LLMs take a novel approach by learning meaning from vast amounts of data without explicit rules, for which the meaning of a constituent can shift dynamically depending on the contextual text. This study explores to what extent a LLM might share similarities with human's behaviors in realistic natural discourse reading.

First, to quantitively model the semantic representation in a dynamic and multilevel nature, we abstracted LLM-based semantic metrics from three domains: 1) *Semantic information density* measures the degree to which constituents carry semantic information for the whole discourse; 2) *Semantic integration difficulty* captures real-time dynamics in semantic distance as the sentence unfolds and context accumulates; 3) *Semantic coherence* indicates the semantic information concentration and coherence of constituents.

Next, we selected nine Chinese passages and ranked their reading difficulty in terms of some linguistic considerations, which are the textual factors at the word, sentence, and discourse levels. The passages were then calculated by the semantic metrics and designed into a self-paced reading task with the participants' reading eye movement being recorded by an eye tracker. A total of 159 healthy adults, 94 typically developed children, and 101 children with developmental dyslexia were involved. Processing intensity, cognitive load, attention, and strategy were measured from reading eye movement indicators.

Then, from the data in the adult readers, the results revealed extensive and robust correlations between LLM-computed semantic metrics and eye-movement features at both cross-paragraph and intra-paragraph levels. The links are interpretable and demonstrate that: semantic information density metrics widely predict processing intensity across scales; semantic integration metrics significantly predict dynamic processing attention strategy; semantic coherence metrics predict cognitive load and processing efficiency.

Last but not least, we explored if LLMs have the potential to provide practical support for special populations, i.e., children and children with dyslexia. The findings suggest specific sensitivities to LLM semantic features in children and dyslexic readers. The dyslexics showed generally broader correlations between reading behaviors and LLM metrics. Sensitivity across paragraphs was also found, demonstrating different paragraphs showed various link patterns.

Our findings suggest that LLMs represent semantic information similarly enough to humans to enable accurate quantification of decoding during natural semantic processing. They might also provide potentials for supporting children's reading learning and dyslexia intervention by designing tailored text materials.

Semi-Lexicalization and Semi-Grammaticalization in Intensifier Adjective Constructions

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Intensifier adjective constructions are a unique type of expressive adjective formation in Sinitic languages, typically combining a monosyllabic core adjective with an expressive morpheme. Their primary function is to intensify the overall depiction and modification conveyed by the core adjective. Constructions like "飞快" (fēi-kuài, 'fly- fast, extremely fast) and "冰寒" (bīng-hán, 'ice-cold, extremely cold') explicitly convey intensification and incorporate vivid expressive imagery, whereas adjectives like "天蓝" (tiān-lán, 'sky blue') do not. Many Sinitic dialects exhibit parallel yet distinct forms, reflecting regional variations in construction and function.

Such constructions, primarily found in East Asian languages, exhibit typologically significant yet language-specific variations. Existing research has largely focused on stative adjectives in modern Sinitic languages. With adjective constructions that convey intensification, much of the research has been fragmented and homogenized, often relying on isolated dialectal data points. Traditionally categorized as XA or BA (A = adjective, X/B = non-core component), their non-core elements have been broadly treated as affixes without detailed analysis. However, intensifier adjective constructions exhibit notable internal variation. Studies exploring the processes of lexicalization and grammaticalization in these constructions remain scarce.

By adopting an integrated approach that combines dynamic and static perspectives with macro and regional analysis, this study systematically classifies intensified adjective constructions into three types from both synchronic and diachronic perspectives and examining their internal variation. Type A maintains the full lexical meaning of each component, allowing independent usage, with a highly productive pattern. Type B (semi-lexicalized) undergoes partial semantic bleaching, where the non-core component enhances intensification while integrating closely with the core adjective, maintaining productivity within a constrained semantic domain. Type C (semi-grammaticalized) exhibits complete semantic bleaching, with the non-core component losing its original lexical meaning and serving solely as an intensifier, displaying paradigmatic fusion and unrestricted combination with any core adjective. However, it has not fully grammaticalized to the extent that it can freely combine with other word classes. The study reveals that the development of these three types of intensifier adjective construction do not follow a strictly linear trajectory but interact in complex ways.

References:
Lehmann, C. (1985). Grammaticalization: Synchronic variation and diachronic change (Vol. 20, pp. 303-318). na.
Himmelmann, N. P. (2004). Lexicalization and grammaticization: Opposite or orthogonal? (pp. 21-42). na.
Liu, D.(2001). Renewal,Reinforcement, and Superposition in Grammaticalization.Linguistic Research, 2,71-81.[刘丹青.(2001).语法化中的更新, 强化与叠加.语言研究,2 ,71-81.]

Sentence final particles at the syntax-pragmatics interface:
Evidence from Wuchuan Cantonese

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Sentence final particles (henceforth SFPs) are generally considered as particles attached to single propositions, which are syntactically configured at CP or SAP layer taking TP or CP as their complements (Lee 1986; Tang 1988; Cheng 1991; Li 2006; Paul 2014, 2015; Tang 2015, 2020; Pan 2015, 2019, 2022; among many others). In fact, the picture of SFPs would be more complicated than expected. It is suggested that the interpretation of SFPs involves "ground" propositions beyond the at-issue propositions, and it is via their interaction that the SFPs are construed. By examining novel data in Wuchuan Cantonese at the interface, this study intends to uncover the propositions responsible for the interpretation of SFPs and explore how they are syntactically represented.

To take the interrogative SFP ts^ha_{31} (喳) in Wuchuan Cantonese for example, it is ambiguous between a rhetorical reading and a confirmational reading. Its interpretations are distinguished by distinctive interactions between propositions denoting beliefs of both interlocutors:

(1) 龙眼树**喳**？'It is a longan tree? (I doubt that / I believe so)'
   a. **Rhetorical reading**: The beliefs of the interlocutors do not coincide:
      The addressee's belief: it is a **longan** tree; the speaker's belief: it is a **lychee** tree.

   b. **Confirmational reading**: The beliefs of the interlocutors coincide:
      The addressee's belief: it is a **longan** tree; the speaker's belief: it is a **longan** tree.

It is proposed that the interaction of propositions should be projected via the articulated GroundPs, i.e., Ground$_{spkr}$P and Ground$_{addr}$P (cf. Wiltschko & Heim 2020, Wiltschko 2021). We argue that both Ground$_{spkr}$P and Ground$_{addr}$P are active in computation based on empirical and theoretical considerations (*pace* Wiltschko 2021). The interpretation of the interrogative SFP ts^ha_{31} (喳) can thus be syntactically sketched as follows:

(2) [**Ground$_{spkr}$P** [Ground$_{spkr}$ ts^ha_{31} $_{[=]/[\neq]}$] [**Ground$_{addr}$P** [Ground$_{addr}$ $_{[=]}$][CP p]]]

In addition to proposition interaction, other pragmatic features affect the construals of SFPs, such as perspective and social ranking encoding (e.g., Chu 2002, Li 2006, Lam 2014, Portner et al. 2019, Alok 2020, Wiltschko 2021, Miyagawa 2022, Dayal 2023). It is postulated that these pragmatic-relevant features should also involve syntactic representation in (2) (cf. Cinque 1999; Speas & Tenny 2003; Hill 2007; Haegeman 2014; Krifka 2021, 2024). Consider the distinction in speaker-addressee relation between ts^ha_{31}(喳) and wa_{55} (哇) in (3):

(3) a.龙眼树**喳**？'It is a longan tree? (I doubt that / I believe so)'
      Acceptable only when the speaker is superior to the addressee in social ranking, e.g., a teacher to a student.

   b.龙眼树**哇**？'It is a longan tree? (I believe so)'
   Acceptable in other cases, e.g., a student to a teacher or his/her peers.

The proposal can be extended to "evaluative" SFPs cross-dialectically (e.g., Mandarin and Hong Kong Cantonese) as well as cross-linguistically (e.g., Japanese and English). If the analysis is on the right track, it is further argued that the interaction of propositions is universal to the interpretation of almost all SFPs, while other features, such as social ranking, are dialect-/language-specific.

Strategies and Challenges in the Chinese-Italian Translation of Culture-Loaded Words: A Case Study of *Alla scorpeta della Cina*

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Abstract

Taking the Chinese-Italian translation of the bilingual textbook *Alla scoperta della Cina* as a case study, this paper examines the challenges and strategic choices involved in translating culture-specific terms—also known as Culture-Specific Items (CSIs)—from Chinese into Italian. Due to their deep cultural specificity, CSIs often create "lexical gaps" that impede effective intercultural communication. This research underscores that translating culture-loaded words is not merely a linguistic conversion but a vital process for fostering intercultural understanding and integration. The study analyzes common issues encountered in the translation of culture-specific terms, including "vocabulary vacancies," the influence of intermediary languages, and cultural untranslatability. Drawing on functionalist translation theory, it investigates the application of domestication and foreignization strategies. The research emphasizes that translators should remain faithful to the cultural connotations of the source text while fully considering the cognitive habits of target readers and selecting appropriate translation strategies to enhance cross-cultural communication.

This paper aims to provide both theoretical grounding and practical guidance for translating Chinese CSIs into Italian, offering insights that may inform future efforts in standardizing cultural terminology and researching intercultural communication.

Examples

To illustrate these points, this paper adopts a functionalist approach, exploring both domestication and foreignization strategies. For instance, while "清明节" is sometimes translated through domestication as la festa dei morti, we opt for a foreignizing approach, rendering it as "Festa della Purezza e luminosità, Qingmingjie," retaining the cultural specificity while introducing a new term to the target language. This is exemplified also by our translation of "九五之尊" as "Somma altezza imperiale, Jiuwu zhizun," preserving the source text's cultural specificity. Furthermore, the influence of English as a mediating language can lead to inaccurate renderings, such as the common, yet imprecise, "calendario lunare cinese" for "农历" (calendario agricolo cinese). We also discuss how grammatical differences, especially regarding the use of articles, can impact translation accuracy as shown by the different usage we encounter for "四合院".

References

Baker, M., 2011. In Other Words: A Coursebook on Translation, 2nd edition. ed. Routledge.

Bassnett, S., 2013. Translation Studies, 4th edition. ed. Routledge.

Ma, R., 2023. Translation of Culture-loaded Words from the Perspective of Cross - Cultural Communication. Int. J. Soc. Sci. Econ. Manag. 4, 89–95. https://doi.org/10.38007/IJSSEM.2023.040212

Nord, C., 2008. Translating as a Purposeful Activity Functionalist Approaches Explained. St. Jerome.

Venuti, L., 2008. The Translator's Invisibility A History of Translation. Routledge.

XIANG, C., 2016. On Translation Strategies of Chinese Culture-Loaded Words. Can. Soc. Sci. 12, 69–74. https://doi.org/10.3968/8067

Structuring Mandarin Nominals: Eventivity and Argument Structures

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This study focuses on the complex interaction between eventivity and argument structure in Mandarin nominals as well as the syntax of Mandarin nominals. Our findings are based on a fine-grained classification of different types of nominals in Mandarin. The classification is conducted on three dimensions. First, nominals are morphologically classified as derived and underived with respect to their having an isomorphic verbal counterpart. Second, in terms of denotation, a nominal is either entity-denoting or event-denoting. We can set them apart according to whether the nominal can co-occur with a frequentative or durative expression (cf. (1a)), a verbal classifier (cf. (1b)) and an eventive predicate (cf. (1c)). Third, a nominal either can license an argument structure or cannot. Based on Deng (2021), we argue that only the former type (known as AS nominal) can serve as the object of an abstract verb (cf. (2a)), co-occur with an agent-oriented adjectives (cf. (2b)), and have a fixed theta relation with its genitive specifier.

(1)　　a. **频繁的/长达一个小时的会议**/*桌子　　　　b. 一**次**会议/*桌子

　　　c. 会议/*桌子正在教室里**进行**。

(2)　　a. 张三对这些学生**加以**了调查/*会议。　b. 张三的对方言的**小心翼翼的**调查/*会议

According to these classification criteria, the following pattern is observed.

Morphology	Denotation	Argument Structure	Examples
Derived	Event-denoting	AS	张三的对方言的调查
		Non-AS	*
	Entity-denoting	AS	*
		Non-AS	张三的长达十页的报告
Underived	Event-denoting	AS	[张三的老师]当得好。
		Non-AS	[张三的这次会议]持续了两个小时。
	Entity-denoting	AS	*
		Non-AS	张三的桌子

There are three gaps in this classification system. We argue that their absence reveals the following two points. Firstly, the absence of (un)derived entity-denoting AS nominals indicates that the existence of argument structure presupposes eventuality. Secondly, the non-existence of derived event-denoting non-AS nominals suggests that there is an embedded verb in some of the derived nominals (following Borer (2013), etc.), so that event-denoting derived nominals obligatorily inherit the argument structure from their verbal stems.

Our classification also implies a non-uniform approach to the syntax of *de*-construction ("的"字结构). Specifically, we argue that the right-branching (RB) structure (Si 2004, Xiong 2005, etc.) should be assigned to AS *de*-nominals, in which *de* serves to introduce its specifier as an argument of the head noun, while the left-branching (LB) structure (Tang 2006, Shi 2008, etc.) better characterizes the structure of non-AS *de*-nominals, where deP constitutes a modifier. This distinction can be further substantiated by syntactic evidence from cleft sentences (cf. (3)) and topicalization (cf. (4)).

(3) a. 这本书是[NP[deP[DP 张三] 的] e]。　　　b. *对这本书的翻译是[deP[DP 张三] [de' 的 e]]。

(4) a. 书，[NP[deP[DP 张三] 的] e]最好。　　　b. *出版，[deP[DP 这本书] [de' 的 e]]最顺利。

Studying Chinese Specialised Lexicography on Education:
A Discourse-Oriented Approach

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During the 1980s and 1990s, the People's Republic of China witnessed an unprecedented surge in the publication of specialised lexicographical works (专科辞书), a phenomenon also partly driven by the implementation of the Second National Lexicographical Plan (1988-2000). Over the years, Chinese political institutions have consistently promoted the compilation of these products, regarding specialised lexicographical tools as crucial for providing knowledge in support of the country's efforts in economic, technological, and scientific reform and modernisation (Wei *et al.*, 2014; Zhao, 2023). Given the social and political central role assigned to education in China, numerous dictionaries and encyclopaedias on the subject have been published on the subject in recent decades.

Building on previous research into lexicography in China and the interplay between (Chinese) lexicographical works and their socio-political, ideological, and cultural context (Fishman, 1995; Chen, 2017; Bertulessi 2023), this paper examines a selected corpus of specialised monolingual Chinese lexicographical products collecting terminology from the field of education. The works selected for this paper include the *Concise Dictionary of Education* (简明教育辞典, 1988), the *Encyclopaedic Dictionary of Education* (教育百科辞典, 1988), the *Great Dictionary of Education* (教育大辞典, 1990, 12 vols.), the *Encyclopaedia of Chinese Education* (中国教育百科全书, 1991), and the more recent *Great Encyclopaedia of Chinese Education* (中国教育大百科全书, 2012, 4 vols.). The paper presents the results of a discourse-oriented lexicographical analysis of selected entries from these works. Also adopting a qualitative and diachronic approach, it focuses on the treatment of specific educational concepts and issues. Particular attention is devoted to the lexicographical representation of the political-ideological, cultural, and moralising dimensions of Chinese education, thus scrutinising entries related to the functions and objectives attributed to education in society.

References
Bertulessi, C. (2023). Chinese Lexicography and the Critical Analysis of Lexicographical Discourse. In S. Zuccheri (Ed.), *Studies on Chinese Language and Linguistics in Italy* (pp. 95-116). Bologna University Press.
Chen, W. (2017). Lexicography, Discourse and Power: Uncovering Ideology in the Bilingualization of Monolingual English Dictionaries in China. *Pragmatics and Society*, 8(4), 600-28.
Fishman, J. A. (1995). Dictionaries as Culturally Constructed and Culture-Constructing Artifacts: The Reciprocity View as Seen from Yiddish Sources. In B.B. Kachru, H. Kahane (Eds.), *Cultures, Ideologies and the Dictionary* (pp. 29-34). Max Niemeyer Verlag.
Svensén, B. (2009). *A Handbook of Lexicography: The Theory and Practice of Dictionary-Making*. Cambridge University Press.
Wei, X. 魏向清 *et al.* (2014). 中国辞书发展状况报告: 1978-2008 (Report on the development of Chinese lexicography: 1978-2008). Shangwu yinshuguan.
Zhao, H. 赵航 (2023). 当代中国专科辞书事业 (Specialised lexicography in contemporary China). 辞书研究 *Lexicographical Studies*, 3, 46-59.

Syntactic choice and object priming in speech production in Mandarin Chinese

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Adult speakers often adapt language production to mitigate processing demands and meet listeners' informational needs in specific speech contexts. Variation in syntactic choices in language production (e.g. active versus passive voice), are influenced by factors such as conceptual accessibility, topicality, noun phrase (NP) length, and lexical-syntactic priming (e.g. Bock et al. 2004; MacDonald 2013). Syntactic choice is often reflected in the choice of different word orders, which requires linearizing thinking for the purpose of speaking. But word order varies across and within languages, offering speakers choices of potentially different word orders to express the same event. Mandarin provides an ideal test domain to explore the factors influencing syntactic choice in language production. Mandarin has a basic SVO word order (e.g. Li & Thompson 1981, Sun & Givón 1985), but allows OSV *BEI* passive and SOV *BA* constructions, both of which prepose object NPs. While the OSV *BEI* and the SOV *BA* constructions are among the most studied syntactic constructions in Mandarin, their alternation with SVO in language production has received limited attention (e.g. Liu 2007; Yao 2014; Yao 2018).

The present study examines how lexical priming of an object NP influences the choice between SVO versus OSV *BEI* or SOV *BA* constructions. Twenty-five native speakers of Mandarin participated in an object priming production task on Zoom, where they watched and described 12 target transitive events depicted in black-and-white drawings (e.g. "a boy pushes a girl") and 12 filler events. Object NPs were counterbalanced for animacy, and trials were randomized. Half of the target events presented the object NP twice before the target event (priming condition) and half without the object NP primes (no-priming condition). Participant's descriptions were coded for word order and speech latencies. Results showed a preference for SVO (48%), followed by SOV *BA* (32%) and O(S)V *BEI* (19%), suggesting SVO as the default word order. In the priming conditions, OV order (SOV *BA* and OSV *BEI*) increased (54.05% vs. 48.25% VO), whereas no-priming conditions favored (S)VO (51.75% vs. 45.95% OV). There is no significant difference in speech latencies between the primed and the unprimed trials, but speakers were faster in producing the OV order than the VO order. We conducted logistic regression analyses in R (Baayen 2008) with *priming condition* as the predictor variable and *word order* (VO vs. OV) and *speech latency* as the outcome variable. The results confirm a significant increase in the use of OV order only for the *BEI* passives and a significantly faster speech latency in producing the *BA* constructions in the priming conditions than in the unprimed conditions. Overall, the results reveal a limited and variable effect of object NP priming on speakers' word order choices, depending on the specific OV constructions. This suggests that other factors – such as word order dominance in a language, semantic/pragmatic connotations and frequency of different constructions – may also contribute to speakers' syntactic choices in production.

Selected references:
Bock, K., Irwin, D. E., & Davidson, D. J. (2004). Putting first things first. In M. K. Tanenhaus (Ed.), The interface of language, vision, and action: Eye movements and the visual world (pp. 249–278). New York, NY: Psychology Press.
Li, C., & Thompson, S. (1981). *Mandarin Chinese: A functional reference grammar*. University of California Press.
Liu, F.-H. (2007). Word order variation and *ba* sentences in Chinese. *Studies in Language, 31*(3), 649–682. https://doi.org/10.1075/sl.31.3.05liu
MacDonald, M. C. (2013). How language production shapes language form and comprehension. *Frontiers in Psychology, 4*, 226. https://doi.org/10.3389/fpsyg.2013.00226

Sun, C. F., & Givón, T. (1985). On the so-called SOV word order in Chinese: A quantified text study and its implications. *Language, 61*, 329–351. https://doi.org/10.2307/414148

Yao, Y. (2014). Predicting the use of *ba* construction in Mandarin Chinese discourse: A modeling study with two verbs. In *Proceedings of the 28th Pacific Asia Conference on Language, Information and Computing (PACLIC28)* (pp. 561–567). Phuket, Thailand: Chulalongkorn University.

Yao, Y. (2018). NP weight effects in word order variation in Mandarin Chinese. *Lingua Sinica, 4*, 5. https://doi.org/10.1186/s40655-018-0037-8

Syntactic processing precedes semantic processing: new ERP evidence from Chinese

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This study investigates the timing and interaction of syntactic and semantic processing during Chinese sentence comprehension, with a focus on whether syntactic processing precedes semantic processing. Using event-related potentials (ERP), we provide new evidence supporting the Syntax-First Model (SFM), which posits that syntactic processing occurs before semantic integration in sentence processing. Using materials based on Sentence Completion Theory (完句成分理论), the experiment involved simple Chinese sentences consisting of a subject, predicate, and sentence-completing constituent, with a total length of four to seven characters. Sentences were manipulated to create syntactic violations (*syntax, √semantics) by disrupting the sentence-completing constituents (e.g. *小王偷偷出发) and semantic violations (√syntax, #semantics) by substituting subjects with inanimate nouns (e.g. *图书馆没出发).

The results showed distinct ERP patterns: syntactic violations triggered early left anterior negativity (LANs), while semantic violations elicited N400s, but no LANs. These findings indicate that syntactic processing occurs before semantic processing, consistent with the hierarchical structure proposed by SFM. Despite the lower accuracy and longer response times for syntactically violated sentences, the ERP data suggest that syntactic processing occurs independently of semantic processing in time, supporting the priority of syntax in the early stages of processing.

Our research contributes to the understanding of sentence processing in Chinese, emphasizing the critical role of syntactic processing even in a language like Chinese, which lacks inflectional morphology. The experimental design and clear ERP evidence offer a more nuanced perspective on the relationship between syntactic and semantic processing, providing valuable insights into the cognitive mechanisms underlying language comprehension.

Fig. 1 The ERP waveform diagram induced by different conditions and the corresponding differential wave topographic map at prefrontal area within a time window of 250-350ms. **a.** The upper and lower parts show the waveforms of a representative electrode on the left (AF3) and right (AF4) hemisphere of the prefrontal cortex, respectively. The shaded bar marks the time window of interest of the study. **b.** The upper and lower parts show the differential wave topographic maps at prefrontal cortex of the semantic violation condition versus the control (SEM - CON) and the syntactic violation condition versus the control (SYN - CON).
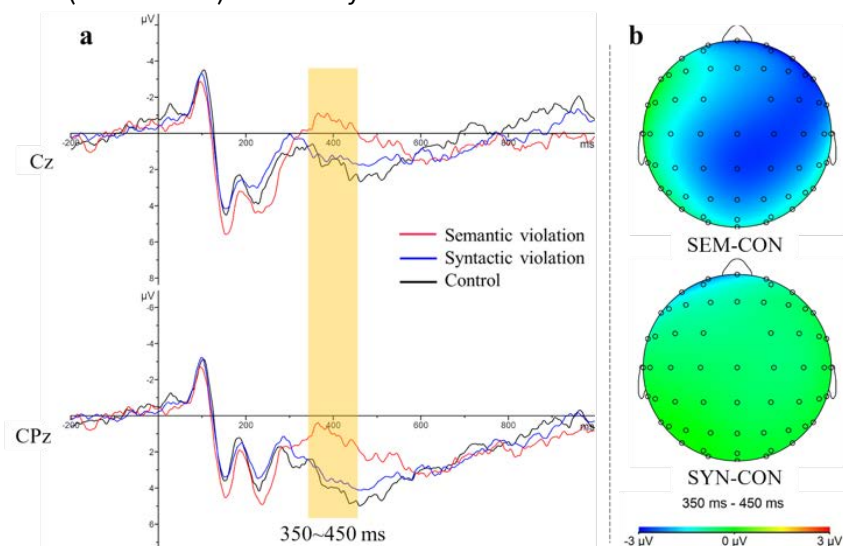
Fig. 2 The ERP waveform diagram induced by different conditions and the corresponding differential wave topographic map at the centroparietal area within a time window of 350-450ms. **a.** The upper and lower parts show the waveforms of 2 representative electrodes (Cz and CPz) of the centroparietal area, respectively. The shaded bar marks the time window of interest of the study. **b.** The upper and lower parts show the differential wave topographic maps at the centroparietal area of the semantic violation condition versus the control (SEM-CON) and the syntactic violation condition versus the control (SYN-CON).

Telicity with(out) quantization: on completive particles in Mandarin Chinese

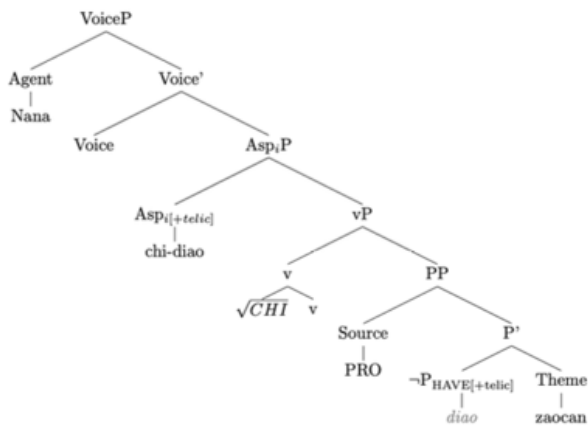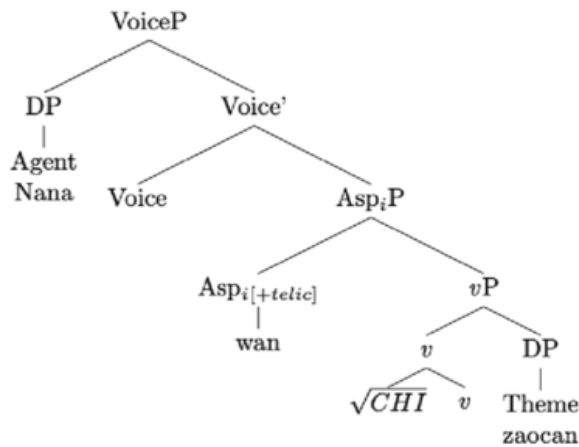Siyu WANG
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Introduction: It has long been noticed that Mandarin Chinese allows for non-culminating accomplishment predicates (Martin, 2019; Soh and Kuo, 2005; Zhang, 2018, a.o.), whose telicity can be established through completive particles such as *wan* or *diao*, as in (1). The addition of these completive particles forms a verbal complex and yields an obligatory telic interpretation, resembling Slavic perfective prefixes (Borer, 2005; Filip, 2000, 2008; MacDonald, 2008). However, despite previous analyses treating them as Slavic-like inner aspect morphemes (Lu et al., 2019; Sybesma, 2017; Xuan, 2008), several syntactic and semantic properties cast doubt on this view: Slavic telicizing prefixes require the theme argument to be quantized, in accordance with the Strict Incrementality Condition (Krifka, 1998). Mandarin completive particles exhibit variability: *wan* permits non-quantized (non-maximal) objects, whereas *diao* encodes telicity with a quantized (maximal) theme. In addition, *diao* exhibits semi-functional properties, displaying sensitivity to the lexical semantics of the verb and imposing strict constraints on the θ role of the object.

(1) Nana zai san-miao   nei chi-wan/diao le   pingguo.
     Nana at three-second in eat-finish/drop PFV apple
     'Nana ate an apple in three seconds.'

(2) a. Nana chi-wan   zaocan   jiu   qu xuexiao.
         Nana eat-finish breakfast then go school
         'Nana finished eating breakfast and go to school.'

     b. Nana chi-diao zaocan   jiu   qu xuexiao.
         Nana eat-drop breakfast then go school
         'Nana finished the breakfast and go to school.'

Research questions: (1) What is the syntactic correlation between telicity and quantization? (2) How do completive particles like diao contribute to both telicity and argument structure? (3) What does the heterogeneity of Chinese completive particles unveil the syntactic nature of telicity?

The proposal: The current study adopts a Neo-constructivist approach to telicity (Borer, 2005; Kardos and Farkas, 2022; Travis, 2010.a.o.). A syntactic functional head Aspi is projected above v and responsible for deriving the uncancelable telic interpretation. Aspi hosts an unvalued telic feature, which is valued by a functional item that merges or moves to this position. Chinese com- pletive particles are [+telic] feature carriers with distinct structural roles.

The analysis: Wan functions as an inner aspect morpheme which merges in Aspi and induces telicity independent of argument structure. The non-quantization effect arises from its syntactic position: above the argument structure and semantically inaccessible to the lower phase (vP). In contrast, diao is morphological realization of the functional item ¬[PHAVE] (Harley, 1995, 2002; Myler, 2016, a.o.) which originates within the argument domain, encoding a change of possession event.

VoiceP
DP — Voice'
Agent Nana
Voice — Asp$_i$P
Asp$_{i[+telic]}$ — vP
wan
v — DP
$\sqrt{CHI}$ v — Theme zaocan

VoiceP
Agent Nana — Voice'
Voice — Asp$_i$P
Asp$_{i[+telic]}$ — vP
chi-diao
v — PP
$\sqrt{CHI}$ v — Source PRO — P'
¬P$_{HAVE[+telic]}$ — Theme
diao — zaocan

This functional item undergoes head movement to Aspi, thereby encodes telicity indirectly. Consequently, *diao* influences both telicity and argument structure: its quantization effect emerges as a semantic entailment of the argument configuration. The lexical and thematic restrictions on *diao* reflect C-I interface requirements for change of possession events.

Theoretical implication: This bipartite analysis of Chinese completive particles, represented by *wan* and *diao* attributes the multiple sources of telicity, i.e., termination and resultativity, to different syn- tactic operations (merge and move). Only the latter is directly linked to quantization via argument structure, refining our understanding of how syntactic structure mediates aspectual interpretation.

Selected references: Borer, H. (2005). Structuring sense: Volume II: The normal course of events. Oxford University Press. ‖ Kardos, É., & Farkas, I.Á. (2022). The syntax of inner aspect in Hungarian. Journal of Linguistics, 58(4), 807–845. ‖ Krifka, M. (1998). The origins of telicity. In S. Rothstein (Ed.), Events and Grammar (pp. 197–235). Springer. ‖ Sybesma, R. (2017). Aspect, inner. In Encyclopedia of Chinese language and linguistics (pp. 186–193).

The acquisition of *dou* by Mandarin-speaking Monolingual Children and Mandarin-English Bilingual Children

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The multifunctional word *dou* in Mandarin Chinese presents significant linguistic complexity and poses a challenge for child language acquisition. This study investigates the acquisition of four major uses of *dou*: (1) as an adverbial universal quantifier meaning *all* (Lee, 1986; Jiang & Pan, 2013); (2) as an intensifier highlighting extreme, unusual, or improbable circumstances (Lee, 1986); (3) as a marker of completed actions/states, roughly corresponding to *already* in English (Jiang & Pan, 2013); (4) as a tone-conveying device for blame (Zheng & Shao, 2008). It is under heated discussion which use is the most fundamental and whether the other uses derive from the fundamental use. We investigated the acquisition of *dou* among Mandarin-speaking monolingual and Mandarin-English bilingual children, aiming to reveal the fundamental use of *dou* in child language, and reflect on the role of adult input frequency and cognitive development in the emergence and frequency of *dou* in child language. We analyzed the naturalistic speech data from 11 monolingual children (aged 1;5-4;8) from four corpora and three Mandarin-English bilingual children (1;7-4;11) from the CHCC corpus in the CHILDES (MacWhinney, 2000).

We found that the children's spontaneous use of *dou* starts at 1;9 for the monolinguals and starts at 2;1 for the bilinguals. A significant positive correlation was found between the children and caregivers in the frequency of *dou*. Focusing on two monolingual children Tong and Heng and two bilingual children Winston and Avia who have been densely sampled, we found that there is a consistent order in the frequency of the four uses of *dou* across child and adult speech: in the monolingual children and caregivers, the quantificational use (1) dominates (51% in children vs. 50% in adults), followed by the *already*-denoting use (3) (24% vs. 19%) and the intensifier use (2) (11% vs. 17%), and the use conveying a tone of blame (4) is the least frequent (7% vs. 9%); in the bilingual children and caregivers, (1) also dominates (68% in children vs. 64% in adults), followed by (3) (16% vs. 21%) and (2) (11% vs. 8%), and (4) is the least frequent (1% vs. 5%).

The results reveal the following patterns: first, the quantificational use of *dou* emerges earlier and is more frequent than the other three uses in child language, suggesting that the former is more fundamental, and the latter uses may derive from the former. Second, the monolingual children exhibit earlier use of *dou* and higher frequency of its non-quantificational uses (2) to (4) than the bilingual children, indicating that monolingual children acquire the polysemous *dou* earlier than bilingual children, which may result from bilingual children's reduced input of *dou* and the lack of cross-linguistic reinforcement from its English counterpart *all* which does not have (2) to (4) uses. Last, the distribution of the different uses of *dou* in the speech samples of both monolingual and bilingual children aligns closely with that in adult input, demonstrating the important role of input frequency in child language acquisition. These findings underscore the centrality of the quantificational function in early *dou* acquisition and highlight the interplay between input frequency, cognitive development and bilingualism in shaping the acquisition of polysemous words.

The Analysis of the 2SG>3 Suffix in Yaoji

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This paper provides a description of the 2SG>3 suffix *-w* in Yaoji, a Situ dialect within the Gyalrongic language family, spoken in Yaoji township, Baoxing county, West Sichuan, China.

Yaoji exhibits a complex person indexation system. For intransitive verbs, the verb agrees according to the person and number of the subjective argument, taking the following suffixes: 1SG suffix *-ŋ*, 1DU suffix *-ṣ*, 1PL suffix *-j*, 2SG suffix *-n*, 2DU suffix *-nṣ*, and 2PL suffix *-ɲ*, while the third person is unmarked. For transitive verbs, Zúñiga ([2006](#)) divides the transitive domain into three: the local domain (1➔2, 2➔1) with both arguments as speech act participants, the mixed domain (1➔3, 2➔3, 3➔1, 3➔2) with one speech act participant and one third person, and the non-local domain (3➔3) with both arguments as third person. Following Zúñiga's ([2006](#)) framework, the personal suffixes in Yaoji aligns with the patient in the local domain, with the first or second person in the mixed domain, and is absent in the non-local domain.

Therefore, in the case of 2SG on 3, we would expect transitive verbs to align with the 2SG, marked by the suffix *-n*, as shown in Example ([1](#)). However, we find that not only is the sentence in Example ([1](#)) valid, but the sentence in Example ([2](#)) is also valid, where a suffix *-w* appears. This indicates that Yaoji has a 2SG>3 suffix *-w*, which occurs only when the agent is second person singular and the patient is third person.

1. *no əjo də-tə-sti-n*
   2SG 3SG PFV-2-hit-2SG
   'You hit him.'

2. *no əjo də-tə-sti-w*
   2SG 3SG PFV-2-hit-2SG>3
   'You hit him.'

In Gyalrongic language family, the full form of the personal suffix *-w* is only found in some Situ dialects, such as Yaoji, Cogtse (Lin [2016](#)), Bragbar (Zhang [2020](#)), and Kyomkyo (Prins [2016](#)), and its occurrence con- ditions vary. In Cogtse, it appears in 2/3SG>3SG/DU/PL, in Bragbar in 3SG>3SG/DU/PL, and in Kyomkyo in 2/3SG>3SG/DU/PL, while in Yaoji, it is limited to 2SG>3SG/DU/PL. According to Gong ([2017](#)), an earlier suffix **-w* appeared only with a third person patient and a singular agent. Additionally, there is also a personal suffix *wə-* appearing in 1/2>3 in Rónghóng Rma, indicating that it is an ancient Burmo-Qiangic feature (Sims [2022](#)). We can infer that this 2SG>3 suffix *-w* in Yaoji is related to it. Therefore, this paper will analyze the distribution of the personal suffixes *-n* and *-w* in Yaoji, hypothesize their development, and comment on the typological implications.

References

Gong, Xun. 2017. Verb Stems in Tangut and Their Orthography. *Scripta* 9(1). 29–48.

Lin, Youjing. 2016. 嘉戎语卓克基话语法标注文本 *jiāróngyǔ zhuókèjīhuà yǔfǎ biāozhù wénběn [Cogtse Rgyal- rong Texts: Fully Analyzed Apontaeous Narratives with an Updated Sketch Grammar of the Language]*. Beijing: Shehui Kexue Chubanshe.

Prins, Marielle. 2016. *A Grammar of rGyalrong, Jiǎomùzú (Kyom-kyo) Dialects: A Web of Relations*, vol. 16. Leiden: Brill.

Sims, Nathaniel A. 2022. "You and Me Against the World": Direct-Inverse Morphology in Rma (Qiang). *Bulletin of the School of Oriental and African Studies* 85(1). 99–110.

Zhang, Shuya. 2020. *Le Rgyalrong Situ de Brag-bar et sa Contribution à la Typologie de l'expression des Relations Spatiales: l'orientation et le Mouvement Associé*: Institut National des Langues et Civilisations Orientales-INALCO PARIS dissertation.

Zúñiga, Fernando. 2006. *Deixis and Alignment. Inverse Systems in Indigenous Languages of the Americas*. Amsterdam: John Benjamins Publishing Company.

The Development of Voice Quality in Second Language Speech Acquisition: A Case Study of the Parallel Speech Corpus of Chinese Natives and Arabic Natives

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The study of segmental and suprasegmental elements of speech (such as vowels, consonants, tones, and stress) is generally considered more perceptible to listeners. In contrast, the voice quality of speakers is relatively less perceptible, yet its investigation holds significant importance. The present study approaches the analysis of acoustic features of L2 learners' (Chinese and Arabic) speech within the framework of dynamic research on L2 speech production, and mainly focuses on the learner's duration of learning (DOL), and gender, L1background and age differences, with the aim to investigate whether voice quality in second language (L2) speech production changes over time as learners advance in their L2 acquisition.

This study involved a total of 83 Arabic native speakers learning Chinese (59 males and 24 females) and 62 Chinese native speakers learning Arabic (23 males and 39 females), representing a diverse stage of learning experiences in terms of the duration of L2 learning (DOL). Each participant recorded word lists in both their first language (L1) and L2, which were subsequently analyzed to examine changes in voice quality. The acoustic parameters analyzed included jitter, shimmer, F0 mean, and F0 range, providing an evaluation of the participants' voice quality. A method for calculating the differences in voice quality between L2 and L1 was employed to dissipate voice difference. A linear mixed-effects model was fitted in R to analyze the effects of DOL, gender, and native language background on the L2 – L1 voice quality differences.

A significant triple interaction effect of DOL, gender, and native language background was observed for jitter, shimmer, and F0 mean, indicating that the effect of DOL on voice quality in L2 speech production is influenced by both gender and language backgrounds. The general trend (Figure 1) showed that, with increasing learning duration, participants exhibited greater jitter and shimmer, while F0 mean and F0 range progressively approached the target language. The findings demonstrate voice quality in L2 speech production changes over time with learning duration. These changes are influenced by gender, and since the language-specific nature of voice quality in L2 production, the impact of learning duration on voice quality is also influenced by the learners' native language background. This research provides valuable insights into the temporal evolution of voice quality in L2 learners and underscores individual and language-specific factors in L2 speech production.
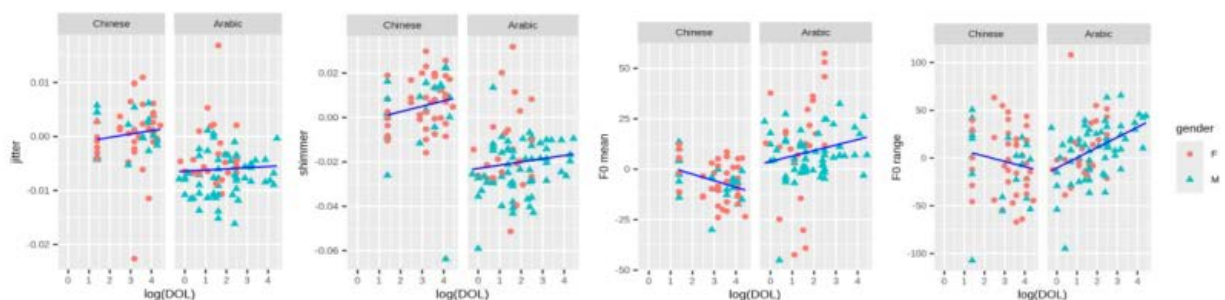

Figure 1. Trends in L2-L1 differences for voice quality over duration of learning (DOL).

Main References:

Järvinen K, Laukkanen A-M, Geneid A. Voice Quality in Native and Foreign Languages Investigated by Inverse Filtering and Perceptual Analyses. J Voice. 2017;31(2):261.e25-261.e31.

The Emergence and Development of Three Passive Constructions in Mandarin-speaking Preschoolers

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Based on 14 longitudinal or cross-sectional child Mandarin corpora, this study offers a panorama of the emergence and development of three passive constructions, including two types of marked passive constructions marked by *bei, jiao, rang,* or *gei*, namely long passive (e.g. *Shanzi ye **bei** ni gao-huai le*, meaning "the folding fan was also broken by you") and short passive (e.g. *Jiejie **bei** guan-qi-lai le*, meaning "your sister was locked up"), and the patient-subject construction (e.g. *Lajiao chi-wan le*, meaning " the chili was eaten up") which also expresses passive meaning but doesn't have passive markers. The data were divided into two developmental stages—2;0-4;0 (Stage 1, from 5 longitudinal corpora of 16 children) and 4;0-6;0 (Stage 2, from 9 cross-sectional corpora of 1,024 children). During Stage 1, the three constructions emerge in the following sequence: the patient-subject construction (2;5), long passives (2;6), and then short passives (3;1). Meanwhile, the frequencies of these three types of passive constructions also show this sequence: patient-subject construction (39‰) > long passives (9‰)> short passives (3‰). This emergence and frequency sequence parallels with the frequency order in adult input (38‰> 18‰> 7‰). We further found that in Stage 1, children have acquired patient-subject construction but not the other two types, as they use the patient-subject construction productively in an adult-like way in terms of relative frequency, predicate type and developmental trajectory. During Stage 2, by observing the developmental trajectories from four groups of children aged 3, 4, 5, and 6 years old respectively, the relative frequency of long passives shows an upward trend of 11 ‰, 24 ‰, 27 ‰, 31‰, with the frequency reaching the peak (31‰) at age 6; in contrast, the production of short passives exhibits a fluctuating pattern of 13‰, 13‰, 21‰, 13‰ across different age groups, with the frequency reaching the peak (21‰) at age 5 and stabilizing at 13‰ . The developmental trajectories suggest that children first acquire the patient-subject construction at 2;0-4;0, followed by the short passive at 4;0-6;0, and then the long passive at 4;0-6;0 or later (the acquisition order: patient-subject construction> short passive > long passive). The emergence and frequency sequence of the three types of passive constructions underscore the importance of input frequency in child language acquisition. The only difference between patient-subject construction and short passive is that the former one doesn't have passive markers such as *bei*; however, in contrast, short passive is easier than long passive without agent. Thus, the interaction of formal complexity and input frequency may result in the discrepancy in the emergence/frequency sequence and the acquisition sequence in early child speech.

Keywords: Mandarin passive constructions, child acquisition, input frequency, formal complexity

Selected references

Deng, X., Mai, Z., & Yip, V. (2018). An aspectual account of *ba* and *bei* constructions in child Mandarin. *First Language*, 38, 243 - 262.

"The Fatal Attraction of *Give*": *pəʔ* -Construction in Suhujia-Wu

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The causative > permissive > passive pathway has been widely recognized as a common trajectory of semantic grammaticalization in many languages (cf. Haspelmath 1990, Huang 2013, Yang 2015), including various languages of the Sinitic family such as Wu Chinese (ISO 639-3: wuu). This study focuses on the *pəʔ*-construction (撥) 'give' in Suhujia-Wu (Northern Wu) and examines whether it follows this pathway or develops an alternative route from a basic verb meaning to a construction expressing passive meaning, as in (1a) to (1b):

1. Suhujia-Wu
a.   verbal *give*

   u˦   **pəʔ**˪iəʔ˪ iəʔ˪-kᵁE˦ yan˦di˦.
   1.SG give 3.SG one-CL   money
   'I give him 1 RMB.'

   b.   passive reading

   lɔ˦- tsã˦ **pəʔ**˪*(lɔ˦- ɦuã˦) p.iɪ-zʅ   tsɔ˦ p.iɔ˦.
   Old-Zhang give (Old-Wang) deceive-PFV money
   'Old Zhang was deceived out of his money (by Old Wang).'

A comparative analysis of the *gěi*-construction 'give' in Mandarin (Cmn) and the *pəʔ*-construction in Suhujia-Wu (Wuu) reveals key differences. Unlike *gěi*, *pəʔ* has limited preverbal use in serial verb constructions (SVCs), appearing only in so-called passive constructions and in prohibitive contexts with negation, but lacking the permissive reading found in Mandarin. Additionally, *pəʔ* requires a following NP in passive constructions, cf. (1b), whereas *gěi* allows omission. A notable distinction is that *pəʔ* more readily accepts inanimate NPs as indirect causer, whereas *gěi* strongly prefer animate NPs.

These differences are tested in two acceptability judgment experiments: Experiment I (N = 45: N_{Cmn} = 22, N_{Wuu} = 23) shows that Wuu speakers are less accepting of agentless *gěi*-passives in Cmn ($p < .001$) but more accepting of inanimate NPs than speakers from Cmn area ($p = .002$). Experiment II (ongoing) investigates *pəʔ* in Wuu, expecting lower acceptability for agentless form while showing no animacy-based restrictions on following NPs. These findings also suggest that even among (self-denominated) native Mandarin speakers, the use of *gěi*-passives varies due to influence from local languages such as Wu Chinese.

Unlike the semantic extension in the causative > permissive > passive model, I argue that *pəʔ* in Wuu is not inherently passive; the passive reading arises from word order and telicity. Instead, *pəʔ* undergoes semantic weakening, i.e. it loses its partial lexical meaning and becomes a grammatical marker, aligning with benefactive applicative periphrases (BAPs, Creissels 2010). The polysemy of BAPs then drives a shift: beneficiary > potential beneficiary > reason (indirect causer).

References

Creissels, Denis. 2010. Benefactive applicative periphrases: a typological approach. In Fernando Zúñiga & Seppo Kittilä (eds.), *Benefactives and Malefactives – Typological perspectives and case studies*, 29–70. John Benjamins Publishing Company.

Haspelmath, Martin. 1990. The grammaticalization of passive morphology. *Studies in Language. International Journal sponsored by the Foundation "Foundations of Language"*, 14 (1). 25–72.

Huang, C. T. James. 2013. Variations in non-canonical passives. In Artemis Alexiadou & Florian Schäfer (eds.), *Linguistik Aktuell/Linguistics Today,* vol. 205, 95–114. Amsterdam: John Benjamins Publishing Company.

Yang, Kairong. 2015. Lun Shanghaihua de Shiyi, Beidong Biaoji [On causative and passive marker in Shanghainese]. *Journal of East China Normal University (Humanities and Social Sciences),* 48(6). 96–103.

The most likely phonetic values of the four grades

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In Chinese rime tables, the earliest known versions of which date back to 1161, each of the four tones is subdivided into four rows called *grades* (等 děng). There is still no consensus on the original phonetic values of these grades (e.g. Orlandi 2021). However, one possibility stands out as the most plausible:

Grade I: no medials (*kāikǒu* 開口)/[*-w-] (*hékǒu* 合口)
Grade II: [*-ɨ-]/[*-ʉ-]
Grade III: [*-ɨj-]/[*-ʉj-]
Grade IV: [*-j-]/[*-ɥ-]

As is widely believed, the four grades appear to indicate the presence and absence of medials. Specifically, they correspond to two medials. The first, present in Grades II and III, was previously a rhotic consonant, most likely the bunched *r*, [*-ɹ-]. By the time the rime tables were being compiled, it had fused with alveolar initials and made them retroflex or post-alveolar. Elsewhere, it became [*-ɨ-]/[*-ʉ-]. The second medial is the palatal glide [*-j-]/[*-ɥ-], and is present in Grades III and IV. Shěn (2020) proposes similar values, though with no medials in Grade IV, and with [*-j-]/[*-ɥ-] as a second value in Grade III.The [*-ɨ-] medial has largely disappeared from modern forms, except in Mandarin as an open vowel after non-palatal sibilant initials (-i in Pinyin). In practice, it is often realized as a syllabic consonant ([z̩], [ɻ̩ʷʐ̩]). The transition from [*-ɨj] to [-ɨ] in these Mandarin forms can be seen as an instance of a widespread sound change in the development of Mandarin, where the main vowel dropped and the medial lengthened, taking over as the main vowel.Earlier influential reconstructions, such as those by Pulleyblank and Baxter, assumed that the historic rhotic medial was already absent in the rime tables, leaving no trace in the medial position. However, the [-ɨ] final in modern Mandarin suggests that the rhotic medial persisted in the rime tables as the [*-ɨ-] medial.

References

Orlandi, Georg. 2021. On the four grades/four calls of Chinese rime tables. Historiographia Linguistica 48(1). 1–24.
Shěn, Zhōngwěi. 2020. *A Phonological History of the Chinese Language*. Cambridge: Cambridge University Press.

The Phonetic Changes of Specific Syllables: from Zero-Initials of Early Modern Chinese to Consonantal Initials

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Chinese has undergone various phonological changes in the process of developing into Modern Chinese. There also are some unique phonological changes that arose from different factors. Some words belonging to Yimu 疑母 and Yumu 喻母, originally having a zero-initial in Early Modern Chinese, later acquired specific initials in Modern Chinese.

For instance, in Early Modern Chinese, based on *Zhongyuan Yinyun*, words such as 牛, 逆, and 鯢 (categorized as Yimu) and 荣, 融, and 容 (categorized as Yumu) were identified as having zero-initials. However, in Modern Chinese, these words are pronounced as 'niú, nì, ní, róng, róng and róng', with their initials respectively transforming into n- and r-. The transitional process of these phonetic changes can be partially traced in some historical texts. Notably, across various editions of *Nogeoldae*—Chinese language textbooks used from the mid to the late Joseon Dynasty—the transition of 牛 from an initial 'ㅇ[ø]' to 'ㄴ[n-]' can be observed. The following table provides a chronological summary of the initial consonant changes for these characters.

牛逆鯢 (Yimu)	zero-initial	zero-initial	partially changed to **initial n-**	initial n-
		partially changed to **initial n-**		
	Yuan Dynasty	**Ming Dynasty**	**Qing Dynasty**	**Modern China**
荣融容 (Yumu)	zero-inital	zero-inital	partially changed to **initial r-**	**initial r-** (partially remained as **zero-initial**)

Lin and Zhu(1999) explains the transformation of Yimu as: 'Only in the case of division III non-rounded-medial syllables with less-vocalic sonorant, initial Yimu shifts to the apical [n-]'. Lee(1990) describes the aforementioned change in Yumu as 'y→r/__wiŋ[02]'. Synthesizing these studies allows us to consider the role of glides in the transition from zero-initials to specific consonant initials, which remains a topic worthy of discussion.

Zhou(2003) conducted an examination of the rhotacization of the Yumu words, investigating the geographical distribution, the timing, and the cause of the change. The author focused on the influence of [+grave] vowels and explained the phenomenon as '[j]>[ɹ]/___[ʊŋ]'. Furthermore, he emphasised that the rate of change varies depending on the type of word, resulting in a diffusion curve resembling the shape of the character 厂.

Building upon Zhou(2003)'s findings, this study aims to examine the consonantalization of both Yimu and Yumu and to reframe these changes as part of a more systematic phonological process. By clarifying the conditioning factors, this study will provide insights into the phonemic interactions that occur within syllables of Early Modern Chinese.

References
Lin and Zhu(1999), *Guyinxue Rumen*, Taipei: Xuesheng Shuju.
Lee(1990), *A study on phonemic change of pre-modern mandarin*, [Doctoral dissertation, Seoul National University].
Zhou(2003), Ejinyinde rihua——Guanhuazhong shangwei jieshude [jʊŋ]→[ɹʊŋ] yinbian, *Hanyushi Xuebao*: 3(1): 129-142

The syntacticization of discourse and sentence final particles in Chinese: evidence from *uəi⁵⁵* in Xiangzhou Mandarin

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Purpose. This study investigates the syntactic and semantic properties of the sentence final particle (SFP) *uəi⁵⁵* in Xiangzhou (象州) Mandarin (a variety of Southwestern Mandarin spoken in Guangxi) and its theoretical implications. A sentence with *uəi⁵⁵* is presented in (1).

(1) *Context: Lisi promised Zhangsan to come to Zhangsan's office at 10:00. It is already 10:30, and Lisi hasn't shown up, so, Zhangsan goes to Lisi's office and says to him:*

lai³¹   ŋo⁵¹   pan²⁴koŋ⁴⁴ɕi³¹   uəi⁵⁵.
come   my   office   SFP
'Come to my office. (You are supposed to have already done so. Do so right now.)'

Properties of *uəi⁵⁵*. Syntactically, *uəi⁵⁵* (i) combines with an imperative, and (ii) occurs only in root environments as defined by Emonds (1970). Semantically, *uəi⁵⁵* expresses that the speaker thinks that the addressee does not live up to an earlier agreement or mutual understanding; the speaker thus utters a sentence with *uəi⁵⁵* to urge the addressee to fulfill the agreement (cf. (1)). It is associated with a certain degree of urgency.

Analysis. Within the Syntacticization of Discourse framework (Miyagawa 2022), this study postulates two projections above CP at the top of the root clause: Speech Act Phrase (SAP), which is the locus of illocutionary force, and Commitment Phrase (ComP), which is the locus of the interlocutors' commitment toward the proposition. The derivation of sentences with *uəi⁵⁵* is sketched in (2). *uəi⁵⁵* is merged in Com_0 and selects a CP bearing the [IMP(ERATIVE)] feature. The earlier agreement or mutual understanding associated with *uəi⁵⁵* is merged in [Spec, ComP]. The urgency function of *uəi⁵⁵* is realized by the movement of *uəi⁵⁵* to SA_0. Finally, CP moves to [Spec, SAP], where it receives illocutionary force (cf. Deng 2015).

(2)   [$_{SAP}$ CP [$_{SA'}$ [$_{SA[uFORCE, EPP]}$ *uəi⁵⁵*] [$_{ComP}$ Commit$_{[COM]}$ [$_{Com'}$ [$_{Com[uIMP, uCOM, DIRECTIVE]}$ *<uəi⁵⁵>*] *<CP$_{[IMP]}$>*]]]]

Implications. (i) It may be the case that the syntactic and semantic properties of certain SFPs in Chinese are better accounted for within the Syntacticization of Discourse framework by positing ComP and SAP above the root CP (cf. also Zhang and Chen 2021; Wei 2023). (ii) Discourse-related information such as illocutionary force plays a part in syntactic computation (Ross 1970; Speas and Tenny 2003; Deng 2015, etc.).

Selected references (abbreviated)

Dun Deng (2015) The syntacticization of illocutionary forces and the root vs. non-root distinction. *Lingua*. **Shigeru Miyagawa** (2022) *Syntax in the treetops*. MIT Press. **Yuyang Wei** (2023) An investigation into the sentence final particle *kʰə²⁴* in Xiangzhou Mandarin. MA thesis, Guangdong University of Foreign Studies.

The Syntax-Discourse Interface Reaction -- The case of Mandarin *le₂*

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This paper investigates the behavior of *le₂*, a Mandarin sentence-final particle which indicates the inchoation and continuation of the state embodied in the sentence. Although (1a) and (1b) have the same proposition, because of *le₂* (1b) has obtained the reading that *ta* 'he' has become a professor and kept the status up to the reference time.

(1)   a.   *Ta shi jiaoshou.*   b.   *Ta shi jiaoshou le.*
              he be professor   he be professor SFP
              "He is a professor."   "He has become a professor."

Le₂ is semantically not compatible with clauses representing action, achievement or accomplishment. The second clause of (2) is thus incompatible with *le₂*, since it has clearly an activity interpretation.

(2)   *Yalin tuikai men, lazhe   Mengyi zoule   jinlai (*le).*
           Yalin open door hold-hand Mengyi walk Asp. in   SFP
           "Yalin opened the door and walked-in holding Mengyi's hand."

Given the constraint on the distribution of *le₂*, it is surprising that sentences (3) and (4) are fine with *le₂*, even though they describe activities or accomplishments.

(3)   *Wo chouyan le.*   (4) *Mengyi daguo   yimiao le.*
           I smoke SFP   Mengyi take Asp. vaccine SFP
           "I've begun the habit of smoking."   "Mengyi has taken the vaccine shot."

The explanation adopted in this paper is that the compatibility between *le₂* and its hosting sentence is influenced by factors of interface between syntax and semantics as well as that between syntax and discourse. Sentence (3) appears in isolation and allows several interpretations semantically and pragmatically, including a habitual reading which stands for a state and is thus compatible with *le₂*.

Sentence (4) represents an action but is compatible with *le₂* for other reasons, due to the interface between syntax and discourse. Sentences like (4) were frequently used during the COVID-19 period by gated community residents who forgot the vaccine certificate while leaving. Mengyi was stopped by the community guards when she tried to go out without a vaccine certificate. Her friend came to help by saying sentence (4), which is in fact a cause-effect complex sentence in the shape of (5). The cause clause depicts the action of taking vaccine shot and the effect clause tells the consequence, which is a state and compatible with *le₂*. The scenario encoded in (5) occurred hundreds of times every day during that period and the same effect clause would have been repeated again and again. In the discourse of Chinese, repeated constituents are considered old information and are likely to be omitted. The final *le₂* represents the speaker's evaluation of the current event and will stay as new information. The syntax-discourse interface thus turns sentence (5) to (4), which should be understood as (5).

(5)   *Mengyi daguo   yimiao, keyi chuqu le.*
           Mengyi take Asp. vaccine can go-out SFP
           "Since Mengyi has taken the vaccine, she can go out."

Sentence (4) is a good example for the syntax-discourse interface influence on syntactic distribution.

The 被 *bèi* passive as a genre-specific construction: Evidence from Chinese environmental discourse

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The 被 *bèi* construction (BPC) is widely recognized as the prototypical passive construction in Chinese. Despite being the subject of inquiry in studies ranging from syntax (Liu, 2016), semantics (Wenfang & Susumu, 2013), to second language acquisition (Chen & Liu, 2020; Locatelli & Iurato, forthcoming), its genre-specific discourse functions remain largely underexplored. Adopting a construction grammar approach, this study aims to address this gap by investigating the BPC from a functional perspective, ultimately contributing to the broader discussion on the role of genres in shaping grammar. The BPC's features were examined in a contrastive framework, with a particular focus on Chinese environmental discourse. The study used a tailor-made multi-genre corpus, the so-called *Chinese Corpus of Environmental Discourse* (CCED), while the *Lancaster Corpus of Mandarin* Chinese served as a reference corpus.

Employing a mixed-method approach that combines quantitative and qualitative analyses, the findings reveal recurring patterns at both the domain-specific and genre-specific levels. At the domain level, a strong correlation emerges between negative connotation, low agent specificity, and generic-event sentences, as in (1), which are consistently found across different genres within the CCED. Similarly, positive connotations and high agent specificity predominantly appear in constructions describing isolated events, as shown in (2).

(1) 环境被破坏。
   'The environment has been damaged.'

(2) 习近平生态文明思想宣传教育项目被省精神文明委员会授予"优秀志愿服务项目"。
   'The Xi Jinping Ecological Civilization Thought Propaganda and Education Project was awarded the "Excellent Volunteer Service Project" by the Provincial Spiritual Civilization Committee.'

From a genre-specific perspective, the BPC exhibits a strong tendency toward positive connotation in formal registers that reference authorities and prominent figures, such as official reports and the press. Conversely, its typical adversative semantics is more evident in academic prose and colloquial registers. These phenomena collectively demonstrate the nature of the BPC as having genre-specific characteristics, and highlight its strategic use to (i) frame negative events as law-like truths creating an impression of neutral narration, (ii) emphasize positive occurrences through detailed descriptions to influence reader's perception, and (iii) remove any implications that might link the speaker to a potentially contentious causal interpretation of the statement.

References
Chen, C.; Liu, F. H. (2020). L2 acquisition of the bei passive in Mandarin Chinese: A constructionist approach. Chinese as a Second Language *Research*, 9(2), 169-198.
Liu, N. (2016). The structures of Chinese long and short *bei* passives revisited. *Language and Linguistics*, 17(6), 857-889.
Locatelli, L.; Iurato. A. (forthcoming). The acquisition of Chinese 被 *bèi* passive construction by L1 Italian learners: A preliminary study. *CSL*.
Wenfang, F.; Susumu, K. (2013). Semantic and discourse constraints on Chinese Bei-passives. *Linguistics & the Human Sciences*, 8(2), 205-240.

Towards a typology of progressive aspect marking in Sinitic

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Compared with other aspects of grammar, the aspectual systems of Sinitic languages have received relatively more scholarly attention (e.g. Chappell 1992, Shi 2005, and Rao 2011). Nevertheless, sample-wise, the existing studies are, generally speaking, neither balanced nor comprehensive; goal-wise, they aim at providing a descriptive account in general, rather than a typological and/or historical analysis. Also, the aspectual category of progressive in Sinitic appears to be understudied, especially from a typological perspective.

In this paper, we present the results of a first pilot study of progressive aspect marking in 41 Sinitic varieties that employ the *zài* 在-type progressive. The dialects considered belong to the Mandarin, Gan, Xiang, Min, Hakka, and Yue groups. We conceive this pilot study as a first step in developing an exhaustive typology of progressive marking constructions in Sinitic. In our sample, we observed four different marking patterns:

Type I: Preverbal single marking

(1)	张三	在	打	李四
	Zhāngsān	*zài*	*dǎ*	*Lǐsì*
	Zhangsan	PROG	hit	Lisi

'Zhangsan is hitting Lisi' (Standard Mandarin)

Type II: Post-VP single marking

(2)	他	打	麻将	在
	Tā	*dǎ*	*májiàng*	*tsə*
	3SG	hit	Mahjong	PROG

'S/he is playing Mahjong' (Huoshan Jianghuai Mandarin; Zhu 2022, p. 10)

Type III: Verb suffix

(3)	佢	吃在	饭
	qú	*chī-zài*	*fàn*
	3SG	eat-PROG	food

'S/he is eating' (Cangwu Yue; Xie 2020, p. 35)

Type IV: Preverbal and postverbal double marking

(4)	现在	还	有	谁
	Xiànzài	*hái*	*yǒu*	*shuí*
	now	still	Have	Who
	在	看	电视	在?
	zài	*kàn*	*diànshì*	***zài***
	PROG	watch	TV	PROG

'Who is still watching TV now?' (Baokang Southwestern Mandarin; Chen 2006, p. 56)

After illustrating the morpho-syntactic strategies found in our sample, we shall discuss the typological patterns and areal distribution sources for those constructions, and their pathways of grammaticalization. Also, we shall offer comparative remarks with Sinitic languages adopting other 'be.at' verbs as markers of progressive aspect, as e.g. Zihu Min 那 *nã* (Peng 2017), as well as the parallel 'be.at' + locative marker construction, as e.g. Tunxi Hui 是莫里 *ɕi²⁴-mo³¹le* 'be.at-dist.dem' (Lu 2018).

Cited works

Chappell, Hilary. 1992. Towards a Typology of Aspect in Sinitic Languages. Editorial Committee of the Institute of History and Philology, Academia Sinica. Jingnei Yuyan ji Yuyanxue: Hanyu Fangyan 境内语言暨语言学：汉语方言 [Chinese Languages and Linguistics Volume I: Chinese Dialects], 1 (1). Taipei: Academia Sinica, 67-106.

Chen, Shuang (陈爽). 2006. Hanyu Fangyan Jumo Zhuci "zai" de Leixingxue Kaocha ji Lishi Tanyuan 汉语方言句末助词"在"的类型学考察及历时探源 [A typological Investigation of the Auxiliary Word "zai (在)" at the End of the Sentence in Chinese Dialects and the Study on its Origins]. *Journal of Huizhou University* (*Social Sciences Edition*). 2006(1): 55-60.

Lu, Wen. 2018. *Aspects of the grammar of Tunxi Hui: A Transitional Sinitic Language*. PhD Thesis. The University of Hong Kong.

Peng, Shuiqin (彭水琴). 2017. Jiangxi Yushan Zihu Minnanhua Yufa Yanjiu 江西玉山紫湖闽南话语法研究 [Study on the Grammar of Zihu Minnan Dialect of Yushan in Jiangxi Province]. MA Thesis. Nanchang University.

Rao Hongquan (饶宏泉). 2011. Hanyu Fangyan Sanzhong Ti de Gongyong Fenbu he Tezheng Hudong 汉语方言三种体的共用分布和特征互动 [The Distribution and Features of the Three Verbal Aspects in Chinese Dialects]. *Studies in Language and Linguistics* (31): 108-112.

Shi, Youwei (史有为). 2005. Hanyu Fangyan Dacheng Qingmao de Leixing Xue Kaocha 汉语方言"达成"情貌的类型学考察 [A Typological Investigation on the Mood and Aspect of Accomplishment in Chinese Dialects]. *Studies in Language and Linguistics* (3): 91-103.

Zhu, Xiaojuan (朱晓娟). 2022. Huoshan Fangyan Chixuti Biaoji "zai, zaidi" Yanjiu 霍山方言持续体标记"在、在底"研究 [A Study on the Continuum Marking "Zai, Zaidi" in Huoshan Dialect]. Master's Thesis. Central China Normal University, Wuhan, China.

Tracing the coinage of the grammar term 'modality' in Chinese: From 19th-Century neologisms to standardized terminology

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Due to its wide-ranging uses, the notion of *modality* is considered one of the most difficult to define; a further complication derives from the ambiguity of the Latin term *modus*, simultaneously related to *modal syllogism* and *verbal mood* (Chiurazzi 2009: 16), and from the twofold reading of terms as *mood*, related to the speaker's attitude as well as to the verbal mood. The aim of this paper is to shed light on how this ambiguity was addressed in the creation of the Chinese lexicon for modality and to trace the path that, beginning in the late 19th century, led to and, to some extent, facilitated the coining of *qíngtài* 情態 ('modality')

and *yǔqì* 語氣 ('phrasal mode') as the Chinese equivalents of 'modality' and 'mode' (Chappell and Peyraube 2016, 296). This analysis will begin by examining the translation of a set of terms related to modality in both its grammatical and philosophical dimensions. Such terminology was primarily coined through the creation of neologisms between the late nineteenth and early twentieth centuries, serving to render concepts used in Western logic and linguistics (see Masini 1993). We will first examine the morphological and semantic features of the renderings of *verbal mood/mood/mode* found in three different repertoires, namely, the coeval primers of Indo-European languages written in Chinese, English-Japanese dictionaries, and bilingual Chinese dictionaries (see Table 1).

Table 1: Chinese translation of 'verbal mood, mode' between 1859 and 1913

Source term	Target term	First attestation	Repertoire
VERB MOOD	*cítài* 辭態	Angelo Zottoli (1859, see Pellin 2009)	Primers of Indo-European languages
	fǎ 法	Cao Xiang 曹驤 (1874, Ibid.)	
	zhuàng 狀	Wang Fengzao 汪凤藻 (1887, 40)	
	yǔqì 語氣, *qíng* 情	Yan Fu 严复 (1905, ed. 1913, 48)	
MOOD (TEMPER)	動詞法 *dòngcí fǎ*	Shibata & Koyas (1883, 539)	English-Japanese dictionaries
	qì 氣, *xīnqíng* 心情, *yìqì* 意氣, *nùqì* 怒氣	Shibata & Koyas (1873, 730)	
	qì 氣, *xīnqíng* 心情, *qíngjǐng* 情景	Nakamura *et al.* (1989: 389)	
MODE	*yàngzi* 樣子, *fǎ* 法	Paul H. Perny (1869, 287)	Bilingual Chinese dictionaries
	yǔqì 語氣, *chéngshì* 程式	Yen Hui-c'hing 颜惠庆 (1910, 639)	
MOOD	*yàng* 樣, *fǎ* 法, *shì* 式, *mò* 模	Yen Hui-c'hing (1910, 644)	
	shì 式, *yàngshì* 樣式, *qìfēn* 氣氛	Richard & MacGillivray (1913, 40)	

Then we will present the terms rendering *modal, modality, mood of syllogism* found in philosophical texts adapted from Japanese, published between the mid-nineteenth and mid-twentieth century, such as the different editions of Inoue Tetsuirō *et al.* 1881-1884, 1902, and 1912 we will highlight the novelties introduced by Wang Guowei (1902) and compare them with entries found in the philosophical dictionaries, such as Richard & MacGillivray (1913), and, when available, with those found in the texts mentioned in Table 1. It will be shown that a comprehensive and distinct terminology, which clearly resolves the contrast between the linguistic vs. philosophical acceptations of the term 'modality,' is already found in the standard dictionary edited by Yen W. W. (Yan Huiqing 顏惠慶, 1877-1950).

Selected references

Chiurazzi, G. (2009). *Dalla critica della ragion pura alla critica della ragione ermeneutica. Kant, Husserl, Heidegger*. Roma: Aracne.

Masini, F. (1993). The Formation of Modern Chinese Lexicon and its Evolution Toward a National Language: The Period from 1840 to 1898. *Journal of Chinese Linguistics Monograph Series*, *6*, i–295.

Pellin, T. (2009). *Lessico Grammaticale in Cina (1859-1924)*. Milano: Franco Angeli.

Two itive verbs in Chaozhou (Southern Min, Sinitic): *kɯ*₃₃ and *lai*₃₃*kɯ*₃₃'go', A reference to Taiwanese

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This paper examines the contrast between the two itive forms in the Chaozhou dialect, a Southern Min variety of Sinitic mainly spoken in Guangdong, China. The first one, *kɯ*₃₃'go.' (the motion away from the speaker), is linked to the most common itive verb shared by many Sinitic languages (1). The second one is a dissyllabic form *lai-kɯ* (literally 'come-go') 'go'. However, like Taiwanese, *lai-kɯ* is restricted to hortative sentences with 1 person subject (including the addressee or not) as illustrated in (2).

(1) *tsao*₃₃*dzek*₅ *uã*₅₃ *kɯ*₂₁₃ *Tiõ*₅₅*tsiu*₃₃
     yesterday 1SG go₂₁₃ Chaozhou
     'Yesterday I went to Chaozhou.'

(2) *naŋ*₅₃   *lai*₃₃*kɯ*₃₃ *Tiõ*₅₅*tsiu*₃₃
     1PL_INCL go₃₃   Chaozhou
     'Let's go to Chaozhou.'

On the other hand, *lai-kɯ* cannot be used to express a motion which has already been completed at the time of utterance. Even when describing an intended future itive event, the dissyllabic verb is not felicitous with a second-person subject.

A similar verb has been described in other Southern Min varieties such as Taiwanese (Lin 1975, Guo 2005, Lin 2006, etc.), and in the Hakka dialect spoken in Liancheng (Fujian, Xiang 1997). For Chaozhou we only have rough outlines (Wang 1991).
This study analyses to what extent the selection of the canonical itive verb *kɯ*₃₃'go.' or the (more constrained) itive verb *lai-kɯ*'go.' depends on the mood and person constraints. We examine the two-way contrast between the two itive forms in four typical patterns. We argue that *lai-kɯ*'go.' may function as directionals, like the canonical itive verb *kɯ* 'go'. It behaves like the deictic verb *kɯ* 'go' after another verb to indicate the deictic orientation of the motion, following the constraints on the person subject and sentence type. We also discuss some issues which have not yet been addressed in previous studies on Taiwanese.
Our analysis is based upon data collected through television series and sentences elicited with native language consultants in China.

Keywords: Deictic verbs, imperative-hortative, modality, morphosyntax, Southern Min

Selected references:
Guo, Weiru. 2005.《指示趋向词"来"、"去"之句法功能及历时演变》 [Historical evolution and syntactic function of the directionals 'come' and 'go']. National Taiwan University, PhD thesis.
Lin, Shuangfu. 1975. On some aspects of the semantics and tonal behavior of Taiwainese Lai. *Journal of Chinese Linguistics*, 3 (2/3): 108-128.
Lin, Ying-Chin. 2006. 论闽南语的指示移动动词 [Some aspects of "spatial motion" in Taiwanese]. Academia Sinica, 613-624.
Wang, Yankun. 1991. 潮州话动词或处所名词前面的 "来" ['*Lai*⁵' before verbs or locative NPs in the Chaozhou dialect]. 汕头大学学报, 8 (1): 54-57.
Xiang, Mengbing. 1997.《连城客家话语法研究》 [Grammatical studies of Liancheng Hakka]. 语文出版社.

也是 *yě shì* ellipsis in Mandarin: a new perspective

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This research deals with the syntax of the Mandarin expression 也是 *yě shì* 'also' 'to be', which is used in conditions where in many languages the VP-Ellipsis is generally involved:

1) a. *Max went to the store, and Oscar did, too.* (May 2002:1094)
   b. 李四去商场了，张三也是。

Lǐsì	*qù*	*shāngchǎng*	*le ,*	*Zhāngsān*	***yě***	***shì.***
Lisi	go	shopping-mall	FP	Zhangsan	*also*	*be*

   'Lisi went to the shopping mall, and Zhangsan did, too.'

We propose that the **Mandarin ellipsis involving 也是 *yě shì* is not parallel to what is proposed for English**: the structure does not involve an ellipsis (as PF-deletion) of the part following 是 *shì*, instead 是 *shì* itself is the pronominalisation of the "missing" portion of the clause. Previous studies on *yě shì* (Wu 2002, Soh 2007, Su 2008, Wei 2009, Li & Wei 2009 a. o.) share the view that the elided portion is not VP-Ellipsis. However, there is still no consensus on the nature of *yě* and *shì*. In line with Yang (2020), we treat *yě* as an additive marker which is an adverb in the high IP area taking scope over negation. However, we argue that ***shì* in *yě shì* differs decisively from the copula** for the following reasons: (i) *Shì* in *yě shì* can be modified by an adverb, but only if *zhèyàng* "like this" is present; (ii) The copula *shì*, when the antecedent is a copular construction, and the focus-related marker *shì*, when the antecedent is a cleft, both must be negated when the antecedent is negative, while in all the other cases *yě shì* cannot be negated; (iii) *yě* cannot be used in isolation without the predicate (*wǒ yě, lit. 'I also').

Therefore, it seems clear that ***yě shì* cannot be modified nor separated, suggesting that the nature of *shì* is not verbal**. We then propose that *shì* in *yě shì*-ellipsis is not a copula, a verb or a focus marker either, but **it should be analyzed as an anaphoric demonstrative pronoun**, referring back to what previously mentioned. The reference *shì* can be the exact **corresponding linguistic antecedent in the previous sentence**, i.e., the TP (including the NegP), or **it can also be the loose extra-linguistic contextual antecedent which allows sloppy reading**. Crucially, it has been extensively shown that *shì* in Classical Chinese (10th-2nd B.C.) was indeed used as a demonstrative pronoun or as an affirmative particle (Chang 2006), while the copular use only emerges around 1st century A.D. (Wang 1958). Notice that in **Modern Chinese, a considerable number of *shì* still possess the grammatical attributes of a demonstrative pronoun** (Qu & Yu 2013), as for instance its grammaticalized form in functional words such as *dàn-shì* ('but', lit. 'despite that'), *xiān-shì* ('first', lit. 'prior to this'), *rú-shì* (lit. 'like this') etc. Finally, we also argue that it is the additive marker *yě* 'also' with its anaphoric nature that has helped to preserve the anaphoric use of *shì* as a pronoun.

Selected References

Li, A. & T-C. Wei. 2023. Sentence Fragment Ellipsis in Chinese. In *Oxford Research Encyclopedia of Linguistics*; Qu, S.& Yu, Y. 2013. Study on shi as a Demonstrative Pronoun in Modern Chinese, in Ji, D., Xiao, G., *Chinese Lexical Semantics,* 416-426; Soh, H. L. 2007. Ellipsis, Last Resort, and the Dummy Auxiliary shi 'Be' in Mandarin Chinese. *Linguistic Inquiry* 38, 1: 178-188; Wei, T-C .2009. The focal structure in Mandarin VP-ellipsis: A Cross-Linguistic Perspective. *Taiwan Journal of Linguistics* 7,1: 85-119.

重建海南閩語聲母鏈變的次序

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　　海南的語言資源非常豐富，彼此接觸頻繁。其中海南閩語和臨高語之間的接觸曾引起過不少學者的興趣 (Solnit 1982; 何大安 1987; 劉新中 2006; 辛世彪 2010; Yue 2010 等)。他們都指出：海南閩語在民族語言的影響下，聲母位置的輔音產生出一道拉變鏈 (drag chain)，而音變的起端是兩個內爆音 (implosive) 的產生，即 *p- > ɓ- 和 *t- > ɗ-。隨後的音變，主要是為了填補 *t- 遺留下來的空缺而形成的。現在我們掌握了更多語料，發現前人所擬的變鏈其實不無可議的地方。本文會以原始臨高語 ('Proto-Ong Be'='POB'; Chen 2017, 2018) 和原始閩南語 ('Proto-Southern Min'='PSM'; Kwok 2018) 為起點，探討海南閩語聲母所發生過的一系列演變，並嘗試重新為這些音變排序。

　　根據前人對海南歷史移民的考察 (蘇雲峰 2002 等)，海南閩語可能沒有單一共同祖語，即海南閩語聲母經歷過的鏈變，可能不止一條。根據對六種海南閩語方言的分析，我們歸納出四種鏈變類型。這些方言都經歷了內爆音化，但對於如何填補 /t-/ 的空缺，卻有不同的策略：

	代表方言	音變 1	音變 2	音變 3	音變 4	音變 5	音變 6
類型 1	文昌	✓	✓	✓	✓	✓	✓
類型 2	萬寧	✓	*s- > θ-	✓	✓	✓	✗
類型 3	三亞	✓	✗	(✓)	✗	✗	✗
類型 4	樂東黃流	✗	✓	✓	✗	✗	✗

表中的音變 1 至音變 6 分別是 (1) PSM *ts- > t-/_{a, o, u}、(2) *s- > t-、(3) *ts- > s-、(4) *t- > x-、(5) *k- > x-、(6) *p- > ɸ-。大部分海南閩語都以 *ts- 補 t-，成為鏈變的第二環。這一方面和塞音、塞擦音擁有相近的特徵有關，另一方面也可能牽涉到 POB 聲母的布局。POB 缺乏帶 *ts- 聲母的詞 (Chen 2017:251)，因此臨高人在轉用閩語的過程中容易出現音變。類型 4 的方言沒有經歷音變 1，構成例外，因為它和其他方言根本不在同一條鏈變上，形成的年代應該較晚。音變 2 和音變 3 為一組，屬於推變鏈 (push chain) 的關係，即 *s- 在 *ts- > s- 的壓力下向 θ- (> t-) 轉移。其動因可以從 POB 的音系 (缺乏塞擦音) 和類型 3 的方言中找到端倪。關於後一種因素，我們留意到類型 3 方言 *ts- > s- 的音變並不徹底，許多口語詞仍保留原來的 *ts-，如三亞「塍」/tsaŋ/、「吹」/tsui/，所以 *s- 移往其他輔音 (音變 2) 的壓力會顯得較小。音變 4、5、6 都屬於進行中的演變，主要流行在北部方言中，那也是臨高語的所在地。海南閩語聲母的演變同時涉及拉變鏈和推變鏈，時代跨度亦長，是研究歷史音變極佳的素材。

楚簡所見戰國雅言詞在楚方音中發生的音變

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戰國楚方言當為楚國貴族在周成王時期（公元前 1055 年—前 1021 年）被封於丹陽之後，歷經大約六七百年，在戰國中期左右形成。在戰國楚方言的形成過程中，的確已經產生了大量的楚方言詞，但其中大部分是沿襲自商周的雅言詞。雅言詞進入到方言中語音往往會發生變化，類似現代方言中的文讀。從楚簡中的楚人習用字可以探索其中的音變。

1. 戰國雅言詞進入到楚方言後，聲母發生的音變

1.1. *ŋ->*n-音變

出土文獻資料表明，一些中古日母字的上古音來源是*ŋ-，如"邇""駬""熱"及"兒"聲系字。音變過程是*ŋ->*n->n̠-。音變條件是主元音為前元音-i、-e。其中*ŋ->*n-音變發生在戰國時代。

1.2. *l->*d-

鄭張尚芳、潘悟雲和白一平三位先生都主張有一部分中古定母字的上古來源是流音*l-。古文字和出土文獻資料可為此說提供證據，並進一步確定音變發生的時代和地域。如"相同"之{同}，商代就已出現。從"庸"在甲骨文有從"用"声和"同"声两个异体来看，"同"的上古声母最初是*l-。楚簡"同"聲系字還與"童"聲系交替的例子表明，{同}的聲母在戰國楚方音裏都已經塞化變成*d-。

1.3. *s-l->*s-t-

白一平指出，有些中古書母字的上古來源是*s-t-、*l̥-等。白先生構擬"知識"之"識"的上古音為*s-tək。不過，從古文字和出土文獻資料來看，"知識"之{識}上古音聲母當構擬為*s-l-。在戰國楚方音中，{識}的聲母發生了*s-l->*s-t-音變。

1.4. *Gl->*l-

潘悟雲和白一沙的上古音系統都為一部分中古以母字構擬小舌音來源，但有所不同。白一沙系統認為音變過程時*G->j-。潘悟雲、劉航宇則改為*G->ɦi->j-（以母）和*Gʷ- > ɦʷi- > jʷ-（以母，中古帶前高元音）。從古文字和出土文獻來看，我們認為這類中古以母的來源是*Gl->*l->j-。

2. 戰國雅言詞進入到楚方言後，韻母發生的音變：元音大轉移的啟動

徐通鏘在王士元詞彙擴散理論的基礎上提出離散式音變，其特點是"每個詞都有它自己的歷史"。離散式音變與語言的歷時的非線性結構 相聯系。離散式音變在完成了它的演變過程以後就會呈現出演變的規律性。這對我們的研究頗具啟示：在東漢大規模元音大轉移之前，元音的音變在任何時代都可能發生。趙彤、王志平、蔡一峰等先生據戰國楚簡，提出漢語史上首次"元音大轉移"在戰國已經開始，是完全有可能的。在楚簡中，*aI>*a、*a>*ɔ、*o>*u，已形成一個後高化的推鏈音變鏈條。

參考文獻

白一平 2016 《關於傳統音韻學的一些問題》，出土文獻與中國古典學國際學術研討會論文。

潘悟雲、劉航宇 2023 《喉音再考》，《民族語文》第 5 期。

徐通鏘 1996 《音系的非線性結構原理和語音史的研究》，《民族語文》第 6 期。

鄭張尚芳 2013 《上古音系》（第二版），上海：上海教育出版社。

朱曉農 2005 《元音大轉移和元音高化鏈移》，《民族語文》第 1 期。

出土文獻《詩經》中的音變現象及其相關問題探究

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　　上古音在韻部離析及韻母構擬的研究主要得力於《詩經》，自明清學者開始離析韻部，乃至當代學者使用西方語言學的方法對於上古韻母進行構擬，都仰賴《詩經》做為主要材料。近期多種出土文獻《詩經》的整理出版，更是對於古韻研究產生推波助瀾的效果，這些文獻的時代定位清楚，能讓學界更清楚古代漢語的樣貌。據此，本文將以出土本的《詩經》為主要材料，論題核心是由六元音的上古音系統探究其中歷時與共時的音變現象，並確立通假條件以此探討古文字的釋讀問題。使用的材料依時代分別為安大簡、漢簡與敦煌本《詩經》，相關銘文、簡帛、石刻材料中的引《詩》片段也將納入比較分析。

　　由於先秦時期對於標準字體的觀念還不發達，所以書寫時以同音或音近字代替的情況相當普遍，也就是所謂的「通假」。在不同版本《詩經》的異文中，通假的比例也相當高，這些通假異文的材料就成了探求古音變化的線索。然而有一些異文的成因比較複雜，它們表面上是共時通假關係，但實際上存在音變問題。例如：《詩經．鄘風．君子偕老》第二章「玼兮玼兮，其之翟也。鬒髮如云，不屑髢也。」表面上是上古藥部字的「翟」與錫部字的「髢」合韻，但其實今本《詩經》的「翟」字存在歷時音變，王力(2013:87)即指出上古藥部四等與錫覺兩部四等合流成為中古錫韻。等到出土本《詩經》發布之後，今本《詩經》藥部的「翟」在安大簡 88 作錫部的「易」，在敦煌本 S789 及 P2529 作錫部的「狄」。新的材料證實了王力合流音變的說法，此外出土本《詩經》也支持 B&S 系統將藥部分出前元音 e 的假設，也就是跟錫部*-ek 合韻的不是所有的藥部字，而是前元音的藥部*-ewk。這跟白一平(2019:44)指出月質合韻集中在前元音月部*-et 的現象平行。

　　除了歷時音變之外，透過不同版本《詩經》異文的比較，也能探究共時音變現象。例如：《詩經．小雅．小弁》第二章：「假寐永嘆」一句的「假寐」在漢代石經作「監寐」。其中魚部字的「假」*-a 異文作談部字的「監」*-am，這是受到鄰接明母字「寐」*m-鼻音聲母的逆同化作用影響，屬於語流音變而非共時通假。

　　綜上所述，本文將結合新構擬的上古音系統與出土文獻，針對《詩經》當中的音變現象進行探究，試圖離析不同的音變類型，以確立共時通假、歷時音變與共時音變的條件。

【參考文獻】
白一平 Baxter, William H. 2019.〈上古漢語韻部的再分部——以月部為例〉，《饒宗頤國學院院刊》第 6 期，頁 29-71。
王力 2013.《漢語史稿》（王力全集第一卷），北京：中華書局。

【簡稱】B&S：Baxter & Sagart 白一平與沙加爾；P：Pelliot 伯希和；S：Stein 斯坦因。

从复杂动词到体词性量化词："或"在上古汉语后期的演变

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上古汉语中有一个表达"有人/有物/有的人或物"义的"或"，汉语学界的多数学者将其视为名词性不定代词（周法高 1959/1990；郭锡良等 1999；杨伯峻、何乐士 2001；董秀芳、郝琦 2019 等），少数学者将其视为副词（Kennedy 1964；杜少先、杜占先 1989；魏培泉 1999 等）。任荷（2025）采用多项证据系统论证了"或"既不是相当于英语"someone/something"的名词性不定代词，也不是量化副词，而是融合一个"存在"义动词成分和一个不定指代名词成分的复杂动词，即"有+pron."；"或 VP"句本质上是一个复谓结构，"NP 或 VP"句则是主谓结构（NP 是主语，"或 VP"是复谓结构所充当的谓语）。该文所用语料主要是代表先秦汉语的传世及出土文献，其结论基本适用于先秦时期的"或"。然而，代表西汉汉语的语料显示，"或"在汉代以后可能发生了新的变化（参看谷峰 2024）。那么，"或"的句法语义属性在上古汉语后期是否发生了变化？发生了怎样的变化？其触发因素是什么？——这正是本文所要讨论的问题。

基于对上古文献中相关用例的全面考察，本文指出，复杂动词"或"在上古汉语后期发生了句法语义演变，触发变化的语境是"NP 或 VP"句。该句式中的"或"被重新分析为表达"部分量化"义的体词性成分——从语义上看，只保留了部分量化的语义功能，不再具备独立指称名物的功能；从句法上看，可被分析为主语（主谓谓语句中的小主语）或状语（体词性成分作状语），其句法义性质与现代汉语中的"有的"具有相似性。

作出上述判断的依据主要是以下三点：（1）在战国末期文献（如《荀子》《战国策》《吕氏春秋》）中出现了"人或 VP"这类表达，说明"或"在语义、句法上的独立性减弱。（2）先秦时期的"NP 或 VP"句只能在"或"前插入副词，汉代以后的"NP 或 VP"句则可在"或"后插入副词（"将、未、颇"等），说明"或"与"VP"之间的关系变得松散。（3）汉代以后的"或"还能作定语修饰名词，构成"或人、或时"等表达（参看魏培泉 2004），说明"或"是体词性成分（而非副词）。

文章最后讨论了"或"在"NP 或 VP"句获得重新分析的原因，以及包含多个并列小句的"（NP）[或 VP，或 VP……]"句式中"或"的语法化历程。

【部分参考文献】

大西克也（2014）试论上古汉语光杆名词主语句及其指称特点，何志华、冯胜利主编《承继与拓新：汉语语言文字学研究（下）》，商务印书馆，北京。董秀芳、郝琦（2019）从上古汉语一批代词形式的消失看汉语量化表达的变化，《当代语言学》（4）。

谷 峰（2024）上古汉语否定词"莫"研究的若干议题，《中国语文》（4）。

任 荷（2025）上古汉语"或"的句法语义属性探析，《语言学论丛》（1）。

魏培泉（1999）论先秦汉语运符的位置. In Alain Peyraube and Chaofen Sun (eds.), *Linguistic Essays in Honor of Mei Tsu-lin: Studies on Chinese Historical Syntax and Morphology*. Paris: CRLAO, Ecole des Hautes Etudes en Sciences Sociales.

魏培泉（2004）汉魏六朝称代词研究，《语言暨语言学》专刊甲种之六，"中研院"语言学研究所

张定（2019）汉语否定不定代词的类型转变，《古汉语研究》（2）。

「大中華語言描寫文獻資料庫」的建構與中國語言描寫之發展與現狀——文獻計量學研究
The Construction of the "Database of Descriptive Literature on Languages in Greater China" and the Development and Current Status of Linguistic Description of China: A Bibliometric Study

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　　中國具有非常豐富的語言資源，幾十年來學界對中國的語言及方言進行了無數的調查和研究，至今累積的文獻卷帙浩繁。「大中華語言描寫文獻資料庫」是一個比較研究和類型學研究導向的語言學文獻資料庫，目標是窮盡收錄對大中華地區語言及方言進行綜合性描寫的長篇文獻。「綜合性描寫」指並非針對特定語言特徵的綜合描寫；「長篇文獻」指篇幅相當於專著的文獻。

　　資料庫的建構包含三個工序：1. 數據收集、2. 數據整合、3. 數據標註。

1. 數據收集　以各種不同的檢索條件從以下來源收集相關書目，共得數據 33972 條。

	專著	碩博論文
內地	讀秀、集獻	知網
香港	港書網（HKALL）、香港中文大學新亞書院錢穆圖書館館藏目錄	LSHK 的本地大學語言學相關學位論文普查（2011-2021）
澳門		澳門文獻港
台灣	國立臺灣大學圖書館館藏目錄	臺灣博碩士論文知識加值系統
國際	Glottolog	

2. 數據整合　以 Python 根據 ISBN、題目、出版年份來合併不同來源的相同文獻，然後人手除錯。整合後數據為 25132 條。

3. 數據標註　篩選出為資料庫收錄對象的數據後，對每條數據進行以下方面的標註：
WORK_ID（對同書不同版本或學位論文出書等編配相同 ID）、內容類型（語法、詞彙、語音、概述）、形式類型（專著、博士論文、碩士論文）、受描寫語言或方言的中英名稱、於其他計劃中的識別碼（ISO 639-3、Glottocode、語保平台 ID）、親緣資訊、使用地。

　　基於上述資料庫的數據，我們針對描述中國境內語言或方言的著作進行文獻計量學的分析，以探討中國語言描寫的發展與現狀。具體問題包括：多少方言點得到了相當於一本專著的描寫？還有甚麼語言或方言缺乏基本的描寫？文獻在描寫對象上的分布是怎樣的？何地之出版機構、學校或作者對於描寫文獻的累積有更大貢獻？有甚麼不同的語言描寫框架和思潮？以上各個問題都可以分別作出歷時分析和共時比較。

道经"自创字"研究刍议

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论文摘要：自创字，是指由道教独创、并只在道经中使用的特殊文字（楷体字），是通行汉字系统中所没有的文字。自创字具有重要的研究价值：首先，自创字为汉字研究提供了新材料；自创字研究的结论，丰富了汉字研究的理论。其次，自创字体现了道教文化，为文字与文化关系研究，提供新思路。最后，自创字为道经及道教的相关研究，提供了新视角。本文拟从自创字的产生原因、字形特点、造字法、形音义关系、造字文化心理等角度，对道经中的自创字进行分析研究。

一、产生原因。自创字所记录的词义，或为道教特有概念的词义，或为普通概念的词义。自创字的产生，是多方面原因共同造成的。

首先，记录道教特有词义的需要。道教特有的神鬼名讳、星斗名称、修行秘法等，通行汉字系统中，没有与之对应的字，因此需要独创文字来记录。

其次，记录普通概念的词义，也力求独特的文字。普通词义，在汉字系统中，已有文字来记录，而道教则另创一字，以示不同。道教追求文字和经典的神圣性、神秘性，因此通过创造与通行汉字不同的文字，表达道经的神圣性。在这样的客观要求和主观意愿共同作用下，道教自创了很多文字，成为道教独特的文字表达形式。

二、字形特点。自创字在字形方面呈现明显特点，大致分为几类：1."雨"字头的自创字，多为神真的名讳用字，如霂。雨在道教中可象征天神，或与天神相关的概念。2."门"字外廓的字，也多为神真名讳，如闿。3."鬼"字旁的字，多为鬼魅名称或星斗名称，如魤、魖。4."女"字旁的字，多为女性神真名讳，如嬩。5."言"字旁的字，多与诵读道经有关，如 、䚉。6.其他自创字。从字形来看，自创字的形成，并非单个的、偶然的，而是成系统的，具有较强的规律性。7.其他类。

三、造字法。自创字一般采用会意和形声两种造字法。自创字几乎都是合体字，而会意和形声，都是造合体字最重要的造字法。会意字如㿝，是"药"的自创字。会意的自创字，其部件之间的意义联系，多源自道教或传统文化中的思想观念。形声字如魤，从鬼，此声。又如芦，从尸，非声。

四、形音义关系。自创字的形音义关系呈现特殊性。自创字特殊的构形表意，体现了道教文化因素。比如用含"雨"的字表示神仙名号，应与古人的"祈雨"有关。古人认为，天神掌管着行云布雨等自然现象。向天神祈雨，天神若能降雨，即具有神力。因此古人将天神与降雨联系起来，认为能致雨的就是神灵。这与"靈""雺"的造字理据类似。有的自创字，与通行汉字同形，但音义皆不同。比如自创字"杆"，神真名，道经注音为"通发切"，与杆 gān 的音义完全不同，仅仅字形相同。二者是一对同形字。这也反映出汉字形音义关系的多维性、或然性。

五、造字文化心理。文字与文化关系密切，文字是文化的载体。自创字是道教特有的文字，是道教文化的产物，体现了道经文化或中华传统文化因素。我们通过分析自创字的构形表意、造字心理等，探寻其所蕴含的文化因素。

综上，与通行汉字相比，自创字有着多方面的特点，具有重要的研究价值。

参考文献：
1.冯时.中国古文字学概论[M].北京：中国社会科学出版社，2016.
2. 陆锡兴.利用道教文字创造的民族文字[J].《民俗典籍文字研究》，2017（02）.

东莞粤语的体貌助词"紧"——描写与溯源

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　　杨永龙（2005）以汉语史上的持续体助词"定"为例，联系客家话、吴语、粤语中的"稳定""牢""实""稳""紧"等，推导出一条产生持续/进行体标记的语法化路径，即：

　　"稳紧"义形容词（结果补语）>唯补词（动相补语）>持续体助词>进行体助词

　　今天广州、香港粤语的"紧"并不完整拥有上述语法化路径中全部环节的用法，比如不能用作持续体助词。杨永龙（2005）立足广州、香港粤语，着重联系阳江、信宜、怀集粤语"紧"的多种功能，认为广州、香港表进行的"紧"应该源于形容词"紧"。不过，片冈新（2015）认为，在考察广州和香港粤语"紧"的时候，不可以用粤西或广西等远离广州的粤语和客家方言语料来填补广州和香港粤语"紧"所缺少的功能。片冈新（2010，2015）考察了早期粤语及今天广州、香港粤语"紧"的用法，发现十九世纪的粤语并没有持续体功能，由此认为粤语"紧"在作为进行体助词以前，没有先具备作为持续体的功能。

　　我们发现，与广州、香港粤语临近且同属广府片粤语的东莞粤语，既存在"紧"作为进行体助词的用法，例如（3），也存在"紧"作为持续体助词的用法，例如（4）和（5）（东莞粤语例句来自《东莞方言调查报告》2022）

　　（3）东莞石龙：落紧雨，唔好走！（下着雨，别走了！）

　　（4）东莞高埗：床处睏紧一个老嘢。（床上躺着一个老人。）

　　（5）东莞石龙：企紧，唔好喐！（站着，别动！）

　　于是东莞粤语的体貌助词"紧"与持续体助词"住"的分工格局，与广州、香港粤语"紧"表进行、"住"表持续的格局有所不同，试比较例（4）、（6）、（7）与例（8）、（9）：

　　（6）东莞高埗：床处睏住一个老嘢。（床上躺着一个老人。）

　　（7）东莞高埗：麻口落紧雨。（外面在下雨。）

　　（8）广州市区：床上睏住（/*紧）个老人家。（床上躺着一个老人。）

　　（9）广州市区：出便落紧雨。（外面在下雨。）

　　本文将讨论以下问题：（一）东莞粤语"紧"的句法语义功能是怎样的？它与体貌助词"住"如何分工？与广州、香港粤语有何异同？（二）结合周边方言及早期文献，探讨东莞粤语"紧"的体貌助词用法从何而来，是自产的还是从外方引进的？

参考文献

杨永龙 2005 从稳紧义形容词到持续体助词——试说"定"、"稳定"、"实"、"牢"、"稳"、"紧"的语法化，《中国语文》第 5 期

片冈新 2010 粤语体貌词尾"紧"的演变与发展，香港中文大学博士学位论文

片冈新 2015 从粤客语语料看进行体标记的特性与语法化，《汉语语料库及语料库语言学》第 25 期

庄初升[主编] 姚琼姿、刘燕婷、邓秋玲、庄初升等着 2022《东莞方言调查报告》，广东人民出版社

高熟悉度汉语三字惯用语字面义加工的 ERP 研究

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惯用语（idioms）是一种具比喻义的固定表达，其比喻义通常与字面义无关。如"拍马屁"，是指谄媚、阿谀、奉承的行为。那么，惯用语加工过程中，是否存在字面义加工？该问题得到了学术界的广泛关注。我们使用实验的方法结合事件相关电位（ERP）技术对高熟悉度汉语三字惯用语是否存在字面义加工的问题进行了实证研究。

本实验招募被试 24 名（男性 9 人），年龄在 18-30 岁之间，母语为汉语。实验中，我们采用语义启动范式，在惯用语启动条件下，启动词为"动词+名词"构成的高熟悉度三字惯用语，如"炒鱿鱼"；另外作为对比条件，我们还设置了启动词为"动词+名词"的三字动宾短语，如"搬桌子"（只有字面义，没有比喻义）。我们将启动词放入句子语境，作为句子尾词出现。目标词跟启动词的关系为字面义相关或字面义不相关两种，要求被试对目标词进行命名，并记录命名时间和脑电反应。该实验范式的逻辑为，如果启动词的字面义得到加工，那么其会影响随后出现的与其语义相关的目标词的加工，表现为：在行为学的反应时间上，与启动词字面义相关的目标词的反应时间会显著短于与启动词字面义不相关的目标词，出现语义启动效应；在 ERP 的 N400 成分上，与启动词字面义相关的目标词的 N400 波幅显著低于与启动词字面义不相关的目标词的 N400 波幅，出现 N400 效应。实验结果显示，动宾短语启动条件下，含动宾短语的句子尾词对字面义相关目标词产生语义启动效应，命名字面义相关目标词的时间显著短于字面义无关目标词；而且脑电结果与行为学结果相一致，与动宾短语启动词的字面义相关的目标词的 N400 波幅显著小于与动宾短语启动词字面义不相关的目标词的 N400 的波幅，表现出典型的语义启动 N400 效应。而惯用语启动条件下，被试对与惯用语字面义相关或字面义不相关两类目标词的反应时间无显著差异，两类目标词的 N400 波幅也不存在显著差异。因此，我们的实验无论从行为学还是脑电的结果上看，惯用语都没有像作为对照的动宾短语一样，对随后出现的字面义相关的目标词产生语义启动效应。因此，我们推测，惯用语作为一种固定化的表达，在语境下，高熟悉度惯用语其字面义并未进行加工。Zempleni 等（2007）曾提出惯用语在线加工中，当惯用语字面义与上下文语境不匹配时，大脑将立马暂停字面义分析，寻求其比喻义。我们的实验结果与他们的观点具有一定的一致性。

对于语境是否限制了惯用语的字面义加工，以及低熟悉度惯用语的语义加工机制如何，还需要进一步的探讨。

主要参考文献
Zempleni M Z, Haverkort M, Renken R, et al. Evidence for bilateral involvement in idiom comprehension: An fMRI study[J]. Neuroimage, 2007, 34(3): 1280-1291.

汉语和东亚语言数词分类词类别功能的共性与差异

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1.研究背景

由于量词依附于数词，通常出现在数量结构中，因此在类型学中称为数词分类词。但学界对量词的原始功能持有不同观点，大致可归纳为以下三种：一、对名词进行分类；二、是计量单位，分类功能仅为附带作用；三、使名词个体化。尽管观点存在着分歧，但无法否认的是部分量词在不同程度上具有类别化的作用。而且需要指出的是，数词分类词的分类标准皆因语言不同而存在差异。比如，汉语中没有专门用于指人名词的个体量词（除非是带有特殊情感意义的量词）。然而韩语中则必须使用专门表示"人"的分类词"myeong"，且这一分类词只能用于指人名词。日语也使用数词分类词"ri/nin"，以将"人"与其他（有生或无生）名词加以区分。(Sera et al., 2023:606)

(1) a. 一个学生　　　　　b. 一个西瓜

(2) a. *haksaeng han myeong*　b.**su-bag han myeong*　c. *su-bag han tong/gae*（韩语）

　　　student　one　CL　　watermelon one　CL　　watermelon one　CL

(3) a. *gakusei hito-ri*　　　b. **suika ik ri/nin*　c. *suika ik ko*　（日语）

　　　student one-CL　　　　watermelon one CL　　watermelon one CL

类型学家指出数词分类词的类别化语义标准有生命度、形状、维度和功能等。以往的研究主要聚焦于单一语言或特定分类词，而本研究将通过覆盖更广泛的东亚语言资料，探讨这些语言在数词分类词语义范畴系统中所表现出的共性与差异。

2.研究方法

本研究所采用的方法与研究思路不同于以往的相关研究。田意民等(2002)曾针对 9 个汉语量词与 90 个具体名词的结合方式进行调查，Sera et al.（2023）则考察了 135 个汉语、日语、苗语名词与数词分类词的结合关系。相比之下，本研究为了在更大范围内系统分析数词分类词的语义搭配特征，考察汉语、泰语、越南语、韩语、日语等五种东亚语言中名词与数词分类词的搭配情况。具体而言，首先以数词分类词较为丰富的汉语为基准，筛选出可与量词搭配的名词。主要数据来源是《现代汉语语法信息词典》，其中收录了两万余条数量名结合信息（俞士汶等，2011）。随后，为了从中选取使用频度较高的名词，本研究结合BCC 语料的词频数据进行考察，选出高频度名词。然而纯粹依赖频率标准会导致某些语义领域（尤其是抽象概念或低频实体）被系统性忽略。为弥补这一缺点，本研究引入 SUMO (Suggested Upper Merged Ontology)的多层级概念框架，在保证高频性的同时对名词进行语义均衡抽样，最终从人类(47)、动物(35)、植物(46)、人造物(112)和抽象概念(108)五大语义域中择取约360 个名词。以"植物"类为例，本文依据"个体层级"与"解剖层级"两个层次对词汇进行分类，并在此基础上共选取了 46 个词。其中，"个体层级"包括树木、花卉、水果、蔬菜、草类、谷物等，而"解剖层级"则包括叶子、根、树枝等植物器官。随后，本研究在韩语、日语、泰语、越南语中查找这些名词的对应词汇，并评估其在上述东亚语言中是否同样属于常用词汇，以确保其代表性。

为了更深入探究数词分类词的语义范畴特征，本研究采用的是本体映射（Ontology Mapping）方法，将名词及其相关的数词分类词对应到上位概念体系中，比较不同语言在语义范畴上的异同点。以汉语"条"为例，该量词通常用于修饰具有线状特征的名词（如"一条绳子""一条蛇"），分别映射到"Physical > Object"下的不同子类（如 Artifact、Animal）。此外，汉语"条"还可与"新闻"、"规定"等抽象名词搭配，这些名词则对应于"Abstract > Proposition"范畴。相比之下，韩语和日语中用于表示"线状特征"的数词分类词适用范围更为狭窄，几乎不涉及抽象概念。通过本体映射，我们能够对东亚语言中数词分类词的语义范畴化方式形成系统认识。

3.研究内容

第一、东亚语言中数词分类词在分类时所依据的主要语义特征是什么？不同语言之间存在哪些差异？尽管学界普遍认为生命度、形状、功能、方向等是常见的分类基础（Croft，1994；Aikhenvald，2000），但对于在具体使用中哪一项依据具有更高的优先性仍存在争议。本研究通过对东亚五种语言中数词分类词的分析，探讨在这些语言中哪些语义范畴具有更强的分类作用，同时考察各语言之间的差异。

第二、数词分类词的发展程度与语言的语义范畴化范围之间存在怎样的关联？前人研究多以个案性描述为主，而本研究进一步区分数词分类词高度发达的语言（如汉语、泰语）与相对不甚发达的语言（如韩语、日语、越南语），并检验两组语言之间的类别化取向是否存在显著区别。为验证这一点，本研究将借助 SUMO 这一上位本体系统，分析各语言中"专用分类词所适用的名词"在概念层级上的分布特征，从而探讨分类词发展程度与语义范畴化扩展之间的相关性。

第三、数词分类词语言中，为什么部分名词只能与通用分类词（general classifier）搭配？这些名词共同拥有哪些语义特征？东亚语言中不少指示具体事物的名词也往往只能与通用分类词搭配。这一现象表明，"生命度""形状""功能"等典型的分类标准尚不足以全面涵盖所有名词的分类准则。因此，本研究通过跨语言的考察，归纳出这些名词的语义范畴特征，从而探讨哪些名词即便不通过专用分类词也能实现语义范畴化，并找出其中所存在的普遍规律。

本研究的分析不仅可以验证 Kiyomi（1992）、Croft（1994）及 Aikhenvald（2000）等关于数词分类词的论述，同时也尝试对现有研究中尚未充分讨论的问题进行补充和完善，为深入理解数词分类词的语义范畴化机制提供新的视角与思路。

汉语口语话题标记的韵律特征探究：以话题标记"这"为例

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汉语是典型的话题优先型语言（Li & Thompson，1976），近年来，汉语话题标记研究一直得到学界关注（徐烈炯、刘丹青，1998；袁毓林，2003；乐耀，2010；李秉震，2012；司罗红，2013；卢烈红，2020 等）。然而，以往研究**大多聚焦于**汉语话题标记的**句法、语义、话语功能**等方面，其**韵律**研究几乎还是**空白**。本研究聚焦汉语指示词"这"在口语中扩展出的一种重要功能角色——话题标记，考察其韵律特征，对比分析话题标记"这"和指示词"这"的韵律特征差异、"这"和其后话题的韵律特征差异，讨论各韵律参数对辨识话题标记"这"的意义，力求从韵律角度拓展对话题标记的认识，并为语法化相关的韵律理论引入新的实证个案，以增加其跨语言证据。

（一）研究语料、语音标注与统计分析

研究方法方面，本文尝试突破以往研究多基于单一汉语口语语料考察韵律的方法，增加语料数量，并从统计学角度展开分析，以期获得更具普遍性的研究结论。

本文话题标记"这"的会话语料涉及**影视会话、媒体访谈和自然口语**等三类，语料合计**逾 100 万字**。采用人工逐条筛选方式从上述语料中提取话题标记"这"用例 312 条，再严格将对比范围限定为同一发话人的同一话轮，从中提取带有指示词"这"和话题标记"这"的音频片段，最后所得符合要求的语料包括 37 个指示词"这"、37 个话题标记"这"、37 个话题成分。使用 **Praat 软件**手工标注目标语料里指示词"这"、话题标记"这"及其后话题成分的边界，并选取时长、音高、音强这三个参量作为主要参数，用 Praat 提取每一考察对象的每个参量数值，观察韵律表现，最后在此基础上采用 **SPSS 29.0** 开展配对样本 t 检验。

（二）主要研究发现

一、"这"从指示词到话题标记的语法化过程出现了**语音溶蚀**（phonetic erosion）现象，且主要体现在时长方面：话题标记"这"的平均时长短于指示词"这"的平均时长（0.126 秒 < 0.144 秒）。**时长**是区分"这"的指示词用法和话题标记用法的**韵律参数**，而**音高、音强不是**区分两种用法的**韵律参数**，这是因为指示词"这"和话题标记"这"在时长方面存在显著性差异（P=0.019，P < 0.05），而在音高、音强方面不存在显著性差异。

二、相较于话题，话题标记"这"具有**较弱的韵律表现**，这从韵律角度验证了**话题标记的附属性**。话题标记"这"的弱韵律表现主要体现在时长和音强这两个参数上：话题标记"这"的平均时长短于话题的平均时长（0.126 秒 < 0.194 秒），话题标记"这"的平均音强低于话题的平均音强（69.30 分贝 < 71.57 分贝）。**时长、音强是**区分"这"和其后话题的**韵律参数**，而**音高不是**区分"这"和话题的**韵律参数**，这是因为"这"和其后话题在时长方面存在极显著差异（P < 0.001），在音强方面也存在显著性差异（P=0.011，P < 0.05），在音高方面则不存在显著性差异。

鉴于上述检测中的表现，对话题标记"这"的各韵律参数可有如下结论：（1）时长是**最重要**的韵律参数；（2）音高**未体现**明显规律；（3）音强属于**复杂**的韵律参数。这可从语言的**类型学共性**、**信息结构**的语音特点和**韵律参数**的性质等方面进行解释。

（三）研究价值

一、本文为汉语话题标记研究提供了**新视角**，从**韵律角度**加深了对话题标记的认识。研究表明，话题标记的韵律特征探究和句法语义分析可以**互为补充、共同验证**。

二、Wichmann（2011）指出，目前语法化的韵律理论的大部分证据来自英语，且主要集中于话语标记。本文研究的是汉语这种**声调语言**的话题标记，为语法化的韵律研究提供了**全新的跨语言证据**。

汉语"XA"式形容词谓语功能的制约及其机制

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现代汉语中有所谓"状态形容词"中的一类复合词，例如"雪白、冰冷、笔直"。本文旨在分析这类词充当谓语的制约及其机制。此类形容词可简称为"XA"式形容词，一般可以转化为"像 X 那么 A"的句式。

"XA"式形容词一般难以单独充当谓语，但其重叠形式附加"的"后能用作谓语。

(1)　　a.她的脸雪白。　　　　　　b.他的手冰冷。
(2)　　a. 她的脸雪白雪白(的)，多漂亮！　　　 b. 他的手冰冷冰冷(的)。

然而，通过语料库检索发现，"XA"式形容词直接用作谓语的例子大量存在，如(3)所示。此外，重叠形式在未附加"的"的情况下也可作为谓语，如(4)。

(3)　　a.　　 翅膀因黑暗而腐烂，腿因池塘而发臭。但是它的脖颈依然雪白。如果它飞，它会在空气中死去。
　　　　b.　　 用手向里摸去，这东西冰凉、光滑，个头也不小。
　　　　c.　　 方家兄弟闻声回头，大哥晃荡着，二哥身体笔直。高马往前一扑，扑到篱笆上，篱笆响着，和他一起倒了。
(4)　　a.　　 我首先伸一只脚进去，接着把肩浸入。水冰凉冰凉，好在水质本身似乎没什么问题。
　　　　b.　　 "大芝子"才八岁左右，比她姐姐长得姣好，皮肤白嫩，双眼皮，眼睛大而亮，眼珠子乌黑乌黑。

本文首先结合语料库语言数据与母语者问卷调查，提取"XA"式形容词直接充当谓语的用例，可以归纳出如下三种主要类型：

第一，"XA"式形容词前后附加一些语法成分。（如：它的脖颈依然雪白。）
第二，"XA"式形容词与其他谓语成分共同构成更长的谓语。(如：表情冰冷、严峻。)
第三，"XA"式形容词在主谓谓语句中作小主语的谓语。(如；她浑身雪白。)

在此基础上，本文从信息结构的角度探讨"XA"式形容词用作谓语的机制。"XA"式形容词与性质形容词类似，一般情况下不能单独充当谓语。这是汉语信息结构对谓语焦点结构的限制。为了使形容词谓语成为焦点，其谓语在语义上必须要表达足够的信息量，同时在形式上需要具备一定的结构复杂性。这一特性不仅适用于性质形容词，也适用于"XA"式形容词。重叠形式能够满足谓语焦点结构的语义和结构要求，而"的"的附加则涉及到句子的完整性及语用条件。

汉语准二元形容词形宾模式的实现机制研究

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准二元形容词是语义上要求与主体、客体两种论元相关联的形容词，客体论元一般通过介宾结构引入（谭景春 1992；张国宪 1995 等）。例如，在句子"中国工人对当地民众很友好"中，"友好"没有带宾语，其语义上的客体论元"当地民众"由介词"对"引入，像这样通过介宾结构引入客体论元的实现模式称为"介宾模式"。介宾模式是准二元形容词最常见的论元实现模式，而在语言使用过程中，准二元形容词发展出了另一种特殊的实现模式。这种模式的客体论元出现于宾语位置，称为"形宾模式"。例如以下句子中，客体论元"她丈夫的死""自己的不小心""这件事"实现为准二元形容词的表层宾语。

1. 所以她除了伤心她丈夫的死，还得在临城、苗庄两头来回的跑，照顾两位老妈妈。（知侠《铁道游击队》）

2. 他非常生气自己的不小心。（冯德英《苦菜花》）

3. 你们俩每天都很苦恼这件事。（CCL）

探讨形宾模式的实现机制是准二元形容词论元实现研究的重要内容。以往研究主要从准二元形容词的语义特征入手，发现只有表示心理状态的准二元形容词可以选择形宾模式（Cheng & Sybesma 2015；郭洁和顾阳 2020 等）。然而，现有研究尚未充分关注形容词论元的语义句法特征，未能对准二元形容词涉及的不同语义角色进行系统的区分。形容词论元对于实现模式的选择具有关键作用，忽视这一点将影响对其允准条件和生成机制的更深入理解。对此，本研究从论元实现的角度出发对形容词论元的特征进行描写，梳理不同论旨角色与实现模式之间的联系，归纳准二元形容词形宾模式的允准条件，并在此基础上对形宾模式的生成机制进行更全面充分的解释。本文主要有以下发现：

1. 归纳形宾模式的形式特征。

2. 准二元形容词的客体论元主要分为对象和原因，客体论元表原因是实现为形宾模式的关键条件，对象一般不能实现为形宾模式。形宾模式的原因宾语需要满足事件语义和本体因果的要求。事件语义要求准二元形容词的表层宾语能够表示包括参与者、行为状态等要素的事件。本体因果要求准二元形容词的表层宾语必须是心理状态的原因本身，不能是基于因果关系的解释或推论。

3. 本文对施用说（Cheng & Sybesma 2015；郭洁和顾阳 2020 等）、轻动词说（Lin 2001；宋晓红 2013 等）和构式说（张建理和徐银 2011；徐银 2015 等）等以往研究的解释进行评述，针对前人研究的问题和对形宾模式的观察提出"介词并入说"，认为形宾模式通过介词并入来引介原因角色。汉语准二元形容词形宾模式与"为"字介词结构都可以引入原因角色，在介词并入理论的启发下，本研究为形宾模式设立了与独立介词"为"对应的零形态附着词缀 $P_{因}$，并分析其句法操作。介词并入方案能够得到程度副词语序、对象角色共现限制、跨语言现象的支持，并为这些现象提供一定解释。

主要参考文献：

郭洁,顾阳.汉语形容词论元结构的再分析[J].当代语言学,2020,22(02):217-236.

Baker M C. Incorporation: A theory of grammatical function changing[M]. The University of Chicago Press: 1988.

Cheng L L S, Sybesma R. Transitive psych-predicates[J]. Chinese syntax in a cross-linguistic perspective, 2015: 207-228.

基于生成词库理论的汉语隐喻式委婉语研究

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委婉语是人类普遍使用的一种语言现象，通常指以温和、迂回的表达代替禁忌或消极话题的表达手段。前人关于委婉语的研究大多从修辞、语用、社会文化等方面研究其功能（Mencken，1936；陈原，1980；束定芳，1989；彭文钊，1999 等），也有不少学者从认知角度解释委婉语的认知理据（邵军航、樊葳葳，2004；谌莉文，2007 等）。其中隐喻是委婉语语义构成的重要基础，但目前学界仍缺少对委婉语字面义和委婉义之间映射关系的系统解读。

Pustejovsky（1995）的生成词库理论主张词库不仅要列出词语的意义，还要解释词语的动态性与创造性使用。目前生成词库理论的研究运用大多聚焦于构词层面，如赵青青、宋作艳（2017）基于生成词库理论对现代汉语隐喻式双音节名名复合词进行了定量和定性分析，但尚未涉及名名短语。隐喻式委婉语既包括复合词也包括介于词和短语之间的成语和熟语，有助于进一步拓展生成词库论的研究范围，因此本文试从生成词库视角探讨隐喻式委婉语的语义关系，拟解决委婉语自身所包含的语义信息会对隐喻产生什么影响的问题。

为了进一步细致描写隐喻式委婉语的语义理解与生成途径，本文筛选了《通用委婉语词典》中 369 个隐喻式委婉语，并根据生成词库的物性角色和语义类对其进行标注，其中人造类 231 例，自然类 138 例。在此基础上考察委婉语在隐喻过程中涉及的物性角色，并探索隐喻前语义类对隐喻产生的影响。

本文统计发现隐喻式委婉语倾向于整体隐喻，最常涉及的物性角色是形式角色，如"土馒头"婉指坟墓，其次是功用角色和构成角色，很少涉及施成角色，符合隐喻式复合词的相关规律；语义类会对委婉语隐喻产生影响，但与复合词不同的是自然类委婉语发生隐喻较多涉及形式角色，而人造类较多涉及功用角色，根据复合词和短语的结构关系会产生内部差异；同时，隐喻式委婉语字面义的语义类不论是自然类还是人造类，发生隐喻后均映射向人造类，与隐喻式复合词的相关规律不一致。另外，在前人概念隐喻的研究中，隐喻模式一般遵循由可及性高的一方向可及性低的一方映射的规律，但委婉语的隐喻映射机制恰恰相反，由可及性低的一方向可及性高的一方映射，这对隐喻的定义构成挑战，为委婉语的语义解读提供了新方法和新路径，也有助于推动对隐喻本质的再思考。

参考文献：
1. James, Pustejovsky. The Generative Lexicon [M]. Cambridge: MIT Press, 1995.
2. 朱景松.通用委婉语词典[M]. 北京：语文出版社,2018
3. 谌莉文.概念隐喻与委婉语隐喻意义构建的认知理据[J].外语与外语教学,2006,(08):17-20.
4. 赵青青,宋作艳.现代汉语隐喻式双音节名名复合词研究——基于生成词库理论[J].中文信息学报,2017,31(02):11-17.

基于知网相关文献浅谈中国书法英译现状和发展

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书法典籍、术语等英译因语言体系与文化背景的差异而呈现各自特点和面临诸多挑战。本文以中国知网 2000 年至 2025 年 1 月期间相关文献为研究对象，梳理国内书法英译的时间脉络和内容，并探讨数字时代书法英译的发展。

首先，梳理发现此间书法英译研究的时间发展脉络：书法申遗成功的 2009 年和之后，该研究迅速发展，其中顾毅和杨晓波等的研究多角度且数量多。

其次，总结该研究有书法典籍英译、书法术语英译、书法翻译理论和策略、书法艺术译介、书法实践报告等内容。（一）书法典籍有孙过庭《书谱》、蒋彝《中国书法》、陈廷佑《中国书法艺术》等，对之进行译本之间的对比、译本和原本的对比，或书法术语、翻译策略的探讨。（二）书法术语英译包括《书谱》中书法概念，博物馆书法展解说词、碑帖名称、书画家字号等术语，如"平正""逸"字词组、"一画""受"等术语，对之进行介绍或对比，或批评相关英译的不足。（三）书法艺术译介的研究，分别梳理西方和国内学界关于中国书法艺术的译介史，并结合具体英译案例讨论中国书法文化。（四）书法英译理论有符号学理论、阐释学理论、关联理论和文化翻译论，特别是"深度翻译"理论，并论述了具体的翻译策略。（五）书法翻译实践对西安碑林、书展讲解词、书法词典、碑刻帖本、礼品书法文本、电影字幕书法的英译实践，翻译硕士对《战国书法研究》等文本的英译丰富了该方面研究。

最后，建言书法英译的未来发展：书法典籍英译需更优质更丰富，多学科合作建立多文本高质量的书法英译文库；书法术语英译需更规范更生动，建立书法术语国际协作平台，动态更新并补充翻译案例；书法英译理论需更系统更实操，要梳理、对比众多翻译理论和策略，使之系统化；书法英译需结合人工智能，用好人工智能工具，并辅之人类翻译，用视觉化手段生动展示书法英译典籍和术语等视觉和文化意义。要在传统与现代、地域与全球、语言与科技之间寻找新的平衡点，为中国书法传承注入新活力。

参考文献：
1.顾毅,林语堂对中国传统书法理论的译介,中国翻译,2009（2）。
2.刘彦仕，"和而不同":中国经典书论术语的英译比较——以《书谱》三译本为例，外国语文，2018（3）。
3.杨晓波,论书法笔法术语的英译——以张充和、傅汉斯《续书谱》英译本为例,中国科技翻译，2018（2）。
4.邵咪咪，国际传播视域下的中国书法术语英语翻译策略研究,名作欣赏，2021（17）。
5.雷莹、赵友斌，中国书法术语英译与中国文化，跨文化研究论丛，2023（2）。
6.仇继锋，中国书法艺术译介史研究，嘉应文学，2025（1）。

论汉语进行体、持续体与情态的同现限制差异

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体(aspect)和情态(modality)都为句子所表达事件的核心图示提供背景信息，二者存在密切的内在联系，不同体标记与情态类型之间存在一定的同现互动关系(彭利贞 2007a: 209)。现代汉语中，一般认为进行体(progressive)用副词"在"标记，持续体(continuous)用助词"着"来标记，它们的功能存在部分重叠。然而，对于"在"和"着"的句法语义区别，学界还存在不同的认识。通过观察"在""着"与情态的互动，可以对观察汉语进行体、持续体的功能分野提供新的思路，从而进一步深化对汉语体范畴的理论建构。

英语的进行体是表达认识情态(epistemic modality)的一种典型语境(Coates 1983: 137/245)，如例(1)中的多义情态动词 may、must 都只能被解读为认识情态。忻爱莉(2000)也注意到了汉语的"进行貌"帮助多义情态动词获得"认知情态"的解读，例(2)中的"应该"自然地表示认识情态。

(1)They **may be reading** something by Shakespear.
He **must have been dishing up** the samen lectures for 30 years at a gradually slower and slower speed.

(2)小明**应该在**买书。

不同的是，持续体助词"着"不仅可以与认识情态同现，如(3)；也与道义情态(deontic modality)相容，如(4)。下面是彭利贞(2007a: 275、2007b)的例子：

(3)a.新生的这一代知识精华中，只有极少数**可能掌握着**现代主义。

b.过道墙边**应该 epi 堆着**五辆自行车，得靠右走。

(4)a.在这块宽绰的私人地盘上，他**可以歪着、趴着、盘腿坐着**，怎么舒服怎么来。

b.你是支书，**应该 deo 想着**大多数人！

然而，现有研究结论尚未涵盖以下语言事实。一方面，特定语境中的"在"可以和道义情态同现，如例(5)；部分认识情态动词与"在"同现受到疑问、否定环境的限制，如(6)。另一方面，"着"与情态类型分化的条件，也还有重新审视的必要。

(5)在前面赶车的是谁？是不是那个本来**应该在**买酒的车夫？(古龙《陆小凤系列幽灵山庄》)

(6) 谁会在甘薯地里建这么一个亭子？自己**会不会在**做梦？(格非《江南三部曲》)

自己**不会在**做梦。/*自己**会在**做梦。

循着这条思路观察，本文主要得到以下认识：

(一)进行体标记"在"与根情态同现十分受限，但可以自然地与认识情态同现。这是因为"在"所标记的事件在中性语境下具有现实性(realis)，这与动力情态的泛时性、道义情态默认的将来指向相悖。

(二)"着"对事件的现实性没有直接贡献，可以与认识情态、根情态同现。如果"V 着"指涉的事件是现实的，它与认识情态相容，一般拒绝根情态。如果"V 着"指涉的事件是非现实的，那么它既可以与认识、又可以与根情态同现。

(三)"在"和"着"与情态的同现限制差异揭示了它们与时间轴的不同关系。"在"通过关联参照时间、事件时间，将事件实现为了时间轴上具体的、现实的事件；"着"不能独立完成这种关联，"V 着"也就不能直接实现为时间轴上的现实事件。

参考文献

彭利贞 2007 《现代汉语情态研究》，北京：社会科学出版社。

彭利贞 2007 论情态与"着"的分化，《语言研究》第 2 期。

忻爱莉 2000 华语情态动词的语意语句法成分之互动，世界华文教育协进会编《第六届世界华语文教学研讨会论文集（第一册）》，台北：世界华文出版社。

Coates, Jennifer 1983 *The Semantics of the Modal Auxiliaries*. London & Canberra: Croom Helm.

偏正结构"N+V"做句子主语时"V"的词类性质探究
——来自行为实验和脑电实验的证据

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现代汉语中，偏正结构"N+V"中"V"的词类性质备受关注。争论的焦点在于偏正结构"N+V"中"V"是否发生名物化。一部分研究认为"V"与偏正结构保持一致的名词性质，发生名物化或名词化（胡明扬，1995；周韧，2012），而另一部分研究则认为"V"仍为动词（朱德熙，1961；史有为，1996；王冬梅，2002）。实证研究同样揭示了"N+V"中"V"的复杂性质。Xia et al.（2023）发现，当语境"N"的名词预期性较强时，"V"能够实现名物化，表现出名词特性；但在"N"的动词预期性较强时，"V"保留动词特性。此外，"N 的 V"在认知上更接近于"N 的 N"（于秒等，2023）。

尽管已有研究对"N+V"中"V"的词类性质进行了广泛探讨，但语法位置对"V"的影响尚未得到充分关注。特别是当"N+V"结构作为句子主语时，"V"的词类性质可能发生变化。"V"不再单纯传递动态事件或动作，而是描述某种状态、特征或类别。这种语义的抽象化（名物化）可能伴随词类性质的转变（名词化）。为验证这一假设，本研究设计了 2 个实验，旨在探讨偏正结构"N+V"中的"V"做句子主语时是否发生名物化和名词化。

实验 1

实验 1 采用自定步速阅读范式，比较"N+N""N+V""N+N/V"三类结构作为句子主语时的反应时，选取双音节名词（如"标题"）、动词（如"修改"）和兼类词（如"构思"）作为目标词，目标词添做"N+X"偏正结构中心语，令"N+X"偏正结构作为句子的主语。如：**身体情况/康复/检查**是非常关键的。三类目标词的词类倾向存在显著差异（$ps<0.05$），词频、笔画数、具体性等词汇语义变量均不存在显著差异（$ps>0.05$）。

采取单因素三水平（词类：名词、动词和兼类词）的被试内设计。实验结果显示，作为中心语的名词、动词和兼类词的反应时没有显著差异，同时其他句子成分的反应时也没有显著差异（$ps>0.05$）。这表明"N+V"在主语位置上与"N+N""N+N/V"一致。

实验 2

为了验证实验 1 的发现，实验 2 使用时间分辨率更高的脑电技术，进一步考察"N+N""N+V""N+N/V"三类结构做句子主语时的神经加工机制。实验 2 的实验设计和实验材料同实验 1。

采取 3（词类：名词、动词和兼类词）×3（脑区：额区、中央区和顶区）的被试内设计。实验结果显示，作为中心语的名词、动词和兼类词的 N1、P200、N400 均没有显著差异（$ps>0.05$），其他句子成分在这些脑电指标上也没有显著差异（$ps>0.05$）。这表明，"N+V"在主语位置上与"N+N"具有基本一致的神经加工机制。

讨论

实验 1 和实验 2 的结果均表明，"N+N""N+V""N+N/V"做主语时的神经加工机制是基本一致的，"N+V"中的"V"在句子主语位置发生了名物化和名词化过程。在主语位置上，"N+V"就是"N+N"。

浅论语用学视角下的"不"和"没"

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摘要："不"和"没"是现代汉语中最常用的否定词，在语言交流中起着关键作用，不仅用于构建否定语气，还能表达特定的情感和态度。近年来，学界对"不"和"没"的句法及语义特征已有大量讨论。然而，仅仅理解词语的基本句法和语义是不够的，还需要深入探讨其语用功能。如果仅从句法和语义层面进行判断而忽视语用功能，很容易导致表达错误甚至沟通障碍。

正如 Halliday（1978）在系统功能语言学理论中指出，语言的选择与社会功能和文化背景密切相关。因此，本文从语用学角度探讨"不"和"没"的使用差异，重点分析其在语境中的语用特征及文化背景。借此，本文以汉语否定词"不"和"没"为研究对象，基于 BCC 语料库中的例句，从以下几个维度分析两者的使用特点及语用意义：

1. 主观意愿与客观限制：探讨"不"如何表达主观意愿，而"没"如何体现客观事实的限制。
2. 时间指向与行动完成性：分析两者在表达否定时对时间范畴和动作完成性的影响。
3. 语用功能与文化背景：考察"不"和"没"在不同文化语境中的使用差异，以及它们所承载的文化意涵。
4. 责任归属：探讨两者在表达否定时如何影响责任归属的认知。

通过研究，我们发现，对"不"和"没"语用特征的深入分析不仅有助于更精准地理解汉语否定表达的规律，还能帮助学习者更灵活、恰当地运用语言，以适应不同语境。研究表明，否定表达不仅是语法现象，更是社会互动的重要组成部分，承载着文化、态度及人际关系的微妙调节功能。

关键词："不"；"没"；"语用功能"

奇里諾《華語—西班牙語辭典》的音韻與編寫系統研究

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1604 年，耶穌會傳教士奇里諾（Pedro Chirino）編纂《華語—西班牙語辭典》（Dictionarium Sino-Hispanicum），是現存最早的閩西語辭典之一。本研究探討該辭典的音韻系統、詞彙書寫方式及其編寫系統，並與道明會體系《西班牙—華語辭典》（Dictionario Hispanico Sinicum）及現代閩南方言比較，以分析其音韻特點與記錄方式。

首先，本研究探求該辭典正確音字對當關係及方言本字。該書在記錄音韻時，經常使用訓讀字，還包含了異體字、錯字與別字，因此需先檢視詞彙的來源、音字對當關係及書寫特徵，在此基礎上進一步探討其對後續閩南語文獻書寫的影響。

音韻系統方面，該辭典大致表現出一定的中古音遺留，其聲韻特徵統整如下：聲母系統使用了 23 組符號；韻母系統由 6 個單元音組成，舒聲韻 62 組，其中 11 組為鼻化韻母，而聲化韻母有 2 組，入聲韻 19 組，並記錄了 6 個入聲韻尾。本文中區辨了幾組聲、韻母的對比。聲調符號則不固定，部分標註可能受中古閩南語與西班牙語音變影響。

此外，本研究從中古音架構探討該辭典中的一字兩讀現象，可能成因包括：中古聲韻合流；文白異讀；部分記音符號的通用性，以及受中古西班牙語音變影響造成的音位變異。從韻攝分類與詞彙來源分析，發現該辭典的語音特徵以漳州與潮汕音為主。

最後，對比《華語—西班牙語辭典》與《西班牙—華語辭典》，發現兩者在部分聲母、韻母記錄方式上不同，可能與編寫者的語音觀察角度、書寫習慣或次方言影響有關。

綜合而言，《華語—西班牙語辭典》體現了中古音與閩南語音韻的交互影響，並呈現出漳、潮語音特徵。其書寫與標音系統雖不一致，仍為研究早期閩南語音韻與傳教士語言學記錄的重要文獻。本研究有助於深化對明清時期閩南語文獻的理解。

關鍵詞：閩南語與西班牙語、十七世紀傳教士語言學、漳州方言、潮汕方言。

主要參引書目：

李毓中、陳宗仁、José Luis Caño Ortigosa、石文誠、Regalado T. José、吳昕泉主編（2022）《閩南—西班牙歷史文獻叢刊四：華語—西班牙語辭典》，新竹：國立清華大學出版社。

Klöter, Henning (2011) *The Language of the Sangleys: A Chinese Vernacular in Missionary Sources of the Seventeenth Century*, Leiden: Brill.

Lien, Chinfa（2023）"In Search for the Dialectal Variants of Hokkien: Based on the Early Bilingual Hokkien-Spanish Dictionary," in Barbara Meisterernst (ed.), *When the West Meets the East: Early Western Accounts of the Languages of the Sinosphere and Their Impact on the History of Chinese Linguistics*, Wiesbaden: Harrassowitz Verlag, pp.15–36.

青海五屯话中标记形式"□"[ʐa]的句法功能及其演变

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五屯话是中国青海省黄南藏族自治州同仁县隆务镇吾屯上庄、吾屯下庄、加查么三个行政村的人群所使用的语言。据我们调查，操五屯话的人语言整体掌握情况是"五屯话>藏语>汉语"。五屯话的生命力源于当地所处的人文环境，具体说来，生计方式、宗教信仰、婚姻状况同时维护着当地的相对封闭性，使得五屯话的活力得以保持。

五屯话是中国甘青地区受语言接触环境所塑造的方言点的典型代表，其语音格局、词汇系统主要来自汉语，同时存在大量藏语借词，语法体系具有显著的阿尔泰语系蒙古语族或藏缅语的语言特征。

我们通过田野调查发现，五屯话中标记形式"□"[ʐa]具有多种句法语义功能，大体上分为两大类。第一类与名词性成分相关，主要用作离比格标记，如下。

    1 你□[tɕiaŋ³⁵]今天□[ʐa]学堂里去。（你从今天起到学校去。）

    2 我北京□[ʐa]来了。（我从北京来。）

    3 他一年到塔□[ʐa]尕□[nɛ³⁵]病了头没哩。（他一年到头小病不断。）

    4 马看□[ʐa]汽车快哩。（汽车比马快。）

第二类与动词性成分相关，主要用作副动词标记，可以用于单句和复句中，表达多种语义关系，如下。

    5 飞地的麻雀打□[ʐa]□□[ka³⁵ia⁵⁵]难哩。（飞的鸟不容易打。）

    6 单刚买了的马撒能□[ʐa]快哩。（刚买来的马跑得快。）

    7 你几个复数路不知道□[ʐa]，我你几个路指给。（你们如果不认识路，我指给你们路。）

    8 我饭要去□[ʐa]，他啊不央给有。（我宁愿讨饭，也不求他。）

    9 你先我的舍看，我来□[ʐa]逮你去。（你先给我看家，我回来后你再去。）

此外，"□"[ʐa]还发展出了类似标补词、话题标记等的用法，如下。

    10 背面人哪说□[ʐa]不好哩。（背后议论别人不好。）

    11 酒喝□[ʐa]他□[tɕaχ³⁵ia³³]有。（喝酒他最厉害。）

我们全面考察了五屯话中标记形式"□"[ʐa]的句法分布和语义功能，在此基础上与周边分布的蒙古语族语言、藏语的语法体系及相关的功能形式做比较，尝试梳理"□"[ʐa]的演变路径及来源，探讨语言接触影响的机制。

全称量化与达到相当高程度——也谈"都"的多义性及语义的统一刻画

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"都"的意义是汉语语义学研究最具争议的话题之一。本文尝试在回应前人对"都"全称量化功能质疑的基础上，进一步完善全称量化说，同时厘清"都"与预设、预期、语气等的关系，从而深化对"都"的语义乃至汉语全称量化现象的认识。主要结论如下：

我们认同全称量化为"都"的语义内核（蒋严 1998，潘海华 2006，等），认为双重量化问题（徐烈炯 2014，等）的实质是："每"是加合算子并非全称量化词（张蕾、潘海华2019）；非全称性或分数量化词如"很多/三分之二"与"都"共现时，类型转变为一元算子，"都"在全称量化"很多/三分之二 NP"的基础上贡献主观大量义。本文认为"都"具有全称量化及达到相当高程度两种可能的语义功能：

"都₁"是汉语典型的全称量化词，具有左向量化倾向。左向无显性量化域而右向存在对比焦点时，"都"自由关联对比焦点（Beaver and Clark 2008）导致可用焦点规则刻画其的语义，而排他性源自对比焦点；"都"右向关联疑问表达时，认为"都"量化预设中的成分（蒋严 1998）及"都"量化疑问焦点（潘海华 2006）都能正确解释其语义。尽管如此，我们更倾向于使用量化对象映射规则来刻画"都₁"的语义，即"都"的量化对象被映射到限定部分，句子的其余部分被映射到核心部分。（1a）和（2a）可能的三分结构分别为（1b）和（2b）。

（1）a. 张三都写的[小说]$_F$。

b. DOU$_x$[x∈相关事件或情境集合] [张三写的小说 in x] （"都"作用于隐性量化域；之后，在"都"的三分结构的核心部分，隐性算子引出第二个层次的三分结构）

（2）a. 张三都买了什么？

b. 预设：∃$_x$[x∈东西][张三买了 x]

DOU$_y$[y∈x][y=什么？] （"都"作用于预设中的 x,即"张三买了的东西"）

"都₂"左向或全局关联，"都₃"右向关联，两者都表达到相当高程度义，表示断言命题（由"都"所在的命题去掉"都"后得到）所指谓的事态在相关程度梯级上的位置高于每个候选命题，如（3）。此时，其语义可以概括为对候选命题的全称量化，见（4）。

（3）a. 连差生都会做这道题。 b.都八点了！

（4）DOU$_q$ [q∈ALT(p)][p≠q, p >$_{degree}$ q] (p 为断言命题)

由于可能性与高程度间存在依存关系（即相关事态发生的可能性越高，它的显著程度就越低），此前相关研究多用可能性梯级来描述"都₂"。又由于可能性与预期间存在关联性（即当相关预期存在时，断言事态发生的可能性越小，越容易获得反预期义），"都₂"常用于表达反预期义。在梯级含义的作用下，"都₂"也可以表全称量化义。当断言命题蕴涵候选命题时，"都₂"的全称量化义具有不可取消性。

用焦点规则解释"都₃"不能直接反映其程度高义。"都₃"确实可以起到加强语气的作用，但用加强语气来概括其语义贡献并不能全面反映其语义。

陈述句中，"都"的量化作用体现在断言而非预设层面；"都₁"右向关联疑问表达时，量化域在预设层面。"都"与预期的关系复杂，存在无预期、反预期（Chen 2008,等）、充当预期触发语（吴昌霖、吴长安 2024）三种可能的情况。

人类语言中的两种反身回指关系：以汉语反身代词"自己"的回指用法为例

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　　根据生成句法约束理论对名词的分类，作为照应语（anaphor）的反身代词必须在以管辖语（governor）为核心的管辖域（governing category）内找到它的先行语（Chomsky 1981）；但是，允准反身代词指向管辖域外先行语的语言并不少见。以汉语为例，反身代词"自己"在管辖域内包含潜在先行语的情况下，仍然可以指向管辖域之外的长距离先行语：

1.　姝华 认为[雪芝 对自己 有信心]。

为了维护约束理论的普遍性，过往研究要么以句法手段将长距离反身回指关系转化为符合"约束原则 A"的局部回指关系（Wexler & Manzini 1987，Pica 1987，Progovac 1992，Charnavel 2019），要么将指向长距离先行语的反身代词分析为受语境条件约束的特殊代词、否定其照应语身份（Kuno 1978，Sells 1987，Reinhart & Reuland 1993，Baker 1995）。汉语学界对反身代词"自己"长距离回指关系的解释亦承袭上述两条路径，分为"句法约束"与"语境约束"两派，但前者难以解释"自己"在长距离回指关系中的语义、语境特征，尤其是如（2）所示阻断效应下人称的不平衡性（person-asymmetric blocking effect，Pan 1997、2001）和（3）所示内涵语境下涉己解读的强制性（intensional obligatory *de se*，Anand 2006、Wang & Pan 2012）；后者则无法解释并非照应语的"自己"为何也能指向管辖域内的先行语。尽管已有研究提出域内约束和长距离约束关系中的"自己"没有同一性，但它们无法解释两个"自己"为何在主语指向（subject-oriented）及阻断效应消解等方面呈现出一致特征（4）（5）。

（2）　a. 我 认为[雪芝 对自己 有信心]。

b. 姝华 认为[我 对自己 有信心]。

（3）　姝华 知道[沪生拿走了自己 的诗集],*但姝华不知道那本诗集是她自己的。

（4）　a. 姝华 向雪芝 推荐过自己 。

b. 姝华 向雪芝 推荐过[[沪生批评自己]的文章]。

（5）　a. 姝华 向我推荐过自己 。（单句中的人称代无词阻断效应）

b. 姝华 向我推荐过[[沪生批评自己]的文章]。（主句中的人称代词无阻断效应）

我们认为，上述两种解释的根本问题在于未能揭示反身回指关系的本质和内部差异：相对于一般代词构建的无标记回指关系，由反身代词构成的反身回指关系要求先行语的有标记性（markedness）；这种"有标记性"可能源于回指关系内部特殊的语义或句法结构（例如先行语和反身代词由同一个动词指派语义角色、句法论元或结构格），也可能来自先行语自身语义或语境角色的显著性（例如说话者以先行语为叙述视角或移情落点）。据此，人类语言中的反身回指关系可分为反身代词指向句法/语义结构中同指成分的"共指反身关系"和以先行语自身显著性为基础的"自指反身关系"。句法学家以约束理论分析所有反身回指关系的做法，本质上是将与管辖者和管辖域无关的"自指反身关系"错误纳入了"共指反身关系"；仅关注长距离反身回指的语境解释则割裂了两种反身回指关系在"先行语之有标记性"方面的共性，并且忽视了"共指反身关系"因句法/语义结构扩张而在形式上呈现为长距离反身回指关系的可能性。就汉语反身代词"自己"而言，我们认为它与长距离先行语构成"自指反身关系"、要求先行语是说话者的移情落点（Wang & Pan 2015）；指向管辖域内先行语的"自己"则为复合反身代词"自己+自己"的同音删略形式（Li 2024），其在管辖域内构建的反身回指关系同时具有"共指"和"自指"两种特征。

上古唇化元音字在出土文獻中的表現—以 Norman(2014)的假設為例

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目前，大部分上古音學者都採用六元音系統（the six vowel hypothesis）。為了構擬六個元音（*a,*e,*i,*o,*u,*ə），所謂"唇化元音假設（the rounded-vowel hypothesis）"與"前元音假設（the front vowel-hypothesis）"是關鍵的理論框架。

在唇化/非唇化元音之間的對立之中，最明顯的例子是元部的韻母。以往的學者給元部只構擬非唇化元音*a。Jaxontov（1960/1986）根據中古音合口的分布、諧聲系列的證據也給原來的部分元部字構擬了唇化元音*o。Baxter（1992）經過統計學的方法證明在詩經中元部*an 只跟*an 押韻，不跟*on 押韻。這說明：（1）Jaxontov 所提出的唇化元音假設是可靠的；（2）在《詩經》時代，*on 尚未與*(w)an 合流。

秋谷裕幸·野原將揮（2019:24）經過閩語和和出土文獻的通假例分析得出以下結論："現代閩語仍然保存着上古非唇化元音*a 和唇化元音*o 之間的對立。這個結論反過來進一步證實 Jaxontov 教授所提出的唇化元音假說能夠成立，也支持上古六元音系統。…，那麼，閩語最古老的語言層次能够追溯到公元前三世紀之前，也就是在戰國時期。"該文還指出："今後我們還需要繼續發掘其他例子。比如 Norman（2014:16、17）指出閩語里'管'和'關'的讀音反映着上古唇化元音*o。"

Norman（2014:15-17）利用歷史比較法對 7 个詞彙的早期形式構擬了唇化元音*o，如："斷"、"卵"、"管"、"關"、"饭"、"船"和"遠"。本文旨在補充 Norman 所構擬詞例的出土文獻證據，以進一步驗證 Norman(2014)提出的假設。通過本研究，我們發現這些詞在至少戰國時期的確具有唇化元音*o。

此外，我們還討論"飯"字的語音和字形演變。如程少軒（2009）所指出，部分唇音聲母字的唇化/非唇化元音的對立並不明顯，"飯"字可能屬於其中之一。

《參考文献》

Baxter, William H. 1992. *A Handbook of Old Chinese Phonology. Berlin*, New York: Mouton de Gruyter.

程少軒 2009.《試說戰國楚地出土文獻中歌月元部的一些陰雲現象》，復旦大學出土文獻與古文字研究中心。2009 年 6 月 10 日。

Jaxontov S E. 1960/ 1986.《上古汉语的唇化元音》，唐作藩,胡双宝选编《汉语史论集》北京：北京大学出版社。

Norman, Jerry 2014. A Model for Chinese Dialect Evolution, *Studies in Chinese and Sino-Tibetan Linguistics: Dialect, Phonology, Transcription and Text* (Edited by Richard VanNess Simmons and Newell Ann Van Auken), Languange and Linguistics Monograph Series 53, Institute of Linguistics, Academia Sinica, 1-26.

秋谷裕幸・野原將揮 2019.《上古唇化元音假说与闽语》，《中国语文》1:15-25。

《绍古先生口授京话》（1880）之"京话"面貌探析

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抄本《绍古先生口授京话》（以下简称《绍古》）藏于长崎大学武藤文库，口授者旗人英绍古，抄者为日本明治时期中文教育舞台上享有"北に鄭あり南に御幡あり（北有郑氏，南有御幡）"之誉的御幡雅文，抄本时间在 1880-1881 年之间。该抄本长崎大学图书馆未公开，除了鱒澤彰夫（2018）的简介、赵葵欣（2025）对内容、抄本红色标记的考证整理以外，未见关于语言方面的具体研究。本文初步考察该抄本之"口授京话"的特征，探寻 19 世纪中期北京官话之面貌，为今后武藤文库其他资料的整理及与同时期其他文献的比较研究打下基础。

主要考察内容及结论如下：一、对照太田辰夫（1969/1988：286）提出的早期北京话七特点发现，①《绍古》虽然使用"我们"和包括对方的"咱们"，无"俺"和"咱"。但面称时多以吾兄、阁下、兄台称对方，小弟、兄弟自称，基本不用人称代词。②有介词"给"的用例：有个朋友家里有事托兄弟给他照管了两天（乾 3a）。/把个如花似玉的活宝贝 送给人家去了（坤 67b）。③无"来着"用例。④用助词"呢"而不用"哩"：何况我们正在快乐饮酒的时候呢（乾 11a）。⑤表禁止有用"别"的例子，但更多用"不要"。⑥副词"很"作状语很少，概为"很+单音形容词"的例子，如"很多、很大、很好"。表达程度前置副词主要有"实在、十分、更"，但以补语形式表程度更多，如"…的狠(的很/得很)、…极了/之极/非常"。⑦《绍古》不见"…多了"用于形容词后表示比较的用法。概而言之，《绍古》符合七大特征中的三点（①②④），特征⑤⑥有少数用例，而不见使用"来着"和表比较的"…多了"用法。

二、疑问句。疑问词文白夹杂，既用"何、如何、何故"；也用"什么、怎么样、为什么"。极性问以"S+么"形式为主：府上宝眷都在这儿么（乾 1a）。正反问形式仅见于判断动词、存在动词和助动词"可以"：是这么着不是（坤 45a）/正月内有别的玩赏的地方没有（坤 26b）/兄台可以赐教不可以（坤 33b）/把这求雨的事先谈谈 可以不可以（坤 27a）。

三、"吗"与"么"用于疑问句尾的差异：《绍古》"吗"仅 3 例，均为反问句：岂不是辜负了那十月怀胎三年乳哺的大恩了吗（坤 33b）。而"么"是极性问最常见的句尾疑问词，也用于反问。比较大岛吉郎（1992）对《红楼梦》程甲本（1791）、笔者对《续红楼梦》（1799 年，抱瓮轩初刊本）中"吗"使用情况的考察，本文认为：A."吗"与"么"的使用最初存在文体差异，"吗"多见于小说。其原因是"吗"为俗字（最初收入明万历年间《字彙》，记作"俗骂字"），而"么"是唐代就见于文献中的句尾疑问词（王力 1980）。因此"么"会被认为更正式，作为官话教授者会自觉或不自觉地采用更正式的表记，而小说这类俗文学用俗字也不会有顾虑。B.疑问句尾"吗"的使用是从反问句中扩散开来的。

本次考察还发现《绍古》中有一些较为特别的表达形式，如：兄台是在这儿多年了 这地方的物理人情一定是老练的（乾 4a-b）/贵衙门是忙得很哪（乾 1a）/试官们皆系朝廷特派的大臣…一定是不能有弊的（坤 4a）。这些形式是个人语言风格还是早期官话特有文体，尚需更多相关文献的考察，也是今后进一步研究的课题。

参考文献：大岛吉郎 1992《紅楼夢》における'嗎'と'麼'について−庚辰本と程甲本の比較を中心に，『外国語学会誌』21 号。赵葵欣 2025 武藤文库所藏早期北京官话资料概述及研究展望，『中国言語文化学研究』14 号。（余略）

臺灣華語「到」的句末助詞化現象

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在臺灣華語中，經常可觀察到一種特殊的 [有 V 到] 結構，從標準普通話的角度來看頗具特色。在普通話中，[有 V 到] 結構中的「到」通常作為結果補語或程度補語使用。一般而言，若動詞(V)為狀態動詞(Stative Verbs，以下簡稱 Vs)，「到」之後通常需接表示程度的成分，如下例 (1) 所示：

(1) 聲音**高到不能再高了**。　　　　　　　　(呂淑湘 1980/1999)

然而，在臺灣華語中可觀察到若干與上述模式不符的 [有 Vs 到] 結構。如下所示：

(2) 所以與其說日本驚恐到了吳家人，不如說吳家人的遊玩方式**有驚恐到我了**。
(網路語料：旅遊心得分享，痞客邦，2013/09/30)

(3) 因為【海猿 3D:最終話】真的**有好看到**‼ (網路語料：電影感想，痞客邦，2011/03/05)

例 (2) 中的狀態動詞「驚恐」後的「我」可視為受事成分，而例 (3) 中「有好看到」基本上僅能出現在句末，並且僅能接續部分句末助詞，難以接續其他成分，此用法在普通話中相對罕見，值得進一步探討其形成背景與語法功能。

根據早期研究(如 Kubler 1979；蒲彥汝 2009 等)，臺灣華語中的 [有 V 到] 結構在語法及語用功能上均較普通話豐富，部分可能受臺灣閩南語(以下簡稱臺語)語法影響。例如臺語中「有」的用法與臺灣華語中的「有」呈現高度對應關係。然而，「到」的用法尚存諸多未明之處，尤其如例 (3) 所示者，其語法功能可能正在轉變為句末助詞。

此外，在臺語中，與華語「到」部分功能對應之詞彙「tioʰ(著)」亦具有句末助詞功能，且常用以表達意料之外的情緒或語氣，如下例 (4) 所示：

(4) 今仔日 哪 會 遮 寒 **著**！(今天怎會這麼冷!)

　　Kin-á-jı̍t ná ē tsiah kuânn--**tioʰ**! 　　　　(教育部臺灣台語常用辭典)

本研究透過搜尋引擎，結合地區及語言限制等方式，蒐集近千則來自部落格、網路論壇等自然語料，分析「到」是否具備句末助詞的語法與語用特徵，並進一步與臺語句末助詞「tioʰ」進行語料對照，探討兩者在分布與使用語境上的異同。儘管本研究尚未深入探討臺灣華語中句末助詞「到」是否源自「tioʰ」的語法轉借，但希冀能為臺灣華語語法變遷的研究提供新視角，作為未來相關議題的理論基礎。

引用文獻：

蒲彥汝(2009)，「臺灣國語「到」之語義功能研究」，國立臺灣師範大學華語文教學系碩士學位論文.

Kubler, Cornelius C.(1979) , "Some differences between Taiwan Mandarin and 'Textbook Mandarin' "Journal of the Chinese Language Teachers Association, Vol. XIV, No.3, Chinese Language Teachers Association.

呂叔湘(1980/1999)，《現代漢語八百詞(增訂本)》，北京：商務印書館.

教育部臺灣台語常用詞辭典 (https://sutian.moe.edu.tw/zh-hant/).

为何存在多重数词现象？
-基于汉语与中国少数民族语言的功能分析

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数词是所有语言中共有的一个词类，但在不同语言中的表现却各有差异。基数词的功能本质上是表达数值，因此原则上不需要多种表达形式。印欧语的数词在词类系统中最为稳定（桥本万太郎，1983）。例如，英语的基数词是单一的（one、two、three……），序数词则使用不同的词语（first、second、third……），而东亚语言的情况则有所不同。例如，韩语的基数词分为"固有语"和"汉字语"系统，是个典型的双重数词体系语言。汉语虽然没有成系统的多重数词体系，但数词"2"存在"两"和"二"的分化现象。

一般认为，"两"表示具体事物的数量，所以用于量词前，而"二"用于表示序数或抽象运算。然而，实际情况并非如此简单。即使在量词前，如果是合成数词（如"二十二本书"），则只能使用"二"。因此，本研究认为，汉语的数词分化现象应从另一个角度来观察。我们支持吕叔湘（1984）、太田辰夫（1987）以及 Lee（2015）等学者的观点，即这种现象与数词"两"的使用范围扩展密切相关。

（1）a. 两千两百二十二　b.两千二百二十二　c.两块两毛二分　d.两块二毛二分 （普通话）

（2）a.*两千两百二十二　a'.两千二百二十二　b.*二千两百二十　b'.两千二百二十 （淮南话）

从上面的例子中可以看到，数词"两"的扩展程度因语言不同而存在差异。对于此现象，学者们指出"两"的扩展规律是：从大的单位到小的单位（太田辰夫 1987、Lee2015 等）。

如果将视野扩展到中国境内少数民族语言，我们可以发现数词的分化是一个非常普遍的现象。以侗台语族语言为例，壮语、布依语、侗语、水语、毛南语等都有数词分化的现象。这些语言除了数词"1""2"以外，其他数词也有相似现象。本研究关注的是，这些语言的数词为何存在多种？它们的功能分工是怎样的？与普通话的数词"两"和"二"的分工相比，有何共同点和差异？我们初步假设，数词形式的分化跟其承担的词性功能有关。已有研究指出（刘丹青 2008：541、Corbett1977 等），在一种语言若存在两种（或多种）数词形式，，通常会表现为一类偏向名词性用法，另一类偏向形容词性（修饰性）用法。Greenberg（1978）亦曾指出，在拥有双重数词体系语言中，可将形式区分为绝对形式（absolute form）和语境形式（contextual form），普通话的"两"和"二"的对立就是典型例子。以下坳壮语和布依语为例加以说明：

（3）a. pu¹³wə:n²³¹**deu⁴²** "一个人" b. ʔit⁵⁵fa:n³¹ʔit⁵⁵ "1100" （下坳壮语，韦茂繁 2012）
　　　个 人 一　　　　　一 万 一

（4）a. pa⁵soŋ₁ "200"　　　b. ɕiən²ŋi₆ "1200" （布依语，周国炎、刘朝华 2018）
　　百 两　　　　　千 二

下坳壮语的数词"1"有"deu⁴²"（固有词）和"ʔit⁵⁵"（汉语借词）两种形式。（蒙元耀 2012）在计量时，一般使用"deu⁴²"（例 3.a），但表示较大的数目时，倾向于使用借用数词"ʔit⁵⁵"，而且在"fa:n³¹（万）"后面省略单位时，数词"1"也只能用"ʔit⁵⁵"（例 3.b）。布依语的数词系统也存在类似的分化。正如例（4）所示，即便是相同的数值 200，布依语分别使用不同的数词。我们可以认为例（4.a）中的数词 2 是形容词性的，例（4.b）的数词 2 是属于名词性的。

以往研究较少系统探讨数词分化，只有少数类型学家对其共性略有提及。本研究旨在从跨语言的角度考察数词系统，特别是对具有双重（或多重）数词体系的侗台语族语言和部分苗瑶语族语言进行全面考察，着重回答以下几个问题：

第一，中国境内部分少数民族语言存在双重（或多重）数词体系。那么这些数词在功能上如何分工？

第二，少数民族语言借用数词与韩语、日语等东亚语言的借用数词有何共同点与差异？在韩语中，数目越大，越倾向于使用借用数词。固有数词通常用于计量，而借用数词用于序数表达。那么，与此相比，少数民族语言的情况有何特点？

第三，本研究将通过对中国境内少数民族语言的考察，重新检验 Corbett（1977）、Greenberg（1974、1978）等学者关于数词分化普遍性的假设。

西方传教士西南官话文献与现今方言音系关系的定量研究

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本研究以 19 世纪西方传教士编纂的西南官话文献为对象，探讨其所记录的音系特点与现今西南官话方言之间的关系。 西南官话作为汉语的重要分支之一，地域分布广泛，内部差异显著，音系现象复杂多样。西方传教士所留文献真实保存了近代西南地区部分方言的语音面貌，为历史音韵与方言演变研究提供了重要的资料。 然而，既有研究多以定性描述为主，缺乏对文献中音系特征及其地域属性的系统量化分析，导致对文献所反映方言面貌的认知仍不够精细。 鉴于此，本文引入定量分析方法，围绕历史文献与现代西南官话方言之间的音系特征展开系统对比研究，通过测算特征相似度，探讨文献与不同地域方言之间的结构关联，并据此推测文献记录方言的地理归属及历史演变脉络。研究对象涵盖 Paul Perny、Adam Grainger、Edward Amundsen 等西方传教士的代表性著作，以及云南、四川、重庆、贵州等地的现今西南官话方言调查资料。本研究尝试以数据驱动的方式推进历史音系特征的精确识别与地域定位，不仅有助于深化对西南官话音系演变过程的理解，亦为传统文献的方言学解读提供新的实证路径，拓展历史语言学与方言学交叉研究的视野。

参考文献（选录）

노혜정(Roh, Hye-jeong)(2021), 〈《西蜀方言(Western Mandarin, Or the Spoken Language of Western China)》(1900)의 편찬 배경과 기초 방언에 대한 재고찰〉, 《중국문학》 109。

노혜정(Roh, Hye-jeong)(2024), 근대 시기 서양 선교사의 西南官話 관련 사전류 문헌 연구- Paul Perny 의 Dictionnaire Français-Latin-Chinois de la Langue Mandarine Parlée (1869)와 Appendice du Dictionnaire Français-Latin-Chinois de la Langue Mandarine Parlée (1872)를 중심으로, 《중국문학》 118。

陈 伟(2018), 〈童文献所记官话音系及其性质〉, 《语言研究》38(2)。

曾晓渝(2018), 〈《西蜀方言》的音系性质〉, 《方言》第 3 期。

甄尚灵(1988), 〈《西蜀方言》与成都语音〉, 《方言》第 3 期。

伊薩亞《俄漢詞典》中的兩種詞重音標記初探

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　　本文以俄國東正教會駐北京傳教團的傳教士伊薩亞（Исайя, 1833-1871）編纂的《俄漢辭典》（1867）為對象，探討其漢語部分中的兩種詞重音標記的功能與特徵。所謂俄國東正教會駐北京傳教團是指以保持在京俄羅斯後裔的東正教信仰為主要目標，自 18 世紀到 20 世紀存在於中國北方的宗教組織。在其約二百年的歷史中，傳教團成員中湧現出了很多位漢學家。伊薩亞曾經參加了第 14 屆（1858-1864）與第 15 屆（1865-1879）的傳教團，在北京度過了十四年的歲月。他對當時的漢語，尤其是北京話所做的紀錄非常詳細。

　　《俄漢詞典》的全名為 *Русско-Китайскій Словарь, разговорного языка /Пекинского наречія/* （即北京話口語的俄漢辭典）。此書於 1867 年出版發行之後，修訂版於 1869-1870 年出版。初版的大小為 13.7×13.7 釐米，線裝兩冊，全 338 頁（268 頁+70 頁），收藏於東京東洋文庫、俄羅斯葉利欽總統圖書館等處。每半頁最大十五行，每一行由俄語詞彙，北京話詞彙，以及用西里爾文字對漢字進行的標音而構成。橋本 1958 指出，此書收錄約 8000 個北京話的口語詞彙。這種標音系統中沒有聲調的表示，但其最大特點為對詞重音的標記，例如：俄語詞彙"Августъ"，對應的北京話詞彙"八月"的標音"Па́юэ"。我們可以看到這種重音標記""（銳音符）在第一音節 Па́ 上。此書還有另外一種重音標記，例如：俄語詞彙"Астрология"，對應的北京話詞彙"飛星法"的標音"Фэйсинъфа̀"。我們可以看到這種重音標記"`"（重音符）在第三音節 фа̀ 上。此書中還可以發現大量的例子，如下所示。

　　（1）　Грецкий орѣхъ　　　核桃　　　Хэ́ тао
　　（2）　Жертвенникъ　　　　祭臺　　　Цзи та́й
　　（3）　Береста　　　　　　樺皮　　　Хуа́пй
　　（4）　Булыжникъ мелкій　石子　　　Шицзы̀
　　（5）　Другъ　　　　　　　朋友　　　Пэнъ ю̀

丸山 2020 指出，中世紀俄語的宗教文獻具有紀錄重音標記的習慣。那些文獻中的銳音符表示詞中的重音，而重音符表示詞尾的重音。本文整理此書中兩種標記的出現趨勢。據筆者的分析，可以認為基本上漢語部分的兩種標記也沿用了中世紀俄語文獻的習慣。本文還試圖闡明此書的著者伊薩亞如何看當時北京話的重音系統。此書的重音標記為目前唯一現存的反映清代北京話重音情況的紀錄。通過此書我們可以觀察清代北京話的另一個面貌。

參考文獻：橋本萬太郎 1958〈ロシアの中國語研究〉，《中國語學事典》，東京：江南書院，pp.328-336.｜丸山由紀子 2020〈14 世紀末–15 世紀モスクワ・ルーシにおける第二次南スラヴの影響–ロシアにおける 18 世紀以降の文字改革に関連して–〉，《日本 18 世紀ロシア研究會年報》17, pp.1-18.

粵桂閩語起始體範疇類型研究

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提要：世界語言及漢語通語、各大方言的起始體相關範疇素為學界研究熱點（Comrie，1976；Thomas ，1982；Smith，1991；Bogaards，2022；Tabrizi，2023；呂叔湘，1942；王力，1944；趙元任，1968；朱德熙，1982；詹伯慧，1991；戴耀晶，1997；唐正大，2005；林華勇，2006；張誼生，2006 等），閩語起始體範疇研究則只見於各方言點的現象描寫。雖僅有現象描寫，但這些描寫展現了閩語內部起始體範疇表達具有顯著差異，如李如龍（1996）認為泉州閩語起始體表達具有多種形式，包括"嘞+動詞+（賓語）+嘮""形容詞+來（嘮）""動詞+著（了）+動詞"和"一下+動詞"，並以"嘞+V+（賓語）+嘮"最為常見。而據施其生（1996）描寫，汕頭閩語並無真正意義的起始體範疇，"動詞/動詞短語+落去"有時可表示動作開始，但"落去"表示開始的同時也強調施事者的主觀意願，覆蓋範圍有限，須是含有"使然"義的句子才可使用，其他大量的口語句子並無所謂起始。

泉州閩語與汕頭閩語譜系上皆屬閩南方言，前者起始範疇形式多樣而後者並無真正意義的起始體。譜系一致的方言在起始體範疇具有如此巨大的差異讓我們對閩語內部起始體形式的類型分佈產生了疑惑。究竟閩語是否有典型的起始體範疇表達形式？起始體的分佈與類型如何？這些問題的解答有賴於更進一步深入調查不同區域閩語。故本文以起始體範疇的表達形式為考察對象，重點調查學界未有研究的廣東、廣西（兼及海南）閩語的起始體表達策略，對閩語內部起始體範疇作類型比較與分佈研究。初步調查表明，粵桂地區閩語多具固定起始體表達形式，但形式特徵各異，如廣東中山閩語用"動詞+浮"表起始，廣西北海閩語用"動詞+來"表起始。本文通過對廣東、廣西等地多個閩語的詳細調查，討論閩語起始體相關範疇的表達策略與形式，對閩語起始體範疇的分佈類型作區域比較，並以語法化理論、語言接觸等視角分析與解釋閩語起始體範疇相關策略的形成與發展模式。

關鍵詞：粵桂閩語；起始體；語言接觸；語法化

语境因素对汉语违实条件句识解的影响——基于眼动追踪实验研究

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印欧语主要通过形式手段表达违实义，而汉语条件句主要基于语境通过语用推理表达违实义，在类型学视角下分别对应违实范畴的两种表达手段。Bloom（1981）提出汉语缺乏形式上的违实标记因而汉语母语者缺乏违实思维，后续诸多研究针对汉语违实条件句编码展开，基本认同语境是汉语条件句违实义达成时出现频率最高、最可及的因素，即汉语主要依靠语用推理表达违实条件，汉语母语者也具备违实思维。本研究旨在通过眼动追踪实验手段分析语境因素对汉语违实条件句识解的影响，进一步在类型学视角下探讨意合手段的表达效率。

影响汉语违实条件句的语境因素主要包括真实性和相关性。真实性是最为基础的语境因素，即条件句中前件小句和说话人认定的事实是否符合，本研究主要对比高真实和低真实（违实）语境因素。语境的相关性是违实条件句研究中另一个重要因素，当语境关联性足够强的时候可以引导人们对后续输入信息进行预期。本实验采用 2（高、低真实）*2（高、低相关）的双因素被试内实验设计。实验材料如下表所示：

表1实验材料举例

条件	材料	
[+真实] [+相关]	S1：小陈发表了一份声明。	S2：如果/他/现在/澄清，别人就不会/继续造谣。
[-真实] [+相关]	S1：小陈发表了一份声明。	S2：如果/他/不/澄清，别人就会/继续造谣。
[+真实] [-相关]	S1：小陈发表了一条微博。	S2：如果/他/现在/澄清，别人就不会/继续造谣。
[-真实] [-相关]	S1：小陈发表了一条微博。	S2：如果/他/不/澄清，别人就会/继续造谣。

实验招募了 30 名年龄在 20-24 岁的汉语母语者作为被试。首先由被试完成练习实验以熟悉实验流程，然后随机呈现实验材料，每次呈现一个完整的"背景句+前件小句+后件小句"。实验数据通过 SR Research EyeLink 1000 Plus 眼动仪（1000Hz 采样率）收集，记录了首次注视时间、凝视时间等关键眼动指标。实验数据的分析使用 R 语言，在前件小句、后件小句的关键动词短语处进行方差分析，评估语境真实性和相关性的主效应及交互效应。

实验结果表明，在低相关语境下，阅读效率显著降低，表现为更长的阅读时间及更多的注视次数，表明语义整合存在困难；而在低真实语境下，阅读效率较高，呈现更短的阅读时间，更少的注视次数。（见图 1）在后期眼动加工指标上，后件小句的关键动词短语处的阅读时间与注视次数显著高于前件小句动词短语处。

Line Plot of IA_DWELL_TIME by Clause, Correlation, and Realism
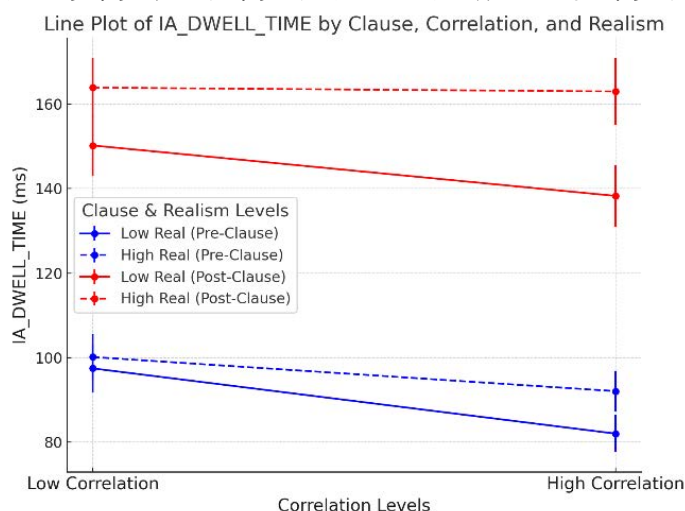
本研究揭示了汉语在违实语义加工上的独特性，即更多依赖语境线索而非形式标记。在加工效率上，采用语用编码的汉语和采用形式编码的印欧语有相同的效率，都在条件句前件小句中已经进行了识解。

早期现代温州话的 OV 语序与受事前置：基于《新约圣书》的对比研究

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吴语中 OV 语序较为常见，受事话题句是其典型形式。徐烈炯、刘丹青（1998）提出上海话等吴语属于 STV 发达的语言，具有弱 SVO、强 SOV 倾向。钱乃荣（2002）指出，上海话小句本为 SOV 语序，向 SVO 的转变是受官话影响。学者们普遍认为，汉语作为话题优先语言（Li & Thompson 1976, 1981；LaPolla 2009, 2017），因受事的信息结构特性（已知/有定），容易形成 OV 语序。研究发现，上海话受事话题句占比达 1/3（刘丹青 2001），浙江吴语（宁波、绍兴、温州）亦表现出 SOV 倾向（林素娥 2015）。钱乃荣（1997）归纳了上海话中 SOV 语序最明显的八种句法环境，包括受事话题句，而林素娥（2015）统计了官话和上海话中受事倾向前置的三类结构以及上海话特有的受事前置条件。

然而，现有研究主要关注上海话，对温州话的受事前置研究较少。本研究基于 1903 年苏慧廉译温州话圣经《新约圣书》（简称"苏"），统计其中 272 个受事句，并与官话《圣经和合本》（简称"和"）对比，探讨：(I) 温州话是否具有明显 OV 倾向；(II) 温州话与官话中强制受事前置的情况；(III) 温州话特有的受事前置模式。

研究发现，温州话 OV 语序比例较高，272 个句中 97 句（35.6%）受事前置，而官话仅 59 句（21.7%）。如表 1 所示，两者均倾向受事前置的情况包括：(a) 受事为复杂 NP，例（1）；(b) 受事为人称代词，例（2）；(c) 受事带有定标记（如"这、那"），例（3）；(d) 受事为光杆名词，例（4）；(e) 受事为全指（如"都、凡"），例（5）；(f) 假设句中的受事前置，例（6）。此外，温州话特有的受事前置包括：(a) "所说做成"结构（共 7 例），例（7）；(b) "有"+光杆名词/疑问代词存现句，例（8）；(c) 处置式比官话更发达，例（9）。98 句受事前置句中 27 句为把（温州话 pó）字句，而官话中只有 12 句使用了把字句。

本研究填补了吴语受事前置研究在温州话领域的空白。结果表明温州话 OV 倾向明显，并揭示其与官话在受事前置模式上的共性与差异。研究丰富了吴语句法研究，为汉语方言语序类型学、汉语句法演变及跨方言比较研究提供了重要参考。未来研究也将考察当代温州话自然口语语料中的受事前置现象，并探讨其历时变化。

表 1：温州话和官话受事前置句的统计

	有定			光杆名词	全指	假设	兼语	存现句		"所说做成"	总计
	复杂 NP	人称代词	有定标记					光杆名词	疑问代词		
温州话	40	12	5	8	5	2	11	3	4	7	97
官话	22	12	1	6	4	2	13	0		0	59

1.   a. <u>坐在死亡的地界和死亡的荫下面那些人</u>，有光出现照着他们。（苏，太 1:18）
    b. <u>坐在死荫之地的人</u>有光出现照着他们。（和，太 1:18）
2.   a. 渠就把<u>他们</u>医好。（苏，太 4:24）   b. 耶稣就治好了他们。（和，太 4:24）
3.   a. <u>这些</u>都会加给你。（苏，太 4:33）   b. <u>这些东西</u>都要加给你们了。（和，太 6:33）
4.   a. 袖手里拿着簸箕, 把<u>麦</u>收仓里。（苏，太 3:12）
    b. 他手里拿着簸箕, 把<u>麦子</u>收在仓里（和，太 3:12）
5.   a. 所以<u>凡不结好果子的</u>就砍了。（苏，太 3:10）
    b. <u>凡不结好果子的树</u>就砍下来。（和，太 3:10）
  1.   a. 但落<u>一铜钱</u>还没差完。（苏，太 5:26）   b. 若有<u>一文钱</u>没有还清。（和，太 5:26）
  1.   a. <u>先知耶利米所说</u>就做成。（苏，太 2:17）   b. 这就应了<u>先知耶利米的话</u>。（和，太 2:17）
  1.   a. 在拉玛有<u>声音</u>听见。（苏，太 2:18）   b. 在拉玛听见<u>号啕大哭的声音</u>。（和，2:18）
  1.   a. 我从埃及会把<u>我的儿子</u>叫出来。（苏，太 2:15）
    b. 我会从埃及召出<u>我的儿子</u>来。（和，太 2:15）

中原官话信蚌片知庄章组声母的读音类型、分布与演变

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古知庄章三组声母的变化是汉语语音史上的一项重要音变，三组声母在现代汉语方言中的读音类型及演变情况复杂，向来为学者们所关注。中原官话信蚌片方言沿淮河呈带状分布，主要分布在河南省南部的信阳地区和安徽省北部地区。文章的研究范围在《中国语言地图集》（2012）B1-5 图的基础上，结合近年来方言调查的最新成果做出一些调整，共涉及 23 个县市 45 个方言点。

文章内容主要分为两部分：第一部分考察了中原官话信蚌片 45 个方言点知庄章三组声母的读音情况，根据音类分合条件分出五大类型，具体包括知二庄组与知三章组对立型、开口与合口对立型、内转与外转对立型、准合一型和合一型，根据音值差异又细分为十小类，这些读音类型涵盖了熊正辉（1990）归纳的"济南型""昌徐型"和"南京型"三种官话方言的基本类型。结合方言地理分布情况，再与周边方言进行比较可以得知，这些类型在信蚌片内部大致以淮河为界分为南北两部分，淮河以北地区与北边的南鲁片、漯项片、商阜片等中原官话的类型表现一致，淮河以南地区则与南边的黄孝片、洪巢片江淮官话的类型存在共性。可见信蚌片方言的知庄章组声母内部存在较大差异，表现出南北官话方言的混合性特征。第二部分通过对历史文献的考察和梳理，分析了中原官话信蚌片知庄章组声母不同读音类型的历史来源、演变过程以及相互之间可能存在的演变关系。其中值得注意的是，安徽金寨斑竹园方言存在知庄章组合口字擦音声母今读舌尖-龈后与唇齿双部位音[ʂf-]的现象，这种读音形式对于解释知庄章组合口字唇齿化的形成过程和音变机制具有重要意义。

YSA FINALISTS

Reconstructing pharyngealized vowels for *Qieyun* Division II

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Abstract

It is widely accepted that Middle Chinese Division II originates from the Old Chinese medial *[r], yet its reconstruction remains highly debated. Existing proposals involve diverse features, including palatalization, velarization, r-coloring, and pharyngealization. To revisit this issue, I integrate evidence on Division II from poetic rhyming, Sino-Xenic materials, *fanqie* 反切 patterns, and historical developments, and identify the properties of Division II as additional non-vowel quality, vowel lowering, *a*-fronting, slight *e*-backing, and phonetic conformability with the low front vowel, uvulars, and rhotics.

After aligning a wide range of potential proposals with these properties, it is found that Division II is best interpreted as palato-pharyngealization, a type of pharyngealization observed in Northeast Caucasian languages where the anterior tongue body is raised toward the palate and the tongue root is retracted constricting the pharynx. Palato-pharyngealization surpasses other potential features in its ability to explain all the properties of Division II. Based on this finding, I reconstruct three (palato-)pharyngealized vowels [eˤ, oˤ, aˤ] as Division-II vowels for the *Qieyun* 切韵 system, and a pharyngeal medial [ˤ] for Middle Chinese before the *Qieyun* system. This pharyngeal medial is derived from decoronalization of the Old Chinese medial *[r], driven by retracted tongue root (Type-A) initials, and subsequently fuses with vowels to form the pharyngealized vowels.

The pharyngealization theory refines the reconstructed Middle Chinese vowel systems and provides a better interpretation of the nature and evolution of Divisions in Early and Later Middle Chinese, thus enhancing the framework of Chinese historical phonology.

1. Introduction

1.1 Divisions in Middle Chinese

Division (等 *děng*) refers to the classification of Middle Chinese (MC) syllables by the quality of medials and vowels[1] (Baxter 1992: 42–43). There are four Divisions (I to IV) in Late Middle Chinese (LMC) as categorized in the rhyme tables (韵图 *yùntú*). This framework can be extended backward to the *Qieyun* 切韵 system (QYS; 601 CE) and earlier stages of Early Middle Chinese (EMC). However, syllable classes in EMC differ from those in LMC in two ways: (a) the *Qieyun* Division of a character may differ from its *Yuntu* Division (Shen 2017; Shen 2020: 30–35; Mai 2022), and (b) *Qieyun* Division III contains multiple subdivisions (Chou 1970; Huang 2012). In this paper, unless specifically indicated, the term "Division" refers to the *Qieyun* Division.[2]

A more effective hierarchical categorization of EMC syllables involves dividing them into two primary types: Type A and Type B (Pulleyblank 1977). Type A contains Divisions I, II, and IV, while Type B encompasses all subdivisions of Division III. The Type A–Type B dichotomy for Old Chinese (OC) and EMC syllables is widely accepted (Shen 2017).

Regarding the phonetic distinction between the two types in OC, Norman's (1994) theory, where Type-B initials are plain consonants and Type-A initials are retracted tongue root (RTR) consonants,[3] has become the most popular theory (Shen 2020: 100–101). Regarding the distinction in EMC, various proposals have been made:

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[1] In this paper, I treat medial and coda segments as consonants instead of vowels, e.g., [j, w] instead of [i, u]. Therefore, when I use the term "vowel," I only refer to the syllable nucleus, a.k.a., the main vowel.

[2] There are also works that reserve the term "Division" for the *Yuntu* Division only, and use the term "Rank" to refer to the *Qieyun* Division (Shen 2017).

[3] Norman's (1994) origin description for Type A is "pharyngealization." According to the categorization in this paper (Section 3.1), the type of pharyngealization of OC Type-A initials is more accurately identified as RTR (Section 5.3). Gong (2018) mistakenly equates it with uvularization.

(a) Type B with high front medials/vowels [j/i] vs. Type A without (e.g., Baxter 1992: 69);

(b) Type B with high non-back medials/vowels [j/i, j̈/ɨ] vs. Type A without (e.g., Huang 1995: 52–66);

(c) Type B with high vowels [i, ɨ, u] vs. Type A without (Pulleyblank 1977);

(d) Type B with tense vowels vs. Type A with lax vowels (Starostin 1989: 18–21);

(e) Type B as lax syllables vs. Type A as tense syllables (Ferlus 2009).

Norman's (1994) RTR theory is also suggested as extendable to some EMC initials (Baxter and Sagart 2014: 75), therefore:

(f) Type B with plain initials vs. Type A with RTR initials.

While theories (a) and (b) have been dominant since the late 20th century, I also value theory (f) because it is supported by Sino-Xenic evidence (Section 2.6).

It is now a consensus that Division-II syllables originated from the OC medial *[r] (Shen 2017; Shen 2020: 76–77; Xu 2023). More specifically, Division-II syllables resulted from OC Type-A syllables with the medial *[r] as well as from OC Type-B sibilant initials plus the medial *[r], i.e., from OC onsets *[Cr] and *[TSr] (Baxter and Sagart 2014: 74–75).

For reconstructing Divisions, Chen (2004) and Mai (2008) proposed the consistency principle: unique phonetic features should be reconstructed for each Division, and all syllables belonging to a particular Division should be consistently assigned these features. This principle applies to both *Qieyun* and *Yuntu* Divisions.

1.2 Previous proposals for Division II

Despite the consensus regarding the OC origin of Division II, the nature of Division II in MC remains debated, with no widely accepted solution. Traditional reconstructions do not assign a specific quality to Division II, while more recent reconstructions often do so.

Across these reconstructions, proposed special qualities for Division II fall into 4 types: (a) **palatalization**, as the medial [ⁱ] in Karlgren's (1915–1926: 629–632) old theory; (b) **velarization**, including the velar medial [ɣ] (Zhengzhang 1987), [ɯ] (Xu and Pan 1985; 1994), [ᵚ] (Pan 2023), or [ɰ] (Shen 2020), velarized syllables [CˠV] (Ferlus 2009), and diphthongs with velar off-glides [Vɨ] (Pulleyblank 1991: 12–13); (c) **r-coloring**, including the r-medial (Zhao 1985; Huang 2002a) and retroflex vowels [Vʳ] (Pulleyblank 1984: 191–193) or [V̠] (Starostin 1989: 16); and (d) **pharyngealization**, as the medial [ʕ] (Gong 2018). Combinations of these features are also proposed, e.g., the r-colored velar medial [rɰ] (Mai 1992) or [rɣ] (Mai 2022).

This paper seeks to identify the most appropriate feature for Division II from these candidate proposals and beyond. To achieve this, I will revisit the properties of Division II (Section 2), explore variants of pharyngealization (Section 3), and then use these properties to determine the best feature for Division II (Section 4).

1.3 Vowels of the QYS

This paper uses Baxter's (1992: 27–85) transcription system (with subsequent modifications in Baxter and Sagart 2014: 12–20) to represent sounds in the QYS. Various reconstructions of the QYS involve different numbers of vowels (Table 1). To facilitate the reader's understanding, I adopt a 10-vowel set for the QYS (Tables 1 and 2) based on Baxter's transcription, vowel distribution (Huang 2002b), and evidence from poetry rhyming practices (Zhou 1996; Zhang 2008). Division-II rhymes in the QYS are also listed in Table 3 for reference.

Table 1. Various reconstructions of vowels of the QYS

	真	殷	东	青	登	冬	耕	江	庚	阳
Baxter (1992)	*i*	*ɨ*	*u*	*e*	*o*	*ow*	*ɛ*	*æw*	*æ*	*a*
Baxter and Sagart (2014)	*i*	*ɨ*	*u*	*e*	*o*	*ow*	*eɑ*	*ɑew*	*ɑe*	*a*
Huang (2002b: Table 2E)	i	ɨ	u	e	ə	o	æ	ɐ	a	ɒ
Starostin (1989: 45–47)	i	ɨ	u	e	ʌ, ə	o	ạ̈	ạu	a, ạ	a, â
Pan and Zhang (2015)	i	ɨ	u	ɛ, e	ɤ, ə	o̤, o	ɛ	ɔ	æ	a, ɑ
Pan (2023)	i	ɨ	u	ɛ, e	ɤ, ə	ʊ, o	ɛ	ɔ	æ	a, ɑ

This paper (Section 5)	i	ɨ	u	e	ə	o	eˤ	oˤ	a, aˤ	ɑ
Available Type-B Divisions	III	III	III	III	III	III			III	III
Available Type-A Divisions			I	IV	I	I	II	II	II	I

Rhymes are presented in the table header as examples for vowels: 真 *Zhēn* (*-in*), 殷 *Yīn* (*-ɨn*), 东 *Dōng* (*-uwng*), 青 *Qīng* (*-eng*), 登 *Dēng* (*-ong*), 冬 *Dōng* (*-owng*), 耕 *Gēng* (*-eang*), 江 *Jiāng* (*-aewng*), 庚 *Gēng* (*-aeng*), and 阳 *Yáng* (*-ang*). Rhymes with the coda *-ng* are selected, except for the vowels *i* and *ɨ*, as there is no contrast between these pair of vowels before *-ng*. Note that the correspondence between these vowels and other rhymes can vary among scholars. Vowels of different heights are separated by vertical lines (also see Table 2). Baxter (1992) treats the vowel roundness of 冬 and 江 as coda labialization (*-wng*, *-wk*), so I list *-w* together with the vowels in the table. For reconstructions that transcribe the Type-A and Type-B vowels in the same cell with different letters, two vowels are separated by a comma, with the Type-B counterpart listed before the comma. In Starostin (1989), underdot = retroflex vowel, ⟨ä⟩ = [ɛ], and ⟨â⟩ = [ɑ]. In Pan and Zhang (2015) and Pan (2023), ⟨ɛ⟩ = [e].

Table 2. Vowels of the QYS arranged by height and frontness[4]

[+front]	[−front] [−round]	[−front] [+round]
真 *i*	殷 *ɨ*	东 *u*
青 *e*	登 *o*	冬 *ow*
耕 *ea*		江 *aew*
庚 *ae*	阳 *a*	

Table 3. Division-II rhymes in ping 平 tone in the QYS arranged by vowel height and coda

Higher	江 *-aewng*	佳 *-ea*	皆 *-eaj*	山 *-ean*		耕 *-eang*	咸 *-eam*
Lower		麻 *-ae*	夬 *-aej*	删 *-aen*	肴 *-aew*	庚 *-aeng*	衔 *-aem*

It is important to note that the *Qieyun* rhyme is not necessarily equal to the phonetic rhyme, i.e., nucleus plus coda, but is often more fine-grained than the latter (Yuchi 2003; Zhang 2008: 140–142; Shen 2020: 120–126). The earlier belief that each *Qieyun* rhyme corresponds to a unique phonetic rhyme (Karlgren 1915–1926: 79–80; Pan and Zhang 2015) is impractical. We should avoid introducing redundant vowels to account for rhyme separations in *Qieyun*; the 10-vowel set presented here is sufficient to account for poetry rhyming.

2. Properties of Division II

2.1 Additional non-vowel quality

2.1.1 Rhyming changes of Division-II rhymes in the Northern and Southern dynasties (420–589)

During the Southern Qi 齐 (479–502)[5], a notable change occurred in poetry rhyming: most Division-II rhymes become strongly independent, tending to rhyme solely with themselves (Zhou 1996: 703). This contrasts sharply with earlier rhyming practices in the Liu Song 刘宋 (420–479) and earlier, when Division-II syllables can frequently rhyme with syllables in other Divisions.

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[4] Phonologists typically prefer [back] instead of [front] when there is only a two-degree frontness/backness distinction (Flemming 2003). However, in the QYS, non-front vowels can be phonetically central (e.g., [ə] for *o*) and are less marked than front vowels, as indicated by the preference of syllables with non-front vowels over those with front vowels when choosing upper spellers (反切上字 *fǎnqiè shàngzì*) (Luh 1963; Huang 2012; also see Section 2.1.3). Therefore, I use the feature [front], making front vowels more marked.

[5] The rhyming practices of the Northern dynasties are basically the same as those of the Southern dynasties at the same period (Zhou 1996: 7, 706; Zhang 2008: 140). Therefore, I refer to the period of the Northern and Southern dynasties by only naming the Southern dynasties.

Taking rhymes with coda -n as an example, the 删 *Shān* rhyme (-*aen*) frequently rhymes with the 寒 *Hán* rhyme (-*an*) before the Southern Qi, but becomes independent after the Southern Qi; similarly, the 山 *Shān* rhyme (-*ean*) frequently rhyme with the 先 *Xiān* & 仙 *Xiān* rhyme (-*en*) before the Southern Qi, but becomes independent after the Southern Qi (Starostin 1989: 32; Zhou 1996: 714–715; Zhang 2008: 52–58).

Exceptions to this independence trend are the 麻 *Má* rhyme (-*ae*) and 庚 *Gēng* rhyme (-*aeng*), whose Division-II finals (*ae* and *aeng*) can rhyme with their Division-III finals (*jae* and *jaeng*) before and after the Southern Qi (Yuchi 2003; Zhang 2008: 30–38, 84–88). *Qieyun* also does not separate the Divisions II and III of these two rhymes. I will return to this in Section 2.5.

To summarize, from the end of the Southern Qi to the publication of *Qieyun*, i.e., in the 6th century, Division-II rhymes are independent of Division-I rhymes, Division-IV rhymes, and most Division-III rhymes. We can represent the rhyming changes as an *e*–*ea* split and an *ae*–*a* split.

2.1.2 Vowel uniqueness of Division II within Type A

After these splits, according to the consistency principle (Section 1.1), there should be a distinctive feature that makes Division-II vowels unique from other vowels within Type A.

Division-I vowels are [−front] and Division-IV vowels are [+front] (Table 2). Given that Division IV in the QYS is always with the vowel *e*, many proposals assign front vowels lower than *e* to Division II as the "feature" for Division II. However, this approach is unsatisfactory due to 3 issues.

First, since there is generally a height contrast within Division II (Table 3), at least two vowels lower than *e*, e.g., *ea* and *ae*, are required in this approach, leading to a 4-degree height contrast of front vowels, e.g., *i*/*e*/*ea*/*ae*. However, a plain 4-height vowel system is problematic according to dominant phonology theories (e.g., Chomsky and Halle 1968: 304–309), which define no more than three vowel heights unless additional features such as [advanced tongue root] ([ATR]) or [tense] are introduced. Moreover, in the 6th century, the 山 *Shān* rhyme (-*ean*) is closer to the 先 *Xiān* rhyme (-*en*) instead of the 删 *Shān* rhyme (-*aen*) (Zhang 2008: 52–58), suggesting that the vowel *ea* is better treated as a mid vowel, or at least phonologically mid. Therefore, it is better to find another feature to deal with the contrast between the two mid vowels, *e* vs. *ea*.

Second, the 江 *Jiāng* rhyme (-*aewng*) is very likely to have a [−front] vowel, conflicting with the assertion that all Division-II vowels are [+front]. In the 6th century, syllables with [+front] vowels rarely rhyme with those with [−front] vowels (Zhou 1996: 7; Zhang 2008: 140–142). However, 江 only rhymes with those with [−front] vowels, including 东 *Dōng* (-*uwng*), 冬 *Dōng* & 钟 *Zhōng* (-*owng*), and 阳 *Yáng* & 唐 *Táng* (-*ang*), while never rhymes with those with [+front] vowels (Zhou 1996: 707–709; Zhang 2008: 25–27). So does its corresponding *ru* rhyme 觉 *Jué* (-*aewk*) (Zhou 1996: 721–723; Zhang 2008: 107–115). In addition, 江 is rendered in Sino-Japanese *go-on* 吴音 as -*aũ* and -*oũ* (Li 2014: 44–46). The latter also indicates a [−front] vowel in MC.

Finally, the phonotactics of Type-A finals with initials in the QYS suggest that Divisions I and IV are closer, while Division II belongs to another class (Norman 1994; Xu and Pan 1994; Baxter and Sagart 2014: 16). Therefore, the above approach that groups Divisions II and IV closer by assigning them the same [+front] value lacks fidelity.

To address these issues, it is necessary to introduce a unique feature for Division-II vowels. This feature cannot be a vowel height or backness/frontness feature as discussed above, nor can it be roundedness since there is *kaikou* 开口 (unrounded) vs. *hekou* 合口 (rounded) contrast. As no basic vowel feature remains, we can confidently conclude that Division II is characterized by an additional non-vowel quality.

2.1.3 Evidence suggesting the existence of the quality

The above conclusion is based solely on internal phonological inference, while evidence suggesting the existence of additional quality of Division II does exist. Yet, no evidence can directly provide a phonetic value for the quality.

For the *fanqie* 反切 spellings in the *Qieyun*-series rhyme books (《切韵》系韵书 Qièyùn-xì yùnshū), Division-II syllables are rarely adopted as upper spellers (反切上字 fǎnqiè shàngzì) (Luh 1963; Huang 2002a).[6] Syllables with simpler finals are typically preferred as upper spellers in *Qieyun*-series *fanqie* spellings, in order to expose the annotated initial and facilitate the spelling process (Luh 1963; Huang 2012). The avoidance of Division-II upper spellers suggests Division-II syllables possess an excess quality that complicates the spelling process.

In Sanskrit-Chinese transcriptions by Xuanzang 玄奘 (602–664), Division-II characters are rarely used, unless the initial is retroflex, which can only combine with Division-II and Division-III finals (Shi 1983). Similarly, in *man'yōgana* 万叶假名, an ancient system using Chinese characters to represent Japanese syllables in the 7th century or earlier, Division-I characters are preferred over Division-II characters when phonetically transcribing the Japanese vowel *a*, with a ratio of approximately 5:1. If the Division-II vowel *ae* were only a plain front vowel, it would be unconvincing to claim that the central vowel *a* in Sanskrit and Japanese could only be suitably transcribed with a back vowel *a* instead of a front vowel *ae* in MC. Therefore, the limited use of Division-II characters in transcribing Sanskrit and Japanese indicates that the quality of Division II is absent in these languages and is unique to Chinese.

In principal Sino-Xenic readings (Sino-Japanese, Sino-Korean, and Sino-Vietnamese), there is no uniqueness of Division-II vowels compared with other Divisions. The low Division-II vowel *ae* and the low Division-I vowel *a* usually both correspond to *a* in these languages (some *ae* corresponds to *e* in *go-on*, which I will discuss in Section 2.3.1).

In later Sino-Xenic materials, particular correspondences to Division II can be found. In Sino-Khitan, several Division-II syllables with velar and glottal initials (*K-* and *ʔ-*) are spelled with the Khitan small script character (character 335 by 契丹文字研究小组 Qìdān Wénzì Yánjiū Xiǎozǔ [Khitan Script Research Group]) as the syllable medial or nucleus, and this character only appears in these Division-II syllables in Sino-Khitan (Shen 2007; Kane 2009: 75). When writing Khitan, represents the word 'elder brother', suggesting its phonetic value is likely a guttural consonant (with an inherent vowel *a*) by comparing with related languages, e.g., Middle Mongolian *aqa* 'elder brother' (Shen 2007; Kane 2009: 33). This indicates that Division II may feature certain guttural articulation. In Tangut rhyme books, there is a bidirectional correspondence between Chinese and Tangut Division-II syllables (Zhengzhang 2016). The phonetic value of Tangut Division II remains largely unclear, with new hypotheses proposing a medial *[r] (Zhengzhang 2016) or a medial *[ʕ] (Gong 2020), so it does not provide insights into the phonetic value of Chinese Division II. Nevertheless, it suggests that a unique quality exists in Division II in LMC.

2.2 Vowel lowering

During the Sui 隋 dynasty (581–618) (Zhang 2008), the two front Division II vowels merged into the lower one, i.e., *ea* > *ae* (Pulleyblank 1984: 111; Huang 1995: 176–177; Xu 2023). This vowel lowering can be regarded as an intrinsic quality of Division II (Song 2016). Some may cite examples of Division-I vowel lowering *o* > *a* in the 灰 *Huī* (-*oj*)–泰 *Tài* (-*aj*) merger and the 覃 *Tán* (-*om*)–谈 *Tán* (-*am*) merger that occurred after *Qieyun* (Huang 1995: 175–176) to challenge this idea. However, this Division-I vowel lowering occurred later than

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[6] Two easy-to-write Division-II characters, 下 *xià* (*haeX*) 'down' and 山 *shān* (*srean*) 'mountain', are slightly more commonly used as upper spellers due to their glyph simplicity (Luh 1963). The preference for glyph simplicity over phonetic harmony likely originates from the lost dictionaries edited in the Jin 晋 dynasty (266–420), *Yunji* 韵集 by Lü Jing 吕静 and *Zilin* 字林 by Lü Chen 吕忱 (Ota 2023). In addition, the reading of 山 in the Jin dynasty is probably in Division III (Baxter and Sagart 2014: 214, 395–396). Accordingly, 山 may be essentially excluded from Division-II upper spellers.

the Division-II vowel lowering (Pulleyblank 1984: 180), and is primarily limited to the lingua franca (or Proto-Mandarin), with southern dialects preserving the 灰 – 泰 and 覃 – 谈 distinctions (Wang 1999). In contrast, a reliable distinction between the two front Division-II vowels in modern dialects is very rare. Both temporal and spatial prevalence of Division-II vowel lowering suggests that Division II does possess the vowel-lowering quality.

There is one exception to vowel lowering: Division-II vowels in the 梗 *Gěng* rhyme group raised from [a] to [ɛ] in the lingua franca of the Tang 唐 dynasty (618–907) (Pulleyblank 1984: 118–120; Huang 1995: 207–210; Xu 2023). This does not refute the vowel-lowering quality of Division II, as this raising occurred to all Divisions in the 梗 rhyme group, e.g., 京 QYS *kjaeng* (Division IIIB) > mid-Tang [kɣɛŋ] > *jīng* 'capital city' paralleling 更 QYS *kaeng* (Division II) > mid-Tang [kɛŋ] > *gēng* 'change (v.)' (mid-Tang cited from Huang 1995, with the medial [i] replaced by [ɣ]). The cause of this raising is unclear; it may be due to assimilation to [+high] codas [ŋ, k] (Zeng 2021) or a push effect from the 江 *Jiāng* rhyme (-*aewng*) (Xu 2023). Nevertheless, we can assume that the rule of 梗-group vowel raising applies synchronically or diachronically after the rule of Division-II vowel lowering, thus making the vowel lowering ineffective.

2.3 *A*-fronting

2.3.1 Formation of the Division-II vowel *ae*

The *ae*–*a* split in Type-A syllables during the Southern Qi (Section 2.1.1) suggests the presence of certain element (e.g., the medial) in Division-II syllables that has an *a*-fronting effect leading to the formation of the front vowel *ae* from *a*.

The frontness of *ae* has phonetic support in Sino-Japanese *go-on*. Some Division-II characters, whether their vowels are *ea* or *ae*, have readings with the vowel *e* instead of the "ordinary" vowel *a* (Li 2014: 380–382). Note that the Japanese vowel *a* is central, so the use of the vowel *e* is to reflect the frontness of the Chinese vowel *ae* (Pulleyblank 1984: 185–186; Starostin 1989: 33; Xu and Pan 1994; Gong 2018). Some Division-II characters even have *go-on* readings with a medial -*y*- (Li 2014: 373–379), which may further support the frontness, though the reliability of these readings remains to be determined.

2.3.2 Palatalization of Division-II *kaikou* gutturals

The palatalization of the 见 *Jiàn* group (*K*-) and 影 *Yǐng* group (*ʔ*-) initials ("gutturals") occurs in Division-II *kaikou* syllables in several MC descendants.

The most well-known descendant is Mandarin.[7] From LMC to Early Mandarin, a medial [j] is inserted (or developed) after Division-II *kaikou* gutturals, e.g., 家 QYS *kae* > Early Mandarin [kja] > *jiā* 'household'. This sound change occurred around the later period of the Song 宋 dynasty (960–1279) and its completion is first confirmed in the 13th-century rhyme book *Menggu Ziyun* 蒙古字韵 (Shen 2020: 249–250). In *Menggu Ziyun*, there is a plain vs. palatalized contrast of gutturals (*k*- vs. *kj*- in Table 4), which mostly corresponds to the *Yuntu* Division III vs. *Yuntu* Division IV contrast (Mai 2022). Interestingly, the Division II *kaikou* gutturals belong to the palatalized group in *Menggu Ziyun*, suggesting that the palatalization tendency of Division II is stronger than that of *Yuntu* Division III in LMC (Mai 2022). The distinction between plain and palatalized dorsal initials in *Menggu Ziyun* is retained in the colloquial readings (白读 *báidú*) of some dialects in Shanxi 山西 and Shandong 山东, where palatalized dorsals (including Division-II characters) have merged with certain coronals (Liu 2017), e.g., *[kʲ]* > [ts] in Rongcheng 荣成 (Table 4). This confirms

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the truthfulness of the documentation in *Menggu Ziyun* and supports the strong palatalization tendency of Division-II *kaikou* gutturals.

Sino-Vietnamese presents a more extreme case: the 见 group initials have been palatalized under the Division-II *kaikou* condition but remain velar elsewhere (Table 5) (Karlgren 1915–1926: 353–354; Pulleyblank 1984: 93–94; Nguyễn 2011: 93–99; Shimizu 2020). In other words, the palatalization tendency of Division II is even stronger here than that of both Divisions III and IV. Moreover, a similar Division-II *kaikou* vs. elsewhere dichotomy of the initial 见 *k-* is observed in the old Sino-Zhuang readings (老借词 *lǎo jiècí*) in Shanglin 上林 Zhuang as [kʲ] vs. [k] (Zhang et al. 1999: 260–262), and in Pinghua 平话 in Binyang 宾阳 as [ts] vs. [k] (Zeng 2021; Teng 2022: 30–31, 80–81). Given the close relationship between Sino-Vietnamese, old Sino-Zhuang, and Pinghua, all of which are probably descendants of a popular southern variant of MC (Li 2002), these reflections of Division-II palatalization in these languages imply that the strong palatalization tendency of Division-II gutturals is not limited to Mandarin but is also present in the south.

Regarding the origin of the palatalization and the medial [j] insertion, there are two main theories: palatalization induced by the front vowel *ae* of Division II, and palatalization induced by the Division-II medial (see Zeng 2021 for a review). Nevertheless, since the vowel *ae* ultimately originated from Division II (Section 2.3.1), both theories ultimately analyze the palatalization in relation to the frontness of Division II.

Table 4. Examples of Division-II kaikou guttural palatalization

	Division	QYS	VN	MZ	RC	BJ and meaning
肝	I	*kan*	*can* [kan˥]	*kan*	[kan˥]	*gān* 'liver'
建	III	*kjonH*	*kiến* [kiən˦]	*ken*	[cian˥]	*jiàn* 'set up, establish'
茧	IV	*kenX*	*kiển* [kiən˩]	*kjen*	[tsian˩˥, cian˩˥]	*jiǎn* 'cocoon'
间	II	*keanH*	*gian* [zan˥]	*kjan*	[tsian˥, cian˥]	*jiān* 'interval'
箭	III > IV	*tsjenH*	*tiễn* [tiən˦]	*tsjen*	[tsian˥]	*jiàn* 'arrow'

VN = Vietnamese (Hanoi dialect). MZ = *Menggu Ziyun*. RC = Rongcheng dialect (Wang 1995). BJ = Beijing dialect. 箭 belongs to *Qieyun* Division III and *Yuntu* Division IV. For characters with two readings in the Rongcheng dialect, the first is the colloquial reading (白读 *báidú*) and the second is the literary reading (文读 *wéndú*).

Table 5. Initials of the 见 Jian group characters in Sino-Vietnamese

MC Initial	Div-II *kaikou*	Elsewhere
见 *k-*	*gi-* [z]	*c-/k-/q-* [k]
溪 *kh-*	*x-* [s]	*kh-* [x]
群 *g-*		*c-/k-/q-* [k]
疑 *ng-*	*nh-* [ɲ]	*ng-/ngh-* [ŋ]

Based on Nguyễn (2011: 105). The initial 群 *g-* has only Division-III syllables in MC. Following Shimizu (2020), the development of *gi-* and *x-* from Division-II 见 *k-* and 溪 *kh-* could be reconstructed as *[kj, kʰj] > Ancient Vietnamese (15th-century) *[kj, tʃ] > Middle Vietnamese (17th-century) [j, ɕ] > Modern Hanoi [z, s].

2.4 Slight *e*-backing

Upon careful inspection of the materials in Section 2.3.2, we can find that Division-II *kaikou* gutturals syllables in the 梗 *Gěng* rhyme group often bypass the medial [j] insertion and the palatalization. In Putonghua and other Mandarin dialects, only part of the 梗-group Division-II *kaikou* guttural characters underwent the medial [j] insertion (Xu and Pan 1985; Wang 2017), e.g., 行 QYS *haeng* > *xíng* 'walk' while 衡 QYS *haeng* > *héng* 'balance'. In Sino-

Vietnamese, old Sino-Zhuang, and Pinghua, the palatalization of Division-II 见 *Jiàn* group initials uniformly did not occur in the 梗 rhyme group (Pulleyblank 1984: 93; Nguyễn 2011: 93–99; Zeng 2021; Teng 2022: 80–81).

This phenomenon, exclusive to the 梗 rhyme group, is quite intriguing. Its occurrence in both Mandarin and these southern languages is unlikely to be accidental (Xu and Pan 1985). It appears to be linked to the other phenomenon unique to the 梗 rhyme group: the [a] > [ɛ] vowel raising (end of Section 2.2). Consequently, the raised vowel would be exempt from the *a*-fronting effect of Division II (Teng 2022: 30).

However, "exemption" does not complete the story, at least for Mandarin.[8] From a typological perspective, it is impossible that a low front vowel triggers palatalization while higher front vowels do not (Bateman 2007: 62–75). Therefore, there must be something that slightly drags back the mid vowel [ɛ] in order to weaken the 梗-group Division-II palatalization. Attributing the *e*-backing effect to the 梗-group velar codas [ŋ, k] (e.g., Huang 2002a) is also not ideal, as these codas are very likely to have gained *palatal* colors in LMC (Pulleyblank 1984: 118–120; see Dong 2016 for a review). Therefore, I propose that this slight *e*-backing effect should be attributed to Division II, as opposed to its *a*-fronting effect.

The *e*-backing effect could also account for the *e–ea* split during the Southern Qi (Section 2.1.1) and their subsequent contrast in the QYS (Section 2.1.2).

2.5 Low front vowel conformability

The vowel uniqueness of Division II discussed in Section 2.1.2 pertains to the scope of Type A. In the QYS, the vowel *ae* appears identically in Divisions II and III in the 麻 *Má* rhyme (-*ae*) and 庚 *Gēng* rhyme (-*aeng*), whose Division-II and Division-III syllables can freely rhyme with each other (Section 2.1.1). This requires that the properties of Division II do not have a noticeable impact on the quality of the low front vowel, otherwise, the rhyming harmony will be disrupted. In other words, the properties of Division II should be conformable to the low front vowel.

2.6 Uvular conformability

The Division-I and Division-II[9] 见 *Jiàn* group initials (*K-*) correspond to uvulars in various Sino-Xenic materials, including in Sui, Miao, Bai, Turkic, and Uyghur (Pulleyblank 1964; Zeng 2003; Yoshida 1994). This indicates that the 见-group Division-I and Division-II initials are phonetically uvulars.[10] Therefore, Division II should also be conformable to uvulars in order for 见 group initials and Division-II finals to combine smoothly.

2.7 Rhotic conformability

The close relationship between Division II and rhotics/retroflexes has been widely discussed (Huang 2002a; Gong 2018). I summarize the main points as follows: (a) Division II originates from the OC medial *[r] (Section 1.1); (b) Division-II finals are the only Type-A finals that can combine with retroflex initials; (c) syllables with sibilant retroflex initials (the 庄 *Zhuāng* group, *Tsr-*) are all listed as *Yuntu* Division II in rhyme tables, termed 庄三化二 *Zhuāng-sān huà èr* (lit. '*Tsr*-III becomes II') by Huang (2006); and (d) Division-II lower spellers (反切下字 *fǎnqiè xiàzì*) can indicate retroflexion of coronal initials. Note that r-colored consonants can involve tongue shapes other than retroflex (Section 3.3.1), and MC "retroflex"

8   For the three southern languages, the absence of 梗-group Division-II palatalization may be attributed to a phonotactic constraint prohibiting the medial [j] preceding front vowels, so LMC [kɛŋ] (Division II) can only be rendered as *[kɛŋ] instead of *[kjɛŋ]. However, this constraint obviously does not exist in LMC and Early Mandarin, where [kjɛ] frequently exists.

9   For EMC materials, the Division-IV 见 group is also involved, i.e., the entire Type-A 见 group is involved. In LMC, the *Qieyun* Division-IV 见 group has merged with the Division-IIIA 见 group, so it is not involved for LMC materials.

10   To my knowledge, the first to link the Type-A 见 group with uvulars is the hypothesis by Luh (1940).

initials only mean r-colored initials, with no evidence indicating whether they are true retroflexes. In summary, Division II should be conformable to rhotics (and other r-colored consonants).

The properties of Division II are comprehensively collected now, and we are in a position to evaluate candidate proposals for Division II based on these properties. However, before doing so, I need to clarify some of the features involved in these proposals, namely the different types of so-called pharyngealization.

3. Three types of pharyngealization

3.1 General introduction and the categorization in this paper

The secondary articulation of "pharyngealization" can vary significantly across languages, involving different articulatory and acoustic effects. Early awareness of this variation can be traced to Delattre (1971) and Catford (1977a: 192–193), who had preliminary discussions on this topic. Subsequent in-depth studies (Hess 1998; Bellem 2008; Moisik 2013; Sylak-Glassman 2014) identify different types of pharyngealization and provide detailed descriptions and comparisons from articulatory, acoustic, and phonological aspects.

Based on these findings, the SPE's specification of uvulars as [−high, +back] and pharyngeals as [+low, +back] (Chomsky and Halle 1968: 304–309) has been criticized and disfavored (see Sylak-Glassman 2014: 109–124; Zeroual and Clements 2015 for reviews). However, new theories continue to emerge and no consensus has yet been reached. Therefore, in this paper, I refrain from making phonology conclusions about different types of pharyngealization and instead describe them from an acoustic aspect, to facilitate the evaluation of Division-II proposals in Section 4. I categorize pharyngealization according to its acoustic effects on vowel quality (a.k.a., vowel coloration) into three types: uvulo-pharyngealization, palato-pharyngealization, and RTR.

Uvulo-pharyngealization has *lowering* and *backing* effects on vowels, i.e., raising the first formant (F_1) and lowering the second formant (F_2). This type is exemplified by the typical realization of emphatic consonants in Arabic, e.g., /tˤ, sˤ/ (Zeroual and Clements 2015). It involves retraction of both the tongue body (*backing*) and the tongue root (*lowering*). It is also referred to as uvularization (see below).

Palato-pharyngealization has *lowering* and *fronting* effects on most vowels, i.e., raising both F_1 and F_2. This type is exemplified by pharyngealized vowels in Northeast Caucasian languages.[11] It involves raising of the anterior tongue body toward the palate (*fronting*) and retraction of the tongue root (*lowering*) (Catford 1977a: 182). However, on non-low front vowels, it has slight *backing* effects instead of fronting effects. For example, in Tsakhur, the six plain vowels /i, e, a, o, u, ɤ/[12] have their pharyngealized counterparts being: /iˤ, eˤ/ *backed* and *lowered*, /aˤ/ *fronted*, and /oˤ, uˤ, ɤˤ/ *fronted* and *lowered* (Catford 1977b; 1983; see Hussain and Mielke 2021 for F1–F2 plots). I will discuss this further in Section 3.2.

Retracted tongue root (RTR) has simply *lowering* effects on vowels, i.e., raising F_1. Given that the tongue is a whole, tongue root retraction causes laxing or lowering of the tongue body, which results in *lowering* effects for all 3 types, while RTR involves no specific front–back movement of the tongue body. RTR has also been called pharyngealization (e.g., Svantesson 1985), though the term RTR is now widely used. The contrast between ATR and RTR is found in a range of languages, including Akan (Hess 1998: 100–116) and Mongolian (Svantesson 1985).

Additional acoustic cues for these types of pharyngealization may be present in specific languages, such as a lowered third formant (F_3) (Section 3.3.1), a wider F_1 bandwidth (Hess 1998), and irregular phonations (McCarthy 1994; Hess 1998).

The nomenclature for uvulo- and palato-pharyngealization remains highly controversial. Some scholars advocate that pharyngealization in Arabic is uvularization rather than

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[11]   Sound samples of Archi (Chumakina et al. 2007) and Tsakhur (Sackett et al. 2022) are available online.

[12]   In Section 3, following the transcription conventions of relevant works, [æ] = low front vowel, and [a] = low central or back vowel. The palato-pharyngealized [aˤ] is acoustically front.

pharyngealization since its gesture and effects differ from those of the pharyngeal fricative /ħ/ (McCarthy 1994; Hess 1998: 117–173). Some go even further to assert that uvulo-pharyngealization is not pharyngealization but uvularization (Colarusso 1981; Sylak-Glassman 2014: 69–70). On the contrary, there is also the claim that palato-pharyngealization is not pharyngealization but palatalization (Hess 1998:33). To remain neutral, I adopt the terms uvulo- and palato-pharyngealization proposed by Bellem (2008: 93, 142) in this paper.

3.2 Palato-pharyngealization in Northeast Caucasian languages and beyond

Palato-pharyngealization in Northeast Caucasian languages is very distinctive. It was first noticed by Trubetzkoy (1931), described as "emphatische Mouillierung" (emphatic softening), a term close to Bellem's (2008: 142) term of palato-pharyngealization (emphatic = pharyngealized and soft = palatalized). Its contradictory *fronting–backing* effects and double-bunching tongue shape (raised tongue body and retracted tongue root) are curious to linguists.

Catford (1983) and Moisik (2013: 489–491) notice that its double-bunching configuration arises from the depression of the back of the tongue body opposite the uvula, pushing the mass of the tongue toward both the palate and the lower pharynx (Fig. 1). The bunching toward the palate naturally yields *fronting* effects for low and front vowels. However, achieving such tongue configuration also limits the articulatory space for vowels, so front vowels are retracted along with back vowels fronted (Hussain and Mielke 2021). Therefore, the acoustic effects of palato-pharyngealization on non-low vowels can also be described as *lowering* and *centralizing* (Catford 1983; Hussain and Mielke 2021).
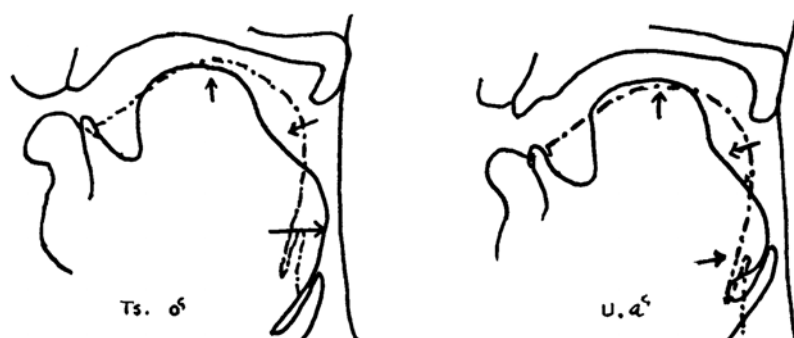

Fig. 1. Tongue shapes (solid lines) of /oˤ/ in Tsakhur and /aˤ/ in Udi (based on X-ray photos in Gaprindashvili 1966) with reference natural tongue shapes added (dashed lines) (reproduced from Catford 1983: Fig. 4)

However, its *fronting* effects on low and back vowels appears overall more prominent than its *backing* effects on non-low front vowels, not only by acoustic parameters but also by phonological processes. In some Northeast Caucasian languages, pharyngealized vowels can become "real" front vowels in the inventory, e.g., Tsakhur /uˤ, oˤ, aˤ/ > Sabunchi dialect [y, ø, æ], and vowels in pharyngealized environments can be realized as "real" front vowels, e.g., Avar /u, o/ ➡ [y, ø] (see Sylak-Glassman 2014: 70–73 for more examples). Interestingly, in Udi, a Northeast Caucasian language, both /æ/ and /a/ exist, but only /a/ has a pharyngealized counterpart /aˤ/ while /æ/ lacks one, probably because the quality of [æˤ] is so similar to [æ] that they cannot contrast (Moisik 2013: 495). In Lak, another Northeast Caucasian language, velars and /l/ even tend to have palatalized allophones in pharyngealized contexts (Moisik 2013: 482–486).

Palato-pharyngealization may occur beyond Northeast Caucasian languages. A sound change of [ʕʷ] > [ɥˤ] > [ɥ] is observed among dialects of Abkhaz, a Northwest Caucasian language (Colarusso 1981), suggesting that this [ʕʷ] is a "palato-pharyngeal". In Amis, an Austronesian language, there is acoustically /u/ lowering and fronting after pharyngeals (Maddieson and Wright 1995). In Inland Salish, the /a/ adjacent to a pharyngeal consonant is realized as [æ] (Kinkade 1967). However, these instances lack physiological data to

confirm their nature. Nevertheless, they demonstrate that the connection between fronting and (palato-)pharyngealization extends beyond Northeast Caucasian languages.

For languages with palato-pharyngealized vowels, failure to recognize the pharyngealization quality can result in a skewed vowel system with an excess of front vowels, e.g., Lak's vowel inventory [i, e, œ, æ, a, u] is actually [i, iˤ, uˤ, aˤ, a, u] (Catford 1977b).

3.3 Pharyngealization and rhotacization

3.3.1 Similarity

Another notable particularity of palato-pharyngealization in Northeast Caucasian languages is its high similarity to rhotacization. In addition to the aforementioned effects, Northeast Caucasian pharyngealization often lowers F_3, which is also an acoustic clue for r-color (a.k.a., rhoticity) (Hussain and Mielke 2021). Indeed, Americans often perceive these pharyngealized vowels as r-colored (Catford 1983). My small-scale casual survey also found that Mandarin speakers tend to perceive them as *erhua* 儿化, which is phonetically vowel rhotacization in Mandarin. Readers may be interested in the sound samples of pharyngealized vowels in Note 11.

There are two types of tongue shape realizations of American English /ɹ/ and /ɚ/: retroflex (where the tongue tip curls upward) and bunched (where the tongue is raised toward the palate with the tip pointing downward), with the latter being more popular (Delattre and Freeman 1968). The vowel /ɚ/ and the *erhua* suffix /ɹ/ in the Beijing dialect (Lee 2005) and Putonghua (Chen et al. 2017; 2024) also have both retroflex and bunched realizations.

Tongue root retraction is present in these English and Mandarin r-sounds. Therefore, the bunched variants are essentially double-bunching (Delattre 1971), nearly identical to the double-bunching shape (Fig. 1) of Northeast Caucasian pharyngealization (Catford 1983) and the pharyngeal fricative /ħ/ in some Arabic dialects (Delattre 1971; Hess 1998: 169–171). Notably, there are rhotic vowels that lack retroflex variants, e.g., /ɚ/ and *erhua* vowels in Chengyu 成渝 dialects of Southwestern Mandarin (Huang et al. 2024) as well as rhotic vowels in Kalasha, an Indo-Aryan language (Hussain and Mielke 2021), although these r-sounds arise from the fusion of retroflexes and vowels. Some scholars further argue that rhotic vowels without retroflex variants are the same as pharyngealized vowels (Catford 2001: 161–162; Hussain and Mielke 2021). Interestingly, Lass (1984: 158) describes the New York English /ɹ/ as a "pharyngealized palato-velar approximant," only a pharyngealized sound instead of a rhotic.

For retroflex variants, they also acoustically resemble bunched variants and Northeast Caucasian pharyngealization. This is because retroflexion, tongue bunching, depression of the back of the tongue, and pharynx constriction all contribute to F_3 lowering, as explained in numerous works (e.g., Delattre and Freeman 1968). Consequently, when coarticulated with vowels, retroflex variants may tend to be replaced by acoustically similar but more gesturally economical bunched variants (Huang et al. 2024).

3.3.2 Decoronalization of rhotics

By juxtaposing rhotic vowels in these languages, a decoronalization chain can be observed: retroflex plus vowel > retroflex vowel > rhotic vowel with retroflex and bunched variants > rhotic vowel with bunched variants only > pharyngealized vowel. In this process, the r-color shifts from coronal to guttural while being preserved.

This process also applies to consonants. The alveolar trill /r/ often exhibits secondary pharyngeal articulation in the world's languages (Boyce et al. 2016). It can be reduced into approximants like /ɹ/ in American English with retroflex and bunched variants. Retroflex variants can then be lost, and the remaining bunched variants can be re-categorized as pharyngeal.

This rhotic-to-pharyngeal shift parallels the well-known rhotic-to-uvular shift (Torp 2001; Kümmel 2007: 228–229) as in French and German. However, there are almost no complete instances of the former shift. The Danish *r* may be one such case. While the contemporary

Danish *r* is customarily transcribed as a uvular fricative/approximant [ʁ/ʁ̞], scholars claim that it is a pharyngeal approximant [ʕ][13] with uvulo-pharyngeal quality, rather than a uvular (Catford 1977a: 163; Ladefoged and Maddieson 1996: 170, 323; Grønnum 2005: 141, 158). If the claim is true, the Danish *r* is a rhotic-to-pharyngeal instance. Furthermore, the coronal realization of *r* is no longer accepted in Standard Danish, even in opera singing (Torp 2001), indicating that the decoronalization process has been completed. Therefore, if we leave aside the orthographic *r*, this Danish phoneme would be classified as a pharyngeal (or uvular) rather than a rhotic.

4. Evaluation of proposals for Division II

4.1 Identifying the best candidate

After a detailed examination of pharyngealization, we can proceed to evaluate the potential features for Division II. I organize the properties of Division II in Section 2 and candidate features for Division II in Table 6. Rhotacization, as a candidate feature, can be divided into the retroflex version and the non-retroflex version. Since non-retroflex rhotacization is very similar to certain forms of pharyngealization (Section 3.3.1), I include only retroflexion for rhotacization as distinct from other types of pharyngealization in Table 6.

Table 6. Matching candidate features with properties of Division II

	No	Palat.	Veler.	Retro.	U-ph.	P-ph.	RTR
Additional non-vowel quality				✓	✓	✓	✓
Vowel lowering				✓	✓	✓	✓
A-fronting			✓			✓	
Slight *e*-backing				✓	✓	✓	
Low front vowel conformability	✓	✓				✓	✓
Uvular conformability	✓				✓	✓	✓
Rhotic conformability	✓		✓	✓	✓	✓	✓

The candidates are: no specific feature, palatalization, velarization, retroflexion, uvulo-pharyngealization, palato-pharyngealization, and RTR. "✓" indicates a match between the feature and the property.

The choice of "no specific feature" naturally conforms to all constraints but fails to satisfy any coloring requirements. For palatalization and velarization, their effects (fronting/backing and raising) are within the vowel qualities. Palatalization conflicts with retroflexes (Hamann 2003: 77–78) and velarization conflicts with the low front vowel. They both involves [+ATR] or [+high], so they conflict with uvulars.[14] Therefore, palatalization and velarization fulfill very few requirements. Next, retroflexion and uvulo-pharyngealization have identical evaluation results. They both can trigger vowel lowering (Hamann 2003: 99–100; Section 3.1) and are compatible with each other. However, they conflict with front vowels or vowel fronting (Hamann 2003: 94–111; Section 3.1). Surprisingly, palato-pharyngealization meets all requirements, stemming from its unique fronting–backing duality (Section 3.2) and similarity to r-colors (Section 3.3), aside from its lowering effects (Section 3.1) and low front vowel conformability (Section 3.2). Finally, RTR lacks fronting–backing effects (Section 3.1).

Thus, palato-pharyngealization emerges as the best candidate and the only feature satisfying all constraints. However, conclusions cannot yet be drawn.

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[13] Sounds transcribed as [ʕ] in the world's languages are usually approximants rather than fricatives (Laufer 1996), so there is no need to explicitly write [ʕ̞] for a pharyngeal approximant.

[14] When we say "conflict," we do not necessarily mean "impossible." Phonologically palatalized uvulars, e.g., /qʲ/, are attested in Northwest Caucasian languages (Sylak-Glassman 2014: 21–28).

4.2 Refuting the velar medial theory

Despite the shortcomings of velarization as a candidate, previous proposals of the velar medial theory (Section 1.2) have assumed dissimilation between the medial and vowel to resolve the shortcomings. Under this assumption, the Division-II vowel undergoes lowering and fronting due to dissimilation or repulsion from the [+high, −front] velar medial (Xu and Pan 1994).

However, the dissimilation assumption is highly unnatural and questionable in the context of the *ae–a* split during the Southern Qi (Section 2.3.1). In Type-A syllables, the low vowel becomes [+front] *ae* in Division-II environments and [−front] *a* in Division-I environments. If Division II features a *velar* medial [ɰ] while Division I lacks it, it is very unlikely for [ɰɑ] in Division II to develop a fronter quality than [ɑ] in Division I would do. In Type-B syllables (only available without codas; see Section 2.1.1), the low vowel becomes [+front] *ae* when following acute/coronal onsets while remaining [−front] *a* elsewhere (Pulleyblank 1984: 221–223). This is clearly a process where the frontness of the vowel *assimilates* to the acuteness/coronality of the preceding segment, aligning with the common pattern of vowel–medial harmony in Chinese (Lin 2002). It is implausible for the same vowel to conversely *dissimilate* from a medial in Type-A syllables.

There is yet another critical issue with the velar medial theory. The palatalization of Division-II *kaikou* gutturals in Mandarin (Section 2.3.2) is attributed to the fronting of the Division-II medial [ɯ] > [ɨ] > [i] in the theory. However, the [ɨ]-like medial of *Yuntu* Division III, which is more fronted than [ɯ], does not trigger palatalization (Section 2.3.2). Mai (2022) notices this issue and suggests that the medial [ɯ] has been spirantized to [ɣ] before triggering palatalization. Nevertheless, it is still implausible that [ɣ] would take precedence over [ɨ] in triggering palatalization.

In addition, Xu and Pan (1994) enumerate several Jin 晉 and Southern Wu 吳 dialects where readings of a few Division-II characters have medials and regard them to be descendants of the hypothetical Division-II velar medial. However, dialect comparisons suggest that these medials result from later vowel breaking, e.g., [ɛ] > [ja] in Jin (Wang 1990) and [ɔ] > [wa] in Southern Wu (Sun 2012). Disproving the dialect evidence, the theory is further weakened.

By refuting the dissimilation assumption and addressing other issues with the velar medial theory, the evaluation results regain legitimacy. Consequently, I conclude that palato-pharyngealization is the most suitable feature for Division II. In Section 5, I will tell the whole story of Division II: the palato-pharyngealization feature in different periods of MC, its origin in OC, and its development into Mandarin.

5. The pharyngealization theory

5.1 Division II in the QYS

Given the uniqueness of most Division-II vowels in the QYS (Section 2.1.2), I decide to reconstruct (palato-)pharyngealized vowels of *Qieyun* Division II: [eˤ, oˤ, aˤ] for *ea*, *aew*, *ae*, respectively, and no Division-II medial is needed. Rewriting these "front" vowels in Baxter's (1992) transcription as pharyngealized vowels parallels Catford's (1977b) treatment of the Lak vowel system (end of Section 3.2).

One issue arises from the free rhyming between the Division-II *ae* and the Division-III *ae* (Section 2.5): can the Division-II pharyngealized vowel [aˤ] rhyme with the Division-III plain vowel [a]? Given that the uvulo-pharyngeal approximant [ʕ] can be regarded as a low back semivowel [ɑ̯] (Pulleyblank 2003), the palato-pharyngeal approximant [ʕ] can also be regarded as a front semivowel [a̯]. With [ʕ] ≈ [a̯], we have [aˤ] ≈ [aᵃ] = [a]. That is, the palato-pharyngealized low front vowel [aˤ] is approximately equivalent to or perceptually indistinguishable from the low front vowel [a] itself. This parallels the absence of the plain–pharyngealized contrast for the low front vowel in Udi (Section 3.2). This is also similar to the lack of ATR–RTR contrast for low vowels in some ATR languages, e.g., Maasai and Yoruba, because the low tongue body of low vowels limits tongue root movement, resulting

in difficulty in ATR–RTR distinction (Moisik 2013: 513). Thus, [aˤ] can freely rhyme with [a]. The issue is resolved.

The (approximate) equivalence between [aˤ] and [a] creates a "singular point" in the vowel system where the plain vowel set overlaps with the pharyngealized vowel set at the low front position. Following the examples of Udi, Maasai, and Yoruba, it would be reasonable to simplify the Division-II vowel [aˤ] as identical to the Division-III [a]. However, adhering to the consistency principle (Section 1.1), I prefer to keep the [a]–[aˤ] distinction, in order to indicate their Divisions clearly, even if it is more of an orthographic trick.

Table 7. Vowels of the QYS based on the pharyngealization theory

	Plain vowels			Pharyngealized vowels		
	[+front]	[−front] [−round]	[−front] [+round]	[+front]	[−front] [−round]	[−front] [+round]
[+high, −low]	真 i	殷 ɨ	东 u			
[−high, −low]	青 e	登 ə	冬 o	耕 eˤ		江 oˤ
[−high, +low]	庚 a	阳 ɑ		庚 aˤ		

For the 庚 *Gēng* rhyme (-*aeng*), Division-III vowel = [a] and Division-II vowel = [aˤ].

By adopting pharyngealized vowels, the vowel system of the QYS presented in Table 2 can be revised as shown in Table 7. Going one step further, I provide my reconstruction of all rhymes in the QYS based on the pharyngealization theory in the Appendix.

5.2 Division II in pre-QYS EMC

Before the Southern Qi, Division II shares vowels with other Divisions (Section 2.1.1), indicating that its feature is not in the vowels. I reconstruct a palato-pharyngeal approximant medial [ʕ] for pre-QYS Division-II syllables. In this way, we have pre-QYS EMC *[Cʕe, Cʕo, Cʕɑ] > QYS [Ceˤ, Coˤ, Caˤ], a fusion of [ʕ] with the vowels. A real-world instance of the fusion process [ʕV] > [Vˤ] is well documented in Maltese (Puech 2018). This process also complies with the assimilation discussed in Section 4.2.

The emergence of pharyngeal vowels makes Division-II rhymes independent of other Type-A rhymes (Section 2.1.1).

5.3 Origin of Division II in OC

Norman's (1994) theory of reconstructing OC Type-A initials as "pharyngealized" consonants is the most popular (Section 1.1). According to the categorization in this paper (Section 3.1), Norman's pharyngealized consonants, transcribed as [Cˤ] by Baxter and Sagart (2014), are more accurately identified as RTR consonants [C̱]. This is because they trigger high vowel lowering or breaking in Type-A syllables from OC to MC but express no fronting or backing effects (Schuessler 2006; Ferlus 2009; Baxter and Sagart 2014: 211–212): OC *[C̱i, C̱ɨ, C̱u] > *[C̱i̞, C̱ɨ̞, C̱u̞] > EMC [Ce, Cə, Co] in most cases.

This RTR-induced high vowel lowering process can have a parallel in rhotics: decoronalization. As noted in Section 3.3, rhotics often exhibit secondary pharyngealization. We can expect that the RTR context of OC Type-A syllables could promote the medial *[r] to develop secondary pharyngealization (Gong 2018) and progressively encourage it to become evident. Finally, the pharyngeal articulation could replace the coronal as the primary articulation, completing the rhotic-to-pharyngeal shift (Section 3.3.2): OC *[C̱r] > *[C̱rˤ] > pre-QYS EMC *[Cʕ], parallel to the high vowel lowering process. In contrast, in the non-RTR context of Type-B syllables where pharyngeal articulations are inhibited, OC *[r] may be better preserved in EMC as a coronal rhotic, e.g., [ɹ], as indicated by Sanskrit-Chinese transcriptions (Shi 1983; Mai 1992).

Some pre-MC Type-B syllables with sibilant retroflex initials also become Division II in the QYS (Baxter and Sagart 2014: 74–75). This can be attributed to the frequent co-occurrence of secondary pharyngealization with r-colored consonants (see Section 3.3).

Pharyngealization that has served as a clue for retroflex initials can be later phonologized as a pharyngeal medial, e.g., OC *[tsr] > *[tʂ] (Type B) > pre-QYS EMC [tʂˤ] (Type A).

5.4 Division II in LMC

During the Sui dynasty, pharyngealized mid vowels become low vowels (Section 2.2) due to the lowering effects of pharyngealization (Section 3.1): QYS [eˤ] > LMC [aˤ]. This parallels the neutralization of mid and low vowels to low in pharyngeal contexts in Syrian Arabic (McCarthy 1994) and Tamashek Berber (Sylak-Glassman 2014: 65). The exact phonetic value of the lowered outcome of [oˤ] is unclear, possibly [ɒˤ]. Later, vowel raising of the 梗 *Gěng* rhyme group in the Tang dynasty (Section 2.4) dragged the 梗-group low front vowel higher again: [aˤŋ] > [ɛˤŋ].

For LMC since the mid-Tang dynasty, vowels in the lower (外转 *wàizhuǎn*, lit. 'outer turn') rhyme groups are in complementary distribution across *Yuntu* Divisions I, III, and IV. Take the 山 *Shān* rhyme group as an example, its non-*ru kaikou* finals in four *Yuntu* Divisions are: I = [an], II = [aan], III = [ian], and IV = [jian] by Pulleyblank (1984: 106) or I = [ɑn], II = [an], III = [iɛn], and IV = [jiɛn] by Huang (1995: 216). Based on this distribution and the fact that they can rhyme in LMC (Pulleyblank 1984: 61), it is good to reintroduce an underlying palato-pharyngeal medial /ʕ/ for *Yuntu* Division II and write the underlying representation of the lower *Yuntu*-Division-II vowel as /ʕa/.[15] This analysis simplifies the lower surface vowels to a single underlying vowel /a/. Surface allophones can be derived via medial-to-vowel coloring, e.g., I = /an/ ➜ [ɑn], II = /ʕan/ ➜ [an], III = /ɣan/ ➜ [ɣɜn~ɣɛn], and IV = /jan/ ➜ [jɛn], where the Division-II medial /ʕ/ parallels other medials, complying again with the assimilation in Section 4.2. This analysis is also similar to some analysis of the pharyngealized vowel [Vˤ] in modern Maltese (Section 5.2) back as /ʕV/ (Puech 2018).

In the higher (内转 *nèizhuǎn*, lit. 'inner turn') rhyme groups, vowels are already in complementary distribution across four *Yuntu* Divisions, since *Yuntu* Division II only exists after sibilant retroflex initials where *Yuntu* Divisions I and IV are absent. This results from the absence of high Division-II vowels in the QYS, ultimately caused by the Type-A high vowel lowering from OC to MC (Section 5.3). Note that Division-III syllables in the QYS with sibilant retroflex initials become *Yuntu* Division II (Huang 2006; Section 2.7), similar to what has happened to some OC Type-B sibilants (Section 5.3).

Only one underlying vowel /ɨ/ (or /ə/) is required for the higher rhyme groups. This leads to a vertical vowel system for LMC with just two underlying vowels, /ɨ/ and /a/. Although this interpretation may seem abstract, it is faithful to the system of rhyme tables and the rhyming practice in LMC: differences among the four *Yuntu* Divisions correspond to differences in the underlying medials, and each rhyme group (摄 *Shè*) represents a single underlying rhyme (Table 8) which serves as a broader rhyming unit in LMC (Pulleyblank 1984: 61). Vertical vowel systems with only two underlying vowels are rare but have been proposed for languages such as Margi, Arrernte, Ubykh, and Abkhaz (Ladefoged and Maddieson 1996: 286).

Table 8. Underlying representations of the 16 LMC rhyme groups

止 ij	遇 ɨ	流 ɨw
蟹 aj	果假 a	效 aw
臻 in, it		深 im, ip
山 an, at		咸 am, ap
梗 ajŋ, ajk	曾 iŋ, ik	通 ɨwŋ, ɨwk
	宕 aŋ, ak	江 awŋ, awk

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[15] On the other hand, from the perspective of [a̠] ≈ [ʕ] in Section 5.1, Pulleyblank's (1984) *Yuntu* Division II [aan] can already be rewritten as /ʕan/.

Codas are based on Pulleyblank (1984: 105–106).

5.5 Development of Division II into Mandarin

In the late Song dynasty, the front Division-II vowel [a] triggers the palatalization of *kaikou* guttural initials, e.g., [ka] > [kja] or [ca] (Section 2.3.2). Adopting the underlying representations in Section 5.4, we can reinterpret this process as palatalization triggered by /ˤ/ due to its fronting effects, e.g., /kˤa/ > /kja/, as seen phonetically in Lak (Section 3.2). We can infer that the tongue body bunching gesture toward the palate of the palato-pharyngeal /ˤ/ induces the palatalization of dorsal initials.

However, the palatalization of glottal initials (at least the 影 *Yǐng* initial [ʔ]) remains difficult to explain, since glottal sounds do not necessarily involve dorsal articulation. Karlgren (1922) pointed out this difficulty, but ultimately conceded that "this apprehension has to give way for the very serious advantages in other respects of Maspero's theory [the palatalization theory]." While this difficulty requires further investigation, it appears to have minimal impact on the validity of my theory, as Karlgren conceded.

The presence of the *hekou* medial *-w-* naturally blocks the palatalization. For the 梗 *Gěng* rhyme group, whose vowel has been raised in LMC, the slight *e*-backing effects of palato-pharyngealization also weaken the palatalization (Section 2.4). Besides, /ˤ/ does not induce guttural palatalization in many dialects other than Mandarin.

Another sound change during the Song dynasty is the rephonologization of lower Division-I finals as Division-II finals in certain environments, reflected in the innovative rhyme table *Shengyin Changhe Tu* 声音唱和图 (Pulleyblank 1984: 83–84) and in most modern dialects (Wang 1999; Zheng 2011). This restructuring of the boundary between Division I and Division II marks the disintegration of Division II as a natural class and the decline of its unique quality. By the 13th-century Mandarin rhyme book *Menggu Ziyun*, Division-II characters have completely lost their distinctiveness as a natural class (Shen 2020: 250).

Do any modern dialects preserve the pharyngeal quality of Division II? No such cases have been reported, except when following retroflex initials. This absence is not surprising and does not weaken my theory, given that the decline of Division II has occurred nearly a thousand years ago. In fact, to our knowledge, no modern dialects retain a natural class corresponding exclusively to MC Division II.

6. Concluding remarks

By reexamining the various properties of Division II in MC, I propose the pharyngealization theory of reconstructing (palato-)pharyngealized vowels for Division II in the QYS and pharyngeal medials for Division II in pre-QYS EMC and LMC. This theory surpasses other proposals in several respects. Its core advantage lies in the unique *a*-fronting and *e*-backing effects of palato-pharyngealization, rooted in the distinctive double-bunching tongue shape, while other candidate features do not have dual fronting–backing effects (Table 6).

It should be acknowledged that the pharyngealization theory was first proposed in Gong (2018). While this study was initially inspired by Gong (2018), I have made significant expansions to enhance and complete the theory. Regarding Division II, I have introduced more evidence, more properties, and other candidate proposals for evaluation. Regarding the diversity of pharyngealization, I have also provided a better categorization and a detailed examination.

The pharyngealization theory not only illustrates the phonetic quality of Division II clearly and accurately but also optimizes the reconstructed phonological system. The introduction of vowel pharyngealization into the QYS yields a more balanced and organized vowel system, consisting of 8 plain vowels [i, ɨ, u; e, ə, o; a, ɑ] and 3 pharyngealized vowels [eˤ, oˤ; aˤ]. The adoption of the Division-II medial /ˤ/ for LMC simplifies its underlying vowel system to just two vowels, /ɨ/ and /a/. According to the pharyngealization theory, the general

development of Division II from OC to MC can be summarized as: OC *[CrV] > pre-QYS EMC *[CˤV] > QYS [CVˤ] > LMC /Cˤa/.

In closing, I would like to boldly say that the contribution of the pharyngealization theory to Chinese historical phonology might be likened to the role of the laryngeal theory in Proto-Indo-European (PIE) phonology. The PIE laryngeals, directly attested only in the extinct Anatolian languages, no longer exist as distinct segments in any living Indo-European languages. This parallels the loss of the natural class of MC Division II in all modern Chinese dialects. The PIE laryngeal *h_2 is typically considered a voiceless pharyngeal fricative [ħ] or a voiceless uvular fricative [χ] (Kümmel 2007: 327–336) due to its *a*-coloring effect which lowers the adjacent *e to *a (also see Section 3.1 for general lowering effects). This also parallels MC Division II which lowers *ea* to *ae*, and my pharyngeal interpretation of Division II aligns with the pharyngeal/uvular proposals for *h_2. Just as the laryngeal theory has become a basic concept in PIE phonology, I anticipate that the pharyngealization theory will similarly transform our understanding and enrich the foundations of Chinese historical phonology.

Appendix. Rhymes of the QYS based on the pharyngealization theory

		iŋ 蒸 -ing	uŋ 东 -uwng	
eŋ 青 -eng	eˤŋ 耕 -eang	əŋ 登 -ong	oŋ 冬钟 -owng	oˤŋ 江 -aewng
aŋ (III) & aˤŋ (II) 庚 -aeng, 清 -eng			ɑŋ 阳唐 -ang	

		ɨ 之 -i	u 尤侯 -uw
i 脂 -ij			
e 支 -e	eˤ 佳 -ea	ə 鱼 -o	o 虞模 -u
a (III) & aˤ (II) 麻 -ae			ɑ 歌 -a

		ɨj 微 -ɨj
(i) (脂 -ij)		
ej 齐祭 -ej	eˤj 皆 -eaj	əj 灰咍废 -oj
	aˤj 夬 -aej	ɑj 泰 -aj

iw 幽 -iw			(u) (尤侯 -uw)
ew 萧宵 -ew		əw 豪 -aw	
	aˤw 肴 -aew		

in 真臻 -in		ɨn 殷 -ɨn	un 文 -un
en 先仙 -en	eˤn 山 -ean	ən 元魂痕 -on	
	aˤn 删 -aen	ɑn 寒 -an	

im 侵 -im			
em 盐添 -em	eˤm 咸 -eam	əm (III) 严 -aem, 凡 -om	əm (I) 覃 -om
	aˤm 衔 -aem	ɑm 谈 -am	

These are surface representations of all phonetic rhymes (rhyme = nucleus + coda) in the QYS, annotated with their *Qieyun* rhyme names in *ping* 平 tone and Baxter's transcriptions. For 豪 -*aw*, there is no definitive evidence to determine whether it is [əw] or [ɑw]; I prefer [əw], since in *go-on* there are -*ou* readings besides -*au* (Li 2014: 148–151). Other modifications to Baxter's vowels (namely, 蒸 -*ing*, 之 -*i*, 虞模 -*u*, 清 -*eng*, and 严 -*aem*) are based on other reconstruction systems and poetry rhyming. [e] in 支 -*e* is likely realized as [ie] (Karlgren 1915–1926: 645). 覃 (Division I) and 严凡 (Division III) are two poetry rhymes (Zhou 1996: 726; Zhang 2008: 135), but their phonetic difference remains unclear; I provisionally write them both as [əm].

References

Bateman, Nicoleta. 2007. *A crosslinguistic investigation of palatalization*. PhD diss., UC San Diego.
Baxter, William H. 1992. *A handbook of Old Chinese phonology*. Berlin: Mouton de Gruyter.

Baxter, William H & Laurent Sagart. 2014. *Old Chinese: A new reconstruction*. Oxford: Oxford University Press.

Bellem, Alex. 2008. *Towards a comparative typology of emphatics*. PhD thesis, SOAS University of London.

Boyce, Suzanne E, Sarah M. Hamilton & Ahmed Rivera-Campos. 2016. Acquiring rhoticity across languages. *Clinical Linguistics & Phonetics* 30(3–5). 174–201.

Catford, John C. 1977a. *Fundamental Problems in Phonetics*. Bloomington: Indiana University Press.

Catford, John C. 1977b. Mountain of tongues. *Annual Review of Anthropology* 6. 283–314.

Catford, John C. 1983. Pharyngeal and laryngeal sounds in Caucasian languages. In *Vocal fold physiology: Contemporary research and clinical issues*, 344–350. San Diego, CA: College-Hill Press.

Catford, John C. 2001. *A practical introduction to phonetics*, 2nd edition. Oxford: Oxford University Press.

Chen, Baoya 陈保亚. 2004. 论切韵音系韵母的一致构拟. In *The joy of research: A festschrift in honor of Professor William S-Y. Wang on his seventieth birthday*, 83–93. Tianjin: Nankai University Press.

Chen, Shuwen, Peggy Pik Ki Mok, Mark Tiede, Wei-rong Chen & D. H. Whalen. 2017. Investigating the production of Mandarin rhotics using ultrasound imaging. In *Ultrafest VIII*. Potsdam: Universität Potsdam.

Chen, Shuwen, Douglas H. Whalen & Peggy Pik Ki Mok. 2024. What R Mandarin Chinese /ɹ/s? – acoustic and articulatory features of Mandarin Chinese rhotics. *Phonetica* 81(5). 509–552.

Chomsky, Noam & Morris Halle. 1968. *The sound pattern of English*. New York, NY: Harper & Row.

Chou, Fa-Kao. 1970. 论上古音和切韵音. 中国文化研究所学报 3(2). 321–457.

Chumakina, Marina, Dunstan Brown, Greville G. Corbett & Harley Quilliam. 2007. *A dictionary of Archi*. Guildford: University of Surrey. https://www.smg.surrey.ac.uk/archi-dictionary

Colarusso, John. 1981. Typological parallels between Proto-Indo-European and the Northwest Caucasian languages. In *Bono homini donum: Essays in historical linguistics*, 475–557. Amsterdam: John Benjamins.

Delattre, Pierre. 1971. Pharyngeal features in the consonants of Arabic, German, Spanish, French, and American English. *Phonetica* 23(3). 129–155.

Delattre, Pierre & Donald C. Freeman. 1968. A dialect study of American r's by X-ray motion picture. *Linguistics* 6(44). 29–68.

Ferlus, Michel. 2009. What were the four divisions of Middle Chinese?. *Diachronica* 26(2). 184–213.

Flemming, Edward. 2003. The relationship between coronal place and vowel backness. *Phonology* 20(3). 335–73.

Gaprindashvili, Shota. 1966. Khmovanta paringalizatsiis bunebisatvis ts'akhurul da udur enebshi. In *Met'q'velebis analizisa da sintezis sak'itkhebi*, 28–80. Tbilisi: Metsniereba.

Gong, Xun. 2018. The ʕayn theory of Grade II in Middle Chinese. In *Proceedings of the 51st International Conference on Sino-Tibetan Languages and Linguistics*, 251–255. Kyoto: Kyoto University.

Gong, Xun. 2020. Uvulars and uvularization in Tangut phonology. *Language and Linguistics* 21(2). 175–212.

Grønnum, Nina. 2005. *Fonetik og fonologi: Almen og dansk*, 3rd edition. Copenhagen: Akademisk Forlag.

Hamann, Silke Renate. 2003. *The phonetics and phonology of retroflexes*. Utrecht: LOT.

Hess, Susan A. 1998. *Pharyngeal articulations*. PhD diss., UC Los Angeles.

Huang, Jing, Feng-fan Hsieh, Yueh-chin Chang & Mark Tiede. 2024. On the two rhotic schwas in Southwestern Mandarin. *Phonetica* 81(1). 43–80.

Huang, Xiaoshan 黄笑山. 1995.《切韵》和中唐五代音位系统. Taipei: Wenchin Press.

Huang, Xiaoshan 黄笑山. 2002a. 中古二等韵介音和《切韵》元音数量. 浙江大学学报 32(1). 30–38.

Huang, Xiaoshan 黄笑山. 2002b.《切韵》元音分韵的假设和音位化构拟. 古汉语研究 2002(3). 10–16.

Huang, Xiaoshan 黄笑山. 2006. 中古 -r- 介音消失所引起的连锁变化. In *Linguistic studies in Chinese and neighboring languages*, 907–919. Taipei: Institute of Linguistics, Academia Sinica.

Huang, Xiaoshan 黄笑山. 2012.《切韵》三等韵 ABC. 中文学术前沿 5. 83–92.

Hussain, Qandeel & Jeff Mielke. 2021. An acoustic and articulatory study of rhotic and rhotic-nasal vowels of Kalasha. *Journal of Phonetics* 87. 101028.

Kane, Daniel. 2009. *The Kitan language and script*. Leiden: Brill.

Karlgren, Bernhard. 1915–1926. *Études sur la phonologie chinoise*. Leyde: E. J. Brill.

Karlgren, Bernhard. 1922. The reconstruction of Ancient Chinese. *T'oung Pao* 21(1). 1–42.

Kinkade, M. Dale. 1967. Uvular-pharyngeal resonants in Interior Salish. *International Journal of American Linguistics* 33(3). 228–234.

Kümmel, Martin Joachim. 2007. *Konsonantenwandel*. Wiesbaden: Reichert Verlag.

Ladefoged, Peter & Ian Maddieson. 1996. *The sounds of the world's languages*. Oxford: Blackwell.

Lass, Roger. 1984. *Phonology: An introduction to basic concepts*. Cambridge: Cambridge University Press.

Laufer, Asher. 1996. The common [ʕ] is an approximant and not a fricative. *JIPA* 26(2). 113–118.

Lee, Wai-Sum. 2005. A phonetic study of the "er-hua" rimes in Beijing Mandarin. In *6th Interspeech 2005 and 9th European Conference on Speech Communication and Technology*, 1093–1096. Lisbon: ISCA.

Li, Lianjin 李连进. 2002. 壮语老借词、汉越语和平话的历史源流关系. 广西师院学报 23(4). 87–91.

Li, Xiang 李香. 2014. 日译吴音的读音层次与六朝南音. Guangzhou: World Publishing Corporation.

Lin, Yen-Hwei. 2002. Mid vowel assimilation across Mandarin dialects. *Journal of East Asian Linguistics* 11.

Liu, Haiyang 刘海阳. 2017. 韵图三四等对立在现代方言中的反映. 方言 39(4). 401–411.

Luh, Chih Wei 陆志韦. 1940. 试拟切韵声母之音值并论唐代长安语之声母. 燕京学报 28. 41–56.

Luh, Chih Wei 陆志韦. 1963. 古反切是怎样构造的. 中国语文 1963(5). 349–385.

Maddieson, Ian & Richard Wright. 1995. The vowels and consonants of Amis—a preliminary phonetic report. *UCLA Working Papers in Phonetics* 91. 45–65.

Mai, Yun 麦耘. 1992. 论重纽及《切韵》的介音系统. 语言研究 1992(2). 119–131.

Mai, Yun 麦耘. 2008. 论对中古音"等"的一致性构拟. 语言研究集刊 5. 18–34.

Mai, Yun 麦耘. 2022. 中古音系研究框架——以介音为核心，重纽为切入点. 辞书研究 2022(2). 1–17.

McCarthy, John J. 1994. The phonetics and phonology of Semitic pharyngeals. In *Phonological structure and phonetic form*, 191–233. Cambridge: Cambridge University Press.

Moisik, Scott Reid. 2013. *The epilarynx in speech*. PhD diss., University of Victoria.

Nguyễn, Đại Cồ Việt 阮大瞿越. 2011. 十七世纪越南汉字音（A 类）研究. PhD diss., Peking University.

Norman, Jerry. 1994. Pharyngealization in Early Chinese. *Journal of the American Oriental Society* 114(3).

Ōno, Tōru 大野透. 1977. 続 万葉仮名の研究. Tokyo: Takayama Honten.

Ota, Itsuku 太田斋. 2023. 关于《玄应音义》的音系性质和特点. 辞书研究 2023(3). 1–31.

Pan, Wuyun 潘悟云. 2023. 汉语古音手册. Shanghai: Zhongxi Book Company.

Pan, Wuyun & Hongming Zhang. 2015. Middle Chinese phonology and *Qieyun*. In *The Oxford Handbook of Chinese Linguistics*, 80–90. Oxford: Oxford University Press.

Puech, Gilbert. 2018. Loss of emphatic and guttural consonants: From medieval to contemporary Maltese. In *The languages of Malta*, 7–53. Berlin: Language Science Press.

Pulleyblank, Edwin G. 1964. The transcription of Sanskrit *K* and *KH* in Chinese. *Asia Major* 11(2). 199–210.

Pulleyblank, Edwin G. 1977. The final consonants of Old Chinese. *Monumenta Serica* 33(1). 180–206.

Pulleyblank, Edwin G. 1984. *Middle Chinese: A study in historical phonology*. Vancouver: UBC Press.

Pulleyblank, Edwin G. 1991. *Lexicon of reconstructed pronunciation in Early Middle Chinese, Late Middle Chinese and Early Mandarin*. Vancouver: UBC Press.

Pulleyblank, Edwin G. 2003. Non-contrastive features or enhancement by redundant features?. *Language and Linguistics* 4(4). 713–755.

Sackett, Kathleen, et al. 2022. *Tsakhur–Azerbaijani–Russian–English Dictionary*. Dallas, TX: SIL International. https://www.webonary.org/tsakhur/

Schuessler, Axel. 2006. The *Qièyùn* system 'Divisions' as the result of vowel warping. In *The Chinese Rime Tables*, 83–96. Amsterdam: John Benjamins.

Shen, Ruiqing. 2017. *Děng*. In *Encyclopedia of Chinese language and linguistics*, vol. 2, 13–20. Leiden: Brill.

Shen, Zhongwei. 2007. Sino-Khitan phonology. *Bulletin of Chinese Linguistics* 1(2). 147–210.

Shen, Zhongwei. 2020. *A phonological history of Chinese*. Cambridge: Cambridge University Press.

Shi, Xiangdong 施向东. 1983. 玄奘译著中的梵汉对音和唐初中原方音. 语言研究 1983(1). 27–48.

Shimizu, Masaaki. 2020. Sino-Vietnamese initials reflected in the phonetic components of 15th-century Nôm characters. *Journal of Chinese Writing Systems* 4(3). 183–195.

Song, Zhaoxiang 宋兆祥. 2016.《切韵》时代前后汉语方言的蟹摄二等重韵. 语言研究 36(4). 68–81.

Starostin, Sergei A. 1989. *Rekonstrukcija drevnekitajskoj fonologičeskoj sistemy*. Moscow: Nauka.

Sun, Yizhi 孙宜志. 2012. 南部吴语古假摄二等字今读类型及相关音变. 方言 2012(2). 134–141.

Svantesson, Jan-Olof. 1985. Vowel harmony shift in Mongolian. *Lingua* 67(4). 283–327.

Sylak-Glassman, John Christopher. 2014. *Deriving natural classes*. PhD diss., UC Berkeley.

Teng, Jimin 滕济民. 2022. 南宁平话音韵研究. MA thesis, Guangxi University.

Torp, Arne. 2001. Retroflex consonants and dorsal /r/. In *'r-atics*, 75–90. Brussels: Université libre de Bruxelles.

Trubetzkoy, Nikolai S. 1931. Die Konsonantsysteme der ostkaukasischen Sprachen. *Caucasica* 8. 1–52.

Wang, Hongjun 王洪君. 1990. 入声韵在山西方言中的演变. 语文研究 1990(1). 8–19.

Wang, Hongjun 王洪君. 1999. 从开口一等重韵的现代反映形式看汉语方言的历史关系. 语言研究 1999(1). 61–75.

Wang, Hongjun 王洪君. 2017.《中原》《洪武》和当代方言中的见开二. 方言 2017(2). 129–141.

Wang, Shuxia 王淑霞. 1995. 荣成方言志. Beijing: Language & Culture Press.

Xu, Baohua 许宝华 & Wuyun Pan 潘悟云. 1985. 不规则音变的潜语音条件. 语言研究 1985(1). 25–37.

Xu, Baohua 许宝华 & Wuyun Pan 潘悟云. 1994. 释二等. 音韵学研究 3. 119–135.

Xu, Shumiao 许树妙. 2023. 中古-r-介音颚化音变与梗摄四韵同用格局的形成. 语言科学 22(2). 194–207.

Yoshida, Yutaka 吉田豊. 1994. ソグド文字で表記された漢字音. 東方学報 京都 66(3). 380–271.

Yuchi, Zhiping 尉迟治平. 2003. 欲赏知音 非广文路——《切韵》性质的新认识. In 古今通塞：汉语的历史与发展, 157–185. Taipei: Institute of Linguistics, Academia Sinica.

Zeng, Xiaoyu 曾晓渝. 2003. 见母的上古音值. 中国语文 2003(2). 109–120.

Zeng, Xiaoyu 曾晓渝. 2021. 近代官话见系开口二等 -i- 介音现象补论. 古汉语研究 2021(3). 18–28.

Zeroual, Chakir & George N. Clements. 2015. The feature [pharyngeal]. In *Features in phonology and phonetics*, 247–276. Berlin: De Gruyter Mouton.

Zhang, Jiankun 张建坤. 2008. 齐梁陈隋押韵材料的数理分析. Harbin: Heilongjiang University Press.

Zhang, Junru 张均如, et al. 1999. 壮语方言研究. Chengdu: Sichuan Nationalities Publishing House.

Zhao, Kegang 赵克刚. 1985. 古本声述学. 重庆师范大学学报：哲学社会科学版 1985(4). 59–71.

Zheng, Wei 郑伟. 2011.《切韵》寒韵字的演变特征与现代吴语. 中国语文 2011(4). 352–363.

Zhengzhang, Shangfang 郑张尚芳. 1987. 上古韵母系统和四等、介音、声调的发源问题. 温州师范学院学报 1987(4). 69–92.

Zhengzhang, Shangfang 郑张尚芳. 2016. 西夏韵书分转所反映的复声母与韵母系统. *Bulletin of Chinese Linguistics* 9(1). 151–162.

Zhou, Zumo 周祖谟. 1996. 魏晋南北朝韵部之演变. Taipei: The Grand East Book Company.

The New Reconstruction of Coda *-s and Postcoda *-s(ə) in Old Chinese

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Abstract

Through a systematic analysis of rhyming patterns in the Shījīng, xiéshēng se- ries distributions, and their correspondences in Late Han Chinese transcriptions, this study proposes a revised reconstruction of the traditional Old Chinese *-s (Middle Chinese qùshēng) coda by distinguishing two distinct categories: coda *-s, which is an integral part of the main syllable, and postcoda *-s(ə), an external element ap- pended to the syllable.

Compared to traditional reconstructions, this new proposal better accounts for pre- viously perceived "irregularities"in Old Chinese phonology. It explains why Mid- dle Chinese qùshēng words could rhyme with non-qùshēng words in the Shījīng and why open syllables could rhyme with words containing *-k coda. Additionally, this reconstruction simplifies the Old Chinese coda system by eliminating the need for complex consonant clusters in coda positions. It also provides a clearer framework for understanding phonological developments from Old to Middle Chinese, particu- larly in relation to Late Han Chinese and Buddhist transcription data. Furthermore, the new reconstruction offers insights into Old Chinese morphology by suggesting that postcoda *-s(ə) represents a remnant of an early suffix.

Keywords: Old Chinese phonology, *-s coda, qùshēng, Shījīng rhyming patterns, xiéshēng series, Late Han Chinese transcriptions, historical linguistics, phonological reconstruction, sound change, Old Chinese morphology

1 Introduction

The traditional account of the development of Middle Chinese qùshēng 去聲 [1] is that it came from an earlier *-s. Haudricourt 1954 argues this *-s followed a *-p, *-t, or *-k, the reconstructions usually are the consonantal cluster codas: *-ps, *-ts, *ks.

The reconstruction of *-s in Old Chinese is boradly valid and well-supported, as this framework has been adopted by numerous scholars, including Pulleyblank 1972 Starostin 1989, Baxter 1992, and Schuessler 2009. However, this reconstruction still faces several challenges, which can be summarized in the following three aspects:

First, in the rhyming patterns observed in the Shījīng, *-s coda syllables could rhyme with non *-s coda syllables. An example can be found in Ode 169.4, The coding sequence system of these Shījīng poems here and follows are provided by Baxter 1992 and the translations are from Karlgren 1950.:

匪載匪来 fěi zài fěi lái

忧心孔疚 yōu xīn kǒng jiù

They have not loaded up and not
come, The grieved hearts are greatly
suffering.

In this stanza, the *-s coda syllable 疚 (jiù) in Middle Chinese rhymes with the non-*-s coda syllable 来 (lái).

While many scholars argue that syllables with *-s coda and those without could naturally rhyme in the Shījīng, some even suggest that the Shījīng rhyme patterns disregard the tonal distinctions of Middle Chinese. However, this interpretation is not universally applicable, as some stanzas with a substantial number of rhyme words adhere strictly to a single Middle Chinese tone category, indicating that tonal distinctions were not entirely ignored. For instance, in Ode 177.1, seven Middle Chinese píngshēng syllables rhyme together, while in Ode 108.1, five Middle Chinese qùshēng syllables form rhymes.

Secondly, Pulleyblank 1962, through the analysis of Chinese transcriptions of foreign words, identified evidence of Middle Chinese (qùshēng) syllables being used to represent sibilants or dental fricatives in earlier Sanskrit. Examples include 三昧 (LHC: /*sɑm-məs/) for Sanskrit Samādhi. However, Schuessler 2009 found that some Old Chinese *-s coda words corresponded

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[1] I use the term qùshēng instead of "departing tone" in this context because the term "departing" implies a specific tonal contour. However, given the lack of concrete evidence regarding the precise tonal contour during that period, the term qùshēng provides a more neutral and appropriate designation without assuming details that cannot be verified.

to non-dental codas in Sanskrit, such as -h, and -q. For instance, 徑路 (LHC: /*keŋ-las/) was used to transcribe qiŋiraq.

This variation indicates that in Late Han Chinese, Old Chinese *-s coda syllables could corre- spond to different Sanskrit codas. This discrepancy suggests that these words may have occurred in distinct phonological environments or that they already exhibited opposition within the phono- logical system of Old Chinese.

Lastly, some xiéshēng series exclusively consist of qùshēng words, such as the 貴 series and the 胃 series. However, other xiéshēng series include words from both qùshēng and other tonal categories. For instance, in the 王 series, we find both the píngshēng word 王 (Old Chinese *ɢwaŋ) and the qùshēng word 旺 (Old Chinese *ɢwaŋs). Schuessler 2009 hypothesizes that these two types of xiéshēng series may reflect different codas during the Old Chinese period.

Based on the challenges outlined above, this study hypothesizes that Middle Chinese qùshēng words correspond to two distinct types of codas in Old Chinese.

For **Category 1**, *-s coda words exclusively rhyme with other *-s coda words in the Shījīng, and most of the words within their xiéshēng series are also *-s coda words.

For **Category 2**, *-s coda words can rhyme with non-*-s coda words in the Shījīng, and their xiéshēng series may include words from any Middle Chinese tonal category.

Furthermore, in Late Han Chinese transcriptions, Category 1 and Category 2 qùshēng words correspond to distinct codas in the transcriptions of foreign words. Although these codas eventu- ally merged into the Middle Chinese qùshēng, they retained some degree of differentiation during the Late Han Chinese period.

In the rest of this article, I will first attempt to prove that Middle Chinese qùshēng words [2] have different origins in Old Chinese. This section will involve two main steps:

a. Classification of *-s coda words based on rhyming patterns in the Shījīng: I will categorize *-s coda words into those that only rhyme with other *-s coda words and those that can also rhyme with *-s coda words.

b. Analysis of their xiéshēng series: I will investigate whether the xiéshēng series of these two categories differ in their tonal composition, specifically whether the series associated with each category exclusively contains *-s coda words or includes other tones.

After completing these steps,I will further analyze how these two categories correspond to

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[2]In previous studies, Middle Chinese qùshēng words have generally been mapped directly to Old Chinese *-s coda words. To maintain consistency in term and given that this study primarily focuses on Old Chinese, I will use the term *-s coda words throughout this article to refer to this group of words.

Late Han Chinese transcriptions of foreign words.

Once the two categories are established, I will propose a new reconstruction for the traditional Old Chinese *-s coda words. This reconstruction will aim to clarify the specific distinctions be- tween the two categories of qùshēng words during the Old Chinese period.

Finally, I will present the evidence supporting this new reconstruction, demonstrating how it better accounts for irregular rhyming patterns in the Shījīng and xiéshēng series. Additionally, I will show that this reconstruction simplifies the Old Chinese phonological system, provides a clearer account of sound changes from Old to Middle Chinese, and offers new insights into the function and development of Old Chinese suffixes.

2 Rhyming difference of Two Categories of Old

Chinese *-s Coda Words

2.1 The Words Only Rhyme with *-s Coda Words

The rhyming distribution of *-s coda words in the Shījīng falls into two categories: (1) words that rhyme exclusively with other *-s coda words, and (2) words that can rhyme with both *-s and non-*s coda words. It is important to note that, due to the limited number of poems in the Shījīng, determining whether a particular *-s coda word can rhyme with non-*s coda words is relatively straightforward in cases of type (2). However, for type (1), there exists the possibility that a word might also be able to rhyme with non-*s coda words, but due to its limited occurrences in the Shījīng, it appears coincidentally to rhyme only with other *-s coda words.

Determining whether a specific *-s coda word rhymes exclusively with other *-s coda words is inherently a probabilistic question. If a rhyme word appears more than three times in the Shījīng and always rhymes with *-s coda words, it is reasonable to conclude that this word is indeed restricted to rhyming with -s coda syllables. However, since very few rhyme words occur more than three times in the Shījīng, relying solely on this criterion would result in a limited set of "*-s coda word rhyming only" examples, leaving most cases ambiguous.

To address this, I propose analyzing these rhyme words based on their xiéshēng series units. This approach draws inspiration from Mattisof 1978, who emphasized the importance of identi- fying relationships among members of the same word-family in the study of ancient languages. The xiéshēng series, which shares a similar nature with word families, provide a useful framework

for this analysis. If all words within a particular xiéshēng series consistently rhyme only with *-s coda syllables, it becomes more plausible that this pattern is not coincidental but rather reflects specific phonological constraints limiting these words to *-s coda rhyming.

Although this study focuses on rhyming patterns in the Shījīng to reconstruct Old Chinese phonology, rhyming materials from the pre-Qin period extend beyond the Shījīng. Consequently, additional rhymed texts and poems are used as supplementary materials. If words within a word- family are found to rhyme exclusively with *-s coda syllables across multiple sources, this would further reinforce the hypothesis that these words are systematically restricted to *-s coda rhyming. I have selected several key texts for analysis, including Wang 1980 's《楚辭韻讀》(Chǔ Cí Yùn Dú), and Jiang Yougao 's《群經韻讀》(QúnJīng Yùn Dú) and《先秦韻讀》(Xiān Qín Yùn Dú) [3]

By systematically examining these texts, I have identified 22 xiéshēng series that exclusively rhyme with *-s coda syllables. These are presented in Table 1. In Table 1, the first column presents the phonetic components associated with each xiéshēng series. The second column lists the specific words within each xiéshēng series. The third column provides glosses, while the fourth shows the (Baxter and Sagart 2014) reconstruction for each word. The fifth column indicates the number of times each word rhymes with *-s coda syllables in the Shījīng, and the sixth column shows the total occurrences of each word in the Shījīng. The eighth column displays the frequency [4] with which these words rhyme with *-s coda syllables in other rhymed texts; for example, a notation of "10/10" indicates that the word appears ten times as a rhyme word in these sources, all exclusively with *-s coda syllables.

Table1: Word Families and Phonological Data

Word Family	Char.	Gloss	Reconstruction (B&S)	Rhyme with Qù	Total Occur	Occurrences in Other Texts with Qùshēng
季	季	youngest	*kʷi[t]-s	2	2	
	悸	agitated	*[g]ʷi[t]-s	2	2	
對	對	respond	*[t]ˤ[u]p-s	3	3	1/1
	懟	ill-will	*[d]r[u]p-s	1	1	10/10

Word Family	Char.	Gloss	Reconstruction (B&S)	Num. of *-s coda Rhymes	Total Occur	other text
類	類	category four	*[r]u[t]-s	5	5	
四	四	four	*s.li[j]-s	1	1	
	駟	four horses	*s.li[j]-s	1	1	
貴	貴	expensive	*kuj-s	0	0	16/16
	潰	break through embankment	*[gʷ]ˤ[ə]j-s	1	1	
胃	匱	box (n.)	*[g]ruj-s	1	1	3/3
	胃	stomach	*[ɢ]ʷə[t]-s	0	0	3/3
	謂	say, tell	*[ɢ]ʷə[t]-s	2	2	
	渭	name of river	*[ɢ]ʷə[t]-s	1	1	
	喟	sigh	*kʷʰˤrə[t]-s	0	0	1/1
既	既	complete (v.)	*[k]ə[t]-s	0	0	3/3
	溉	to wash	*[k]ˤə[t]-s	1	1	1/1
	墍	to plaster	*qʰə[t]-s	4	4	10/10
	愛	to love	*[q]ˤə[p]-s	1	1	
	優	lose the breath	*qˤəp-s	1	1	
惠	惠	kind, good	*[ɢ]ʷˤi[j]-s	2	2	3/3
	穗	ear of grain	*s.[ɢ]ʷi[t]-s	2	2	2/2
奚	遂	advance (v.)	sə-lu[t]-s	3	3	6/6
	檖	ear of grain	*s.[ɢ]ʷi[t]-s	1	1	
	樕	kind of tree	*sə.lu[t]-s	1	1	
市	沛	uprooted		0	0	2/2
	肺	lung	*pʰo[t]-s	1	1	3/3
	旆	streamer	*bo[t]-s	2	2	1/1
	芾	be covering	*pjuts	1	1	1/1
	霈	/	/	0	0	

Word Family	Char.	Gloss	Reconstruction (B&S)	Num. of *-s coda Rhymes	Total Occur	other text
萬	邁	proceed	*mˤrat-s	7	7	4/4
	厲	cruel	*[r]at-s	5	5	5/5
隸	蠆	scorpion	*mə-rˤ̥a[t]-s	1	1	
	逮	reach to	*m-rˤəp-s	1	1	1/1
彗	棣	cherry tree	*[N].rˤəp-s	1	1	
	彗	broom	*s-[ɢ]ʷe[t]-s	0	0	1/1
未	慧	intelligent	*[ɢ]ʷˤe[t]-s	0	0	1/1
	嘒	to chirp	*qʷhˤi[t]-s	0	0	
	妹	younger sister	*C.mˤə[t]-s	2	2	4/4
貝	寐	sleep	*mi[t]-s	1	1	3/3
	味	taste (n.)	*m[ə]t-s	3	3	2/2
屆	昧	dusk; dark	*mˤ[u][t]-s			28/28
	貝	cowry shell	*pˤa[t]-s			
帶	敗	defeat (v.t.)	*pˤra[t]-s			1/1
	屆	reach to	*kˤr[i][t]-s	4	4	2/2
乂	棄	throw away	*[kʰ]i[t]-s	4	4	2/2
	帶	girdle, strap	*C.tˤa[t]-s	2	2	2/2
歲	滯	obstruct	*[d]r[a][t]-s	1	1	1/1
	刈	mow, cut	*ŋa[t]-s	0	0	4/4
	艾	Artemisia	*C.ŋˤa[t]-s	0	0	5/5
	歲	year	*s-qʷhat-s	7	7	1/1
	穢	bad	*qʷat-s	2	4	1/1
	薉	weeds	*hat-s	0	0	
卒	濊	tinkle	*qʷhˤat	2	2	
	萃	water sound	*[dz][u]p-s	0	1	
		collect, crowd		1	1	

Word Family	Char.	Gloss	Reconstruction (B&S)	Num. of *-s coda Rhymes	Total Occur	other text
	醉	drunk (adj.)	*Cə.tsu[t]-s	2	2	
	誶	insult	*s-tsu[t]-s	2	2	
	瘁	be suffering	*dzju[t]-s	5	5	1/1

In Table 1, all the *-s words from these 22 xiéshēng series exclusively rhyme with *-s coda words, both in the Shījīng and in other pre-Qin textual materials. Moreover, this rhyming pat- tern is consistent across the entire xiéshēng series. Therefore, from the perspective of rhyming distribution, the words within these xiéshēng series can be categorized as belonging to the group of words in the Shījīng that rhyme exclusively with *-s coda words.

Therefore, from the perspective of rhyming in the Shījīng, the words listed in the table that belong to these 22 xiéshēng series are unambiguous words [5] which rhyme with *-s coda that rhyme exclusively with *-s coda words. If the xiéshēng series containing these words also predominantly consists of qùshēng words, these can be classified as unambiguous Category 1*-s coda words.

2.2 The Words Only Rhyme with non-*-s Coda words

For the unambiguous Category 2 words, which can rhyme with both *-s coda words and non *-s coda words in the Shījīng, the determination is more complex. Here, I adopt a relatively stringent criterion: if a word appears as a rhyme word in the Shījīng at least three times, and more than half of those instances involve rhyming with non-*-s coda words, it can be considered unambiguous. If a word appears as a rhyme word twice in the Shījīng, it must rhyme exclusively with non-*- s coda words to be considered unambiguous. Words that appear only once are excluded from consideration, as they might represent coincidental phenomena rather than consistent patterns.

I have listed the unambiguous words that can rhyme with non-*-s coda words in Table 2.

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[5]Baxter 1992 introduced the concepts of ambiguous and unambiguous words in phonological reconstruction. Un- ambiguous words are those with clear and definitive phonological evidence, such as words that exclusively rhyme within a single category, exhibit consistent xiéshēng patterns, or have Middle Chinese forms that directly reflect their Old Chinese phonology .When reconstructing the framework of the six-vowel system, Baxter first estab- lished the frame by using unambiguous words before put other words into this framework. This study adopts the same approach: in classifying *-s coda words based on multiple sources of evidence, only unambiguous words are considered. Regarding rhyming evidence, all words listed in Table 1 qualify as unambiguous cases that exclusively rhyme with traditionally *-s coda words.

Table 2 unambiguous non-*-s coda rhyming words

Char.	Gloss	Reconstruction (B&S)	Num. of Non-Qù Rhymes	Total Occur
事	affair	*[m-s-]rəʔ-s	7	7
害	injury	*N-kˤat-s	5	8
命	command	*m-riŋ-s	7	7
故	old	*kˤaʔ-s	4	5
信	truthful	*s-ni[ŋ]-s	7	7
茂	flourishing	mruʔ-s	6	7
定	settle	*m-tˤeŋ-s	2	4
慶	rejoice	*[kʰ]raŋ-s	7	7
路	road	*Cə.rˤak-s	3	4
去	depart	*[k]ʰ(r)ap-s	3	3
夜	night	*[ɢ]Ak-s	5	6
憲	law	*qʰar-s	5	5
疚	anguish	*[k]ʷəʔ-s	5	5
顧	look around	*[k]ʷˤaʔ-s	7	7
告	announce	*kˤuk-s	2	2
射	shoot	*Cə.lAk-s	2	3
政	government	*teŋ-s	2	2
帝	God	*tˤek-s	3	4
畏	fear	*ʔuj-s	2	3
助	help	*[dz]ra-s	2	2
報	repay	*pˤuk-s	4	4
笑	to laugh	*[s-l]aw-s	4	4
附	be attached to	*N-p(r)oʔ-s		3
悼	sad; pity	*[d]ˤawk-s	3	3
誨	instruct	*m̥ˤə(ʔ)-s	2	3

Char.	Gloss	Reconstruction (B&S)	Num. of Non-Qù Rhymes	Total Occur
庶	numerous	*s-tak-s	3	3
姓	surname	*seŋ-s	2	3
戾	transgress	*[r]ˤe[t]-s	3	4
忌	warn; avoid	*m-k(r)ək-s	2	3
狩	to hunt	*s.tuʔ-s	3	3
晦	last day of a moon	*m̥ˤək-s	2	2
舊	old	N-kwəʔs	2	2
振	shake	*tər-s	2	2
奏	bring forward	*tsˤo(ʔ)-s	2	2
孝	filial	*qʰˤuʔ-s	2	2
僭	err	*tsˤ[i]m-s	2	2

It is noteworthy that when comparing the *-s coda words listed in Table 1, which rhyme ex- clusively with other *-s coda words, with those in Table 2, which can also rhyme with non-*-s coda words, a clear pattern emerges. The words in Table 1 tend to appear as cohesive units within their respective xiéshēng series, whereas those in Table 2 are more sporadically distributed. In other words, for the *-s coda words in Table 1, the *-s coda appears to function as a feature of the entire xiéshēng series. In contrast, for the *-s coda words in Table 2, the *-s coda seems to be an attribute of each individual word rather than a shared feature of the entire xiéshēng series to which it belongs. Based on this distinction, I will analyze in Section 3 whether there are differ- ences between the two categories of *-s coda words within their respective xiéshēng series. This analysis will further illustrate the different phonological behaviors of these two categories in Old Chinese and provide additional evidence to support my new reconstruction attempts.

3 Xiéshēng Series of two categories of *-s coda words

3.1 Xiéshēng Series of the *-s coda words which can only rhyme

with *-s

To investigate the characteristics of the xiéshēng series to which the words that rhyme exclusively with *-s coda words in the Shījīng belong, I will list the xiéshēng series corresponding to each word in Table 3. Additionally, I will consult Shuōwén Jiězì (《说文解字》) and Guǎngyùn (《廣韵》) to include all the characters within each xiéshēng series and their corresponding tones as recorded in Qièyùn, Analyzing the tonal distribution across different xiéshēng series.

Table 3: Xiéshēng Series of the *-s coda words which can only rhyme with *-s

Phonetic	MC Tone	Characters
季	qù	季悸瘁
對	qù	對樹轛薱礋濧懟
類	qù	藾頪纇類禷
四	qù	訵呬四兕柶泗牭駟
貴	qù	貴䝿韚膭憒䥯嘳䔲黌墳讀潰繢殨闠僓讀瞶聭禬櫃髖櫃匱饋
胃	qù	喟胃謂愄媦渭蝟熆緭颭
既	q ù rù	愛恔曖優�蔓瑷溉概摡臂慨嘅槪既暨蔇盜䰟墍槩摡 暨 櫃
叀	qù	惠憓漶蟪蕙橞總譓鏸穗轞
㒸	qù	隊磙骸遂隧襚鐩璲橻燧遂轊鐆鐩㒸彖簒墜邃謎
巿	q ù rù	沛芾㤄佈鮄霈沛怖肺柿怖皾旆跿 怖拂酺羋跿旆芾巿皾
萬	q ù rù	厲礪勵襧癘灑蠣蟻櫔糲嶤蠆邁勱講萬購蠤講 糲 蠆
隶	q ù rù	悷逮埭靆睫逮隶鯦鯦 踶悷
彗	q ù rù	嘒嚖暳慧擪撍轊槥彗篲橞篲鐏髄槥轊 篲

未	qù	妹眛昩佅未味茉沫鮇寐魅
貝	qù	貝鋇跟狽敗垻淇跟敤退唄
屆	qù	屆眉
棄	qù	棄弃
帶	qù rù	帶癗蹛艜櫙癗蹛艜櫙殢懘遰撣墆懘嵽墆撣
乂	qù	刈乂汉艾斃䬺
卒	qù rù	晬裻綷倅淬焠崪碎誶啐醉瘁崒頞萃粹膵睟卒倅稡猝捽椊觧崒窣鯎欶啐誶

From Table 3, it is evident that the xiéshēng series are predominantly composed of qùshēng words. The few rùshēng words present within these series are typically alternate readings of qùshēng words recorded in Guǎngyùn.

For example, in the 萬 xiéshēng series, the characters 勱 and 糲 are recorded in Guǎngyùn with both qùshēng and rùshēng readings. Notably, earlier sources such as Zhuànlì Wànxiàng Míngyì (《篆隶万象名义》) and surviving fragments of Yùpiān (《玉篇》残卷) only document the qùshēng pronunciation for 勱, while the rùshēng pronunciation appears only in Guǎngyùn. This suggests that the rùshēng reading likely emerged during the Middle Chinese period, possibly reflecting a regional dialectal variation that was recorded at that time.

And for the character 糲, Shuōwén Jiězì defines its meaning as a 'unit of measurement for grains.' However, by the time of Guǎngyùn, the rùshēng pronunciation of 糲 is associated with the meaning "coarse grain," indicating that the rùshēng form may have emerged later, possibly as a borrowing to express a different concept.

In Table 3, with the exception of the 卒 (zú) and 市 (fú) xiéshēng series, nearly all other series consist exclusively of qùshēng words, with only a minimal presence of rùshēng words. Further- more, the few rùshēng words present align with the patterns observed in the earlier examples, where their rùshēng readings appear to be later developments or dialectal variations recorded in Guǎngyùn.

Given this distribution, it can be concluded that these xiéshēng series are unambiguous in their composition, predominantly containing qùshēng words. In other words, within Category 1, where words rhyme exclusively with *-s coda words in the Shījīng, their corresponding xiéshēng series

overwhelmingly consist of qùshēng words, with very few exceptions.

3.2 Xiéshēng Series of the *-s coda words which can rhyme with
non-*-s coda words

Since the words that can rhyme with non-*-s coda syllables are not as limited within a few Xiéshēng Series as those in Category 1, it is impractical to exhaustively list all words in their respective Xiéshēng Series due to space constraints. Therefore, I adopt an illustrative approach: for words in Table 2, if their Xiéshēng Series contains píngshēng, shǎngshēng, or rùshēng words, I provide an example of such a word in Table 4. If a particular Xiéshēng Series does not contain an attested word from a given tonal category, I mark it as N/A in Table 4.

Table 4 Xiéshēng Series of Unambiguous Words that Can Rhyme with Non-*-s Coda Words

	事	害	命	故	信	茂	定	慶	路
píng	N/A	N/A	零	蛄	人	N/A	丁	N/A	N/A
shǎng	史	蠆	冷	古	N/A	N/A	頂	N/A	N/A
rù	N/A	瞎	N/A	N/A	N/A	N/A	N/A	N/A	各
	夜	憲	疢	顧	告	狩	政	帝	畏
píng	N/A	N/A	蜏	N/A	N/A	N/A	征	啼	煨
shǎng	N/A	蠆	久	戶	浩	守	整	N/A	猥
rù	亦	瞎	郁	N/A	楷	N/A	N/A	摘	N/A
	報	笑	附	悼	誨	庶	姓	戻	忌
píng	N/A	N/A	符	N/A	梅	遮	生	N/A	N/A
shǎng	N/A	N/A	附	N/A	每	N/A	省	N/A	己
rù	N/A	N/A	N/A	桌	N/A	摭	N/A	喉	N/A
	孝	舊	振	奏	晦	僭	去	助	
píng shǎng rù	痒 老	N/A 舅 N/A	唇 祗	N/A N/A N/A	梅 每	簪 憯	祛 麩 砝	租 祖	

In Table 4, a small number of words belong to Xiéshēng Series that contain only qùshēng (去 声) words, such as 茂 (mào), 慶 (qìng), 笑 (xiào), 報 (bào), and 奏 (zòu). However, this is likely

because these Xiéshēng Series consist of very few words—often just the word itself, as in the cases of 笑 (xiào) and 報 (bào), or at most one or two additional words. The absence of other tonal categories in these series is probably due to the small number of words within them rather than a structural tendency.

Apart from this, the majority of words listed in Table 4 belong to Xiéshēng Series that include words from multiple tonal categories. This contrasts sharply with the Xiéshēng Series in Table 3, where Category 1 words overwhelmingly belong to series that contain only qùshēng words.

It is also important to note that, while some Xiéshēng Series in Table 4 contain only qùshēng and rùshēng words—similar to the pattern seen in Table 3—their distribution differs significantly. For instance, in the Xiéshēng Series of 路 (lù), over 90 percent of the words belong to rùshēng, rather than qùshēng. This is distinct from the pattern in Table 3, where the qùshēng-rùshēng alternation occurs only in a small number of cases.

Thus, we can conclude that words that can freely rhyme with non-*-s coda words in the Shījīng —those belonging to Category 2—are also found in Xiéshēng Series that include words from multiple tonal categories, rather than being restricted to qùshēng words alone.

Based on the differences between Category 1 and Category 2 in their Xiéshēng Series distri- butions, we can infer that the element previously reconstructed as *-s coda by earlier scholars functions differently in the two categories. In Category 1, *-s appears to be a part of the root, which explains why it is consistently reflected in Xiéshēng Series patterns. In contrast, in Category 2, *-s is not a core component of the root but rather an additional element. As a result, it does not necessarily appear in all words within the same Xiéshēng Series, allowing for greater variation in tonal categories within the series.

4 The evidence from early third-century transcriptions

Pulleyblank 1962 referenced Bailey 1946 article Gāndhārī [6], which provided examples demon- strating that Middle Chinese qùshēng syllables were used to represent foreign sibilants or dental fricatives.

Drawing on early third-century transcriptions [7], Pulleyblank 1962 presented evidence suggest-

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[6]Gāndhārī is a Middle Indo-Aryan language primarily used between the 3rd century BCE and the 5th century CE. It originated in the Gandhāra region, which corresponds to present-day northwestern Pakistan and eastern Afghanistan. Closely related to Sanskrit and Pali, Gāndhārī played a significant role in early Buddhist literature, particularly as Buddhism spread from India to Central and East Asia.

[7]Notably, in the transmission of Buddhist texts, phonetic transcriptions of Buddhist terminology and proper nouns

ing that some Middle Chinese qùshēng syllables still retained the *-s coda during this period. Since transcriptions typically adhere to the principle of selecting Chinese characters that closely match the pronunciation of source-language terms, Pulleyblank analyzed the characters used to transcribe sibilants from foreign languages. His analysis led to the conclusion that these Chinese characters corresponded to syllables in third-century Chinese whose final sounds most closely approximated the phoneme /s/.

However, in reality, Middle Chinese qùshēng syllables in third-century transcriptions do not exclusively correspond to -s coda syllables. Schuessler 2009 provided several examples where Middle Chinese qùshēng syllables corresponded to non-dental codas in Sanskrit, such as -h, -q, and -χ, or in some cases, to syllables without any coda, as illustrated in Table 5.

Table5: qùshēng syllables corresponded to non-dental codas in Sanskrit

	護澡	大宛	謝	徑路	丘就	高附
OC	*ɢʷˤaks-tsˤawʔ	*lˤats-ʔorʔ	səlAks	kˤeŋs-rˤaks	khwə-dzuks	Cə.kˤaw-Np(r)oʔs
Trans.	waxšāb	Taχwār	šāhi	qiŋiraq	kujiala	kaβоυpa

As shown in Table 5, not all qùshēng characters correspond to dental codas in transcriptions; such correspondences occur only with specific characters.

To better understand this phenomenon, I have compiled a list of all words that correspond to sibilants in transcriptions and summarized their characteristics. For Gāndhārī materials, I pri- marily relied on the compilation by Baley et al. 2023, which proposed Gāndhārī pronunciations in IPA and included additional vocabulary. This reconstruction builds upon the description of sound changes from Sanskrit to Gāndhārī outlined in Baums 2009. Moreover, the IPA transcriptions in Baley et al. 2023 are consistent with the pronunciations recorded in the Gāndhārī Dictionary by Baums and Glass 2002 for attested words. [8] Additionally, Pulleyblank 1962 provided further examples of non-Buddhist transcriptions, which I have incorporated into the analysis as supple- mentary data：

(1) 波羅奈 to Sanskrit *vārāṇasī, 奈 OC *nˤa[t]s

(2) 三昧 to Sanskrit *samādhi, IPA /samaːzi/, 昧 OC *mˤu[t]s

(3) 提謂 to Sanskrit *Trapusa, to Khoranese *ttravaysa, 謂 OC *[ɢ]ʷə[t]s

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into Chinese were often employed instead of semantic translations.(Nattier 2008)

[8]For each qùshēng character with a clear correspondence, I have also included the Old Chinese (OC) reconstruction based on Baxter and Sagart 2014

(4) 忉利 to Sanskrit *trāyastrimasa, to Khoranese *ttavatrisa, 利 OC *C.ri[t]s

(5) 央匱 to Khoranese *amgusda, to Tocharian *B.ankwas, to Uighur *ʔnkhpws, 匱 OC *[g]rujs

(6) 賴毘 to Sanskrit *raśmi, IPA /raspi/, 賴 OC *rˤa[t]-s.

(7) 賴吒和羅 to Sanskrit *rāṣṭrapāla, IPA /raːʂʈapaːla/, 賴 OC *rˤa[t]-s.

(8) 舍衞 to Sanskrit *Śrāvastī, IPA /ɕaːʋasti/, 衛 OC *[ɢ]ʷ(r)a[t]s.

(9) 尼拘類 to Sanskrit *nyagrodha, IPA /niɡroːza/, 類 OC *[r]u[t]s.

(10) 阿會亘 to Abhāsvara, 會 OC *ɦʷˤajs

(11) 首陀衞 to suddhāvāsā, 衛 OC *[ɢ]ʷ(r)a[t]s

(12) 須彗 to sudrsa, 彗 *C.tˤa[t]s

(13) 對馬 to Tsushima, 對 OC *[t]ˤ[u]p-s, This transcription occurs in the third century 魏略, this transcription maytransferr to a semantically related second name of the island.

(14) 貴霜 to Kushan, 貴 OC *kujs

(15) 都賴 to Tarzāz, 賴 OC *rˤa[t]-s. This transcription appears later in Han-shu, which is the name of the river in the northern territory of 康居. DeGroot (1921) identified it with Talas river.

(16) 蒲類 to *barus, to Turkish bars 'tiger'. This is a name of a nomadic kingdom of Han period, and also the ancient name of Lake Barkol. 類 OC *[r]u[t]s.

Among the examples listed above, many overlap with the words in the xiéshēng series from Table 1 and Table 3, such as 未 (wèi), 昧 (mèi), 類 (lèi), 彗 (tuǐ), 貴 (guì), 匱 (kuì), 對 (duì), and 謂 (wèi). In other words, the words that correspond to dental codas in transcriptions predominantly belong to Category 1. These words exclusively rhyme with *-s coda words in the Shījīng and are part of xiéshēng series that are composed almost entirely of qùshēng words.

The words in Table 5 that correspond to non-dental codas, such as 路 (lù) and 附 (fù), also overlap with the unambiguous words listed in Table 2 that can freely rhyme with non-*-s coda words in the Shījīng. Although the remaining -s coda words in Table 5 do not meet the criteria for unambiguous classification due to appearing only once or not appearing at all in the Shījīng, their single instances of use still show them rhyming with non–s coda words.

Based on the discussion so far, a summary can be drawn: words previously reconstructed as *-s coda in Old Chinese can be divided into two distinct categories, and specific unambiguous examples have been identified for each.

For **Category 1**, *-s coda words exclusively rhyme with other *-s coda words in the Shījīng, and the majority of words within their corresponding xiéshēng series are also *-s coda words. In

Han dynasty transcriptions, these words correspond to dental codas.

For **Category 2**, -s coda words can rhyme with non-*-s coda words in the Shījīng, and their xiéshēng series may include words from any tonal category in Middle Chinese. In Han dynasty transcriptions, these words almost never correspond to dental codas.

Having established these two categories, the next step is to address the issue of how to provide a revised reconstruction for these two distinct types of Old Chinese *-s coda words.

5 The new reconstructions for Old Chinese *-s coda words

5.1 The coda *-s and the postcoda *-s(ə)

In this section, I will first present my reconstruction and then demonstrate the evidence supporting this proposal. And then, I will examine whether this new reconstruction offers a better explanation for patterns observed in Old Chinese rhyme texts and the sound change from Old Chinese to Middle Chinese.

For Category 1, which consists of words that exclusively rhyme with *-s coda words in the Shījīng, I propose that *-s functions as an integral part of the syllable's dental coda, similar in nature to other dental codas such as *-n, *-r, *-j, and *-t. This suggests that in these words, *-s was a structural component of the syllable's phonological system, behaving like other codas within the same dental consonant group.

For Category 2, which includes words that can rhyme with both *-s coda and non-*-s coda words, I propose the presence of an additional element that extends beyond the main syllable structure, attaching to the coda rather than forming part of it. Baxter and Sagart 2014 introduced the term **preinitial** for elements that precede the main syllable. Based on this, I designate this additional element occuers after coda as **postcoda**, reconstructing it as *-s(ə). It is important to clarify that the notation *(ə) is a temporary placeholder, used here solely to emphasize that *-s before it is not a coda in the main syllable but rather an independent element appended to the main syllable.

In summary, the traditional reconstruction of *-s as a single coda type in Old Chinese can be divided into two distinct categories: one in which *-s remains a true coda, behaving like other dental codas (-n, *-r, *-j, *-t), and another in which functions as a postcoda, an additional element

beyond the main syllable structure, reconstructed as *-s(ə).

5.2 Why postcoda *-s(ə) can rhyme with non *-s coda words

In my reconstruction, words with the postcoda *-s(ə) can freely rhyme with traditionally non *-s coda words, whereas words with a true *-s coda can only rhyme with other *-s coda words. This model effectively resolves the long-standing issue noted in previous studies regarding the irregular rhyming of Middle Chinese qùshēng syllables with other tonal categories in the Shījīng.

The widespread occurrence of such irregular rhyming patterns led Qing dynasty scholars to perceive Old Chinese rhyming as highly flexible and permissive regarding tonal distinctions, ulti- mately concluding that tonal distinctions were not strictly observed in early poetry. For example, Chen Di of the Ming dynasty, in his Máo Shī Gǔ Yīn Kǎo (< 毛詩古音考 >), stated: "The ancients did not distinguish the four tones...the theory of the four tones arose in later ages. "This reflects his belief that tones were not consistently differentiated in ancient poetry. Similarly, Gu Yanwu stated, "The ancients strung all four tones together, "further underscoring the perceived tonal flexibility in Old Chinese poetry.

However, rhyming in the Shījīng does take tone into account. Long rhyme sequences frequently contain only words from the same Middle Chinese tonal category, demonstrating a clear preference for tonal consistency in rhyme schemes. For example, in Ode 177 (Xiǎo Yǎ ·Liù Yuè 小雅·六

月), seven Middle Chinese shǎngshēng words rhyme together, while in Ode 108 (Wèi Fēng

Fén Jù Rù 魏风·汾沮洳), five Middle Chinese qùshēng words form a consistent rhyme sequence. Therefore, the rhyming of qùshēng words with words from other tonal categories is an exceptional phenomenon. For this special phenomenon, the reconstruction of the postcoda *-s(ə) provides a plausible explanation.

Before providing an explanation, it is necessary to briefly introduce the nature of rhyming in the Shījīng. Shījīng does not consistently target the final syllable of each line but rather the final stressed syllable. For example, in Ode 98.2, the rhyming words appear in the third-to-last syllable of each line, where 著 (zhù), 素 (sù), and 華 (huá) form a rhyme:

俟我於著乎而 (sì wǒ yú ZHÙ hū ér)

充耳以素乎而 (chōng ěr yǐ SÙ hū ér)

尚之以瓊華乎而 (shàng zhī yǐ qióng HUĀ hū ér)
Translated as Karlgren 1950:

Lo! He waited for me in the space between the screening wall and the gate.

Lo! He had ear-stoppers of white (material).

On them he had the most exquisite of stones.

In the example Ode 98.2, 乎而 (hū ér) functions as a two-syllable particle, which is unstressed. As a result, the rhyming function falls on the final stressed syllable of the main lexical word, which in this case is the third-to-last syllable. This principle also applies to the new reconstruction of syllables which containing the postcoda -s(ə). In these cases, the main syllable serves as the stressed syllable and participates in rhyming, while *-s(ə), as a non-stressed postcoda element, does not necessarily influence the rhyme structure.

In addition to stanzas like Ode 98.2, where all unstressed syllables are same, there are cases such as Ode 37.1, where the second-to-last syllables 節 (jié) and 日 (rì) rhyme, despite being followed by different unstressed particles—兮 (xī) and 也 (yě), respectively.

Another example can be found in Ode 209.4, where the final word of the first line is an un- stressed syllable, while the second line ends in a stressed syllable. Consequently, the second-to-last syllable of the first line, 熯 (hàn), rhymes with the final stressed syllable of the second line, 愆 (qiān):

我孔熯矣, (wǒ kǒng HÀNyǐ)

式礼莫愆。 (shì lǐ mò QIĀN)

This rhyming pattern is highly relevant to the phenomenon of Middle Chinese qùshēng words rhyming with non-qùshēng words. It provides a parallel for cases where the main syllable of a word containing a postcoda *-s(ə) rhymes with a syllable that lacks this element. Just as in Ode 209.4, where the final stressed syllable determines the rhyme, regardless of whether an unstressed syllable follows, words reconstructed with postcoda *-s(ə) could rhyme based on their main syllable.

Therefore, the reconstruction of postcoda *-s(ə) provides an explanation for the seemingly irregular rhyming patterns in the Shījīng, where Middle Chinese syllables from different tonal categories can rhyme with each other. Rather than being an exception or irregularity, this phe- nomenon aligns with the established principles of Shījīng rhyming, which primarily considers the final stressed syllable while allowing unstressed elements to be ignored in rhyme patterns.

5.3 The explanation for the contact between *-k coda and open syllable

Karlgren 1954 was the first to observe that in the Shījīng, open-syllable words frequently rhyme with *-k coda words. For instance, the traditional yú (魚) group rhymes with the duó (鐸) group,

and the zhī (之) group rhymes with the zhí (職) group. Based on this pattern, he reconstructed a *-g coda for words in the yú and duó groups. Pulleyblank (1962) also noted this phenomenon and proposed a similar solution, reconstructing glottal codas for these Middle Chinese open-syllable words.

Starostin 1989 further discovered that open-syllable words predominantly rhyme with shǎng- shēng and qùshēng words but rarely with píngshēng words. Since it is widely accepted that Middle Chinese shǎngshēng syllables originated from Old Chinese forms with a glottal coda,I adopt Bax- ter and Sagart's reconstruction of *-ʔ for these words. Given that *-ʔ and *-k are both stops and share a similar place of articulation, their ability to rhyme is relatively straightforward to explain. However, if qùshēng words are reconstructed with a *-s coda, the rhyming between *-s and *-ʔ becomes difficult to account for.

To address this issue, both Starostion ibid. and Schuessler 2006; Schuessler 2009 proposed reconstructing *-h for these qùshēng words. The key difference between their approaches lies in the structural status of *-h: Starostin considered *-h to be an suffix following the coda rather than an integral part of the syllable, whereas Schuessler treated *-h as the coda itself.

One advantage of the postcoda *-s(ə) reconstruction over the suffix *-h is that, from both a typological perspective and a phonetic-semantics interface, *-s(ə) is more plausible as a mean- ingful element. The sound /h/ is a glottal fricative that is often weak and difficult for listeners to perceive, making it an unlikely candidate for carrying distinct morphological meaning as a suffix. In contrast, /s/ is more perceptible and commonly functions as a suffix in many languages. For instance, in English, /s/ serves as a productive plural morpheme, demonstrating its natural role as a suffix.

Additionally, the postcoda *-s(ə) reconstruction can also account for the rhyming between open syllables and *-k coda syllables. Take Ode 245.3 as an example, where '字'(zì) rhymes with '翼'(yì). Under Baxter and Sagart's reconstruction, '字'is reconstructed as *mə-dzəs and '翼'as *ɢʷrək, showing a significant coda difference that makes their rhyming irregular. The phonetic component of '字'is '子', which suggests a possible alternative reconstruction. If we reconstruct '字'with a postcoda *-s(ə), yielding *mə-dzəʔ-s(ə), its rhyming with '翼' *ɢʷrək aligns with the pattern of shǎngshēng syllables rhyming with *-k coda syllables. This reinterpretation resolves the irregularity in rhyming.

5.4 A more simpolified Old Chinese Coda system

The reconstruction of the *-s coda and the postcoda *-s(ə) simplifies the Old Chinese coda system. Under this reconstruction, complex consonant clusters such as *ks, *ns, *ms, etc., are no longer necessary, leaving only single-consonant codas. The revised coda system is presented in Table 6.

Table 6 The Old Chinese coda system with new reconstruction

	Stop	Nasal	Approx.	Trill	Fricative
Labial	-p	-m	-w		
Dental	-t	-n	-j	-r	-s
Velar	-k	-ŋ	-∅		

From the perspective of linguistic typology and cross-linguistic universals, dental codas are among the most commonly attested across languages. The postcoda, as an additional element, can be attached to any coda except *-s coda, making it a systematic and flexible component of the phonological structure.

Looking back at Table 1, all the unambiguous words that rhyme exclusively with *-s coda belong to the traditional Old Chinese dental coda rhyme groups. In other words, Category 1 words are consistently found within the traditional dental coda rhyme categories. In contrast, the words listed in Table 2, which can freely rhyme across different tonal categories, are distributed across various traditional rhyme groups rather than being concentrated within a single coda type.

This distribution aligns perfectly with the system presented in Table 6: Category 1 words belong to syllables with dental codas, whereas Category 2 words may have different codas in their main syllables, with the postcoda *-s(ə) functioning as an additional element rather than a core coda.

To more clearly illustrate the distinction between coda *-s and postcoda *-s(ə), I present a minimal contrast set with the examples 路 (lù), 慮 (lǜ), and 厲 (lì). In this comparison, 路 (lù) and 慮 (lǜ) represent cases where a non *-s coda is followed by a postcoda *-s(ə), while 厲 (lì) inherently has a dental coda *-s:

路 *rˤak-s(ə)–Traditional duó (鐸) group 慮

*ra-s(ə)–Traditional yú (魚) group

厲 *ras–Traditional yuè (月) group

5.5 Postcoda *-s(ə) and the suffix of Old Chinese

I chose to use the term "postcoda"rather than "suffix"for two main reasons. First, I cannot determine with certainty whether postcoda -s(ə) includes an actual vowel following -s, nor can I specify what this vowel might be—/ə/ is merely a provisional notation. Second, I am unable to assign a clear morphological function to the postcoda. Given the uncertainty in both phonological and morphological aspects,I have opted for a more cautious approach and refrained from labeling it as a suffix. However, it is worth noting that the postcoda -s(ə) as reconstructed in this study *highly overlaps with the patterns that Baxter and Sagart (2014) explicitly identify as involving a -s suffix.

Baxter and Sagart (2014: 59), based on observed semantic relationships between qùshēng and non-qùshēng words in Old Chinese, identified three primary functions of the -s suffix in their sys- tem: (i) nominalizing verbs, (ii) deriving denominal verbs, and (iii) forming verbs of outwardly directed action from verbs of inwardly directed action or stative verbs. They provided a range of specific patterns as supporting evidence for each function. Given the substantial number of patterns they outlined, I consider these three functions to be relatively well-supported. To fur- ther investigate the phonological behavior of words exhibiting these patterns, I have extracted the relevant words from their study and compiled their rhyming distribution in Table 8.

Table 8 rhyming distribution of suffix -s word

Char.	Gloss	Morphology Gloss	rhyme with Qù	Total Occur
處	*t.qʰaʔ/ *t.qʰaʔ-s	be at/ place	0	6
度	*[d]ˤak/ *[d]ˤak-s	measure (v.)/ (n.)	0	3
惡	*ʔˤak/ *ʔˤak-s	ugly/ hate	0	3
好	*qʰˤuʔ/ *qʰˤuʔ-s	good/ like (v.)	2	3
樂	*[ŋ]ˤrawk/ *[ŋ]ˤrawk-s	music/ cause rejoice	1	1
令	*riŋ/ *riŋ-s	send (person)/ issue command	0	1
喪	*s-mˤaŋ/ *s-mˤaŋ-s	mourning/ lose	0	2
食	*mə-lək/ *s-m-lək-s	eat/ feed	1	1
下	*gˤraʔ/ *m-gˤraʔ-s	down/ descend	0	3
語	*ŋ(r)aʔ/ *ŋ(r)aʔ-s	speak/ tell	0	1

Although it is difficult to determine whether the words in Table 8 functioned as qùshēng or non- qùshēng forms in the Shījīng [9] I have listed them together to avoid potential biases in individual judgment. However, the table reveals a clear pattern: in nearly all instances, these words rhyme with non-qùshēng words. This suggests that words with a definitively reconstructible -s suffix, as identified by Baxter and Sagart, belong to Category 2 in my framework.

Another reason for reconstructing the postcoda as *-s(ə) is that, as mentioned, Middle Chinese qùshēng syllables correspond to different morphological functions in Old Chinese. This suggests that in an even earlier stage, the postcoda -s may have been followed by different vowels, each associated with distinct functions. However, due to the lack of sufficient evidence to reconstruct the exact vowel quality, I provisionally represent it as /ə/.

5.6 The sound change of *-s and *-s(ə) from OC to MC

Although both *-s coda and postcoda *-s(ə) merged into the qùshēng (departing tone) in Middle Chinese, they actually underwent different sound changes at different times. This distinction ex- plains why, in Han dynasty transcriptions, only words belonging to the *-s coda category continued to correspond to dental codas, while words with postcoda *-s(ə) did not.

The timing of the sound change further explains why, in transcriptions, only Category 1 -s coda words correspond to dental codas, while postcoda *-s(ə) words do not. The phonological process behind this distinction is also reasonable. Since *-s is an integral part of the coda and more tightly bound within the syllable structure, it is more resistant to early loss. In contrast, *-s(ə), as an external element attached to the syllable, is more prone to being lost over time.

Additionally, another notable difference is that after *-s coda was lost, it not only resulted in the same tonal development into qùshēng as postcoda *-s(ə), but also led to the emergence of an additional -j. For instance, 厲 ras > ljej. This can be understood as a case of compensatory lengthening—a phonological phenomenon in which the loss of a consonant is compensated for by lengthening the preceding vowel, maintaining the syllable's weight and rhythmic balance. This process helps preserve the overall phonetic structure of the word despite the sound change.

Compensatory lengthening is widely attested across languages. For example, in Middle English during Chaucer's time, the word night was phonemically /nixt/. When the /x/ sound was lost, the vowel /i/ was lengthened to /iː/ to compensate, resulting in the pronunciation /niːt/, which later shifted to the diphthong /aɪ/ in Modern English. A similar compensatory mechanism may have

[9]Since such distinctions rely on textual interpretation, which is not always definitive

played a role in the development of the -j coda in some *-s coda words in Chinese.

This compensatory lengthening occurred exclusively in *-s coda words and not in postcoda *- s(ə) words because only *-s was an integral part of the syllable structure. As a part of main syllable, *-s played a structural role in determining the phonotactic constraints of the syllable. When it was lost, the vowel underwent lengthening to maintain the syllable 's phonological weight.

In contrast, postcoda -s(ə) functioned as an external attachment of the syllable. Since it was not tightly integrated into the syllabic nucleus or coda, its loss did not disrupt the phonotactic balance of the syllable, thus eliminating the need for compensatory lengthening.

6 Conclusion

This study proposes a new reconstruction of the traditional Old Chinese *-s by distinguishing two distinct categories: *coda -s, which is an integral part of the main syllable, and postcoda *-s(ə). The term postcoda is adopted to parallel Baxter and Sagart 2014 use of preinitial. Just as preinitial refers to elements added before the main syllable onset, postcoda designates additional elements occurring after the coda of main syllable.

For the words with *-s coda, which exclusively rhyme with other *-s coda words in the Shījīng, their xiéshēng series that predominantly contain qùshēng words and exhibit a strong correspon- dence with dental codas in Late Han transcriptions.

The comparison between examples of unambiguous OC *-s coda words in the new reconstruc- tion and those reconstructed by Baxter and Sagart ibid. is presented as follows:

	對	味	敗	肺	慧	四
New Recons.	*kus	*məs	*pˤras	*pʰos	*ɢʷˤet-s	*s.lis
B & S	*tˤup-s	*mət-s	*pˤrat-s	*pʰot-s	*ɢʷˤet-s	*s.lij-s

The loss of the *-s coda occurred after the Eastern Han, during which the syllable underwent compensatory lengthening by adding a -j coda to maintain phonetic balance.

In contrast, *postcoda -s(ə) words, which can freely rhyme with non-*s coda words in the Shījīng, are found in xiéshēng series containing various tonal categories and rarely correspond to dental codas in transcriptions.

The comparison between examples of unambiguous OC postcoda *-s words in the new recon- struction and those reconstructed by Baxter and Sagart is presented as follows:

	命	狩	助	帝	戻
New Recons.	*mriŋ-s(ə)	*s.tuʔ-s(ə)	*dzra-s(ə)	*tˤek-s(ə)	*rˤet-s(ə)
B & S	*m-riŋ-s	*s.tuʔ-s	*dzra-s	*tˤek-s	*rˤet-s

The loss of *postcoda -s(ə) took place before the Eastern Han. Once the *-s coda also disap- peared, both categories eventually merged into Middle Chinese qùshēng.

References

Bailey, H. W. (1946). "Gāndhārī." In: Bulletin of the School of Oriental and African Studies 11.4, pp. 764–797.

Baley, J., N. W. Hill, and E. Caldwell (2023). "Chinese Transcription of Buddhist Terms in the Late Hàn Dynasty." In: Journal of Open Humanities Data 9.10.

Baums,S and A Glass (2002). A Dictionary of Gāndhārī. Retrieved 2024-10-27, from https://stefanbaums. com/baums_grammar_outline.pdf.

Baums, S. (2009). "A Gāndhārī Commentary on Early Buddhist Verses: British Library Kharoṣṭhī Fragments 7, 9, 13 and 18." PhD thesis. University of Washington.

Baxter, W. H. (1992). A handbook of Old Chinese phonology. Berlin; New York: Walter de Gruyter.

Baxter, W. H. and L. Sagart (2014). Old Chinese: A new reconstruction. Oxford; New York: Oxford University Press. Haudricourt, A.-G. (1954). "L'origine des tons en viêtnamien." fre. In: Journal Asiatique 1941-1995 242, pp. 69– . Karlgren, B. (1950). "The Book of Odes: Chinese text, transcription and translation." In: (No Title).– (1954). "Compendium of Phonetics in Ancient and Archaic chinese." In: The Museum of Far Eastern Antiquities.

Mattisof, J. A. (1978). "Variational Semantics in Tibeto-Burman: the 'origanic' approach to linguistic comparison." In. Nattier, J. (2008). A guide to the earliest Chinese Buddhist translations: texts from the Eastern Han (Dung-han) and Three Kingdoms (San-guo) periods. International Research Institute for Advanced Buddhology, Soka University.

Pulleyblank, E. G. (1962). The consonantal system of Old Chinese. Verlag nicht ermittelbar.– (1972). School of Oriental and African Studies. University of London, pp. 368–373.

Schuessler, A. (2006). ABC etymological dictionary of Old Chinese. Honululu: University of Hawaii Press.– (2009). Minimal Old Chinese and Later Han Chinese: A Companion to Grammata Serica Recensa. Honululu: Uni- versity of Hawaii Press.

Starostin, S. (1989). Reconstruction of Old Chinese Phonological System. Moscow: Nauka. Wang, L. (1980). The rhyme of Chuci. shanghai:Shanghai gu ji chu ban she.

從海南閩語的給予義雙及物結構看原生結構與接觸引發遷移的互動

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1. 引言

在語言類型學研究中，雙及物結構（ditransitive construction）一般指由雙及物動詞構成，包含一個施事論元（agent，下文簡稱 A 或施事），一個客體論元（theme，下文簡稱 T 或客體）和一個類似接受者（recipient，下文簡稱 R 或與事）的結構（劉丹青 2001；陸丙甫、羅天華 2009；Malchukov et al. 2010；Haspelmath 2015）。[16] 據此定義，雙及物結構是一種論元結構，其並不等同於雙賓結構；前者屬於句法——語義概念，而後者屬於表層句法結構概念（劉丹青 2001；張敏 2011）。雙及物結構在句法表層可以不同句式編碼，雙賓結構只是其中一種形式（劉丹青 2001）。就語義功能而言，雙及物結構以具體物品的給予和轉移為最典型的核心意義，但用於編碼雙及物結構的句式往往進一步發展出其他功能（張伯江 1999；Malchukov et al. 2010；丁加勇、張敏 2015）。

在漢語方言學界，有關雙及物結構的研究可謂汗牛充棟，但以海南閩語為對象者則相當有限。惟海南閩語的雙及物結構範疇存在不少值得關注和討論的現象。其一，文獻中往往指海南閩語最常用的雙及物結構為遵循「動詞-客體-與事」語序的「倒置雙賓句」，與其他閩南語迥異（曹志耘主編 2008a：096；張敏 2011；Lee 2011）；張敏（2011）更指該語序是受粵語及客語影響的結果。但據筆者調查，此類結構並非普遍見於海南閩語各方言中，不同方言允准的雙及物結構句式亦並不一致，其間差異有待進一步的細緻描寫和分析。其次，海南閩語存在「要」、「分」和「乞」三個功能一致的給予動詞；前兩者基本不見於原鄉地區閩南語。多個語義功能相似成分共存的現象，往往反映出不同歷史層次的疊加，箇中緣由有待發掘。此外，不同給予動詞在各方言的使用情況並不完全相同，其句法性質差異或是對其歷史深度和來源的反映，亦需要進一步考察。[17] 有鑑於此，本文著意利用海口、瓊海和港門閩語的語料，對海南閩語的雙及物結構作系統考察。本文第二節主要以三地方言給予動詞為切入點，關注最典型的給予義雙及物結構的句法表現；第三節則嘗試從歷時角度解釋其在不同方言中呈現的差異；第四節為全文總結。要之，本文希望回答以下研究問題：

1. 海南閩語各地方言的給予動詞和給予義雙及物結構存在什麼差異？
2. 各類給予動詞的來源是什麼？
3. 造成三地方言給予義雙及物結構差異的原因是什麼？

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[16] 學界對於雙及物結構的定義存在分歧。部分學者如 Goldberg（1995）、張伯江（1999）、Kittilä（2006）等將雙及物結構等同於雙賓語結構（double object construction），而將與格結構（dative construction）等利用句法手段引介非施事論元的結構排除在外。此外，就意義而言，雙及物結構亦有狹義和廣義之分：狹義的雙及物結構表達的是所有權轉移事件（如「給」（give）、「借」（lend））以及認知轉移事件（如「告訴」（tell）、「展示」（show））。且由於限定了非施事論元只能是客體（theme）及類似與事的角色，狹義的雙及物結構也不包括奪取類結構（我偷他一支筆）、放置類結構（我放了一支筆在桌子上）、稱呼類結構（我叫他老王）以及受益類結構（我給他買了一本書）；後幾類被歸入三元結構（three-argument construction）（Malchukov et al. 2010）。廣義的雙及物結構則可指所有有三個論元參與的事件（參 Margetts and Austin 2007 "three-participant events"）。有關不同學者對雙及物結構定義差別的討論，並參 Chin（2022：7-10）。本文主要關注狹義雙及物結構中涉及給予動詞者。

[17] 楊望龍（2019）、沈冰（2022）和楊望龍、史文磊（2023）詳細探討海南閩語特有給予動詞「要」的來源、用法和語法化路徑，但對於其他給予動詞如「分」、「乞」，以及它們在不同方言中的句法性質差異著墨不多。

文中所用海口、瓊海、三亞港門閩語語料主要為作者 2022 年至 2024 年間在海南海口、瓊海和三亞港門田野調查所得。[18] 其他方言與非漢語語料參考已有方言、語言調查報告和語法研究論著，具體出處隨文引出。

2. 海南閩語的給予動詞和給予義雙及物結構

給予動詞{GIVE}一向被認為是最普遍的雙及物動詞，[19] 其所構成的結構亦是跨語言雙及物結構研究的重點（Haspelmath 2013）。Kittilä（2006）便指在大部分語言中，給予動詞{GIVE}都是最典型、及物性最高的雙及物動詞，也最能和雙賓結構搭配。換言之，如果一個語言能夠接受雙賓結構，那麼給予動詞{GIVE}幾乎一定能出現在其中；如果只有一個動詞能夠出現在雙賓結構中，那麼在大部分情況下就是給予動詞{GIVE}。[20] 張敏（2011）進一步提出「通用給予動詞」（general-purpose verb of giving）的概念（簡稱 V 給），特指與官話的「給」、粵語的「畀」，及英語 "give" 相對應的動詞；[21] 他認為就漢語方言而言，「V 給」的性質決定了該方言使用的雙及物結構類型：沒有「V 給」的方言，一定沒有給予類雙賓「動詞+與事+客體」結構（即文中的雙賓 A 式）；雙賓結構可用「動詞+客體+與事」結構（即文中的雙賓 B 式）的方言裡，「V 給」多來自表「持拿」義的單及物（二價）動詞。此外，「V 給」能否出現在特定雙及物結構中，也決定了其他給予類動詞能否出現在同類結構。[22] 由此觀之，給予動詞「V 給」的性質會影響方言雙及物結構的句式編碼類型。這也是研究雙及物結構的起點。

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[18] 文中海口閩語主要發音人為（1）CMH，女，54 歲，海口市龍華區人，高中學歷；（2）WZC，男，49 歲，海口市美蘭區人，本科學歷；（3）HYH，女，44 歲，海口市美蘭區人，本科學歷；（4）HYL，女，44 歲，海口市美蘭區人，本科學歷。瓊海閩語主要發音人為（1）CYY，男，60 歲，瓊海市嘉積鎮人，高中學歷。港門閩語主要發音人為（1）MGM，女，58 歲，三亞市崖州區港門村人，初中學歷；（2）PMF，男，68 歲，三亞市崖州區港門村人，中專學歷。

[19] 不同學者對「雙及物動詞」的定義不一。一般類型學研究中的「雙及物動詞」指的是帶施事論元（A）、客體論元（T）和類似接受者論元（R）的動詞，但是對於這些論元是否需要（或如何）借助論元標竿（argument flagging）和論元標引（argument indexing）等特殊句法手段進行編碼沒有限制（Malchukov et al. 2010；Haspelmath 2013；2015 等）。在這種定義下，即使是只能借助與格介詞才能引介與事論元的動詞也屬於「雙及物動詞」。本文即採取這種說法。但是 Kittilä（2006）則認為只有在所引介的兩個賓語論元（T 和 R）都和一般及物動詞的直接賓語（P）標記一致時，該動詞才屬於「雙及物動詞」（ditransitive verb）。換言之，只有能出現在雙賓結構中的才是雙及物動詞。如果所引介的兩個賓語論元標記有差別（differential marking），那麼該動詞只能算作「及物三價動詞」（transitive trivalent verb），而不屬於「雙及物動詞」。本文依前一種看法。

[20] Kittilä（2006）也指出上述傾向存在反例。如德語 'lehren' (teach) 可以出現在雙賓語結構中，但是 'geben' (give) 則出現在與格結構中。此外，部份缺乏給予類雙賓句的漢語方言中，奪取類動詞如「偷」、「搶」卻可以構成雙賓句（張敏 2011）。Malchukov et al.（2010）認為給予動詞{GIVE}相較其他動詞在雙賓語結構更為普遍主要是功能因素驅動的結果：一方面給予動詞 {GIVE} 具有高度及物性，且其中與事成分 R 的受影響程度（affectedness）較高；另一方面，給予動詞{GIVE}所支配的兩個非施事論元在顯著度（prominence）（主要指「有生性」（animacy）和「指稱度」（referentiality））上存在明顯的不對稱，其與事論元 R 往往較客體論元 T 更為顯著，因此不需要借助特殊句法手段標註。因此，當其他類別的動詞在與事的受影響程度（如奪取類動詞「偷」、「搶」）或是所支配論元在顯著度上的不對稱性（如「教」）高於給予動詞{GIVE}時，則會比後者更有可能出現在雙賓結構中。

[21] 「V 給」有兩個異於其他含給予義的動詞如「送」、「交」、「獎」、「發」、「寄」（張文稱為「給予類動詞」）的特點：其一，「V 給」的使用頻率遠較後者為高。其二，「V 給」的語義特徵更為單純基礎，僅包含[+給予]；但給予類動詞除了[+給予]外，還包括[+方式]特徵；如「送」表達的是「以無償的方式給」，「獎」則表達「以獎賞的方式給」。

[22] 「V 給」能夠出現在特定雙及物結構，是其他給予類動詞可以出現在同一結構的必要條件，但並非其充分條件。即如果「V給」無法出現在雙賓 A 式，則其他給予類動詞也無法出現；但如果「V 給」可以出現在雙賓 A 式，也不一定代表其他給予類動詞也可以出現。以粵語為例，一般而言只有「V 給」「畀」可以出現在雙賓 B 式中，構成「V-DO-IO」雙賓結構，如「我畀咗本書佢（我給了他一本書）」。「送」、「寄」等給予類動詞出現在雙賓 B 式中則非常不自然：「*/？？我送咗本書佢。（我送了他一本書。）」、「*我寄咗封信佢。（我寄了他一封信。）」

值得注意的是，前述「V 給」的定義主要立足於語義。但在張敏（2011）的討論和潘秋平、項夢冰（2020）等採用「V 給」這一術語的研究中，「V 給」除了在語義特徵上較為特殊外，在句法上也體現為具備為兩個賓語賦元能力的「真正的三價動詞」。[23] 由於部分方言的給予動詞並不能同時滿足「V 給」語義特徵和句法特徵的要求，為清晰起見，本文不會採用「V 給」這個術語，而是將滿足「僅包含[+給予]」這一語義特徵的動詞稱為「給予動詞」（與「送」、「獎」等「給予類動詞」相對），但對於其是否能為兩個賓語賦元則另作討論。至於由給予動詞構成的雙及物結構，本文則稱為「給予義雙及物結構」，與由「給予類動詞」構成的「給予類雙及物結構」相對。本文主要關注的是海南閩語的給予動詞和給予義雙及物結構。

2.1 三地方言給予動詞和給予義雙及物結構的分類考察

海口、瓊海和三亞港門閩語使用的給予動詞並不一致：海口、瓊海使用「分」和「要」；港門閩語則使用「乞」和「要」。[24] 其中「分」和「乞」屬於單純的外向動詞，主要表達{給予}義。[25]「要」的情況則較複雜。作為動詞時，「要」既能表達{索取/拿取}，也可以表達{給予}，屬於雙向動詞（bi-directional verb），[26] 如：

a. {索取}
(1)〈瓊海〉　　　汝**要**[ʔiɔ⁵³]啤酒唄？你要啤酒嗎？　　　　　　（楊望龍、史文磊 2023）
(2)〈港門〉　　　汝磨鏡愛**要**穤少錢？你磨鏡子想要多少錢？
　　　　　　　　tu³¹ vuə²² kie²⁴ ʔai²⁴ ʔie³⁵ toi³³ tsie³¹ tsi²²

b. {拿取}
(3)〈海口〉　　　**要**蜀塊名片出來要去我儂。拿一張名片出來給我們。
　　　　　　　　ʔio⁵⁵ ziak³ xɔi³⁵ mia²¹ fin³⁵ sut⁵ lɛ²¹ ʔio⁵⁵ hu³⁵ va²¹³ neŋ²¹
(4)〈瓊海〉　　　我趁褲□[ɗoŋ²²]裡**要**手機出來。他從口袋裡拿出手機。
　　　　　　　　ɦua³¹ xan²¹⁻⁴⁵ xɔu²¹⁻⁴⁵ ɗoŋ²² lai⁴² ʔiɔ⁵³ siu³¹ ki³⁴ sut⁵ lai²²
(5)〈港門〉　　　汝相信我，**要**筆共紙出來乞我寫。你相信我，拿筆和紙出來給我寫。
　　　　　　　　tu³¹ θie³³ θiŋ²⁴ vuə³¹, ʔie³⁵⁻³³ ɓi³⁵ kaŋ³³ tuə³¹ tsʰui³⁵ lai²² kʰi³⁵ vuə³¹ θie³¹

c. {給予}
(6)〈海口〉　　　我**要**蜀千銀去老陳。我給了老陳一千塊錢。
　　　　　　　　va²¹³ ʔio⁵⁵ ziak³ sai²⁴ ŋin²¹ hu³⁵ lau³³ ɗaŋ²¹
(7)〈瓊海〉　　　阿爸**要**蜀百銀去我。爸爸給了我一百塊錢。
　　　　　　　　ʔa⁴² ɓa⁵³ ʔiɔ⁵³ ziak³ ɓɛ⁵³ ŋin²² xu⁴⁵ ɦua³¹
(8)〈港門〉　　　我**要**兩百銀乞伊嘍。我給了他兩百塊錢。
　　　　　　　　vuə³¹ ʔie³⁵ no⁴²⁻⁴⁴ ɓɛ³⁵ ŋin²² kʰi³⁵ ʔi³³ lo³³

雖然作為給予動詞的「要」經常出現在與格結構中，但「要」的{給予}義並不是臨時的語境意義，而是穩固的義項。如（9）、（10）中，「要」可以帶體標記單用回答問題；也可以不帶與事論元出現，如（11）-（13）；或是出現在關係從句中，如（14）、（15）：

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[23] 所謂「具備為兩個賓語賦元能力的『真正的三價動詞』」，指在不借助與格介詞便能夠直接引介與事論元 R 和客體論元 T 的動詞。換言之，即是可以出現在雙賓結構中的動詞。

[24] 據《漢語方言地圖集》圖 151「給」的記錄，南部和西部方言如昌江、東方、樂東、三亞主要使用「乞」；東部和東北部方言如陵水、萬寧、瓊中、瓊海、文昌則使用「分」；北部方言如海口、澄邁則使用「要」。詳參曹志耘（2008b：151）。但據沈冰（2022）和楊望龍、史文磊（2023），給予動詞「要」在海南閩語的分佈極為廣泛，涵蓋大部分方言。

[25] 海口和瓊海方言中「分」還有{分配}、{分發}的義項。如「我分錢去伊」一句，可以理解為給予義的「我給他錢」，也可以理解為分發義的「我分他錢」。

[26] 有關「要」的語源，學者意見不一。Lee（2010）認為其本字為{遭受}的「著」；張敏（2011）則認為包含了不同來源，表示{給予}的「要」源自表示{撿拾}的「撧」，表示{索取}的「要」就是「要」；陳鴻邁（1996：124）、符其武（2008：337-338）、沈冰（2022：205-207）及楊望龍、史文磊（2023）等則認為其本字就是「要」；沈冰（2022：205-207）和楊望龍、史文磊（2023）對從音韻、語義等角度論證{索取}義的「要」就是其本字，其說可從。「要」的本字並非本文討論重點，本文取後種說法，將其記為「要」字。

（9）〈海口〉　　　A: 本書汝**要**去老陳嗎？[27] 那本書你給了老陳了嗎？

ɓui²¹³ tu²⁴ lu²¹³ ʔio⁵⁵ hu³⁵ lau³³ ɗaŋ²¹⁻²¹⁵ ma³³

B：**要**嘍。給了。

ʔio⁵⁵ lo³³

（10）〈瓊海〉　　　A：許本書汝**要**去老陳去唄？那本書你給了老陳了嗎？

ɦio²¹⁻⁴⁵ ɓui³¹ tu³⁴ lu³¹ ʔiɔ⁵³ xu⁴⁵ lau⁴² ɗaŋ²² ɦu³⁴ ᵐɓɛ³⁴?

B：我**要**去嘮。我給了。[28]

ɦua³¹ ʔiɔ⁵³ ɦu³⁴ lau³¹

（11）〈海口〉　　　伊倘無**要**錢佇。他還沒給錢呢。

ʔi²⁴ ziaŋ²¹³ vo²¹ ʔio⁵⁵ tsi²¹ lu³³

（12）〈瓊海〉　　　基督教無**要**[ʔiɔ⁵³]錢溜。基督教不會給錢的。　　　　　（楊望龍、史文磊 2023）

（13）〈港門〉　　　我**要**錢封。我給紅包。/#我拿紅包。

vuə³¹ ʔie³⁵ tsi²² ɓaŋ³³

（14）〈海口〉　　　總是親情**要**個花紅，汝就□[fɛ⁵⁵]著。都是親戚給的紅包，你就拿著。

toŋ²¹³ ti³³ sin²⁴ tsia²¹ ʔio⁵⁵ kɛ²¹ hui²⁴ ʔaŋ²¹, lu²¹³ tsiu³³ fɛ⁵⁵ ɗo²¹³

（15）〈港門〉　　　家己儂**要**個錢封，要嘍要嘍！自己人給的紅包，拿吧拿吧！

ka³³ ki³³ naŋ²² ʔie³⁵ kai²² tsi²² ɓaŋ³³, ʔie³⁵ lo³³ ʔie³⁵ lo³³

　　就雙及物結構的句式編碼類型而言，本文採取劉丹青（2001）的分類，將漢語方言的給予類雙及物結構大致分為四類：

1. 雙賓 A 式，即「動詞-與事-客體」結構，如普通話「給他書」；
2. 雙賓 B 式，即「動詞-客體-與事」結構，如粵語「畀書佢」；
3. 介賓補語式，即「動詞-客體-與格介詞-與事」結構，如普通話「送書給他」；
4. 複合詞式，即「動詞-與格介詞-與事-客體」，如中寧話「給給我一碗水」。

　　曹志耘（2008a：096）、張敏（2011）、Lee（2011）等指，海南閩語普遍使用雙賓 B 式結構。但據本文調查，海口、瓊海和港門三地方言其實不太能接受該類結構，與記錄不符：

（16）〈海口〉　　　　伊**分/要**兩個銀？？（去）我。他給我兩塊錢。[29]

ʔi²⁴ ɓun²⁴/ʔio⁵⁵ no³³ kɛ²¹ ŋin²¹ va²¹³

（17）〈海口〉　　　　我**分/要**蜀本書？？（去）伊。我給他一本書。

va²¹³ ʔio⁵⁵/ɓun²⁴ ziak³ ɓui²¹³ tu²⁴ *(hu³⁵) ʔi²⁴

（18）〈瓊海〉　　　　阿爸**分/要**蜀百銀*（去）我。爸爸給我一百塊錢。[30]

ʔa⁴² ɓa⁵³ ʔiɔ⁵³ ziak³ ɓɛ⁵³ ŋin²² xu⁴⁵ ɦua³¹

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[27] 海口閩語的體標記「去」（以及介詞「去」）常發生弱讀，並會進一步丟失所有音段成分融進前一個音節，只留下高調依附在前一音節的聲調中。此類合音會導致前一個音節發生變調，使之結尾升高變為高調。

[28] （10）「我要去嘮」一句中，「去」是體標記，而不是介詞「去」。瓊海話中作為體標記的「去」和作為介詞的「去」讀音不同，前者是[ɦu³⁴]，後者是[xu⁴⁵]。詳參楊望龍（2019）及楊望龍、史文磊（2022）中的討論。

[29] 據沈冰（2022：201），（16）句中的與格介詞「去」可以省略不說，構成雙賓 B 式結構。惟本文發音人表示，（16）省略與格介詞「去」雖然可以接受，但比較不自然；其他情況下，雙賓 B 式結構感覺非常彆扭。由此可見，雙賓 B 式在一部分海口方言使用者中接受度仍然比較低。

[30] 楊望龍、史文磊（2023）指，瓊海方言的與格介詞「去」與前一音節合音後還可繼續發生弱化，直至在語音上完全省略，形成「V-T-R」的結構，如「要[ʔiɔ⁵³]書我」。但據本文發音人，此類雙賓 B 式結構的使用仍較為受限，大部分情況下都不可接受。又，楊望龍老師於私人通訊中指出，瓊海閩語自然語流中「去」確實可完全脫落，在聽覺上已無法體現，但其實發音人感知上「去」還是存在的；換言之，瓊海閩語這一結構的表層形式已發生變化，但底層結構還沒有作重新分析。

（19）〈瓊海〉　　　　我**分/要**蜀本書*（去）伊。我給他一本書。
　　　　　　　　　　ɦua³¹ ɓun³⁴/ʔiɔ⁵³ ziak³ ɓui³¹ tu³⁴ xu⁴⁵ ʔi³⁴
（20）〈港門〉　　　　阿爹**乞**蜀百銀*（乞）我。爸爸給我一百塊錢。
　　　　　　　　　　ʔa³³ dɛ³³ kʰi³⁵ za⁴²⁻⁴⁴ ɓɛ³⁵ ŋin²² kʰi³⁵ vuə³¹
（21）〈港門〉　　　　我**要**兩百銀*（乞）伊嘍。我給了他兩百塊錢了。
　　　　　　　　　　vuə³¹ ʔie³⁵ no⁴²⁻⁴⁴ ɓɛ³⁵ ŋin²² kʰi³⁵ ʔi³³ lo³³

　　眾多學者指出，廣泛見於東南方言的雙賓 B 式是由介賓補語式省略介詞而來（Xu and Peyraube 1997；劉丹青 1997；2001；Tang 1998；鄧思穎 2003：79；張敏 2011；Chin 2022：81）。但從上例可見，海口、瓊海和港門方言介賓補語式雙及物結構中，引介 R 的與格介詞在大部分情況下仍不能省略，是以雙賓 B 式在這些方言尚未發展成熟。

　　雙賓 A 式雙及物結構在三地方言中的使用情況則頗為參差。海口、港門方言的給予動詞可以構成「動詞-與事-客體」結構的雙賓 A 式，但瓊海方言則不可：

（22）〈海口〉　　　　妎父**分**我蜀百銀。爸爸給了我一百塊錢。
　　　　　　　　　　mo⁵⁵ ɓɛ³³ ɓun²⁴ va²¹³ ziak³ ɓɛ⁵⁵ ŋin²¹
（23）〈海口〉　　　　妎父**要**我蜀百銀。#爸爸拿了我一百塊錢。/爸爸給了我一百塊錢。
　　　　　　　　　　mo⁵⁵ ɓɛ³³ ʔio⁵⁵ va²¹³ ziak³ ɓɛ⁵⁵ ŋin²¹
（24）〈瓊海〉　　　　*阿爸**分**我蜀百銀。爸爸給了我一百塊錢。
　　　　　　　　　　ʔa⁴² ɓa⁵³ ɓun³⁴ ɦua³¹ ziak³ ɓɛ⁵³ ŋin²²
（25）〈瓊海〉　　　　#我**要**伊蜀百銀。#我拿他一百塊錢/*預期解讀：我給他一百塊錢。
　　　　　　　　　　ɦua³¹ ʔiɔ⁵³ ʔi³⁴ ziak³ ɓɛ⁵³ ŋin²²
（26）〈港門〉　　　　阿爹**乞**我蜀百銀。爸爸給我一百塊錢。
　　　　　　　　　　ʔa³³ dɛ³³ kʰi³⁵ vuə³¹ za⁴²⁻⁴⁴ ɓɛ³⁵ ŋin²²
（27）〈港門〉　　　　阿爹**要**我蜀百銀。#爸爸拿了我一百塊錢。/爸爸給我一百塊錢。
　　　　　　　　　　ʔa³³ dɛ³³ ʔie³⁵ vuə³¹ za⁴²⁻⁴⁴ ɓɛ³⁵ ŋin²²

　　海口和瓊海方言使用相同的給予動詞「分」和「要」，但只有海口方言允許它們進入給予義雙賓 A 式結構。其中，由於「要」有{拿取}和{給予}兩個義項，且海口方言允許奪取義雙賓 A 式結構，「要-與事-客體」有兩種解讀。如（23）既可以理解為「爸爸拿了我一百塊錢」，間接賓語「我」理解為來源（source）；也可以理解為「爸爸給了我一百塊錢」，「我」是接受者。在沒有語境支持的情況下，（23）傾向理解為拿取義。[31] 但如有語境支持，則（23）可理解為給予義：

（23'）〈海口〉　　　我即次考試無錯。妎父**要**我蜀百銀。我這次考試考得不錯。爸爸給了我一百塊錢。
　　　　　　　　　　va²¹³ tsi⁵⁵ si³⁵ xau²¹³ si³⁵ vo²¹ so³⁵. mo⁵⁵ ɓɛ³³ ʔio⁵⁵ va²¹³ ziak³ ɓɛ⁵⁵ ŋin²¹

　　（23'）的前句提供了背景資訊「這次考試考得不錯」；在這個前提下，「要」只能理解為給予動詞，理解為{拿取}則不合理，因此後句可理解為給予義雙賓結構。

　　瓊海方言不存在給予義雙賓 A 式結構，因此（24）不能說。[32] 但由於該方言允許奪取類雙賓 A 式，因此（25）能說，卻會被理解為拿取義「我拿他一百塊錢」。港門方言的給予動

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[31] 沈冰（2022：201）指，出現在雙賓 A 式的給予動詞「要」不能表給予義。根據本文發音人的語感，如沒有語境支持，雙賓 A 式的「要」類句子的確傾向理解為拿取義；但如果語境提供了相關資訊，則「要」構成雙賓 A 式表達給予義也沒有問題。

[32] 瓊海方言中所有給予類動詞，包括「送」、「借」、「餵」等都不能夠進入雙賓 A 式。惟發音人指「獎勵」可以進入雙賓 A 式，「老師獎勵我一支鋼筆」可以接受。我們認為這可能是因為「獎勵」一詞比較文雅，發音人受普通話影響可以接受其出現在給予義雙賓 A 式結構。當我們用同義的單音節詞「獎」再次詢問發音人時，發

詞「乞」和「要」都能構成給予義雙賓 A 式。惟「要」在沒有語境支持時同樣傾向理解為{拿取}義，情況與海口方言相類。

相對雙賓結構而言，介賓補語式結構才是三地方言中使用最為自由普遍的雙及物結構。劉丹青（2001）指出，漢語方言的介賓補語式符合結構像似性和線型像似性，[33] 也不受重成分後置傾向的約制，實為最無標記（unmarked）的結構。（28）-（31）反映各給予動詞都能進入介賓補語式結構，且處於該結構中的雙向動詞「要」沒有歧義，只會理解為{給予}。尤其當與事或客體論元結構較複雜、份量較重時，介賓補語式實是最自然的表達：[34]

（28）〈海口〉　　**我要/分**蜀本上枚月乃出版個書**去**伊。我給了他一本上個月才出版的書。
va²¹³ ʔio⁵⁵ / ɓun²⁴ ziak³ ɓui²¹³ tsio²⁴ mo³³ kau²¹³ na⁵⁵ sut⁵ ɓaŋ²¹³ kai²¹ tu²⁴ hu³⁵ ʔi²⁴

（29）〈瓊海〉　　**我要/分**蜀本伊覓好久都無覓著個書**去**伊。我給了他一本他找了好久都找不到的書。
ɦua³¹ ʔiɔ⁵³ / ɓun³⁴ ziak³ ɓui³¹ ʔi³⁴ ɗie³¹ hɔ³¹ ku³¹ ɗou³⁴ ᵐbɔ²² ɗie³¹ ɗo³¹ kai²² tu³⁴ xu⁴⁵ ʔi³⁴

（30）〈港門〉　　**要/乞**蜀□[kʰai³⁵]長長個柴**乞**我。給我一根長長的棍子。
kʰi³⁵ / ie³⁵ za⁴²⁻⁴⁴ kʰai³⁵ ɗo²² ɗo²² kai²² tsʰa²² kʰi³⁵ vuə³¹

（31a）〈海口〉　　**我分/要**蜀本書**去**好久無見面個老同學。我給了好久沒見面的老同學一本書。
va²¹³ ɓun²⁴/ ʔio⁵⁵ ziak³ ɓui²¹³ tu²⁴ hu³⁵ ho²¹³ ku²¹³ vo²¹ ki³⁵ miŋ²⁴ kɛ²¹ lau³³ ɗaŋ²¹ ʔo³³

（31b）〈海口〉　　？**我分/要**好久無見面個老同學蜀本書。我給了好久沒見面的老同學一本書。
va²¹³ ɓun²⁴/ ʔio⁵⁵ hu³⁵ ho²¹³ ku²¹³ vo²¹ ki³⁵ miŋ²⁴ kɛ²¹ lau³³ ɗaŋ²¹ ʔo³³ ziak³ ɓui²¹³ tu²⁴

張敏（2011）指，接受雙賓 A 式的方言一般也能接受「動詞-與格介詞-與事-客體」複合詞式結構。海口和港門方言的給予動詞都能直接和與格介詞結合並帶上與事論元，但瓊海方言則不可，與該預測相符：

（32）〈海口〉　　**伊分去/要去**我蜀/許本書。他給我一本書/那本書。
ʔi24 ɓun²⁴ hu³⁵/ʔio⁵⁵ hu³⁵ va²¹³ ziak³/hu³⁵ ɓui²¹³ tu²⁴

（33）〈瓊海〉　　***我分去/要去**伊蜀千銀。我給他一千塊錢。
ɦua³¹ ɓun³⁴ xu⁴⁵/ʔiɔ⁵³ xu⁴⁵ ʔi³⁴ ziak³ sai³⁴ ŋin²²

（34）〈港門〉　　**伊乞乞/要乞**我蜀/□[ʔa³⁵]本書。他給我一本書/那本書。
ʔi³³ kʰi³⁵⁻³³ kʰi³⁵ / ʔie³⁵⁻³³ kʰi³⁵ vuə³¹ ʔa³⁵/ za⁴²⁻⁴⁴ ɓui³¹ tu³³

綜上所述，三地方言各類給予義雙及物結構的分佈情況可以下表概括：

音人指介賓補語式的「老師獎一支鋼筆去我。（老師獎勵一支鋼筆給我。）」才是最自然的說法，雙賓 A 式的「老師獎我一支鋼筆」比較彆扭。

[33] 所謂「結構像似性」，指在語義上直接賓語（客體）和動詞關係較間接賓語（與事）緊密，反映在結構上則表現為前者可以直接和動詞結合，後者卻需要通過介詞引入。「線型像似性」則是指在線型順序上，介賓補語式中直接賓語（客體）也比間接賓語（與事）更加接近動詞。詳參劉丹青（2001）。

[34] 值得注意的是，海口及瓊海方言使用來源自趨向動詞和終點介詞的「去」來引介與事，與港門方言和大部分閩南語使用源自給予動詞的與格介詞情況不同（有關「去」從趨向動詞到與格介詞的語法化過程，參沈冰 2022：145-146）。我們認為，海口及瓊海與格介詞的特殊，與海南閩語原有給予動詞「乞」在北部方言中被其他新起給予動詞所取代有關，具體討論見本文第三節。要之，我們認為在早期海南閩語中，「乞」或同時充當給予動詞和與格介詞；當海口及瓊海方言替換掉原有給予動詞「乞」後，連帶造成了原有與格介詞「乞」的失落。海口和瓊海方言的說話者啟用了一個新結構「要/分+T+去+R」來表達物品的給予和轉移，並逐漸將原本作為終點標記的「去」語法化為與格介詞。無論在漢語方言還是世界語言中，這種語法化路徑都十分常見（Heine and Kuteva 2002：37-38；張敏 2011）。又文昌方言使用語素[ti¹¹]引介接受者；Lee（2011）認為，[ti¹¹]即是「至」，和「去」一樣來源自趨向動詞。文昌方言和瓊海方言同為北部西片，親緣關係較瓊海方言和海口方言更為緊密，但兩者的與格介詞並不相同。有鑑於此，我們認為新興格介詞的興起或頗為晚近，至少發生在文昌和瓊海分支以後。

方言點	動詞	雙賓 A 式	雙賓 B 式	介賓補語式	複合詞式
海口	「分」	+	(-)	+	+
	「要」	+	(-)	+	+
瓊海	「分」	-	-	+	-
	「要」	-	-	+	-
港門	「乞」	+	-	+	+
	「要」	+	-	+	+

表 1、海口、瓊海和港門方言給予動詞的句法分佈

表 1 反映了兩項重要發現：其一，與前人紀錄不同，海南閩語中雙賓 B 式並非普遍存在的格式；各方言唯一共有的雙及物結構為介賓補語式結構。其二，瓊海閩語的給予動詞雖然在詞彙上與海口、港門方言有所重合，但這個方言本身卻不允許任何給予義雙賓構式。換言之，海南閩語不同方言給予動詞引介論元（argument-taking）的能力存在差異。瓊海方言的給予動詞正由於不具備同時給兩個賓語賦元的能力，只能借助與格介詞引介與事論元，而無法構成雙賓結構。

需要注意的是，本文於此區分雙及物動詞（ditransitive verb）、三元謂語（three-place predicate）及三價動詞（trivalent verb）的概念：雙及物動詞指帶施事論元（A）、客體論元（T）和類似接受者論元（R）的動詞，但是對於這些論元是否需要（或如何）借助論元標竿和論元標引等句法手段進行編碼沒有限制（Malchukov et al. 2010；Haspelmath 2013；2015）；三元謂語則屬於語義結構的層面，指題元網絡（theta-grid）規定了其必須選擇三個論元，缺一不可（鄧思穎 2003：85-86）；三價動詞則是著眼於句法上動詞帶論元的能力，指其不需要借助特殊的句法手段（如與格介詞）即可以直接帶兩個賓語。[35] 這三個概念有重合之處，但是不完全相同。以瓊海方言的給予動詞「分」為例，其既是雙及物動詞，也是三元謂語，因為其題元網絡要求它選擇三個論元（施事、客體、接受者）。在沒有額外語境的支持下，以下句子是不合法的：

（35）〈瓊海〉　　*我分蜀本書去嘮。預期解讀：我給了一本書。
ɦua³¹ ɓun³⁴ ziak³ ɓui³¹ tu³⁴ ɦu³⁴ lau³¹

但瓊海方言的「分」並不是三價動詞，因為它無法直接帶兩個賓語構成雙賓結構，而需要借助與格介詞「去」引介與事論元。按照上述分類，我們可以對三地方言給予動詞性質再作細分：

方言點	動詞	雙及物動詞	三元謂語	三價動詞
海口	「分」	+	+	+
	「要」	+	+	+
瓊海	「分」	+	+	-
	「要」	+	+	-
港門	「乞」	+	+	+
	「要」	+	+	+

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[35] 此處「雙及物動詞」、「三元謂語」及「三價動詞」的定義僅就本文討論而言。事實上，不同學者對於其體術語的內涵看法不一。如 Kittilä（2006）就將能直接帶兩個賓語，且兩個賓語標記一致的動詞稱為「雙及物動詞」（即本文「三價動詞」）；而將需要借助差別標記才能帶兩個賓語的動詞稱為「及物三價動詞」（transitive trivalent verb）（包含但不等於本文「雙及物動詞」，因為 Kittilä（2006）還包含帶其他類型論元如處所論元（locative）的三元結構）。張敏（2011）中，「雙及物動詞」和「三價動詞」交替使用，兩者皆指可以直接帶兩個賓語的動詞（文中亦稱「真正的三價動詞/雙及物動詞」），對應本文所稱「三價動詞」。

表 2、海口、瓊海和港門方言給予動詞的性質比較

接下來需要回答的問題是，為什麼明明是同源成分，卻只有瓊海方言的給予動詞不是三價動詞？如果海南閩語的給予動詞原來並非三價動詞，那麼它們又是如何在部分方言中發展為三價動詞的呢？

2.2 海南閩語給予動詞和兩類雙賓結構的關係考察

在討論海南閩語的給予動詞如何發展為三價動詞前，首先需要解釋為何我們認為「分」和「要」原本並非三價動詞：

前提
1. 給予動詞「分」和「要」在眾多海南閩語方言中都有分布；
2. 方言間整齊的語音對應關係反映「分」和「要」是同源的成分；

在承認上述前提的基礎上，對於三地方言給予動詞的性質差異，存在兩種可能解釋：其一、「分」和「要」一開始並非三價動詞，只是後來在海口、港門方言中演變為三價動詞；其二、「分」和「要」原本便是三價動詞，卻在瓊海方言中失去了為兩個賓語賦元的能力。本文採納第一種可能性，一方面是因為在漢語方言中從非三價動詞演變為三價給予動詞是常見的演變，但是從三價給予動詞「倒退」為非三價動詞則是特異發展，在缺少歷時文獻證據的情況下，我們抱持審慎態度；其二，從下文討論可見，「分」和「要」與典型的三價給予動詞（如普通話的「給」）和其他方言中的同源三價給予動詞（潮州閩語、梅縣客語的「分」）相比，在句法性質上差異明顯。如果採納第二種可能性，則要進一步說明為什麼同樣是三價動詞，「分」和「要」的句法表現卻如此特殊。相反，如果假設它們一開始不是三價動詞，而是後期通過某種方式演變為三價動詞，其特殊句法表現是特殊演變模式的結果，更能符合儉省原則（parsimony principle）。

張敏（2011）嘗據給予動詞和客體、與事論元結合的能力將其分為「與事型」、「受事型」和「中立型」三類：[36]

    a. 「與事型」給予動詞：可單獨帶與事賓語，不可單獨帶受事賓語；
    b. 「受事型」給予動詞：可單獨帶受事賓語，不可單獨帶與事賓語；
    c. 「中立型」給予動詞：可單獨帶受事賓語和與事賓語；或均不可。

海南閩語的「分」和「要」屬於典型的「受事型」給予動詞：[37]

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[36] Margetts and Austin（2010）、Li and Wu（2015）也根據類似的原則對給予動詞進行分類；他們將只可帶客體論元的給予動詞稱為 "T-type verb"，對應張敏（2011）的「受事型」給予動詞；只可帶與事論元的給予動詞稱為 "R-type verb"，對應張敏（2011）的「與事型」給予動詞；張敏（2011）中的「中立型」給予動詞在這兩篇文章中沒有相應分類。北京話的「給」在張敏（2011）的分析中為「中立型」，但在 Li and Wu（2015）中則被歸入 "R-type verb"。

[37] 「分」和「要」的來源也決定了它們屬於「受事型」給予動詞。「分」來源自{分配/分發}義動詞「分」，而{分配/分發}義動詞本來就只能和被分配/分發的物件（受事）結合，如「分西瓜」、「分錢」，但不能說「*分你/小明」。「要」原本是{拿取}義動詞，和東南方言中其他來源自{把持}義的動詞一樣，{拿取}義動詞也只能和被拿取的事物（受事）結合，如可以說「要筆（拿筆）」、「拿刀」，但一般不能說「*要你/人（*拿你/人）」、「*拿小明」。

(36a)		去覓阿公，阿公解**分**錢。去找爺爺，爺爺會給錢。（海口閩語，沈冰 2022：201）
(37b)	〈海口〉	本書**分***（去）即枚儂嘍。那本書給這個人了。
		ɓui²¹³ tu²⁴ ɓun²⁴ *(hu³⁵) tsi⁵⁵ mo³³ neŋ²¹⁻²¹⁵ lo³³
(37a)	〈海口〉	伊倘無**要**錢佇。他還沒給錢呢。
		ʔi²⁴ ziaŋ²¹³ vo²¹ ʔio⁵⁵ tsi²¹ lu³³
(37b)	〈海口〉	***要**我攏無要。給我都不要。
		ʔio⁵⁵ va²¹³ lo³³ vo²¹ ʔio⁵⁵
(38a)	〈瓊海〉	底個儂我都**分/要**三十銀去嘮。每個人我都給了三十塊錢了。
		dɛ²¹ kai²² naŋ²² ɦua³¹ dɔu³⁴ ɓun³⁴/ ʔio⁵³ ta³⁴ tap³ ŋin²² ɦu³⁴ lau³¹
(38b)	〈瓊海〉	許本書**分/要***（去）老陳去嘮。那本書給老陳了。
		ɦɔ²¹⁻⁴⁵ ɓui³¹ tu³⁴ ɓun³⁴/ʔio⁵³ *(xu⁴⁵) lau⁴² daŋ²² ɦu³⁴ lau³¹
(39a)	〈港門〉	汝但**要**蜀滴錢，乜儂替汝做□[ho³³]個工。你才給丁點兒錢，誰給你幹這樣的活？
		tu³¹ na³³ ʔie³⁵ za⁴²⁻⁴⁴ ni³⁵ tsi²², mi³⁵ naŋ²² tʰoi²⁴ tu³¹ to³⁵ ho³³ kai²² kaŋ³³
(39b)	〈港門〉	大大個蘋果**要***（乞）汝，我要細細個。大大的蘋果給你，我要小小的那個。
		dua³³ dua³³ kai²² pʰiŋ³¹ kuə³¹ ʔie³⁵⁻³³ kʰi³⁵ tu³¹, vuə³¹ ʔie³⁵ θoi²⁴ θoi²⁴ kai²²

非三價「受事型」動詞要演變三價給予動詞，主要循兩條路徑。第一條是以介賓補語式雙及物結構為起點，通過介詞省略演變為三價動詞。學者很早指出，漢語方言中給予義雙賓 B 式來源自介詞的省略，其大致過程如下（Xu and Peyraube 1997；劉丹青 1997；2001；Tang 1998；鄧思穎 2003：79；張敏 2011）：

（給予）動詞+ T +介詞+ R > 給予動詞+ T +（介詞）+ R > 給予動詞+ T + R[38]

在介詞省略後，原非三價動詞被重新分析為能為兩個賓語賦元的三價動詞。換言之，這一類給予動詞是通過雙賓 B 式建立其三價動詞的地位。東南方言中一部分來自於{拿持}義、{傳遞}義或{分派}義的動詞便是通過這個格式發展為{給予}義三價動詞（Li and Wu 2015；夏俐萍 2017）。能夠出現在雙賓 B 式的三價給予動詞並不一定能夠出現在雙賓 A 式，因為這兩個雙賓句式無論在來源、形成過程或是句法結構上都有差異，兩者之間並非單純語序倒置的關係（鄧思穎 2003；張敏 2011；夏俐萍 2017）。[39] 惟如果某方言的給予動詞是通過雙賓 B 式發展出為兩個賓語賦元的能力，我們會預期該方言能夠接受雙賓 B 式給予義結構。從前文討論可知，三地方言都不接受雙賓 B 式，是以海口、港門方言的三價給予動詞並非通過該句式發展而來的。

「受事型」給予動詞演變為三價給予動詞的第二條路徑，其關鍵在於發展出和與事論元結合的能力。張敏（2011）指出，「受事型」給予動詞演變為三價給予動詞並構成雙賓 A 式結構，要先發展出帶與事賓語的能力，成為「中立型」給予動詞；潘秋平、項夢冰（2020）將其總結為一條蘊含關係：「一個方言若沒有可單獨帶與事賓語的『V 給』，那麼它一定沒有給予類雙賓 A 式」，即：

缺乏給予類雙賓 A 式 ⊃「受事型」給予動詞

雙賓 A 式的詞序是「給予動詞-與事-客體」，給予動詞先引介與事論元，其後再帶客體論元；如果給予動詞無法直接和與事論元結合，那麼自然無法構成雙賓 A 式。此蘊含關係對現代

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[38] 在演變的最初階段，主要動詞或仍非真正的給予動詞，而是{拿取/把持}義動詞。此處為方便起見故統一記為「給予動詞」。

[39] 鄧思穎（2003：129-162）指出，能夠接受雙賓 A 式的方言有一個表「擁有」的功能性詞類 F，並且在 VP 上形成一個功能詞短語 FP；間接賓語（與事）從 VP 補足語位置移動至該 FP 的指定語位置，給予動詞則經過 FP 中心語移動到輕動詞短語 vP 的中心語 v 的位置，形成表層的「V-IO-DO」詞序。只能接受雙賓 B 式，或只能接受介賓補語式結構的方言缺乏這個功能性詞類 F，因此間接賓語無法進行移位。

漢語方言和上古漢語給予類動詞的句法分佈都有預測力（張敏 2011；潘秋平 2015；潘秋平、項夢冰 2020；Li and Wu 2015）。因此需要回答的問題是，「受事型」給予動詞如何發展出引介與事論元的能力？

從歷時發展來看，「受事型」給予動詞能直接帶與事論元，或為其和與格介詞結合，再發生省縮的結果（張敏 2011；Li and Wu 2015；夏俐萍 2017）：原本介賓補式雙及物結構中，有定客體或因話題化或用處置式被提至句首，或因語用因素被省略，導致原本引介客體論元的給予動詞緊鄰與格介詞，共同表達客體轉移並到達與事的複合過程。這種「給予動詞+介詞」形式在使用中逐漸凝固，主要起引出與事的作用，甚至進一步被重新分析為複合形式的與格介詞。當原來的與格介詞被省略後（Li and Wu 2015 稱為介詞併入 preposition incorporation），原本的「受事型」給予動詞也具有了引介與事的能力，轉變為「中立型」給予動詞。大致過程如下：

> 給予動詞+ T +與格介詞+ R >（處置標記）+（T）+ 給予動詞+與格介詞+ R >
> （處置標記）+（T）+ 給予動詞+（與格介詞）+ R >
> （處置標記）+（T）+ 給予動詞 + R

能單獨引介與事是原「受事型」給予動詞演變為雙及物三價動詞的前提。至於演變為「中立型」給予動詞後如何發展出雙賓 A 式結構，則須就個別方言的情況進行討論。如 Li and Wu （2015）認為，宜春贛語的雙賓 A 式是普通話影響下結構借用（structural borrowing）的結果。本文認為雙賓 A 式的產生亦有其內部動因。劉丹青（2001）指，間接賓語（與事）的話題性高於直接賓語（客體），且前者往往屬於已知信息。說話者或根據話題或舊信息居前原則，發展出雙賓 A 式結構。

從（36）-（39）可見，瓊海和港門方言中的「分」、「要」仍排斥直接和與事賓語結合。只有海口閩語的「要」發展較快，與格介詞「去」常發生弱讀合音，甚至能被完全省略：

(40a)〈海口〉　　**許本書要？？（去）**老陳嘍。那本書給老陳了。
　　　　　　　　hu³⁵ ɓui²¹³ tu²⁴ ʔio⁵⁵ (hu³⁵) lau³³ ɗaŋ²¹⁻²¹⁵ lo³³
(40b)〈海口〉　　**許本書分*（去）**老陳嘍。那本書給老陳了。
　　　　　　　　hu³⁵ ɓui²¹³ tu²⁴ ɓun²⁴ hu³⁵ lau³³ ɗaŋ²¹⁻²¹⁵ lo³³
(41a)〈海口〉　　**許本書要（去）**即枚儂嘍。那本書給這個人了。
　　　　　　　　hu³⁵ ɓui²¹³ tu²⁴ ʔio⁵⁵ (hu³⁵) tsi⁵⁵ mo³³ niŋ²¹⁻²¹⁵ lo³³
(41b)〈海口〉　　**許本書分*（去）**即枚儂嘍。那本書給這個人了。
　　　　　　　　hu³⁵ ɓui²¹³ tu²⁴ ɓun²⁴ hu³⁵ tsi⁵⁵ mo³³ nen²¹⁻²¹⁵ lo³³
(42a)〈海口〉　　**許本書要？（去）**伊嘍。那本書給他了。
　　　　　　　　hu³⁵ ɓui²¹³ tu²⁴ ʔio⁵⁵ hu³⁵ ʔi²⁴⁻²⁴⁵ lo³³
(42b)〈海口〉　　**許本書分*（去）**伊嘍。那本書給他了。
　　　　　　　　hu³⁵ ɓui²¹³ tu²⁴ ɓun³⁴ hu³⁵ ʔi²⁴⁻²⁴⁵ lo³³

從（40）-（42）可見，海口方言中「要」比「分」更能夠直接和與事結合；尤其當與事是「指-量-名」結構時，「要」後可自由省略與格介詞「去」。但對於「分」而言，即使與格介詞「去」不以音節形式出現，也須以超音段的音調形式依附在「分」之上。我們認為此或與這兩個給予動詞的語音形式有關：「要」[ʔio⁵⁵]與「去」[hu³⁵]合音後沒有產生音高上的變化，而只是略微拉長為[ʔio⁵⁵⁻⁵⁵]；但「分」[ɓun²⁴]與「去」[hu³⁵]合音後，調值變化則較明顯（[ɓun²⁴⁻²⁴⁵]）。是以即使是在弱化合音的情況下，說話者也更明顯感知到「分」後的與格介詞「去」，因此其完全「併入」要更加困難。

從「受事型」演變為「中立型」後，給予動詞往往還會進一步語法化為與格介詞，出現在「V + 客體 + 與格介詞{給予} + 與事」格式中，或構成「V-與格介詞{給予}」式複合詞（夏俐萍

2017）。Li and Wu（2015）亦指出，「受事型」給予動詞（文中稱 T-type verb）能構成雙賓 A 式的前提是其能充當與格介詞。誠然，大部分僅使用雙賓 A 式的方言，其介賓補語式中的與格介詞基本都來自給予動詞（張敏 2011），但「由給予動詞語法化而來的與格介詞 ⊃ 給予類雙賓 A 式」的蘊含規律是否可以在兼用雙賓 A、B 式的方言中成立，則需要更多考察。但不可否認的是，與格介詞負擔著標示間接賓語題元角色的重要任務（鄧思穎 2003：88），也是和與事論元關係最緊密的成分。如果「受事型」給予動詞已經發展出與格介詞的用法，那麼它肯定具備引介與事論元的能力，這也是檢測其是否演變為「中立型」給予動詞的重要指標。

海南閩語的「分」和「要」在充當與格介詞時表現並不一致。在海口和瓊海方言中，「分」都不能充當與格介詞：

（43a）〈海口〉　　*伊分/要蜀本書**分**我。他給我一本書。
　　　　　　　　　　ʔi²⁴ ɓun²⁴ /ʔio⁵⁵ ziak³ ɓui²¹³ tu²⁴ ɓun²⁴ va²¹³
（43b）〈海口〉　　*伊送蜀條裙**分**女朋友。他送一條裙給女朋友。
　　　　　　　　　　ʔi²⁴ taŋ³⁵ ziak³ ɗiau²¹ kun²¹ ɓun²⁴ ni²¹³ foŋ²¹ ziu²¹³
（44a）〈瓊海〉　　*伊分/要蜀本書**分**我。他給我一本書。
　　　　　　　　　　ʔi³⁴ ɓun³⁴ / ʔiɔ⁵³ ziak³ ɓui³¹ tu³⁴ ɓun³⁴ ɦua³¹
（44b）〈瓊海〉　　*伊送蜀條裙**分**女朋友。他送一條裙給女朋友。
　　　　　　　　　　ʔi³⁴ taŋ²¹ ziak³ ɗiau²² kun²² ɓun³⁴ ni³¹ pʰoŋ²² ziu³¹

（43）-（44）顯示，無論搭配同音給予動詞「分」、不同音給予動詞「要」，還是給予類動詞「送」，「分」在海口和瓊海方言中都無法出現在與格結構中充當與格介詞。另一方面，「要」在海口方言中則已初步發展出近似與格介詞的用法：

（45a）〈海口〉　　伊分蜀本書**要**我。他給我一本書。
　　　　　　　　　　ʔi²⁴ ɓun²⁴ ziak³ ɓui²¹³ tu²⁴ ʔio⁵⁵ va²¹³
（45b）〈海口〉　　？？伊要蜀本書**要**我。他給我一本書。
　　　　　　　　　　ʔi²⁴ ʔio⁵⁵ ziak³ ɓui²¹³ tu²⁴ ʔio⁵⁵ va²¹³
（46a）〈海口〉　　？伊送蜀條裙**要**女朋友。他送一條裙子給女朋友。
　　　　　　　　　　ʔi²⁴ taŋ³⁵ ziak³ ɗiau²¹ kun²¹ ʔio⁵⁵ ni²¹³ foŋ²¹ ziu²¹³
（46b）〈海口〉　　*我賣蜀條裙**要**伊。我賣一條裙子給他。
　　　　　　　　　　va²¹³ vɔi²⁴ ziak³ ɗiau²¹ kun²¹ ʔio⁵⁵ ʔi²⁴

海口方言的發音人可以接受「要」出現在以「分」、「送」為主要動詞的與格結構中充當與格介詞，但也指出最自然、最常用的與格介詞還是「去」。又（45b）中當主要動詞為「要」時，與格介詞也更傾向用「去」；（46b）中當主要動詞為表所有權轉移而非給予的「賣」時，其或由於和「要」固有的給予義產生衝突而變得不合法。可見即使在海口方言中，「要」的語義還是較為實在，尚未語法化為真正的與格介詞。同類句子在瓊海和港門方言中都不能接受，亦顯示這兩個方言的「要」仍是作為主要動詞使用，尚未開始語法化。

此外，海南方言的「分」、「要」也無法和動詞結合，構成「V+分/要」式複合詞：

（47a）〈海口〉　　*我**分**分老陳蜀千銀。我給老陳一千塊錢。
　　　　　　　　　　va²¹³ ɓun²⁴ ɓun²⁴ lau³³ ɗaŋ²¹ ziak³ sai²⁴ ŋin²¹

（47b）〈海口〉　　*我**分**要老陳蜀千銀。我給老陳一千塊錢。
　　　　　　　　　　va²¹³ ɓun²⁴ ʔio⁵⁵ lau³³ ɗaŋ²¹ ziak³ sai²⁴ ŋin²¹
（48a）〈海口〉　　*我**要**分老陳蜀千銀。我給老陳一千塊錢。
　　　　　　　　　　va²¹³ ʔio⁵⁵ ɓun²⁴ lau³³ ɗaŋ²¹ ziak³ sai²⁴ ŋin²¹
（48b）〈海口〉　　*我**要**要老陳蜀千銀。我給老陳一千塊錢。

va²¹³ ʔio⁵⁵ ʔio⁵⁵ lau³³ ɗaŋ²¹ ziak³ sai²⁴ ŋin²¹

(49a)〈海口〉　　　*我**送分**伊蜀本書。我送給他一本書。

va²¹³ taŋ³⁵ ɓun²⁴ ʔi²⁴ ziak³ ɓui²¹³ tu²⁴

(49b)〈海口〉　　　*我**送要**伊蜀本書。我送給他一本書。

va²¹³ taŋ³⁵ ʔio⁵⁵ ʔi²⁴ ziak³ ɓui²¹³ tu²⁴

（47）-（49）在瓊海和港門方言中皆不合法。由此可見，「分」和「要」在三地方言中仍未發展為真正的與格介詞，充其量處於語法化的初期階段。

　　綜上所述，海南閩語中的「分」、「要」仍然屬於比較典型的「受事型」給予動詞，也並未語法化為與格介詞；尤其是「分」，其在海口和瓊海方言中皆明顯排斥直接和與事論元結合。前文提及學者通過觀察漢語方言給予動詞和雙賓結構的分佈，提出以下蘊含關係：

<div align="center">

缺乏給予類雙賓 A 式 ⊃「受事型」給予動詞

</div>

上述蘊含關係在眾多漢語方言，甚至在上古漢語中都得到了驗證。瓊海方言缺乏雙賓 A 式結構的現象，也完全符合預測。真正弔詭的是，為什麼屬於「受事型」給予動詞「分」、「要」的海口和港門方言竟然違背了普遍規律，能夠構成雙賓 A 式給予義雙及物結構？「分」、「要」既然不是通過雙賓 B 式演變為三價動詞，也並非如其他東南方言般通過與融合介詞變為可帶與事論元的「中立型」給予動詞，那它們又是如何賦元與事論元並進入雙賓 A 式的呢？我們認為，此或反映海南閩語的「分」、「要」並非通過語言內部的自然演變發展出的三價給予動詞；其特殊的句法表現，與其歷史來源，以及它們和海南閩語中另一個給予動詞「乞」的互動有關。

3.　海南閩語給予動詞的歷史層次及來源考察

　　很多海南閩語中都存在多於一個給予動詞，如海口和瓊海就同時使用「分」和「要」，港門則兼用「乞」、「要」。一般而言，功能相類但形式不同的成分往往有不同的來源和歷史層次，而同一方言中多種形式的並存則反映著歷史層次的疊置，海南閩語中的「乞」、「分」、「要」亦是如此。

3.1「乞」的來源及歷史層次

　　綜合方言內部證據、和其他閩方言的比較，以及歷史文獻紀錄三個方面，我們認為「乞」才是海南閩語最古老的原生給予動詞。首先，與「分」和「要」不同，港門閩語的「乞」是一個既可以帶與事，也可以帶客體的「中立型」給予動詞。且就海南方言內部比較而言，「乞」比「分」、「要」的語法化程度要更高：

（50）〈港門〉　　　我要兩百銀**乞**伊嘍。我給他兩百塊錢了。

vuə³¹ ʔie³⁵ no⁴²⁻⁴⁴ ɓɛ³⁵ ŋin²² kʰi³⁵ ʔi³³ lo³³

（51）〈港門〉　　　伊**乞**□[ʔa³⁵]本書**乞**我。他給我一本書。

ʔi³³ kʰi³⁵ ʔa³⁵ ɓui³¹ tu³³ kʰi³⁵ vuə³¹

（52）〈港門〉　　　我□[hi³⁵]條衫褲**乞**伊。我扔一/那件衣服給他。

vuə³¹ hi³⁵ ɗiau²² θa³³ kʰeu²⁴ kʰi³⁵ ʔi³³

（53）〈港門〉　　　我賣□[ʔa³⁵]條裙囝**乞**伊。我賣那條裙子給她。

vuə³¹ voi³³ ʔa³⁵ ɗiau²² kuŋ²² kie³¹ kʰi³⁵ ʔi³³

（54）〈港門〉　　　阿爹**乞乞**/要**乞**我蜀百銀。爸爸給我一百塊錢。

ʔa³³ dɛ³³ kʰi³⁵⁻³³ kʰi³⁵ /ʔie³⁵⁻³³ kʰi³⁵ vuə³¹ za⁴²⁻⁴⁴ ɓɛ³⁵ ŋin²²

（55）〈港門〉　　　寄**乞**伊蜀封信。寄給他一封信。

kie²⁴ kʰi³⁵ ʔi³³ za⁴²⁻⁴⁴ ɓaŋ³³ θiŋ²⁴

（56）〈港門〉　　　我賣**乞**伊□[ʔa³⁵]條裙囝。我賣給她那條裙子。

vuə³¹ voi³³ kʰi³⁵ ʔi³³ ʔa³⁵ ɗiau²² kuŋ²² kie³¹

(57) 〈港門〉　阿爹做**乞**我蜀間厝。爸爸蓋給我一間房子。

　　　　　　ʔa³³ ɗɛ³³ to³⁵⁻³³ kʰi³⁵ vuə³¹ za⁴²⁻⁴⁴ kaŋ³³ tsʰu²⁴

(58) 〈港門〉　我**乞**伊買了蜀條極□[tsʰaŋ²⁴]個裙囝。我給他買了一條很漂亮的裙子。

　　　　　　vuə³¹ kʰi³⁵ ʔi³³ voi³¹ liau³¹ za⁴²⁻⁴⁴ ɗiau²² kɛ⁴²⁻⁴⁴ tsʰaŋ²⁴ kai²² kuŋ²² kie³¹

(59) 〈港門〉　伊**乞**妹妹做蜀個燈籠。他給妹妹做了一個燈籠。

　　　　　　ʔi³³ kʰi³⁵ muə³³ muə³³ to³⁵ za⁴²⁻⁴⁴ kai²² ɗeŋ³³ laŋ²²

　　　（50）-（53）反映「乞」在與格結構中充當與格介詞時非常自由，對主要動詞沒有限制。（54）-（57）則反映「乞」直接和各類動詞結合構成複合詞式「V 乞」的能力很強：其不但不排斥和同音動詞結合（如（54）「乞乞」），也不排斥和本身無給予/轉移義的動詞結合（如（57）「做乞」）。（58）、（59）反映的是「乞」在港門閩語中已發展出引介受益者的功能，可以出現在動詞前充當受益者標記。⁴⁰ 無論是「分」還是「要」，都無法完全實現（50）-（59）中「乞」的用法。由此可見，港門方言的「乞」已經發展為非常成熟的與格介詞，其功能進一步擴展，意義已經十分虛化。⁴¹「乞」整體語法化程度明顯高於「分」和「要」，後兩者仍然屬於實義的給予動詞；由於語法化程度較高的成分往往也更具歷史深度，我們認為「乞」應是三者中最古老的形式。

　　　和其他閩語方言的對比也進一步支持了上述說法。⁴² 我們發現，福州（閩東）、潮汕和雷州（閩南）方言皆使用「乞」作為給予動詞和與格介詞，用法和港門方言非常一致：

(60)　**伊乞我幾本書。**他給了我幾本書。　　　　　　（福州閩語；陳澤平 1997）

(61)　**姨姨送蜀合花瓶乞我。**阿姨送一對花瓶給我。　　　　（福州閩語；陳澤平 2000）

(62)　**姨姨送乞我蜀合花瓶。**阿姨送給我一對花瓶。　　　　（福州閩語；陳澤平 2000）

(63)　**伊乞我個銀。**他給我一塊錢。　　　　　　　（潮州閩語；李永明 1959：261）

(64)　**我送一本書乞汝。**我送一本書給你。　　　　　（汕頭閩語；施其生 2000）

(65)　**廠獎乞伊郵摩托車。**廠裡獎給他一輛摩托車。　　（汕頭閩語；施其生 1997）

(66)　**乞把筆我。**給我一支筆。　　　　　　　　（雷州閩語；林倫倫 2006：232）

(67)　**我乞本書乞伊。**我給了他一本書。　　　　　（雷州閩語；林倫倫 2006：232）

(68)　**伊講乞我，汝阿報告准啦。**他對我說，你的報告批准了。

　　　　　　　　　　　　　　　　　　　　　　　　（雷州閩語；李榮主編 1998：19）

　　　「乞」在閩方言的廣泛分佈反映其為閩語的固有成分。另一方面，十六、十七世紀閩南語文獻中其實也已見「乞」廣泛用作給予動詞和與格介詞的記錄（李如龍 1996；Chappell 2000；Chappell and Peyraube 2007；Lien 2005；陳麗雪 2005；吳瑞文 2015），如：

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⁴⁰　港門閩語中，「乞」出現在動詞前只能理解為受益者。「*伊乞我乞□[ʔa³⁵]/蜀本書（他給我給了一本/那本書）」在港門方言中不合法，反映「乞」出現在動詞前所引介的論元不能是接收者或者終點。惟港門閩語「乞+受益者」出現在動詞前的用法在海南閩語中十分罕見，可能是受附近軍話方言影響的結果。

⁴¹　「乞」在港門方言中還能充當容任動詞和被動標記，前者如「我攏共伊講無乞伊去，伊蜀□[tsʰɛ³¹]愛去。（我都跟他說了不給他去，他一直要去。）」；後者如「我個目乞籃球拍傷了。（我的眼睛被籃球砸傷了。）」。

⁴²　福州、潮汕和雷州方言的「乞」也可以充當被動標記，如福州閩語「魚乞貓囝銜咯。（魚被貓叼走了。）」（陳澤平 1997）；汕頭閩語「個碗乞伊扣破去。（那個碗被他打破了。）」（施其生 1997）；雷州閩語「□[a⁵⁵]茶盅乞伊拍爛啦。（茶杯被他打碎了。）」（林倫倫 2006：234）。廈、漳、泉地區閩南方言不使用「乞」做為給予動詞或與格介詞，而大多用其他語素如「互」（「與」）、「度」。但在這些閩南方言中，「乞」仍可以充當被動標記：如廈門閩語有「乞伊騙去（被他騙了）」（李榮主編 2002：355）；泉州閩語有「衫褲乞傳雨沃澹去嘮。（衣服被雨淋濕了。）」（李如龍 1997）。Chappell（2015）指，從給予動詞發展為致使動詞和被動標記在南方漢語方言和南方非漢語（壯侗語）中非常普遍。「乞」在廈、漳、泉方言中充當被動標記的用法應該亦是從給予動詞用法發展而來。只不過後來「乞」在和其他給予動詞的競爭中落敗，只在這幾個方言中保留被動標記的用法。

（69）　　你**乞**我輕輕錢。你給我一點錢。

　　　　　　　　　　　　　　（1566 年《荔鏡記》（潮泉插科），轉引自陳麗雪 2005：84）

（70）　　阮唱山歌**乞**恁聽。我唱山歌給你們聽。　　（1566 年《荔鏡記》，轉引自李如龍 1996）

（71）　　求僚氏保庇生人。賜**乞**伊呀勞舍。

　　　　"(I) entreat God to protect the living and bestow upon them grace."

　　　　　　　　　　　　　　　（Dotrina Christiana 1607：156，轉引自 Chappell 2000）

　　　（69）-（71）反映「乞」在十六世紀的閩南語中已是一個三價給予動詞，能夠賦元兩個賓語並構成雙賓 A 式；另一方面，「乞」也已經語法化為與格介詞，既可以出現在介賓補語式中，也可以和其他動詞結合構成複合詞。綜上所述，我們認為「乞」應是隨最初的福建移民一同傳入海南，在早期海南閩語中已用作三價給予動詞；由於雙賓 A 式是閩語固有的雙賓結構（張敏 2011），我們相信初期的海南閩語也是和廣大閩方言一樣使用此構式。

　　　然而為何如今「乞」只保留在港門方言等瓊南閩語中？我們認為，這是因為在瓊南閩語支出後，瓊北閩語中發生了給予動詞的詞彙替換，導致原生三價給予動詞「乞」的失落。考海南南部的較大規模的人口遷入和開發大約發生在明朝年間（海南省地方史志辦公室編 1994：17-18）。從上引文獻可見，當時原鄉地區的閩南話中「乞」依然是最常用的給予動詞之一。由於是時從閩南地區遷往海南島的移民數量龐大（海南省地方史志辦公室編 1994：17-18），兩地方言應該仍然較為相似。在瓊南閩語的祖先從北部遷出時，「乞」應仍是主要的給予動詞。後來，北部海南閩語在其他方言和語言的影響下，以新的給予動詞「分」和「要」取代了「乞」；但由於地理隔絕，北部發生的詞彙替換並沒能影響到港門方言等瓊南閩語，是以最古老的「乞」反而能在偏遠的南部方言中得到保留，形成典型的「古詞殘存於鄉野」局面（參柳田國男 1930/1980）。這種詞彙上的存古也和瓊南、瓊北閩語在語音特徵上的差異相配合，前者相比之下保留了如送氣塞音、送氣塞擦音等更多早期特徵（參辛世彪 2013）。

3.2 「分」的來源及歷史層次

　　　雖然本文認為「分」、「要」皆為後起的給予動詞，但兩者來源並不相同。首先討論「分」。「分」在海南閩語中是一個分佈廣泛的給予動詞，見於南部和西部以外幾乎所有海南閩語。[43] 但在海南閩語以外，「分」就只見於潮汕閩語和部分粵西閩語：

（72）　　伊**分**我本書。他送我一本書。　　　　　　　（潮州閩語，李新魁、林倫倫 1992：125-126）

（73）　　我**送**一本書**分**汝。我送一本書給你。　　　　　　　（汕頭閩語，施其生 1997）

（74）　　老師**分**給汝一本好厚的書，是無啦？老師給了你一本很厚的書吧？

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[43] 雖然「分」在瓊北閩語中皆有分佈，但據筆者調查及文獻反映，「分」在北片東部方言（如文昌、瓊海、萬寧、陵水）中可能較北部西片（海口、澄邁、屯昌）更為常用。一方面，《漢語方言地圖集》（曹志耘主編 2008b：151）記錄東部和東北部方言如陵水、萬寧、瓊中、瓊海、文昌使用「分」；北部方言如海口、澄邁則使用「要」。雖然《地圖集》的記錄不能反映這些方言中同時存在這兩種形式，但是或體現出母語者對於這兩個語素的偏好和使用頻率存在不同傾向。其次，在北部東片的文昌方言中，「分」已通過介詞省略進一步往「中立型」給予動詞方向演變，存在「□[he⁴²]許本冊分（至[ti¹¹⁻⁵⁵]）我。（把那本書拿給我。）」（雲惟利 2004：267）和「我買蜀本冊分伊。（我買一本書給他。）」（Lee 2011）的用法。文昌方言的「分」也逐漸語法化為與格介詞，可以接受「明天拍個電話分我。（明天打個電話給我。）」（雲惟利 2004：263）類的結構。這些反映在文昌方言中「分」的使用頻率應該較高，是以其演變速度也更快。相較之下，錢奠香（2002）討論屯昌閩語語法（北部西片）的專著全書 1000 多個例句中，無一例使用「分」表示{給予}，而全用「要」。筆者田野調查時也發現，瓊海發音人更習慣用「分」來表達{給予}，海口發音人則傾向用「要」。

lau⁴⁴² su³³ puŋ³³ ki¹³ lu²¹ jiak² pui²¹ hɔ²¹ kau⁴⁴² tik⁵ tsu³³ si⁴⁴² bɔ²² la³³

<div align="right">（電白閩語，語保工程平台）</div>

此外，「分」也是客家話主要的給予動詞：

(75) 　　阿叔**分**割兩百元。_{叔叔給我兩百元。}　　　　　　　（梅縣客語，林立芳 1997）

(76) 　　二姑**分**一張郵票**分**躝。_{二姑給他一張郵票。}　　　　（梅縣客語，林立芳 1997）

(77) 　　阿叔**分分**割一身西裝。_{叔叔給我一身西裝。}　　　（梅縣客語，林立芳 1997）

符其武（2008：290）、Lee（2011）皆認為，瓊北閩語的「分」來源於客家話。張敏（2011）進而指出，「分」雖然並非客家話專有，但在客語中分佈廣泛，在閩語中卻僅見於與客語有密切接觸的邊緣地區，如潮汕、粵西、海南；兼之明本潮州戲文純潮調的《金花女》、《蘇六娘》和潮泉插科的《荔鏡記》均未見「分」用作給予動詞，是以「分」即使是通過潮汕閩語傳入，也顯然並非其固有成分，只是以之為中介。需要注意的是，潮汕閩語（73）、（74）和客語（76）、（77）中「分」作與格介詞的用法在海口和瓊海閩語中都不能接受，反映「分」在進入海南閩語的時候，或未發展出充當與格介詞的功能。

潮汕人移居海南，直至清代始成規模，但移民人口不眾；惟明清以來，潮汕戲班常於海南演出，甚受歡迎。[44]海南方言通過潮州移民和戲曲，吸收了不少特有詞彙（符玉川 1996），「分」或亦在此列。至於客語，其使用者亦大多是清代乾嘉以後才從梅縣一帶遷來，其音系仍與梅縣客語相當接近（海南省地方史志辦公室編 1994：256-257；張惠英 2006）；但考慮到客語在海南島的分佈集中在儋州南部一帶，我們認為其對海南閩語各方言，尤其位於東北部的瓊海等方言直接產生影響的可能性較低。但無論如何，海南閩語的「分」或是直接借用自客語，或是通過潮汕閩語傳入，其時間上限都不太可能早於清朝。[45]

結合前文對「乞」的討論，「分」傳入海南時，海南閩語很有可能仍普遍使用原生的「乞」以及相應雙賓 A 式結構。在接納外來給予動詞「分」時，海口閩語和瓊海閩語或採取了不同策略，導致如今「分」在這兩個方言中句法分佈的差異：海口閩語採取的是「詞彙替換」的策略，直接借用「分」來替代原有給予動詞「乞」，並繼承了「乞」構成雙賓 A 式的能力；瓊海方言則是以整個介賓補語式結構為單位借入「分」，並在其後的競爭中逐漸淘汰了「乞」和雙賓結構。[46]

3.3 「要」的來源及歷史層次

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[44] 《海南島志》云：「清康乾間，土戲最盛行。[⋯⋯]至其腔調，初惟用潮音，其後代有變異，雜以閩廣歌曲。」（轉引自符玉川 1996）

[45] 粵西閩語中同樣存在以「分」為給予動詞的現象；考慮到海南閩語和粵西閩語有著密切的發生學關係，後者亦有可能是海南閩語「分」的來源之一。但另一方面，「分」在粵西閩語中的分佈也不算普遍（如雷州閩語即不用「分」為給予動詞），且使用「分」的方言（如電白閩語）大多與客家話有著密切的接觸關係；是以粵西閩語中的「分」或有可能是比較晚近的、借用自客語的成分。

[46] 參考鄧思穎（2003：129-162）的分析，海口閩語或在借入「分」後仍保留了表「擁有」義的功能性詞類「F」，只是發生詞彙上「乞」＞「分」的替換；瓊海閩語則是在借入「分」後，同時失落了詞彙詞「乞」和表「擁有」義的功能性詞類「F」，因此即使「分」也是給予動詞，也無法構成雙賓 A 式結構。

「要」是海南閩語特有的給予動詞，不僅不見於其他閩南方言，甚至也不見於海南島以外漢語方言。[47] 前文指出，海南閩語的「要」兼具{索取}、{拿取}和{給予}三種意義。無獨有偶，和海南閩語有密切接觸關係的臨高話中也有一個兼表{索取}、{拿取}和{給予}意義的動詞[ɔu1]：

a. {索取}
　（78）　hau2 tsək8 ti4 **ɔu1** mɔk8 tsuŋ3 ti4 hem1 kə2 **ɔu1** in2in1 le4
　　　　　我 若 是 **要** 稻穀 總 是 跟 他 **要** 完完 的
　　　　　「我要買稻穀，都是跟他要。」　　　　　（臨高語波蓮話，劉劍三 2009：56）
　（79）　mə2 da2 biaŋ3 hau2 tə3 ən1 lɔi1 vɔi3, hau2 di2 **ɔu1** sin2 ho3
　　　　　你 竟然 放 我 駛這麼 遠 了，我 要 **索取** 錢 和
　　　　　「你讓我駛出這麼遠了，我得跟你要船費。」　　（臨高語波蓮話，劉劍三 2009：56）
b. {拿取}
　（80）　e2, **ɔu1** bɔi1 ti3, mə2 di2 **ɔu1** ki3liau4 **ɔu1** bɔi1
　　　　　好，**拿** 去 吧，你 要 **拿** 多少 **拿** 去
　　　　　「好吧，拿去吧，你要拿多少就拿去。」　　　（臨高語波蓮話，劉劍三 2009：55）
　（81）　kiaŋ2kiaŋ3 bɔi1 dɔŋ1 vɔi3 mə2 tsu4 **ɔu1** suŋ3 mia2 hiak7
　　　　　剛剛　 去 到 了 你 就 **拿** 鞭炮 來 放
　　　　　「一到了我家，你就拿出鞭炮來放。」　　　（臨高語波蓮話，劉劍三 2009：60）
c. {給予}
　（82）　hau2 ləŋ1 lan2 iŋ3 mo1 du2 xəm3 **ɔu1** sin2 **jɔu3** mə2
　　　　　我 回 家 賣 豬 都 欠 **拿** 錢 **給** 你
　　　　　「我就是回家把豬賣了也要給你錢。」　　　（臨高語波蓮話，劉劍三 2009：119）
　（83）　tsiaŋ1 sin2 da3 lan2 nə4 kə3 in2in1 **ɔu1 jɔu3** lak8 hu2 hə3, ja3 **ɔu1** kim1
　　　　　將 錢 裡 家 那 些 完完 **拿 給** 兒子 個 一，也 **要** 金
　　　　　xat8 hem1 **jɔu1** kə2
　　　　　塊 添 **給** 他
　　　　　「把家裡的錢全部給了兒子，還給了他一塊金子。」
　　　　　　　　　　　　　　　　　　　　　　　（臨高語波蓮話，劉劍三 2009：129）
　（84）　e2, tin2teŋ1 tsək8 mən2lai3 jɔu3, laŋ1 fɔi2 di2 **ɔu1** na4 **ɔu1** ti3
　　　　　算了，先生 若 沒有 在，下 次 要 **拿** 才 **拿** 嘛
　　　　　「算了，先生要是沒錢，下次要給才給嘛。」　　（臨高語波蓮話，劉劍三 2009：54）
　（85）　mə2 di2 **ɔu1** sin2 hau2 na4 **ɔu1** mə2, kiau4 sin2 hau2 du2 **ɔu1** mə2
　　　　　你 要 **拿** 錢 我 才 **給** 你，多少 錢 我 都 **給** 你
　　　　　「你想要錢我都給你，多少錢我都給你。」　　（臨高語波蓮話，劉劍三 2009：56）
　（86）　hau2 tsu4 **ɔu1** sin2 mə2, mə2 bɔi1 vian1 lak8 mo1 hu2 hə3 mia2 sui1
　　　　　我 就 **要** 錢 你，你 去 買 小 豬 個 一 來 蒸
　　　　　「我就拿錢給你買頭乳豬回來，把它蒸熟。」　（臨高語波蓮話，劉劍三 2009：60）

臨高語的[ɔu1]可單用表{給予}（84），也可以直接引介與事論元（85），構成介賓補語式（82）、複合詞式（83）和雙賓 B 式（86）。由此可見，[ɔu1]在臨高語中已經發展為中立型的三價給予動詞。

　　海南閩語「要」和臨高語[ɔu1]高度平行的語義功能，存在三個可能解釋：其一，海南閩語的「要」複製了臨高語的[ɔu1]的功能；其二，臨高語[ɔu1]複製了海南閩語「要」的功能；其三，「要」和[ɔu1]的功能分佈是平行演變的結果。前兩種可能性都與接觸引發遷移有關，只是遷移方向不同。沈冰（2022：209-212）注意到這兩種語言給予動詞功能分佈的高度平行性，

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[47] 沈冰（2022：211）指出，海南島其他漢語方言如儋州話、軍話和邁話中，都存在兼具{索求}、{拿取}和{給予}的「要」，可以視作海南語言的區域特徵。

並提出遷移的方向應該是「海南閩語 > 臨高語」。她指出，海南閩語「要」和臨高語的[ɔu1]除表{索取}和{拿取}義外，還發展出給予動詞、容任動詞以及被動標記的功能；而大部分壯侗語中，和臨高語[ɔu1]同源的形式都沒有發生類似的演變：
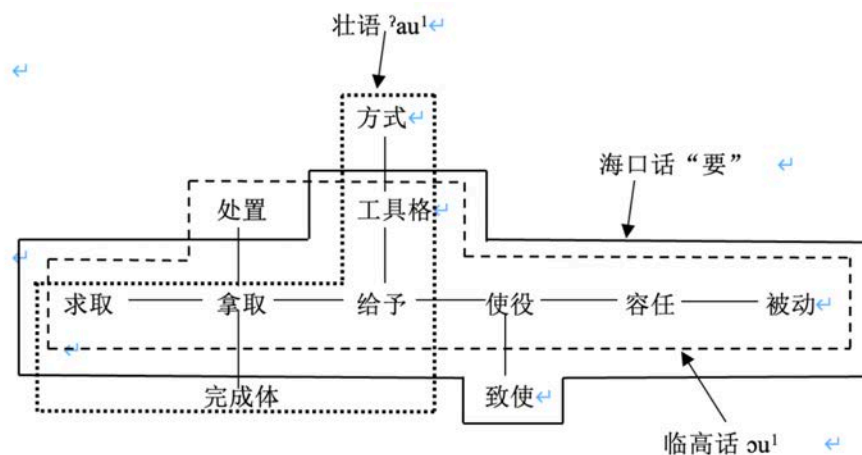
圖1、臨高話[ɔuˀ]、壯語[ʔauˀ]、海口方言「要」的語義地圖

（轉引自沈冰 2022：210，圖 6-1）

其次，沈冰（2022：210）也指出，「要」在海南閩語中普遍存在，且不同程度地可用作給予動詞、容任動詞和被動標記。在漢語方言中，「拿取動詞 > 給予動詞 > 容任動詞 > 被動標記」這一語法化路徑也相當普遍。再考慮到臨高語複製海南閩語語素相關功能並非孤例，她判斷臨高語「拿取動詞 > 給予動詞 > 容任動詞 > 被動標記」這一演變很可能是複製周邊海南閩語語法化路徑的結果。

我們認同沈文提出臨高語[ɔu1]「給予動詞 > 容任動詞 > 被動標記」的演變是複製海南閩語語法化路徑的結果的觀點，但對於「拿取動詞 > 給予動詞」這一階段的遷移方向，則有不同看法。的確，其他壯侗語似乎不會把和臨高語[ɔu1]的對應成分用作給予動詞。但許雁（2014；2015）已經指出，「拿+NP1+給+NP2」型雙及物結構實是與臨高語親緣關係關係緊密的壯語中最常用的雙及物結構，尤其是在表達「有意的給予性」轉移以及當直接賓語（客體）的修飾成分較多時，如：

(87) kau⁵⁵ **ʔau⁵⁵** tʰaːp³³ kʰau³⁵ ziə²¹ **h̩³⁵** mai³³
我 **拿** 擔 米 玉 **給** 你。
「我給你一擔玉米。」　　　　　　　（廣西大新壯語，許雁 2014）

(88) te⁵³ **au²¹** seːk³³ θui⁵³ ni⁴⁵ **hui⁴⁵** ŋo³³
他 **拿** 冊 書 這 **給** 我。
「他給了我這本書。」　　　　　　　（廣西三湖壯語，許雁 2014）

(89) min2 **ʔau1** paːn1 haːk8ɬɛŋ1 nɯŋ6 **hɯ3** kau1
他 **拿** 班 學生　一 **給** 我。
「他把一班學生交給我。」　　　　　（廣西崇左壯語，黃瑩洪 2018：27）

(90) te1 **ʔau1** lɯk8ɕɯ2 me6 ʔdiau1 **həɯ3** kou1
他 **拿** 黃牛 母 一 **給** 我。
「他把一頭母牛給我。」　　　　　　（廣西都安壯語，黃瑩洪 2018：27）

壯語中任何一種給予類雙及物結構都可以變成「拿 + NP1 + 給 + NP2」式，使用非常自由（許雁 2014；2015）。此外同屬壯侗語的傣語、老撾語和泰語中，也常用這一結構，尤其當客體論元的修飾成分較多或是全句語義重點時（黃瑩洪 2018：30）：

(91) kan² tsɛt⁷ dai³ mɛːn⁶ ni⁶, **ʔauˀ** ŋɯn²kən³ **hɯ³** ku¹ tɛ⁴ nə⁶

如果 數 得 對 呢，**拿 銀錠 給** 我 真 叮囑語氣

「如果數得對呢，真的給我銀錠啊！」　　（雲南景洪傣語，巫凌雲、張秋生 1981：
135）

(92)　háw **ǎw** ngə́n **hǎj** mɛ̄ɛ-thàw
　　　1p **take** money **give** mother-old
　　　'I gave money to my mother-in-law.'　　　　　　（標準老撾語，Enfield 2002）

(93)　cáw **ǎw** ngə́n　hàa-lɔ̂ɔj　kìip **hàj** khɔ̀ɔj
　　　2P **take** money five-hundred　kip **give** 1P
　　　'You gave me 500 kip.'　　　　　　　　　　（標準老撾語，Enfield 2002）

(94)　phom²¹⁵ **ʔau³³** luːk⁵¹ **hai⁵¹** khun³³
　　　我　帶 孩子 **給** 你
　　　「我把孩子帶給你。」　　　　　　　　（標準泰語，黃瑩洪 2018：31）

因和[ɔu1]同源的成分在壯侗語中往往也充當處置標記，[48] 學者一般將上述「{拿}-T-{給}-R」結構分析為由{拿取}義動詞構成的連動結構，或是用處置標記把客體論元提前的「介賓狀語式」結構（許雁 2014；2015）。但即使句法性質存在差異，我們也不能否認壯侗語的「{拿}-T-{給}-R」式雙及物結構是一種極為普遍且非常能產的結構，應為壯侗語中表達給予事件的主要使用格式（major use pattern）。[49] 相反，在絕大多數閩南語中「{拿}-T-{給}-R」都不是表達{給予}義的首選句式；其意義實在，適用語境有限，甚至略帶書面語色彩（鄭子鑫 私人通訊），是典型的「次要使用格式」（minor use pattern）。如非受語言接觸的影響，我們較難解釋為何海南閩語為何在語言中已存在給予動詞（「乞」）的情況下，啟用一個本身不具備給予義的動詞，通過迂迴（periphrastic）的方式以表達給予意義。

其次，我們發現海南閩語中「要」的各項功能明顯有歷史深度和層次差別：

	北部西片		北部东片		北部东南片		南部东片		南部西片
	海口	定安	文昌铺前	琼海	陵水三才	万宁长丰	三亚港门	乐东佛罗	东方感城
给~钱	分、要	分、要	分、要	分、要	分、要	分、要	乞、要	乞、要	乞、要
让~我去	要	要	要	要	要	分	乞	乞	乞
被~同志们拦住了	要	要	要	要	分	分	乞	乞	乞

表 3、海南閩語給予動詞、容任動詞、被動標記的語法形式
（轉引自沈冰 2022：210，圖中紅線為筆者所加）

48　臨高語的[ɔu¹]也有處置標記的用法，見前引沈冰（2022：210）圖 6-1。
49　所謂「主要使用格式」與「次要使用格式」相對。前者指的是使用頻率高，適用語境廣泛，在概念上非常鮮明突出，而且與特定語法功能聯繫緊密的格式。後者則是指使用頻率低，適用語境較有限的格式；在說話者的認知中，「次要使用格式」並不是一個顯著概念，只能勉強地表達某種意義，甚至不被認為是固定、獨立的格式（Heine and Kuteva 2005：45）。如比利時東部和義大利北部的德語使用者因為受到當地強勢語言如法語、義大利語（羅曼語言）的影響，更多使用原本在德語中屬於「次要使用格式」的屬格結構來取代德語最常用的複合名詞結構，如：'das Traubenbündel'（'the grape bunch'）> 'das Bündel von Trauben'（'the bunch of grapes'）；比較義大利語：'il grappolo d'uva'（'the bunch of grapes'）（Heine and Kuteva 2005：46）。

從表 3 可見，海南閩語中普遍存在的其實只有{索取/拿取}和{給予}的「要」，充當容讓動詞和被動標記的「要」只見於北部西片和北部東片，且呈現從北往南逐漸擴散的趨勢。我們認為，海南閩語「要」「拿取動詞＞給予動詞」和「給予動詞＞容任動詞＞被動標記」很有可能分為兩個獨立的演變階段。前一階段發生較早，在瓊南閩語從瓊北閩語支出前已經完成，是以如今南北方言中都存在表{給予}的「要」；第二階段演變則較為晚近，應是以北部西片方言（如海口）為中心正緩慢向其他方言和語言擴散，[50] 如下圖所示：

圖 2、「要」的兩個語法化階段在海南閩語中的歷史層次差異

既然「要」的語法化分為兩個獨立階段，且兩者歷史層次相差頗遠，那麼就存在兩個環節演變動因和過程不一致的可能。考瓊南閩語和瓊北閩語分支時，海南閩語送氣塞音、塞擦音擦化仍處於萌芽階段，但已從臨高語中借入內爆音聲母[ɓ-]、[ɗ-]，[51] 反映當時兩種語言已經發生密切接觸。這也是海南閩語「要」受臨高語影響發生「拿取動詞＞給予動詞」演變的先決條件。

其三，沈冰（2022）以持拿義動詞發展為給予動詞、容讓動詞及被動標記這一語法化路徑在漢語方言中頗為常見這一現象，論證遷移的方向應為「海南閩語＞臨高語」。惟上節嘗論證，海南閩語的「要」與其他漢語方言中從持拿義動詞演變而來的給予動詞性質不盡相同：一方面，「要」不能構成雙賓 B 式，並非通過介賓補語式省略介詞演變為三價給予動詞；另一方面，「要」仍抗拒直接和與事賓語結合，理應不能構成雙賓 A 式。換言之，「要」從拿取義動詞演變為可以出現在雙賓結構的三價給予動詞的過程中存在「斷鏈」，反映其並不是通過內部演變發展而來，不能與其他漢語方言等量齊觀。相反，臨高語中卻存在[ɔu1]「拿取動詞＞給予動詞」的完整路徑。（87）、（88）顯示，臨高語中接受「[ɔu1][給予]+客體+與事」的雙賓 B 式結構，這一結構也廣泛見於其他壯侗語（黃瑩洪 2018）。此外，語料反映臨高語的與格介詞常發生省略，如：

(95)　　tsək8 ən1　hau2 tsu4 **tia3 xɔi3 hiu2 mə2** ti2 hi4
　　　　若　這樣　我　就　**寫　契　條　你**　吧
　　　　「這麼說，我就給你寫張地契吧！」　　　（臨高語波蓮話，劉劍三 2009：57）

(96)　　mə2 dek8 kə2 ɔi3 kɔn1 ki3kai3 mə2 tsu4 **vian1 ki3kai3 kə2 kɔn1**
　　　　你　看　他　愛　吃　什麼　你　就　**買　什麼　他　吃**

50　沈冰（2022）、Lee（2010）指文昌方言以「要」為容讓動詞及被動標記。然而 de Souza（1903）*A Manual of the Hailam Colloquial* 記錄的文昌方言還使用了另一語素 "thái" 來充當容讓動詞，如"Thái î tóh" 'let him do'（de Souza 1903：10）。又 de Souza（1903）的紀錄中，「要」也不用作被動標記，而只使用 "diohᵒ"（著），如 "Duh diâ béh diohᵒ nāng phá duh tih" 'You will certainly be beaten to death' 「汝定欲著儂拍汝死（你肯定會被人打死）」（de Souza 1903：9）。雲惟利（1987）記錄的文昌方言中，也有「分」用作容任動詞者，如「某姐割稻田當央，何無擔頭**分**哥望（阿姐割稻田中央，何不抬頭給哥看）」（雲惟利 1987：266）；被動標記則全用「分」，不見使用「要」者，如「讓你先來，又**分**你佔便宜（讓你先來，又被你佔便宜）」（雲惟利 1987：275）。雲惟利（2004）於 1999 年調查比較文昌、汶萊等地三代海南母語者的語言差異，其記錄中反映 60 歲以上的老年文昌發音人主要以「分」為被動標記，而 60 歲以下的中、青年發音人則傾向使用「要」。綜上所述，我們認為在文昌方言中「要」發展出容讓動詞和被動標記的用法也應是晚近的事。

51　早期學者認為海南閩語的內爆音聲母來源自黎語（如雲惟利 1996）。後期學者指出，綜合其他的語音特徵和語言的地理分佈，海南閩語的內爆音聲母應該是通過臨高語而非黎語借入，詳參劉新中（2006：218-219）。本文認同後一種說法。

「你看他喜歡吃什麼你就買什麼回來給他吃。」（臨高語波蓮話，劉劍三 2009：57）

由此觀之，臨高語完全具備[ɔu1]從拿取動詞演變為給予動詞的必要條件：「[ɔu1]-T-{給}-R」在高頻使用下，出於經濟原則省略與格介詞，並在雙賓 B 式中發展為成熟的給予動詞。海南閩語「要」或只是直接複製了臨高語[ɔu1]的多義模式（polysemantic pattern）。

最後，「海南閩語為模式語說」和「平行演變說」都無法回答以下問題：為何海南閩語偏偏要將「要」這一語素發展為給予動詞？沈冰（2022：213）指出「要」在海南閩語以外的閩語中都是非口語常用字，只有文讀音[iau]，出現在「要求」、「重要」類書面語中。楊望龍、史文磊（2023）也提出，「要」[ʔio]的讀音或來自於明代南系官話的文讀音（軍話）。假如「拿取動詞 > 給予動詞」完全由內因驅動，為何不選擇海南閩語固有的、口語常用的持拿義動詞，而要選擇一個非閩語的文讀音？考慮到「要」早在臨高語的影響下發展出兼具{索要}和{拿取}義的功能（楊望龍、史文磊 2023），我們推斷海南閩語之所以將「要」而非其他口語常用的拿持義動詞發展為給予動詞，正是因為模式語臨高語的給予動詞[ɔu1]身兼{索取}、{拿取}和{給予}三個義項；海南閩語中，也只有「要」能夠符合這一語義模式，和[ɔu1]完全對應。

綜上所述，海南閩語「要」的給予用法，應是受臨高語[ɔu1]語義功能影響的結果。我們認為，「[ɔu1]-T-DAT-R」結構是臨高語表達給予事件的主要使用格式。在與臨高語發生接觸後，海南閩語祖語「要」先是複製了臨高語[ɔu1]兼具{索要}和{拿取}的用法；與此同時，在後者影響下，原本在海南閩語中屬次要使用格式的「{拿取}『要』+T+DAT+R」結構使用頻率大幅增加。這種接觸導致的演變只是改變了特定結構的使用頻率，但並沒有涉及外來成分的借用或是對原來成分的替換（replacement），體現的是語言接觸中協商（張敏 2011），所帶來的改變也是潛移默化的。其後，臨高語的[ɔu1]因高頻使用和介詞省略，在雙賓 B 式結構中演變為成熟的給予動詞；其亦將「拿取動詞 > 給予動詞」這一語義發展通過接觸，以介賓補語式的「{拿取/給予}『要』-T-DAT-R」結構為中介傳入海南閩語中。在這一階段中，臨高語是模式語，海南閩語則是複製語/受語。由於海南閩語只是複製了臨高語的語義功能分佈，直接將「要」用作給予動詞，而並未經過漢語方言「拿持義動詞 > 給予動詞」的內部演變步驟，其在句法性質上也和其他方言來源自拿持義動詞的給予動詞有明顯分別。與上一小節討論「分」的情況類似，在海口、港門方言中，「要」這單一語素是遷移的核心，其被等同於原有的給予動詞「乞」，因此後來也繼承了「乞」三價動詞的性質；但在瓊海方言中，「要」所處的整個介賓補語式雙結構，而非單一語素，才是語言接觸引發演變的基礎。又因臨高語的[ɔu1]至今沒有語法化為與格介詞，是以三地方言中也不太能接受「要」作與格介詞。後來，部分瓊北閩語進一步將給予義的「要」語法化為致使/容任動詞和被動標記，並通過接觸引發語法化將此演變回頭傳入臨高語，造成如今「要」和[ɔu1]高度平行的功能分佈。

要之，海南閩語給予動詞的歷時發展和更替可以下圖概括：
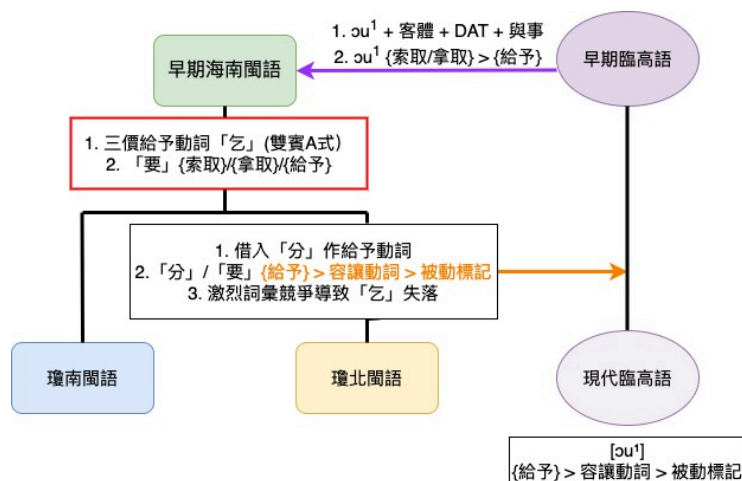
圖 3、海南閩語給予動詞的歷時演變

從上圖可見，海南閩語給予義雙及物結構的複雜現狀，實不能以單一因素的影響作解釋。存古、語言接觸與語言自身內部競爭和演變的共同作用塑造了其現今面貌。

4. 總結

本文系統考察海口、瓊海及港門方言的給予動詞和雙及物結構的來源和功能，得出以下結論：

1. 三地方言給予動詞雖然同源，但在不同方言中句法分佈並不一致：海口、港門方言的給予動詞可以構成雙賓 A 式、介賓補語式和複合詞式雙及物結構；瓊海方言的給予動詞則只能構成介賓補語式結構。惟三地方言皆不太接受雙賓 B 式結構，為前人說法作補充。

2. 海南方言的給予動詞「分」、「要」都是典型的受事型給予動詞，既排斥直接和與事賓語結合，也尚未語法化為與格介詞。是以海口方言和港門方言中「分」、「要」屬三價動詞並能構成雙賓 A 式的句法表現，屬於「缺乏給予類雙賓 A 式 ⊃ 『受事型』給予動詞」這一蘊含關係的罕見例外。

3. 「乞」、「分」、「要」三個給予動詞存在歷史層次和來源的差異。其中，「乞」的層次最古老，屬海南閩語原生的給予動詞，如今只保存在瓊南閩語中；「分」則在清朝時自潮汕閩語或是客家話借入；「要」是海南閩語與臨高語發生語言接觸後，在後者的影響下從{索取/拿取}義動詞發展為給予動詞。

4. 「分」、「要」之所以能在海口和港門方言中充當三價動詞並構成雙賓 A 式，是因為兩地方言直接以之對應原有的三價給予動詞「乞」，並複製了後者的句法性質。瓊海方言則是在詞彙更替的過程中同時失落了「乞」和雙賓 A 式，是以本質上仍屬於受事型給予動詞的「分」和「要」在此方言中無法構成雙賓 A 式。

參考文獻

曹志耘主編。2008a。《漢語方言地圖集（語法卷）》。北京：商務印書館。

曹志耘主編。2008b。《漢語方言地圖集（詞彙卷）》。北京：商務印書館。

陳鴻邁。1996。《海口方言詞典》。南京：江蘇教育出版社

陳麗雪。2005。閩南語雙賓式共時與歷時研究。國立政治大學中國文學系博士學位論文。

陳澤平。1997。福州話的動詞謂語句。收錄於李如龍主編：《漢語方言特徵詞研究》。廈門：廈門大學出版社，頁 105-120。

陳澤平。2000。福州方言的介詞。收錄於李如龍、張雙慶主編：《介詞》。廣州：暨南大學出版社，頁 101-121。

鄧思穎。2003。《漢語方言語法的參數理論》。北京：北京大學出版社。

丁加勇、張敏。2015。從湘方言動詞句式看雙及物結構語義地圖。收錄於李小凡等著：《漢語多功能語法形式的語義地圖研究》。北京：商務印書館，頁 234-255。

符其武。2008。《瓊北閩語詞彙研究》。成都：四川大學出版社。

符玉川。1996。古代移民與海南方言。收錄於詹伯慧等編：《第四屆國際國際閩方言研討會論文集》。汕頭：汕頭大學出版社，頁 20-28。

海南省地方史志辦公室編。1994。《海南省志（第三卷）・人口志・方言志・宗教志》。海口：南海出版公司。

許雁。2014。壯語給予類雙及物結構的類型學考察。《廣西民族師範學院學報》第 2 期，頁 91-95。

許雁。2015。仡佬語與壯語給予類雙及物結構之比較。《漢藏語學報》第 8 期，頁 65-76。

黃瑩洪。2018。台語雙及物結構語序研究。中央民族大學中國少數民族語言文學專業碩士學位論文。

李榮主編。1998。《雷州方言詞典》。南京：江蘇教育出版社。

李榮主編。2002。《廈門方言詞典（第二版）》。南京：江蘇教育出版社。

李如龍。1996。泉州方言給予義的動詞。收錄於李如龍：《方言與音韻論集》。香港：香港中文大學中國文化研究所吳多泰中國語文研究中心，頁 162-166。

李如龍。1997。泉州方言的動詞謂語句。收錄於李如龍、張雙慶主編：《動詞謂語句》。廣州：暨南大學出版社，頁 121-135。

李新魁、林倫倫。1992。《潮汕方言詞考釋》。廣州：廣東人民出版社。

李永明。1959。《潮州方言》。北京：中華書局。

林立芳。1997。梅縣方言的動詞謂語句。收錄於李如龍、張雙慶主編：《動詞謂語句》。廣州：暨南大學出版社，頁 221-237。

林倫倫。2006。《粵西閩語雷州話研究》。北京：中華書局。

劉丹青。1997。蘇州方言的動詞謂語句。收錄於李如龍、張雙慶主編：《動詞謂語句》。廣州：暨南大學出版社，頁 1-20。

劉丹青。2001。漢語給予類雙及物結構的類型學考察。《中國語文》第 5 期，頁 387-398。

劉劍三。2009。《臨高語話語材料集》，北京：中央民族大學出版社。

劉新中。2006。《海南閩語的語音研究》。北京：中國社會科學出版社。

陸丙甫、羅天華。2009。中國境內語言的雙及物結構語序。《漢藏語學報》第 3 期，頁 56-70。

潘秋平。2015。《上古漢語與格句式研究》。北京：商務印書館。

潘秋平、項夢冰。2020。連城新泉客家話的給予動詞和給予類雙及物結構。《語言學論叢》第 61 輯，頁 50-91。

錢奠香。2002。《海南屯昌閩語語法研究》。昆明：雲南大學出版社。

沈冰。2022。接觸視角下的海口方言多功能語法形式。中山大學語言學及應用語言學專業博士學位論文。

施其生。1997。汕頭方言的動詞謂語句。收錄於李如龍、張雙慶主編：《動詞謂語句》。廣州：暨南大學出版社，頁 136-152。

施其生。2000。汕頭方言的介詞。收錄於李如龍、張雙慶主編：《介詞》。廣州：暨南大學出版社，頁 157-172。

巫凌雲、張秋生。1981。《西雙版納傣語文概況（傣文）》。昆明：雲南民族出版社。

吳瑞文。2015。從歷史語法的觀點論「乞」在閩語中的演變。《中國語言學集刊》第 8 卷第 2 期，頁 313-342。

夏俐萍。2017。句法庫藏裂變：從連動式到給予類雙及物結構。《語言研究集刊》第 18 輯,頁 25-46。

辛世彪。2013。《海南閩語比較研究》。北京：商務印書館。

楊望龍。2019。瓊海話語法專題研究。浙江大學漢語言文字學專業博士學位論文。

楊望龍、史文磊。2022。瓊海話「去」的多功能用法及其語法化——兼及對語法複製理論的思考。《語言學論叢》第 2 期,頁 92-110。

楊望龍、史文磊。2023。海南閩語「要」的功能演變與語源問題。《語言研究集刊》第 31 輯,頁 234-251。

雲惟利。1987。《海南方言》。澳門：澳門東亞大學。

雲惟利。1996。海南閩語聲母的特殊變化。收錄於詹伯慧等編：《第四屆國際閩方言研討會論文集》。汕頭：汕頭大學出版社,頁 38-47。

雲惟利。2004。《一種方言在兩地三代間的變異：文昌話和漳州話在本土與外地的時地差異》。廈門：廈門大學出版社。

張伯江。1999。現代漢語的雙及物結構式。《中國語文》第 3 期,頁 175-184。

張惠英。2006。海南方言的分區。《方言》第 1 期,頁 79-89。

張敏。2011。漢語方言雙及物結構南北差異的成因：類型學研究引發的新問題。《中國語言學集刊》第 4 卷第 2 期,頁 87-270。

【日】柳田國男（YANAGITA Kunio）。1930/1980。《蝸牛考》。東京：岩波書店。

Chappell, Hilary and Alain Peyraube. 2007. *The diachronic syntax of ditransitive constructions from Archaic Chinese to early Southern Min (Sinitic)*. Paper presented at the Conference on Ditransitive Constructions, Max Planck Institute for Evolutionary Anthropology, Leipzig (Germany), 23-25 November 2007.

Chappell, Hilary. 2000. Dialect Grammar in Two Early Modern Southern Min Texts: A Comparative Study of Dative k̂it 乞, Comitative câng 共 and Diminutive gùia 仔. *Journal of Chinese Linguistics* 28(2): 247-302.

Chappell, Hilary. 2015. Linguistic Areas in China for Differential Object Marking, Passive and Comparative Construction. In Hialry Chappell, ed., *Diversity in Sinitic Languages*, 13-52. Oxford: Oxford University Press.

Chin, Andy Chi-on（錢志安）. 2022. *Cantonese GIVE and Double-Object Construction*. Amsterdam/ Philadelphia: John Benjamins Publishing Company.

de Souza, S. C. 1903. *A Manual of the Hailam Colloquial*. Singapore: The Government Printing Office.

Enfield, N.J. 2002. Functions of give and take in Laos Complex Predicate. In Robert S. Bauer, ed. *Collected Papers on Southeast Asian and Pacific Languages*, 13-36. Canberra: Pacific Linguistics.

Goldberg, Adele E. 1995. *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago and London: The University of Chicago Press.

Haspelmath, Martin. 2013. Ditransitive Constructions: The Verb 'Give'. In Matthew S. Dryer and Martin Haspelmath, eds., *The World Atlas of Language Structures Online. Leipzig: Max Planck Institute for Evolutionary Anthropology*. (Available online at http://wals.info/chapter/105, Accessed on 2022-10-13.)

Haspelmath, Martin. 2015. Ditransitive constructions. *Annual Review of Linguistics* 1: 19-41.

Heine, Bernd and Tania Kuteva. 2002. *World Lexicon of Grammaticalization*. Cambridge: Cambridge University Press.

Heine, Bernd and Tania Kuteva. 2005. *Language Contact and Grammatical Change*. Cambridge: Cambridge University Press.

Kittilä, S. 2006. The Anomaly of the Verb "Give" Explained by Its High (Formal and Semantic) Transitivity. *Linguistics* 44(2): 569-612.

Lee, Hui-Chi. 2010. Hainan Min Passive. *Tsing Hua Journal of Chinese Studies* 40(4): 765-787.

Lee, Hui-Chi. 2011. Double Object Construction in Hainan Min. *Language and Linguistics* 12(3): 501-527.

Li, Xuping and Yicheng Wu. 2015. Ditransitives in Three Gan Dialects: Valence-increasing and Preposition Incorporation. *Language Sciences* 50: 66-77.

Lien, Chinfa (連金發). 2005. Families of Ditransitive Constructions in Li Jing Ji. *Language and Linguistics* 6(4): 707-737.

Malchukov, A.L., Martin Haspelmath and Bernard Comrie. 2010. Ditransitive Construction: A Typological Overview. In Andrej Malchukov, Martin Haspelmath and Bernard Comrie. eds., *Studies in Ditransitive Constructions: A Comparative Handbook*, 1-64. Berlin: De Gruyter.

Margetts, Anna and Peter K. Austin. 2007. Three Participant Events in the Languages of the World: Towards a Crosslinguistic Typology. *Linguistics* 45(3): 393-451.

Tang, Sze-Wing, 1998. On the 'inverted' double object construction. In Stephen Matthews, Ed., *Studies in Cantonese Linguistics*, 35-52. Hong Kong: The Linguistic Society of Hong Kong.

Xu, Liejiong and Alain Peyraube. 1997. On the Double Object Construction and the Oblique Construction in Cantonese. *Studies in Language* 21(1): 105-127.

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对"连……都/也"结构的程度语义学分析

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[摘要]：本文沿 von Stechow(1984)的传统，基于程度语义学(degree semantics)对汉语"连……都/也"结构进行分析。本文认为"连……都/也"结构的直陈命题(prejacent)对应由语境决定的某个量级(scale)上的刻度(degree)，表达的是相关主体在与该量级相关的形容词上程度高。该形容词可能为正极或负极形容词(positive/negative polar adjective)，取决于由以直陈命题对应的刻度为端点的正负范围(positive/negative extent)与该量级上的某个正负阈值(positive/negative threshold)之间的包含关系。若正范围包含正阈值，则表达对应的正极形容词的程度高；若负范围包含负阈值，则表达对应的负极形容词的程度高。"连……都/也"各个部分的组合性贡献如下："连"标记直陈命题对应的刻度是某个范围的端点，"都"全称量化以该刻度为端点的某个方向上的所有点，形成正范围或负范围；而"也"与"都"的区别仅在于，"也"预设除端点外的某个方向上的所有点，并通过该预设与断言（即直陈命题对应的刻度所标记的端点）相结合得到同样的语义。在语言事实上该分析能够解释胡亚(2018)对汉语"连……都/也"结构的四种分类，包括其新提出的主体对比类，覆盖大量的汉语数据；在理论上该分析能够修缮基于个体的全称量化分析以及基于可能性的量级分析等旧有理论的漏洞，并暗示汉语中存在独立的程度类型 d；另外，通过现有模型下范围包含关系与命题衍推关系之间的关联，当前的分析甚至能够与普遍的极性(polarity)现象以及向下衍推(Downward Entailment)理论相互印证。

[关键字]：连……都/也；正负极形容词；程度语义学；范围；全称量化；衍推关系

A Degree-Based Analysis of the Mandarin *lián…dōu/yě* Construction

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Abstract　This paper, following the tradition of von Stechow (1984), offers an analysis of the Mandarin Chinese *lián…dōu/yě* construction within the framework of degree semantics. I propose that the prejacent of this construction corresponds to a contextually determined degree on a certain scale and indicates that the relevant subject exhibits a high degree with respect to a gradable adjective. This adjective may be either positively or negatively polar, depending on whether the positive or negative extent, defined with the prejacent's mapping degree as its endpoint, includes a corresponding positive or negative threshold on the scale. If the positive extent includes the positive threshold, the construction conveys a high degree of the positive adjective; if the negative extent includes the negative threshold, it expresses a high degree of the negative adjective.

The compositional contributions of the components are as follows: *lián* marks the prejacent's mapping degree as the endpoint of an extent; *dōu* universally quantifies over all points extending from that endpoint in one direction, forming a positive or negative extent; *yě*, differing only minimally from *dōu*, presupposes all points in that direction except the endpoint, and combines this presupposition with the assertion (i.e., the prejacent) to derive the same overall meaning.

Empirically, this analysis accounts for the four types of *lián…dōu/yě* constructions classified by Hu (2018), including the newly proposed subject contrast type, thus covering a wide range of Mandarin data. Theoretically, it improves upon previous accounts that rely on universal quantification over individuals or scalar likelihood and provides evidence for an independent degree type *d* in Mandarin. Furthermore, by connecting the inclusion relations between extents

and thresholds to logical entailment patterns, this analysis contributes to a broader understanding of polarity phenomena and the theory of Downward Entailment.

Keywords *lián...dōu/yě*, positive and negative polar adjectives, degree semantics, extent, universal quantification, entailment relations

一、引言

汉语"连......都/也"结构的相关研究颇丰，其中一些研究认为"连......都/也"具有统一的抽象语义并对该结构进行整体的描写和解释。周小兵(1990)指出"连"字句处于分级序列的顶端而受到强调；郭锐(2006)认为"连"字句预设了一个集合，该集合包含两个及以上的形成衍推序列的对比命题，其中"连"字句表达的命题内容是最不可能或最不应该发生的；潘海华(2006)对"连"字结构进行基于三分结构的焦点敏感运算，其中"连"标记的对比焦点位于话题中，不影响全称量化的映射方式，但产生了梯级选项集合，而该集合为"都"的量化对象，其中也隐含了"连"标记的焦点位于梯级集合的最低点从而推导出全称量化之义；邵敬敏(2008)采用刘丹青(2002)首次提出的"框式结构"的概念，认为"连......都/也"结构是整个结构的功能而非某个特定介词的作用，并进一步指出其语法意义为表示某一事件实现或未实现的可能性，从而达到"意外"的效果；邓川林(2012, 2023)认为"连"字句所关联的焦点项处于语用量级的最低位置等等。

"连......都/也"在很多情况下与副词"甚至"[52]呈现出类似的语言表达效果，而"甚至"大体上对应于英语的 *even*。针对英语 *even* 的形式语义学经典分析 Karttuenn & Peters (1979)认为 *even* 除了断言当前命题以外还有两个预设，即基于个体的添加性预设和基于可能性的量级预设。以例句(1)为例：

(1) Even [Bill]$_F$ likes Mary. (甚至连比尔都喜欢玛丽。)
   a. 基于个体的添加性预设：~> 除了 Bill 以外，还有其他人也喜欢 Mary。
   b. 基于可能性的量级预设：~> 与其他人相比，Bill 是最不可能喜欢 Mary 的人。

英语 *even* 的使用具有焦点敏感性，在句(1)中，*Bill* 承载了焦点的角色。(1a)表示这个句子表达了一个预设，即"除了 Bill 以外，还有其他人也喜欢 Mary"，而这一预设的添加是直接基于由焦点项 *Bill* 激活的选项集，称作基于个体的添加性预设。

除此之外，句(1)还预设了(1b)，即"与其他人相比，Bill 是最不可能喜欢 Mary 的人"。也就是说，由 *Bill* 所激活的选项集位于一个可能性的序列中，该可能性对应的是对 *Bill* 激活的选项集中的成员 x 来说，有多大的可能性使得 x 喜欢玛丽为真。这一预设称作基于可能性的量级预设(可见 Rooth 1992; Lahiri 1998; Chierchia 2013 等)。

对汉语"连......都/也"结构的形式语义分析目前有两大主要路径，这两大主流分析各自面临的问题正好对应 *even* 的两个预设会面临的挑战。

以蒋严(1998)和潘海华(2006)为代表的分析认为"都"的基础义为全称量化义，其他含义都是从基础意义中推导而出。具体而言，"连"标记的对比焦点引出一个以当前对象为端点的梯级选项集，"都"对该集合的成员进行全称量化。该分析本质是基于个体的全称量化，潜在问题是某些语境并不要求不同于当前对象的个体使得命题成立。例如，在(2)中提到的场景中，(2a)中"连......都/

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[52] 将另文讨论"连……都/也"与"甚至的区别。

也"的使用十分自然，然而(2a)中基于个体的添加性预设并没有得到满足，因为电视机是小明的父亲唯一砸掉的东西。

(2) 场景：小明与父亲产生了争执，二人争执不下，父亲一气之下把电视机砸了，但没有砸任何其他东西。

    a. 他气得连电视机都/也砸了。

    ((2a) ↝̸ 除了电视机以外，他还砸了其他的东西。)

以 Xiang(2016, 2020) 和 Liu(2018, 2021) 为代表的方案将"都"处理为一个在真值上无贡献(truth conditionally vacuous)而只强调直陈命题为最强命题或可能性最低命题的算子。然而，基于可能性的量级预设也受到了一些语言事实的挑战。主要分为两个方面，一方面，"连......都/也"关联的命题并不一定是最不可能发生的，即不一定位于量级的端点。在例(3)所示的场景中，"坐得下五个人"并不是量级的端点，"坐得下六个人"才是，但是句(3a) "连......都"的使用十分自然。

(3) 场景：有一天，小明等四个人坐车，车的最大容量为六个人。小明问司机：这辆车坐得下四个人吗？司机说：

    a. 连五个人都坐得下。

另一方面，有时"连......都"关联的命题与可能性完全无关。(4)中的语句只能表达"穷"的程度很高，以至于"热心都没了"，但"人没了热心"似乎并不天然处于可能性的量级之中。

(4) 我穷得连热心都没了。

相关学者对英语的 even 也提出了类似的质疑，并通过不同路径进行新的分析，其中一些研究认为 even 的许可和一个语境中的性质有关(Rullmann, 2007; Greenberg, 2018; Zhang, 2022)。本文认为对 even 的程度语义解释可以迁移到对汉语"连......都/也"的解释，但是在具体的分析上将有所不同。以下为本文的结构安排：第二部分介绍汉语中"连......都/也"结构的不同类别和相关语言事实。第三部分介绍基于程度语义学对英语 even 的解释。第四部分将程度分析扩展到汉语的"连......都/也"结构，并具体化这一直觉，为"连......都/也"结构提供形式化的分析。第五部分使用本文的形式化工具对四种不同的"连......都/也"结构进行再分析。第六部分总结全文并对当前方案与衍推关系有关的一些现象进行解释，例如否定极项的允准问题。

二、汉语"连......都/也"结构语言景观

胡亚(2018)在构式语法的框架下研究"连......都/也"，然而其对相关语言现象的调查和总结对形式语义学的研究有较大的参考价值，尤其是提供了亟待解释的数据。文章将与"连......都/也"相关的表达分为四类，即主体对比、集合成员、整体事件和典型量级，其中的主体对比类是作者根据历史考察发现的新类别，且其出现的时间最早。表一呈现了这四种类型的特征以及相关例句。

表一："连......都/也"的类别以及语义区别(引自胡亚(2018))

类别	语义解释	例句
主体	比较"连"前两项主体,参照项一定在前句出现,强调主体存异	<u>你的办公室</u>至少有个窗户,<u>我的</u>连窗户都没有
集合	比较"连"后 XP,参照项是隐含集合,强调 XP 低可能性的意外	连<u>三岁小孩儿</u>都知道这个道理
事件	比较 VP+XP 事件,参照项是相关事件,强调 VP+XP 作为典型事件的低可能性	连<u>口</u>都没漱就跑出去了
量级	比较 XP 的"量",参照项是 XP 内的全量,强调 XP 的量多或量少	连<u>一口</u>都没喝

胡亚(2018)提供相关依据,证明了集合成员类是"连……都/也"的原型类型,而对"连……都/也"进行统一语义分析的研究多数只关注到了这一原型类型的语义,这样的分析无法扩展到其他类型。以表格中的例句"连三岁小孩儿都知道这个道理"为例,过往研究多认为"连"标记焦点成分"三岁小孩儿",而焦点引出了一系列与之相关的选项集,例如{三岁小孩儿,青少年,中年人,老年人},其中当前命题的焦点"三岁小孩儿"位于该选项集的端点,是最不可能使"x 知道这个道理"为真的选项,因此衍推出与其他选项相关的命题都为真。然而,该分析在应用于其他三个类别时,都存在着各自的问题。

典型量级类往往使用例如"一滴水""一分钱"之类的极小词,这一类词很容易引出具有量级关系的选项集且自然地位于该选项集的端点,因此达到与上述集合成员类表达相同的效果。但典型量级类的解释存在一个潜在的问题,某些量级表达能够同时出现在肯定的或否定的表达中,例如(5a)和(5b)。(5a)的直陈命题为"他不给我一分钱",而(5b)的直陈命题为"他给我一分钱",这是两个在语义上完全相反的命题,理论上不可能同时满足"可能性低"的预设。

(5) a. 他连一分钱都不给我。
    b. 他连一分钱都给了我。

整体事件类可对应于刘丹青(2002)首次提出的"非典型'连'字句",其最大特点是难以找到与"连"后成分对应的成员从而形成一种可能性等级的量级。胡亚(2018)将其特点总结为通过"连……都/也"关联的事件引出与之相关的事件作为参照项进行比较,而"连"引介的只是整个事件的一部分。例如表格中的例句"连口都没漱就跑出去了","口"并不引出任何可作为动作"漱"的对象的选项集,而是整个事件"漱口"引出相关的选项集。

主体对比类是胡亚(2018)最新系统提出的新类别,它的特点是"连……都/也"所在小句的前小句出现参照项,强调两个小句的主体在命题所述层面上存在差异。例如表格中的句子"你的办公室至少有个窗户,我的连窗户都没有"表示"你的办公室"和"我的办公室"在"是否有窗户"方面的表现不同。这句话并不预设"我的办公室除了没有窗户,也没有其他东西",即基于个体的添加性预设失效。第二点,相关表达也并不预设"连……都/也"关联的表达可能性低,如果说根据日常经验,"办公室没有窗户"的可能性还算低,"不敢骂警察"并不是正常认知中的低可能性事件,然而例句(6)中的"连……都"使用十分自然。

(6) 坐牢以前还敢骂警察,出来以后连警察都不敢骂了。 (CCL)

以上的分析至少展示了三点。一，虽然与当前命题相关的选项集典型地由"连"后的成分引出(多见于集合成员类和典型量级类)，但情况并非总是如此，尤其在整体事件类中，其选项集由"连……都/也"关联的事件引出；二，添加性预设并不总是得到满足，在某些情况中，语境中并不存在任何满足要求的相关个体或事件；三，基于可能性的量级预设并不总是得到满足，也某些情况下"连……都"关联的命题可能性并不低，甚至很高，或者根本与可能性量级无关。

三、英语 *even* 的程度语义解释

这一部分介绍过往研究中对英语 *even* 的另一种解释，即非基于可能性量级，而是基于一个上下文中显著的性质对应的量级，并指出对汉语中的"连……都/也"结构也共享相同的语言直觉。

Rullmann(2007)较早地提出 *even* 的许可与某个等级性质(a graded property)相关。*Even* 激活的选项集排序的标准是一个上下文中显著的等级性质，而当前命题使得该性质位于一个极值。在例(7)中，该性质为"成功的程度"。

(7)　Mary even won the [gold medal]F.
　　　Alternatives:　　　　　　　　*Associated graded property:*
　　　Mary won gold medal.　　　high degree of success
　　　Mary won silver medal.　　　　　　　　　↑
　　　Mary won bronze medal.　　　low degree of success　　　　　　　(Rullmann 2007)

具体来说，Rullmann 认为选项集 $p_1...p_n$ 与某种等级性质 q 相关联，其中 p_1 是 q 最强的证据，而 p_n 是最弱的证据(关于论证(argumentation)的相关理论参见 Anscombre and Ducrot 1983; Kay 1990)。Rullmann(2007)虽然较早提出 *even* 的使用与程度语义相关这一直觉，但并没有基于程度语义学去具体化这种直觉，而是转向了有关论证的形式化路径，这种处理方式有一些潜在问题，具体参见 Greenberg(2015, 2018)。

Greenberg(2018)认可 Rullmann(2007)的这种语言直觉，然而在处理上，Greenberg 采纳了不同的路径。Greenberg(2018)的分析完全基于等级性(gradability-based analysis)。具体而言，Greenberg 通过一系列语境的测试，将 *even* 的语义处理为直陈命题与其选项命题在上下文中某个显著的量级上的比较，及二者与该量级的某个标准值的比较。观察例句组(8)，对于 *even p* 来说，首先它表达的命题在程度上要高于其选项命题 q，例如(8a)中，*Bill* 的身高超过 *John*。然而仅仅比命题 q 在程度上更高并不是使用 *even* 的充分限制条件，与(8b)和(8c)相比，(8a)中 p 和 q 均在程度上超过了由语境决定的某个阈值。

(8)　Context: John and Bill want to join our basketball team, where the standard for player height is 1.90 m.
　　　Coach: So—what about John and Bill?
　　　Agent (a): John is 1.95 m tall and Bill is (even) [2.10]F.
　　　Agent (b): John is 1.70 m tall and Bill is (??even)[1.75]F.
　　　Agent (c): John is 1.75 m tall and Bill is (??even) [1.95]F.　　　　　(Greenberg, 2018)

基于以上的语言事实，Greenberg(2018)提出了关于 *even* 基于等级性的预设，如(9)所示，对于个体 x，命题 p，以及一个由语境提供的等级性质 G 来说，以下两个条件成立：在 G 量级上，x 在所有 p 可及世界里的最大程度高于其在所有 q 且非 p 可及世界里的最大程度；x 在 q 且非 p 可及世界里的最大程度至少和 G 量级的阈值一样高。更直观的图示见(10)。

(9)　For all q: q ∈ C ∧ q ≠ p, *even*(C)(p)(w) presupposes that for some salient entity x (denoted by some non-focused or contrastive topic constituent in p) and a contextually supplied

gradable property G, the following holds: ∀w1,w2 [w1Rw ∧ w2Rw ∧ w2 ∈ p ∧ w1 ∈ [q ∧ ¬p]] → [the max d2 (λd2.G(d2)(x)(w2)) > [the max d1(λd1.G(d1)(x)(w1)) ∧ the max d1(λd1.G(d1)(x)(w1)) ≥ stand$_G$]   (Greenberg, 2018)

(10)   Degree-based presupposition   (Greenberg, 2018)
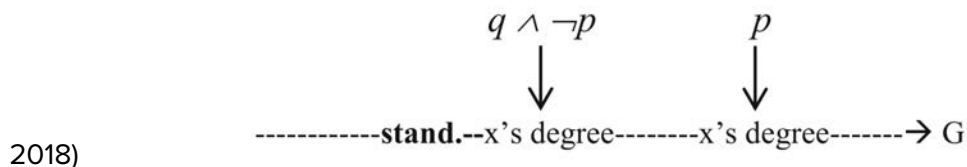
Greenberg 提出的第一个版本，是基于刻度的分析[53]，进而她发现有一些语言现象无法使用基于刻度的本体分析，而需要采纳范围(extent)分析。如果按照(9)中的定义分析例(11)的情况会得到错误的预测，由于 John 的身高是固定的，它不会在不同的可及世界中发生变化，因此第一个条件无法得到满足。

(11)   Context: Mary visits the Smiths and meets their young son, John, who is 1.60 m tall.
         Mary: I see that John is tall. No wonder about that, since both of you are tall as well.
         How old is he? 10 years old?
         Mrs. Smith: No. He is 7!
         Mary: Wow! So he is even VERY tall!   (Greenberg, 2018)

因此 Greenberg 提出了新的分析，即进行比较的并非量级上的刻度点，而是代表范围的区间。在(11)的例句中，'he is even very tall'之所以是合理的回答，并不是因为 John 变得更高了，而是因为此时他的身高是与一个新的更低的阈值进行比较。也就是说，John 的身高超过 7 岁标准身高的差值大于他的身高超过 10 岁标准身高的差值。基于此，(9)和(10)的定义与图示修改为(12)和(13)。

定义(12)要求：在 G 量级上，x 在所有 p 可及世界里的最大刻度与其阈值之间的差距高于其在所有 q 且非 p 可及世界里的最大刻度与其阈值之间的差距；且 x 在两种可及世界里的刻度都至少和 G 量级的阈值一样高。更直观的图示见(13)。

(12)   ∀w1,w2 [w1Rw ∧ w2Rw ∧ w2 ∈ p ∧ w1 ∈ [q ∧ ¬p]] → DIFF (the max (λd2.G(d2)(x)(w2), stand$_G$) > DIFF (the max (λd1. G(d1)(x)(w1), stand$_G$) ∧ the max d1 (λd1. G (d1)(x)(w1))≥ stand$_{1,G}$ ∧ the max (λd2. G(d2)(x)(w2) ≥ stand$_{2,G}$ (Greenberg, 2018)

(13)   Extent-based presupposition   (Greenberg, 2018)
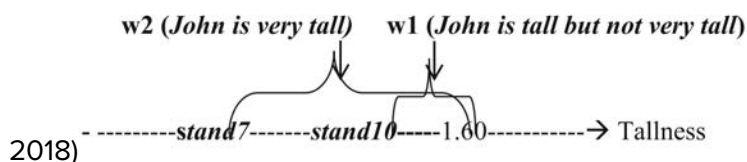
Greenberg(2018)基于范围的分析方法对汉语"连……都/也"结构分析有很大的参考价值。

Zhang(2022)认同 Greenberg(2018)的相关直觉，并确认 even 回答了与语境某个程度相关的在议问题(question under discussion, QUD)，基于此，她结合程度语义和信息量(informativeness)，对 even 的语义做出描写，具体方法本文不会涉及，因此不作展开。

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[53] 为了将本体中量级上表示程度的点和语义上表达的"程度"区分开来，在下文中都将前者译作"刻度"。

四、"连......都/也"的程度语义学分析

重新回到汉语的"连......都/也"结构，第二部分展示了汉语中"连......都/也"结构的四种类型，以及目前主流的分析会遭遇的问题。第三部分提到的基于程度的分析可以扩展到汉语"连......都"的使用。这一部分将提供具体的语料讨论汉语"连......都/也"结构的四种类型与程度语义的关联，并说明这一方案如何化解旧分析中遭遇的问题。

(一)"连......都/也"结构与程度的关联

例句(14)属于主体对比类，该例句表达的是"我的办公室"在由语境决定的某个等级形容词所代表的量级上程度高。假设语境决定该量级为"采光度"，那么同事 B 说这句话实际上表达的是自己的办公室采光度比同事 A 的更差，也就是其负向程度("暗度")更高。

> (14)　语境：同事 A 向同事 B 抱怨自己的办公室采光很差。
> 　　　　同事 B：你的办公室至少有扇窗户，我的连窗户都没有。

例句(15)属于集合成员类。假设语境决定该量级为"复杂程度"，那么"连三岁的小孩儿都知道这个道理"表示这个道理简单易懂，也就是简单程度高。

> (15)　语境：某大学生捡到钱没有归还失主，而是偷偷藏了起来，他的父亲发现此事之后对他进行教育。
> 　　　　父亲：拾金不昧，连三岁的小孩都知道这个道理。

例句(16)属于整体事件类。假设语境决定该量级为"着急程度"，那么"连口都没漱就跑出去了"表达的是父亲的着急程度很高，以至于没有漱口就跑了出去。

> (16)　语境：清晨，父亲刚起床，邻居敲门说父亲的店里出事了，因此父亲急急忙忙......
> 　　　　例句：连口都没漱就跑出去了。

例句(17)属于典型量级类。假设语境决定该量级为"自律程度"，那么"连一口都没喝"表达的是父亲在戒酒方面的自律程度高，承诺要戒酒因此一口都没有喝。

> (17)　语境：长年酗酒的父亲声称要戒酒，由他的孩子监督，母亲回到家后询问孩子关于父亲今日的饮酒情况。
> 　　　　　　孩子：连一口都没喝。

综合看来，"连......都/也"的四种类型都与语境中某个性质相关，可以通过构造相关的语境证明"连......都/也"表达的是在由语境决定的某个等级形容词上程度很高。除此之外，汉语更是有显性的语言事实作为依据，证明该结构与程度表达密切相关，即在大量的语料中，"连......都/也"都呈现为某个等级形容词(gradable adjective)的补语成分，例如(18a)(18b)，或后续句，例如(18c)(18d)，表达程度很高，其表达效果类似于英语中的 *so...that...*，且该结构的能产性很强。[54]

> (18)　a. 疼得连腮帮子都肿了。
> 　　　　b. 吵得连心里都烫熟了。
> 　　　c. 冬天太冷，连手脚都冻僵了。
> 　　　　d. 你实在糊涂！连轿车都不知道么？

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[54] (18a)-(18d)语料均来自 CCL 语料库。

综合以上分析，"连……都/也"的直陈命题往往与由语境决定的某个等级形容词有关，代表着主体在该形容词的量级上达到了某个程度，相关的形容词可能是正极形容词或负极形容词。这一分析可以较好地解决旧有分析在解释"连……都/也"结构时面临的困难。

首先，该程度是与"连……都/也"的直陈命题相关联的，因此其选项集应当由完整的命题决定，而不是单纯由某个名词性成分决定。需要承认的是"连"后名词性成分有其特殊性，作为焦点成分它是必须进行替换的内容。但事实上它不是唯一可替换的内容，例如例句(16)若要得到正确解读则其选项命题并非通过仅仅替换"口"而实现，而是至少替换"漱口"这一完整事件。一些表达可以通过简单地替换名词性成分获得不同的排序，但另外一些则需要通过替换更大的结构。因此，当前分析不仅可以覆盖集合类型类和典型量级类，也可以扩展到整体事件类和主体对比类。至于"连"和"都"的各自作用，将在下文形式化时具体展开。

第二，基于个体的添加性预设未必需要满足。本文认为，传统分析中的添加性预设实际上并非基于个体的添加，而是基于程度(更准确来说，在本文中是"刻度")的添加。例如"他生气得连电视机都砸了"并不直接预设"其他东西也被砸"，甚至并不预设任何相关事件。相反，这个句子全称量化的或者添加的对象是比命题"砸电视机"对应的刻度更低的刻度值，而这些更低的刻度分别关联不同的命题，当前世界未必属于该命题(但至少存在某个可及世界属于该命题)。换言之，"他砸了手机"未必在当前世界满足，但"他砸了手机"的生气程度在当前世界已经达到，因此该命题至少在某个可及世界成立。

第三，在当前分析中，基于可能性的量级预设并不一定要得到满足。首先，上文提出某些表达与命题的可能性无关，而是在相关语境中与某个量级上的刻度相关联。例如(14)中"我的办公室没有窗户"这一表达无关可能性，而是与"我的办公室的采光度"有关。其次，程度分析也可以回答为什么典型量级中的某些表达既可以出现在肯定句又可以出现在否定句，例如极小词在某些肯定句和否定句中都可以表达"程度高"，这是因为其量级选取和程度评估机制是不同的，下文将展开分析。
第三，(6)中"不敢骂警察"并非传统意义上的低可能性事件，但却可以出现在"连……都/也"结构中。这是因为此时的程度阈值并非由等级形容词自带的阈值提供，而是由前小句"敢骂警察"所对应的刻度更新。而后小句则表示当前主体在量级的反方向上超过了这一阈值（因为是对前小句的否定表达），表达负极形容词的程度高。主体对比类正是通过这样的机制，形成了两个主体分别正向程度高和负向程度高的对比格局，成为一种能产结构。

如此看来，通过将"连……都/也"与一个量级相关联，可以对其语义特点进行描述。该量级以及相关阈值隐性地与某个等级形容词相关，或显性地由语境提供。

(二)本体介绍

在以下的形式化描写中，本文将基于程度语义学对"连……都/也"结构进行分析。本文采纳的等级形容词的本体沿袭 von Stechow 的传统(参见 Seuren 1984, von Stechow 1984, Meier 2003)。von Stechow 将等级形容词处理为对象(objetcs)以及与该形容词相关的一个量级(scale)上的区间(intervals)之间的关系，这样的区间称作范围(extent)。量级是由一系列的刻度

组成的射线，有最小元素但没有最大元素，刻度(degree)指的是位于量级上的某个正实数，体现为点。而范围是量级的稠密凸子集，体现为线。并非所有的量级的子集都可称作范围，具体而言，以 0 为起点，以正实数 n 为终点的区间，即⟨ₐ 0, n)，叫做正范围(positive extent)；而以 n 为起点

指向正无穷的区间叫做负范围(negative extent)，即⟨_A n, ∞)，其他的区间都不是范围。图示如下(引自 Meier 2003)：

(19) 本体图示
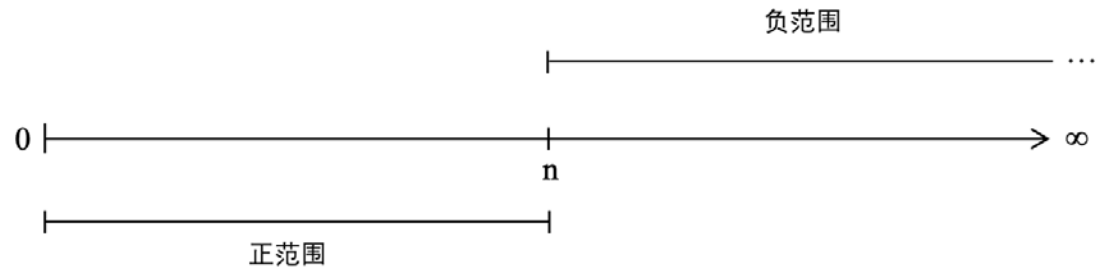
关于范围的术语表达总结如下：

(20) a. 某对象 *o* 在一个由形容词 A 定义的量级上的正范围：⟨_A 0, n⟩
　　　 b. 某对象 *o* 在一个由形容词 A 定义的量级上的负范围：⟨_A n, ∞⟩
　　 n=φ(o)，φ 是一个将每个个体 o 映射到刻度 n 的测量函数，并且 n 是一个正实数。

在本文的分析中，进行一些术语和工具的添加以及修改。首先，本文添加一个函数 ψ，使得 n=ψ(p)，ψ 是一个将每个命题 p 映射到刻度 n 的函数。其次，在(20)的基础上添加方括号"[ ]"和圆括号"( )"，其中方括号意味着该集合能够取到该端点，而圆括号意味着该集合不能够取到该端点；在对应的图示中，线段表示能够取到该端点，圆圈则表示不能够取到该端点。最后，由于本文的基本观点是"连……都/也"结构关联的命题能够通过映射关系对应到某个刻度，而具体实现中该命题有可能是肯定命题也有可能是否定命题，在以下图示中，肯定命题对应的表达实现为实线，而否定命题对应的表达实现为虚线。

另外，我们遵循传统将形容词分为正极形容词与负极形容词。等级形容词常常以一组反义词的形式出现，例如"高"对应"矮"，"大"对应"小"。有一些测试手段可以区分正负极形容词，比如正极形容词可以与测量短语(measure phrases)共现：两米高/*两米矮。[55] 一对反义词激活的量级往往是同一个，但采取不同的阈值，正范围超过正阈值代表正极形容词对应的程度高，负范围超过负阈值责代表负极形容词对应的程度高。正阈值的术语表达为 d_{stdd^+}，负阈值的术语表达为 d_{stdd^-}。

基于以上修改和说明，将"小明连一米九都到了"和"小红连五十厘米都没到"展示为以下图示：

(21) 身高高/矮度图示

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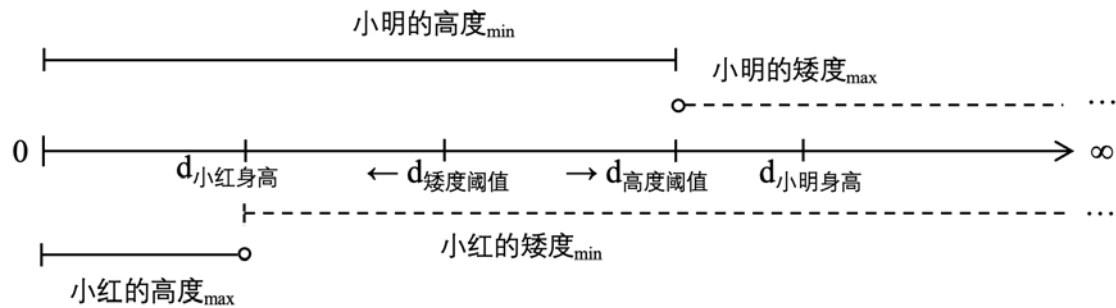
[55] 英语中还能通过是否能与 how 形成问句来测试，即 how big/*how small。但是汉语中，似乎"多大/多小"都可以，因此不作为区分汉语正负极形容词的测试手段。

假设矮度阈值为 1m，低于 1m 看作个子矮，高度阈值为 1.7m，高于 1.7m 看作个子高。在"小明连一米九都到了"中，小明身高至少是 1.9m，超过高度阈值 1.7m，表现为正范围包含正阈值，即 $d_{\text{高度阈值}} \in [0, d_{\text{小明身高}}]$，此时表达小明很高；在"小红连五十厘米都没到"中，小红身高的最大值无法取到 0.5m，超过矮度阈值1m，表现为负范围包含负阈值，即 $d_{\text{矮度阈值}} \in [d_{\text{小红身高}}, \infty)$，此时表达小红很矮。

在以下的分析中注意两点。第一，严格来说"连……都/也"结构表达的并非精确值，而是至少/至多的概念，但由于正范围的最小值以及负范围的最大值已经满足包含正/负阈值，因此扩大集合不会影响最后的运算结果，在下文的图示上仍然用 min 和 max 标出最大值和最小值，但在具体的文本分析中将省略。第二，介于两个阈值之间的刻度既不在正范围上包含正阈值，也不在负范围上包含负阈值，而是位于"既不高也不矮"的区间中。如果没有语境提供其他多余的信息更新比较标准，则相关的表达因缺少信息量而不满足"连……都/也"的使用条件。

(三)汉语"连……都/也"的形式化表达

上文论证了汉语"连……都/也"结构与一个程度表达有关，并且引入了本文将采纳的本体传统，本节在此基础上对"连……都/也"结构进行形式化的分析。以(22)为例，(22b)表达的是派对的热闹程度高，(22d)表达的是派对的冷清程度高。

> (22)　a. 今天的派对热闹吗？
> 　　　　b. 连小红都来了。
> 　　　　c. 昨天的派对热闹吗？
> 　　　　d. 连小明都没来。

对于(22)中的表达，可以作出(23)的图示。

> (23)　派对的热闹/冷清程度图示
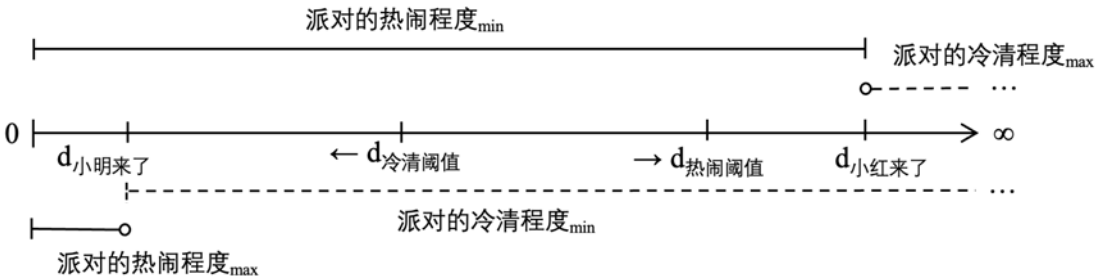
在(23)中，由语境决定的量级是派对的热闹/冷清程度，在该量级上，对命题"小明来了"进行相应的函数运算得到对应刻度 $d_{\text{小明来了}}$，即 $\psi(\text{小明来了'}) = d_{\text{小明来了}}$，命题"小红来了"同理。此时，"连小明都没来"表达的派对热闹程度对应范围 $[0, d_{\text{小明来了}})$，冷清程度对应 $[d_{\text{小明来了}}, \infty)$，负范围包含负阈值，表示派对的冷清程度高；"连小红都来了"表达的派对热闹程度对应范围 $[0, d_{\text{小红来了}}]$，冷清程度对应 $(d_{\text{小红来了}}, \infty)$，正范围包含正标准，表示派对的热闹程度高。

某个性质上的"程度高"在量级上表现为某个阈值属于对应范围，正阈值必须属于正范围，负阈值必须属于负范围，否则无意义。$d_{\text{热闹阈值}} \in [0, d_{\text{小红来了}}]$，$d_{\text{冷清阈值}} \notin (d_{\text{小红来了}}, \infty)$，因此"连小红都来了"表示在该量级所表示的正范围上程度高，即派对的热闹程度高；$d_{\text{冷清阈值}} \in [d_{\text{小明来了}}, \infty)$，$d_{\text{热闹阈值}} \notin [0, d_{\text{小明来了}})$，因此"连小明都没来"表示在该量级所表示的负范围上程度高，即派对的冷清程度高。

下面从组合性的角度分别分析"连""都""也"各自的语义贡献，首先来看"连……都"结构。"连"表达当前命题所对应的刻度对应的是某个范围的端点，"都"全称量化以该刻度为端点的某个方向的所有

刻度(即正范围或负范围)所对应的可能命题。虽然这些命题在当前世界未必成立，但必然在某一个可及世界(accessible worlds)中成立。[56]将"连......都"关联的核心命题记作 p，它的选项命题记作 q，命题所在的语境为 C，当前世界为 w，可及世界为 v，某个量级上的正极阈值为 d_{stdd}^+，负极阈值为 d_{stdd}^-，某个命题所对应的刻度为 $\psi(p)$，其形式化表达如(24)所示。(24a)表示如果 d_{stdd}^+ 属于正范围，那么对于任何属于该语境的选项命题 q 来说，如果命题 q 对应的刻度小于等于命题 p 对应的刻度，那么一定存在某个可及世界属于命题 q，这时表达正向形容词对应的程度高。(24b)表示如果 d_{stdd}^- 属于负范围，那么对于任何属于该语境的选项命题 q 来说，如果命题 q 对应的刻度大于等于命题 p 对应的刻度，那么一定不存在任何可及世界属于命题 q，这时表达负向形容词对应的程度高。

(24)　a. Positive extent: $\lambda p.[(d_{stdd}^+ \in [0, \psi(p)]) \rightarrow \forall q \in C [\psi(q) \leq \psi(p) \rightarrow \exists v.(vRw \land v \in q)]]$
　　　　b. Negative extent: $\lambda p.[(d_{stdd}^- \in [\psi(p), \infty)) \rightarrow \forall q \in C [\psi(q) \geq \psi(p) \rightarrow \neg \exists v.(vRw \land v \in q)]]$

再来看"连......也"结构。"连"表达当前命题的对应刻度是端点，"也"预设该点某个方向的所有刻度(但不包含该刻度)对应的可能命题。采用与(24)相同的术语，(25a)表示如果 d_{stdd}^+ 属于正范围，那么语句断言当前世界属于该命题且命题对应刻度为 $\psi(p)$，并预设对于任何属于该语境的选项命题 q 来说，如果命题 q 对应的刻度小于命题 p 对应的刻度，那么一定存在某个可及世界属于命题 q，这时表达正向形容词对应的程度高；(25b)表示如果 d_{stdd}^- 属于负范围，那么语句断言当前世界不属于该命题且命题对应刻度为 $\psi(p)$，并预设对于任何属于该语境的选项命题 q，如果命题 q 对应的刻度大于命题 p 对应的刻度，那么一定不存在任何可及世界属于命题 q，这时表达负向形容词对应的程度高。"连......也"的断言部分和预设部分相结合能够得到和"连......都"相同的语义，这也解释了为什么"连......都"和"连......也"的表达效果相似，并且能够在几乎所有语言使用场景中相互替换。

(25)　a. Positive extent: $\lambda p.(d_{stdd}^+ \in [0, \psi(p)]) \rightarrow$
　　　　assertion: $\lambda p.(w \in p \land \psi(p))$
　　　　presupposition: $\lambda p.\forall q \in C [\psi(q) < \psi(p) \rightarrow \exists v.(vRw \land v \in q)]$
　　　　　assertion+presupposition:
　　　　　$\lambda p.[(d_{stdd}^+ \in [0, \psi(p)]) \rightarrow \forall q \in C [\psi(q) \leq \psi(p) \rightarrow \exists v.(vRw \land v \in q)]]$
　　　　b. Negative extent: $\lambda p.(d_{stdd}^- \in [\psi(p), \infty)) \rightarrow$
　　　　assertion: $\lambda p.(\neg (w \in p) \land \psi(p))$
　　　　presupposition: $\lambda p.\forall q \in C [\psi(q) > \psi(p) \rightarrow \neg \exists v.(vRw \land v \in q)]$
　　　　　assertion+presupposition:
　　　　　$\lambda p.[(d_{stdd}^- \in [\psi(p), \infty)) \rightarrow \forall q \in C [\psi(q) \geq \psi(p) \rightarrow \neg \exists v.(vRw \land v \in q)]]$

五、四种不同"连......都/也"结构的再分析

基于第四部分的形式化内容，可以对四类不同的"连......都/也"结构进行再分析，并在此过程中详细阐释一些技术上的细节处理。

在进行分析前首先指出判断量级极性和决定测量命题时需要遵循的一些准则。第一，正极形容词和负极形容词的本质差别在于零值，往往事物的原初状态代表正极形容词的起点，例如身高

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[56] 此处使用可及世界而非可能世界(possible worlds)，是因为本文认为这些与某个程度相关联的命题都是可以以当前世界为出发点通过某种方式或手段达到的，而并非仅仅是逻辑上的一种可能性。例如在"他连电视机都砸了"这一语句所在情境中，虽然"他"可能没有砸除了电视机以外的其他东西，但是如果通过改变现实世界中的某些条件(例如电话机离"他"非常近)，那么可能他也砸了电话机，因为无论如何现有的生气程度已经到了"砸电话机"所需要的生气程度(假设"砸电话机"对应的刻度值低于"砸电视机"所对应的刻度值)。

总是从矮到高的，0m 为"高"的起点；年龄总是从小到大的，0 岁为"老"的起点。这表明正极形容词往往是有界的，可测量的，而负极形容词则不然。这也解释了为什么正极形容词可以与测量短语共现。然而有时不能通过例如"五米高/*五米矮"这样的测量短语测试某些形容词的极性，但是日常生活中有一些类似的表达可以起到相同的效果，例如，"难度系数/复杂指数"和"*简单系数/*简单指数"的对比，在某种意义上揭示了不同的形容词与测量语义的兼容性特征，因而"复杂/困难"为正极形容词，而"简单/容易"为负极形容词。

第二，测量命题的选择也不是随意的，核心问题是究竟以肯定形式还是否定形式作为基本命题进行排序。(23)以肯定命题"x 来了"作为派对热闹程度的测量命题，然而在"这把椅子连小明都坐不上"这样的句子中，否定形式"这把椅子 x 坐不上"才是椅子高度的测量命题，证据有两点。首先，从直觉上来说，如果要借用"某人是否坐得上某把椅子"来评估椅子高度，那么实际上是根据"谁坐不上这把椅子"而不是"谁坐上了这把椅子"，即椅子高度与"x 坐不上这把椅子"是正相关的，x 取值越大，椅子越高。其次，命题之间的衍推关系也能说明问题。如果记"这把椅子一米二的孩子坐不上"为 p，"这把椅子一米五的孩子坐不上"为 q，此时 p∧¬q = p and only p，**即 p 在语义上并不衍推 q；而如果记"这把椅子一米二的孩子坐得上"为 p**，"这把椅子一米五的孩子坐得上"为 q，那么 p∧¬q = ∅，即 p 衍推 q。**为了保持测量命题的排序方向与肯定形容词的排序方向一致，此时适合用否定命题"这把椅子 x 坐不上"为测量命题。**

在澄清这两点之后，对四种不同类型的"连……都/也"结构进行分析。 第一类是集合成员类，参考例句(15)"连三岁的小孩都知道这个道理"。在这一案例中，**"复杂"为正极形容词，否定命题为测量命题，** 其图示如(26)所示。其中命题"三岁的小孩不知道"对应的刻度位于左侧，而"成熟的中年人不知道"对应的刻度位于右侧，$d_{复杂阈值} \in [0, d_{成熟的中年人不知道}]$，$d_{简单阈值} \in [d_{三岁的小孩不知道}, \infty)$。

(26) 道理的复杂/简单程度图示
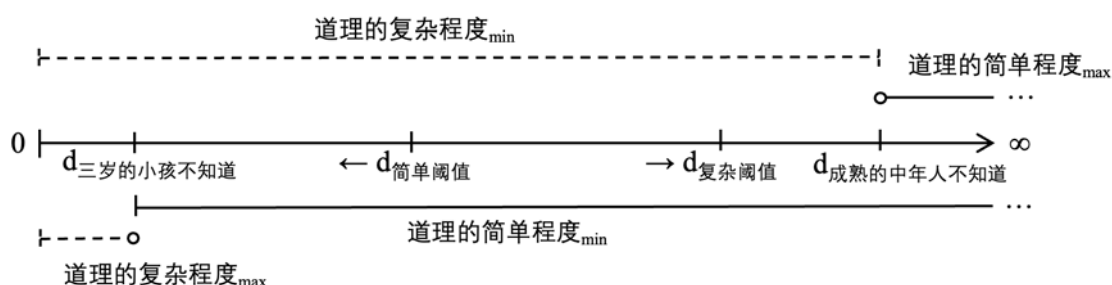
因为 $[0, d_{成熟的中年人不知道}]$ 代表的正范围包含正阈值 $d_{复杂阈值}$，所以(27a)中的否定命题（测量命题为否定形式）是恰当的语句，而 $(d_{成熟的中年人不知道}, \infty)$ 代表的负范围不包含负阈值 $d_{简单阈值}$，因此(27b)中的肯定命题（即测量命题的否定形式）是不恰当的语句；相反，因为 $[d_{三岁的小孩不知道}, \infty)$ 代表的负范围包含负阈值 $d_{简单阈值}$，所以(27c)中的肯定命题是恰当的语句，而 $[0, d_{三岁的小孩不知道})$ 代表的正范围不包含正阈值 $d_{复杂阈值}$，因此(27d)中的否定命题是不恰当的语句。

(27) a. 连成熟的中年人都不知道这个道理。
　　　b. #连成熟的中年人都知道这个道理。
　　　c. 连三岁的小孩都知道这个道理。
　　　d. #连三岁的小孩都不知道这个道理。

此处的分析暗示了命题在同一个语境的量级模型中的排序是固定的，因此其恰当性也是确定的。但语境的变化会导致比较标准的更新，进而导致语句恰当性发生改变。如果参与比较的集合是"成熟的中年人"和"历经世事的老年人"，那么"连成熟的中年人都知道这个道理，更何况是历经世事的老年人"则是合法的语句。此时直陈命题的比较对象不再是某个语境中的形容词的隐性阈值，而是后续句中"历经世事的老年人不知道"所代表的道理复杂程度。根据图示，$d_{历经世事的老年人不知道} \in [d_{成熟的中年人不知道}, \infty)$，即 $d_{历经世事的老年人不知道}$ 属于复杂量级上的负范围，因此"连成熟的中年人都知道这个道理"在道理的简单程度上能够衍推"历经世事的老年人知道这个道理"，语句的合法性程度的比较中得以实现。

第二类是整体事件类，图示见(28)。正极形容词代表主体的着急程度，测量命题为否定形式。命题"没涂指甲油出门"对应的刻度位于左侧，"没漱口出门"对应的刻度位于右侧，$d_{着急阈值} \in [0, d_{没漱口出门}]$，$d_{从容阈值} \in [d_{涂指甲油出门}, \infty)$。

(28) 主体的着急/从容程度图
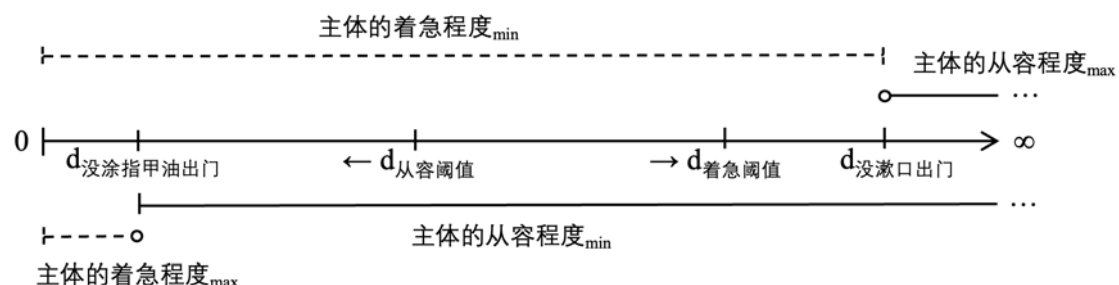
因为 $[0, d_{没漱口出门}]$ 代表的正范围包含正阈值 $d_{着急阈值}$，所以(29a)中的否定命题是恰当的语句，而$(d_{没漱口出门}, \infty)$代表的负范围不包含负阈值 $d_{从容阈值}$，因此(29b)中的肯定命题是不恰当的语句；相反，因为$[d_{没涂指甲油出门}, \infty)$ 代表的负范围包含 $d_{从容阈值}$，所以 (29c)中的肯定命题是恰当的语句，而$[0, d_{没涂指甲油出门})$所代表的正范围并不包含正阈值 $d_{着急阈值}$，因此(29d)中的否定命题是不恰当的语句。

(29) a. 连口都没漱就跑出去了。

    b. #连口都漱了才跑出去。

    c. 连指甲油都涂了才跑出去。

    d. #连指甲油都没涂就跑出去了。

在整体事件类中，基于命题对应的刻度展开分析，解释了旧有分析中认为"连"引介可比对象这一观点所无法覆盖的数据，使得更多的语言事实得到合理的说明。

第三类是典型量级类，例句(5)提出相同的量级表达有时既可以出现在肯定的环境中又可以出现在否定的环境中，例如"一分钱"，这对原有的基于可能性大小的分析造成挑战，因为完全相反的命题不可能同时满足可能性低。

观察发现，虽然在特定的情况下表示小量的量级表达能够出现在反转的语境中，但是显然它们在否定语境中的能产性更高，而在肯定语境中则受到诸多限制，例如(30a)(30c)和(30e)均可说，但(30b)(30d)和(30f)则不恰当。

(30) a. 他连一个字都没写。

    b. #他连一个字都写了。

    c. 他连一句话都没说。

d. #他连一句话都说了。

e. 他连一分钱都没赚。

f. #他连一分钱都赚了。

极小词若能够出现在肯定形式中还需要一个语义限制，即相关谓词必须涉及给予、转让等受与关系，如(31)中的"给""留给""上交"，或涉及消耗、丧失等隐性否定义，如(32)中的"花""喝""吃"。这一语义限制的本质在于保持总量的确定性，拒绝总量增长。例如，给予或转让是在物质总量确定的情况下从与者迁移到受者，即受者获得的乃与者丧失的，进而轻松转换为否定的形式，例如"他连一分钱都给了我"相当于"他连一分钱都没留给自己"；而消耗或丧失则是通过肯定的命题表达总量的减少，使之从存在状态转换为不存在状态，因此也可以轻松转换为否定的形式，例如"他连一粒米都吃了"相当于"他连一粒米都没留下"。正是隐性否定义使得"他连一分钱都给了我"较之于"他连五百万都给了我"在慷慨之余多了无私之感，使"他连一粒米都吃了"较之于"他连五碗饭都吃了"在能吃之余多了饥饿之感，因为后者通过表示数量的绝对值大而表达程度之高，而前者通过表示数量的穷尽表达程度之高。(30)中的"写""说""赚"都是创生类动词，无法转换为相应的否定形式，所以无法允准与量级相关的极小词。

(31)　a. 他连一分钱都给了我。

　　　　b. 她连一滴水都留给了孩子。

　　　　c. 他连一粒米都上交给了组织。

(32)　a. 他连一分钱都花了。

　　　　b. 他连一滴水都喝了。

　　　　c. 他连一粒米都吃了。

以给予类为例，首先讨论极小词出现在显性否定句中的情况。如(33)所示，正极形容词为与者的慷慨程度，测量命题为肯定命题。命题"给我一分钱"对应的刻度位于左侧，而"给我五百万"对应的刻度位于右侧，$d_{慷慨阈值} \in [0, d_{给我五百万}]$，$d_{吝啬阈值} \in [d_{给我一分钱}, \infty)$。

(33)　与者的慷慨/吝啬程度图示
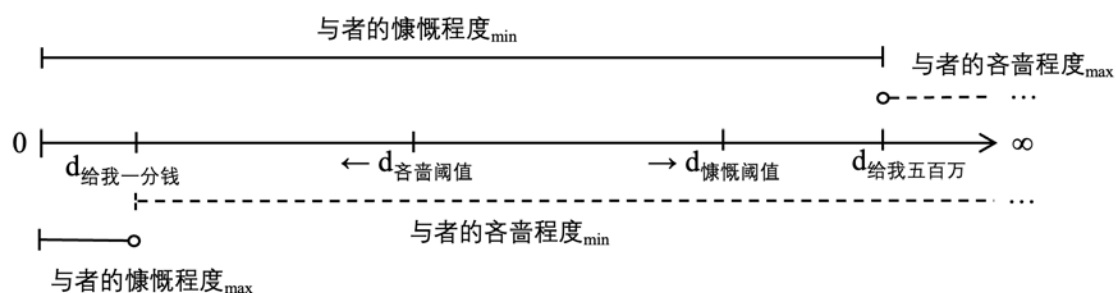
因为 $[0, d_{给我五百万}]$ 代表的正范围包含正阈值 $d_{慷慨阈值}$，所以 (34a)中的肯定命题是恰当的语句，且能在适当的情况下转换为否定句"他连五百万（都给了我，）都没留给自己"，而$(d_{给我五百万}, \infty)$代表的负范围不包含负阈值 $d_{吝啬阈值}$，因此(34b)中的否定命题是不恰当的语句；相反，因为$[d_{给我一分钱}, \infty)$ 代表的负范围包含负阈值 $d_{吝啬阈值}$，所以(34c)中的否定命题是恰当的语句，且能在适当的情况下转换为肯定句"他连一分钱（都没给我，）都留给了自己"，而$[0, d_{给我一分钱})$代表的正范围并不包含 $d_{慷慨阈值}$，因此(34d)中的肯定命题是不恰当的语句。注意，(34b)和(34d)在其他的模型中可能是可说的，例如在(35)的语义图示所代表的模型中，(34b)和(34d)分别对应于(36a)和(36c)，是可

以说的，但在(33)的图示下是不可说的。这两个语义图示触发的底层机制是不同的，加工出的语句合法性也是不同的。

(34)　a. 他连五百万都给了我(，都没留给自己)。

　　　b. #他连五百万都没给我。

　　　c. 他连一分钱都没给我(，都留给了自己)。

　　　d. #他连一分钱都给了我。

接下来讨论极小词出现在隐性否定句中的情况。如(35)所示，正极形容词为与者的自私程度，测量命题为肯定形式。命题"留给自己一分钱"对应的刻度位于左侧，而"留给自己五百万"对应的刻度位于右侧，$d_{自私阈值} \in [0，d_{留给自己五百万}]$，$d_{无私阈值} \in [d_{留给自己一分钱}，\infty)$。

(35)　与者的自私/无私程度图示
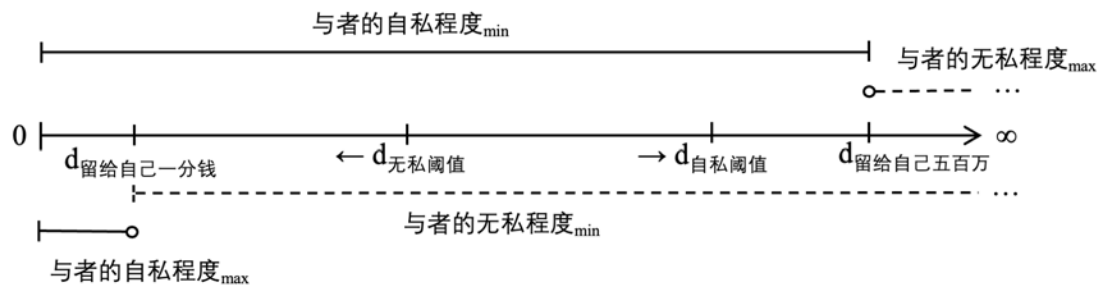
因为$[0，d_{留给自己五百万}]$代表的正范围包含正阈值$d_{自私阈值}$，所以 (36a)中的肯定命题是恰当的语句，且能在适当的情况下转换为否定句"他连五百万（都留给了自己，）都没给我"，而$(d_{留给自己五百万}，\infty)$所代表的负范围并不包含负阈值$d_{无私阈值}$，因此(36b)中的否定命题是不恰当的语句；相反，因为$[d_{留给自己一分钱}，\infty)$代表的负范围包含$d_{从容阈值}$，所以 (36c)中的否定命题是恰当的语句，且能在适当的情况下转换为肯定句"他连一分钱（都没留给自己，）都给了我"，而$[0，d_{留给自己一分钱})$代表的正范围并不包含$d_{自私阈值}$，因此(36d)中的肯定命题是不恰当的语句。注意，(36b)和(36d)在其他的模型中可能是可说的，例如在(33)的语义图示所代表的模型中，(36b)和(36d)分别对应于(34a)和(34c)。

(36)　a. 他连五百万都留给了自己(，都没给我)。

　　　b. #他连五百万都没留给自己。

　　　c. 他连一分钱都没留给自己(，都给了我)。

　　　d. #他连一分钱都留给了自己。

本文并不通过逆转量级的方式解决该问题(Xiang, 2020)，而是认为特定语义条件下可转换为否定形式是解释这一现象的主要原因，这种处理主要有两个优势。首先，在理论工具上可以保证量级的单一性，即正反义词共享同一量级，命题的排序也是固定的，所谓的"逆转量级"并不能解决问题；其次，现有方案可以解释更多的语言 X 数据，通过量级逆转解释极小词的允准问题导致的直接后果是无法解释例句(30)中恰当性的对立，因为所有的量级都能找到其逆量级，这样的话极小词应该能够在所有的肯定句中都可以得到允准，这与语言事实相反。

综上，现有模型解释了在特定情况下量级词之所以在肯定句和否定句中都可以出现的原因，并强调表示小量的量级词能够自由地出现在否定句中，但出现在肯定句中时需要额外的限制条件，即相关谓词必须表示给予、转让或消耗、丧失等可以转换为否定形式的表达。

第四类是主体对比类，是"连......都/也"结构中较为特殊的类型，由前后两小句组成，其中后句是对前句命题的否定，并由此形成主体间的对比。不同于由语境决定的形容词自带一个程度阈值，这一结构的本质上是由前小句显性地更新一个程度阈值，其中前小句所表达的命题程度达到了该阈值，而后小句表达的命题程度没有达到。

如(37)所示，此时的正向量级为办公室的亮度，其阈值由前小句更新，即 d $_{有个窗户}$。不同于前三种情况，此时前后小句代表的命题并不分列于正负阈值的两侧并得到清晰的程度高低图示，而是共享同一阈值。其中，两个小句的命题程度分别在正负范围上包含该阈值，正范围包含该阈值，则表达亮度相对高，负范围包含该阈值，则表达暗度相对高。

(37) 办公室的亮度图示
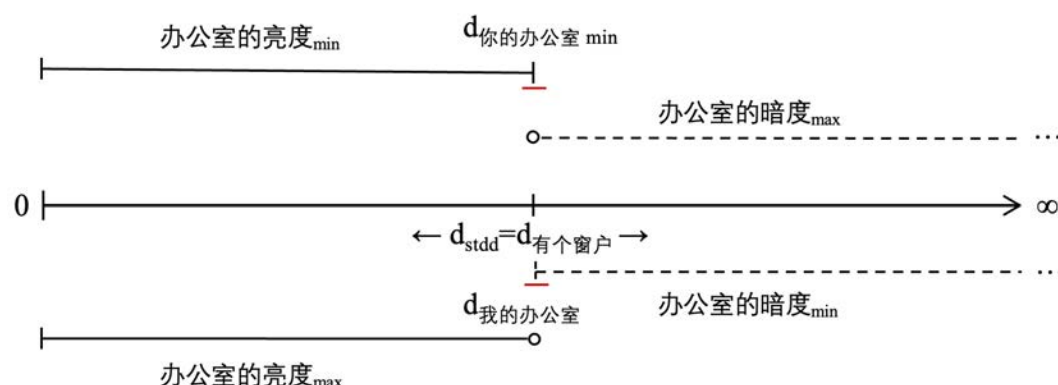
由前小句可知，此时的程度阈值 d $_{有个窗户}$，是 d $_{你的办公室}$的最小取值，因此 d $_{stdd}$ ∈ [0，d $_{你的办公室}$]必然成立，也就是说[0，d $_{你的办公室}$]代表的正范围包含阈值，即前小句"你的办公室(至少)有个窗户"表达办公室亮度相对高；相反，因为 d $_{stdd}$ ∈ [d $_{我的办公室}$,∞)，所以[d $_{我的办公室}$,∞)代表的负范围包含阈值，因此后小句"我的连窗户都没有"表示我的办公室暗度相对高。如果把前小句的"至少"改为(38b)的"至多"，句子将不合法，因为此时 d $_{有个窗户}$成为了 d $_{你的办公室}$的最大取值，不能保证 d $_{stdd}$ ∈ [0，d $_{你的办公室}$]必然成立，前后句的对比也因此不成立。

(38) a. 你的办公室(至少)有个窗户，我的连窗户都没有。
　　　b. #你的办公室至多有个窗户，我的连窗户都没有。

这一分析巧妙化解了例句(6)对基于可能性的分析造成的挑战，在此重复为(39)。(39)中"连......都/也"结构的直陈命题"不敢骂警察"并不是人们通常认知中的低可能性事件，但仍然得到了允准，因而基于可能性的分析失效。在现有的程度分析中，前小句除了断言一个事实以外，更是更新一个程度阈值 d $_{敢骂警察}$，"连......都/也"的直陈命题则对前小句加以否定以表达其在负范围上超过该阈值，因此在对应的负极形容词上程度高。因此，在主体对比类"连......都/也"结构中，前后小句往往形成对比格局。

(39) 坐牢以前还敢骂警察，出来以后连警察都不敢骂了。 (CCL)
总体而言，对程度阈值所对应的命题本身的肯定和否定，使得程度阈值必然包含于不同方向的范围中，故而在该结构中前后小句统一地形成了程度上的正负对比，因此主体对比类的"连......都/也"句完全可以通过现有模型进行分析，符合某种共同的认知机制，是非常能产的一种结构。

六、总结

本文沿袭了 von Stechow 对等级形容词的本体预设，作为本文的主要分析工具。具体而言，"连……都/也"的直陈命题通过映射函数对应到某个量级上的程度，即命题可以看作是内涵性特征的外延表现。另外，基于以该刻度为端点正/负范围与某个正/负阈值之间的包含关系，"连……都/也"暗示主体在某个方面程度高。这一理论假设的直接证据是"连……都/也"结构普遍地出现在等级形容词的后续句或其补语成分中。

基于刻度是基于孤点的分析，然而汉语结构中的全称量化算子"都"或添加性算子"也"提示了相关分析应当是基于复数而非孤点。而在 von Stechow 的本体传统中，与语言学意义上的等级形容词有关的多点结构即由连续的刻度点组合而成的范围，分为正范围与负范围，分别对应区间 $<_A 0, n>$ 和区间 $<_A n, \infty>$。因此，"连……都/也"体现为正负范围与正负阈值之间的包含关系。若 $d_{stdd}^+ \in <_A 0, n>$，则表达正极形容词程度高；若 $d_{stdd}^- \in <_A n, \infty>$，则表达负极形容词程度高。

上述分析可以回应本文提出的一系列问题。首先，在本文的分析中，"连……都/也"结构量化的对象是可以映射到量级刻度的命题而不仅仅是"连"标记的成分(一般是个体)，这就解释了"连"后成分找不到选项命题的情况，如例句(16)。其次，这一分析能够消解例句(2a)所带来的的挑战，由于"连……都/也"结构中的量化是基于与程度关联的命题，因此并不一定涉及个体的添加问题。换而言之，"连电视机都砸了"并不预设除电视机以外的其他东西也被砸了，而只是断言主体的生气程度达到了"砸电视机"这一命题所对应的生气程度，且预设存在可及世界，使得比当前生气程度更低的程度对应的命题成立，因此未必要求"砸电视机"的选项命题必须在当前世界成立。"连……都/也"的本质在于通过表达一个当前世界成立的命题，将内涵性的程度转换为外延性的具有真值的命题。

基于量级的分析相对于基于可能性的分析也有其优势。首先，例句(3)提出"连……都/也"关联的命题并不一定是最不可能发生的，现有的分析则不要求该刻度必须位于量级的端点，而是要求其所在的区间包含某个程度阈值即可。其次，例句(4)的关联命题不存在天然的可能性高低之说，但仍然可以指向某个与语境有关的量级，如"富裕程度"。

另外，第五部分证明了现有分析可以覆盖四种类型的"连……都/也"结构，包括胡亚(2018)新提出的主体对比结构。原有的基于可能性的分析无法覆盖这一部分的语言事实，因为例句(6)中"不敢骂警察"并不是通常认知中的低可能性事件。现有的分析则认为前小句的信息更新一个程度阈值，而前后小句的命题所对应的刻度在不同方向的范围上包含这一阈值，使其形成对比。

采用连续的范围而非孤立的刻度代表"连……都/也"结构所表达的语义，有以下几点优势：首先，基于范围的分析能够更好地解释主体对比类数据，即范围与程度阈值本身之间的包含关系决定其在某个量级上的程度高低；其次，范围的方向性也解释了肯定命题和否定命题的程度对比，这正是因为它们在不同方向的范围上包含程度阈值，而不需要再引入相反的量级；解释第三，采用范围而非刻度能够更好地某些命题之间的衍推关系，例如"他拿了冠军"并不衍推"他拿了亚军"，此时这是两个独立的互不相关的命题，而"他连冠军都拿得到"衍推"他连亚军都拿得到"，因为"他拿得到冠军"所对应的实力在范围上包含"他拿得到亚军"所对应的实力，如果此时将各自对应的实力分析为刻度点而非范围，那么这种包含关系就无法得到体现，相应的衍推关系也无法证明；第四，有文献提到可能性与衍推之间的关系(Crnič 2011, Xiang 2020)，如例(40)所示，但实际上不论是可能性还是衍推关系，都是量级上范围的包含关系的结果。大范围意味更低的可能性，而小范围意味着更高的可能性，在事物发展逻辑上，只有先达到一个小的范围才能达到一个更大的范围，因此小范围是更容易达到的、可能性更高的；在量级上，大范围覆盖更多

的刻度点，传递更多的信息量，小范围覆盖更少的刻度点，传递更少的信息量，且大范围包含小范围，因此代表大范围的命题衍推代表小范围的命题。由此可以得出，可能性更低的命题衍推可能性更高的命题。

(40) Entailment and Scalarity (Crnič 2011: 15)

If p ⊆ q, then p ≤$_{likely}$ q.

(If a proposition p entails a proposition q, then p is at most as likely as q.)

衍推与量级 (Crnič 2011: 15)

如果 p ⊆ q，那么 p ≤$_{likely}$ q。

(如果命题 p 衍推命题 q，那么 p 的可能性小于等于 q。)

值得注意的是，要分清在向上衍推(Upward Entailing, UE)语境中集合之间的包含关系和在量级基础上的范围包含关系。(41)和(42)是在普通的向上衍推语境中的集合包含关系以及命题衍推关系，一般认为否定极项出现在向下衍推(Downward Entaling, DE)的语境中(参见 Fauconnier 1975, 1978; Ladusaw 1979; 陈莉、潘海华 2020a, 2020b 等)。在向上衍推语境中，汉语中的否定极项(Negative Polarity Items, NPIs)"任何""什么"不能得到允准，因此(41c)不合法。而(43)和(44)是基于量级的分析，虽然在表层上(43a)到(43b)的衍推是将"大房子"替换为"房子"，满足向上衍推的定义，但实际上[0, d $_{买了房子}$] ⊆[0, d $_{买了大房子}$]，即"房子"所代表的命题在范围上包含于"大房子"所代表的命题，本质是一种向下衍推，此时(43c)满足向下衍推的条件，能够允准汉语极项极小词"一滴水"。该分析与陈莉、潘海华(2020a)提出的基于逻辑层面的向下衍推(Downward Entailments at the Logical Form, LF-DE)不谋而合。究其本质，(41)中的例句是基于存在量化的向上衍推，而(43)是以"都"为标志的基于全称量化的向下衍推(参见陈莉、潘海华 2020b)。本文的分析亦能够更好地解释汉语"连……都/也"结构中的极项允准现象。

(41) a. 他买了大房子。

b. 他买了房子。

大房子 ⊆ 房子

a ➡ b

c. *他买了任何/什么房子。

(42) 集合衍推关系的图示
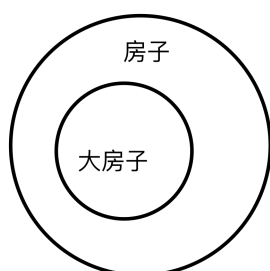
(43) a. 他连大房子都买了。

b. 他连房子都买了。

[0, d $_{买了房子}$]⊆[0, d $_{买了大房子}$]

a ➡ b

c. 他连一滴水都买来了。

(44) 主体的富裕程度图示

0 ———————————————————————————————————— ∞
　　　　　　　　　　　d_{买了房子}　　　d_{买了大房子}
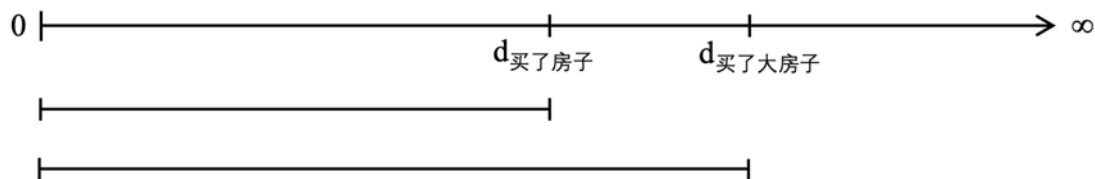
在语言事实上，本文对"连……都/也"的分析解决了旧有方案的遗留问题，新的理论模型能够更系统全面地解释更多的语言事实；在理论贡献上，首先，现有分析能够组合性地解释"连""都""也"各自的贡献，即"连"标记当前命题所对应的刻度是某个范围的端点，"都"表达全称量化，即断言以当前命题对应的刻度为端点到某个方向的所有点，"也"表达添加义，预设以当前命题对应的刻度为端点到某个方向的所有点(但不包含当前端点)；其次，该分析暗示了在普通话中，表达程度在本体上必须具有单独的类型，即刻度 d，因为"连……都/也"是基于刻度（所对应的命题）的添加而非基于个体或事件，具体语义表达式参考(24)(25)；最后，本文的分析能够更好地反应命题之间的衍推关系，并与普遍的极项理论相互印证。

跳出形式语义学的框架，从认知的层面一窥"连……都/也"结构这一语言现实。如果可以通过显性的手段直接表达某一命题，例如通过语言中的形容词来表达程度，那么为什么要大费周章地通过"连……都/也"结构进行相关的表征？最直接的原因来自于某些程度的内涵性，即我们无法通过具体的方式、单位或者工具对某一主体的某一性质进行测量，例如"一个人的生气程度"，此时，借助主体的外在表现却可以反推其生气的程度并将之具体化，例如"他砸了电视机"。而第二点，如同袁毓林(2022)引用 Pinker(1997)所述，形容词是反应人类感知、情绪和意识的最基本的心理状态，然而对于这些人类的认知是极为有限的，那么对应的形容词词库自然也是有限的，而虽然判断或总结是需要更高思维能力的更为间接的认知活动，但描述是直接的，通过描述一个当下发生的事件或陈述一个已然为事实的命题，来转喻说话人真实想要表达的对主体在某个维度上达到了某个程度的判断，是非常自然的认知手段。结合这两点，鉴于表达需求的当下性和求真性，人类语言发展出了以"连……都/也"结构转喻程度之深的语言手段。

参考文献

陈莉 潘海华 2020a 《极项理论中衍推关系的评估层面》，《中国语文》第 2 期。

陈莉 潘海华 2020 《单调性与"都"的极项允准功能》，《外国语(上海外国语大学学报)》第 3 期。

邓川林 2012 《"总"字句的量级用法》，《世界汉语教学》第 1 期。

邓川林 2023 《对比话题理论与"连"字句研究》，《语言教学与研究》第 6 期。

郭锐 2006 《衍推与否定》，《世界汉语教学》第 2 期。

胡亚 2018 《"连 XP 都/也 VP"构式的分类层级和原型效应》，《语言教学与研究》第 4 期。

蒋严 1998 《语用推理与"都"的句法语义特征》，《现代外语》第 1 期。

刘丹青 2002 《作为典型构式句的非典型"连"字句》，《语言教学与研究》第 4 期。

潘海华 2006 《焦点、三分结构与汉语"都"的语义解释》，《语法研究与探索》第 13 期。

邵敬敏 2008 《"连 A 也/都 B"框式结构及其框式化特点》，《语言科学》第 4 期。

袁毓林 2022 《形容词的极性程度意义及其完句限制条件》，《中国语文》第 2 期。

周小兵 1990 《汉语"连"字句》，《中国语文》第 4 期。

Anscombre, J., & Ducrot, O. (1983). *L'argumentation dans la langue. Liège*, Bruxelles: Pierre Mardaga.

Chierchia, G. (2013). *Logic in grammar: Polarity, free choice, and intervention*. Oxford University Press.

Cresswell, M. J. (1976). The semantics of degree. In Barbara H. Partee (ed.), *Montague Grammar*, 261-292. New York: Academic Press.

Crnič, Luka. (2011). Getting *Even*. Doctoral Dissertation, Massachusetts Institute of Technology. Cambridge, MA.

Fauconnier, G. (1975). Polarity and the scale principle. *Proceedings of Chicago Linguistics Society*, 11, 188-199.

Fauconnier，G. (1978). Implication reversal in a natural language. In F. Guenthner and S. Schmidt (eds.) *Formal Semantics and Pragmatics for Natural Languages*, 289-301. Dordrecht: Reidel.

Greenberg, Y. (2018). A revised, gradability-based semantics for even. *Natural Language Semantics*, 26(1), 51-83.

Karttunen, L., & Peters, S. (1979). Conventional Implicature. In *Presupposition* (pp. 1-56). Brill.

Kay, P. (1990). Even. *Linguistics and Philosophy* 13: 59–111.

Kennedy, C. (1997). Comparison and polar opposition. In Aaron Lawson (ed.), *Proceedings of SALT 7*, 240-257.

Ladusaw, W. (1979). *Polarity Sensitivity as Inherent Scope Relations*. Doctoral Dissertation, University of Texas at Austin.

Lahiri, U. (1998). Focus and negative polarity in Hindi. *Natural Language Semantics*, 6(1), 57-123.

Liu, M. (2018). Varieties of Alternatives: Focus Particles and Wh-Expressions in Mandarin. Beijing: Peking University Press and Springer.

Liu, M. (2021). A pragmatic explanation of the mei-dou co-occurrence in Mandarin. *Journal of East Asian Linguistics*, 30, 277-316.

Meier, C. (2003). The meaning of too, enough, and so... that. *Natural Language Semantics*, 11(1), 69-107.

Pinker, S. (2007). How the Mind Works. New York: W. W. Norton & Company. 《心智探奇：人类心智的起源与进化》，郝耀伟译，浙江人民出版社，2016 年。

Rooth, M. (1992). A theory of focus interpretation. *Natural Language Semantics*, 1(1), 75-116.

Rullmann, H. (2007). What Does *Even* Even Mean? Ms., University of British Columbia.

Seuren, P. A. (1984). The comparative revisited, *Journal of Semantics*, 3, 109–141.

von Stechow, A. (1984a). Comparing semantic theories of comparison, *Journal of Semantics*, 3, 1–77.

von Stechow, A. (1984b). My reaction to Cresswell's, Hellan's, Hoeksema's and Seuren's comments, *Journal of Semantics* 3, 183–199.

Xiang, Y. (2016). Mandarin particle dou: A pre-exhaustification exhaustifier. In Christopher Piñón, ed., *Empirical Issues in Syntax and Semantics*, 11. Paris, CSSP. Pp. 275-304.

Xiang, Y. (2020). Function alternations of the Mandarin particle dou: Distributor, free choice licensor, and 'even'. *Journal of Semantics*, 37(2), 171-217.

Zhang, L. (2022). The presupposition of *even*. *Proceedings of SALT 32*, 249-269.

论表示肯定偏向的语气词"吧"和句末"不是"的源流关系
——兼议"罢咱/不咋"的性质

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提要　普通话语气词"吧"可用于祈使劝令（"吧₁"）或揣测询问（"吧₂"）；本文认为"吧₁""吧₂"不同源，"吧₁"来自劝止义"罢"，"吧₂"则来自句末"不是"合音。文章首先探讨以往的单源论或多源论思路尚存的问题，辅以问句偏向理论分析"吧₂"和"不是"的肯定偏向。文章指出，近代汉语"（是......）不是？"问句经历了从极性选择问句到偏向极性问句的演变，"不是"虚化为附属标记，最终合音为具有肯定偏向性质的"吧₂"。形义对应上，共现词项及语境分布情况反映了"吧₂"和"不是"的功能一致性；合音理据上，句末"是"字轻读而韵母 a 化，在满汉合璧文献等早期北京话材料以及汉语方言中的"罢咱/罢则/不咱/不则/吧咋"等句末助词是"不是"弱读合音为"吧₂"的过渡音形。可见，"吧₁""吧₂"同形的本质是偶然同音，二者不存在语义演变关系。

关键词　吧　不是　肯定偏向　极性问句　罢咱/罢则/不咱/不则/吧咋

1. 引言

本文讨论普通话语气词"吧"的来源问题。语气词"吧"是多义虚词，需要明确各项功能之间是否有演变关系，以及字形"吧"是否记录了同音词。

目前的争议是，用于祈使劝令的"吧"（记作"吧₁"）和用于揣测询问的"吧"（记作"吧₂"）的来源是否相同。摘取《现代汉语八百词》的释义如下：

(1)　吧₁：用在祈使句末尾，表示命令、请求、催促、建议等。
　　　　你好好儿想想～｜你到底同意不同意～
(2)　吧₂：用在问句末尾，往往不是单纯提问而有揣测的语气。
　　　　这座房子是新盖的～？｜他大概已经走了～？　（吕叔湘主编，1999：56-57）

"吧₂"还可以用于陈述句末尾，仍表示揣测，只是提问意味消减：

(3)　吧₂：用在陈述句末，使语气变得不十分确定。（《现代汉语词典》第 7 版，22 页）
　　　　他是上海人～｜你明天能见到他～｜小张大概不会来了～

目前的共识是，"吧₁"来自近代汉语劝止义"罢"（太田辰夫，1958/2003：334；孙锡信，1999：163 等），由此表示命令、请求、催促、建议等言语行为。

目前的分歧是，"吧₂"是"吧₁（罢）"的功能扩展还是另有源头。

（一）同源论者认为，"吧₁""吧₂"有功能扩展关系，并试图给出统一的语义解释。例如，太田辰夫（1958/2003：334）认为，"吧₂"是由于"罢"的决定语气变得委婉而表推测；胡明扬（1981：416）将"吧"的功能统一为"赋予说话内容以不肯定口气"。[57]但是，同源论面临一些不易解释的问题。

第一，历时发展上，"吧₁"宋元之际萌芽，"吧₂"清代始见（孙锡信，1999；李崇兴，2008 等），即使两者有语义演变关系，也只能是"祈使 > 疑问"。

第二，语义演变上，"祈使 > 疑问"的路径很难说通。"罢（吧₁）"本为劝阻义，意思近于"适可而止、不再过多考虑"等，为何语气委婉弱化就能变为用于揣测询问的"罢（吧₂）"，句类转换如何实现，解释起来很困难。

第三，语法分布上，"罢（吧₁）"在元明时期多和动态谓词（如"去"）或"还是、不如"等表

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[57] 徐晶凝（2003）还认为，"吧"的演变是"疑问＞祈使"的情态语用化过程。尽管徐晶凝（2022：130）不再坚持这一思路，但也主张两类"吧"的内在语义关联是"不确定、求确认"而可统一。

明抉择行为的词项共现；同形的"罢（吧₂）"在清代出现后则基本用于静态判断句，跟"别是、大概"等揣测表达共现。两类"吧"分布迥异，难以搭建重新分析的过渡语境。

第四，语义功能上，"吧₁""吧₂"很难统一为"不确定/不肯定"。例如：

(4) 太离谱了吧₂？还是搞点现实一点的研究吧₁！（《人民日报》2004 年 6 月）

例（4）"吧₂"确实有"不完全肯定"意味，但"吧₁"并未表明言者犹豫，言者对希望听者做什么是十分确定的，这植根于劝止义"罢"的"如此即可"义。

可见，"吧₁"和"吧₂"的形义关联是假象，二者没有语义演变关系。

（二）多源论者认为，"吧₁"和"吧₂"是同音词。赵元任（1926：894、1952：41、1968：807）一贯主张，是非问句中写作"罢/吧"的助词是"不啊"合音，吕叔湘（1956：264）附议，朱德熙（1982：211）亦区分用于祈使和用于疑问的两类"吧"。征引赵元任先生的"吧₂"语例如下：

(5) a. 你去罢？｜你喝酒罢？｜他聪明罢？（赵元任，1926：893-894）
    b. 你去吧？｜你知道吧？｜我告送过你了吧？（Chao, 1968: 808）

遗憾的是，其语例只是单拎短句而未还原完整语境，未给出更细致的语义说明。

本文赞同分立两类来源的"吧"，但对"吧₂"源自"不啊"合音存疑：

第一，形式上，"不啊"结构早期少见。Chao（1968: 807）已指出，现代汉语共同语不说"你去不啊？"，类似形式多见于方言；抛却辅助合音的"啊"，近代汉语中"VP 不？"问句也不多见（参见张敏，1990；魏培泉，2007 等）。

第二，意义上，"VP 不？"跟"VP 吧₂？"的功能不对应。"VP 吧₂？"是言者已有肯定信念，希望确认信息真假（详见下文）；而"VP 不？"或"VP 不 VP？"基本是中性问句，言者对回答没有倾向。由此，"VP 吧₂？"能用"是/对/不是"等作答（参见叶述鋆，2021：29），而"VP 不（VP）？"能和"到底/究竟"共现（参见 Law, 2008 等），两类问句的功能和分布有较大区别：

(6) 等掏完了，我说："｛用笤帚扫扫吧₂/#用不用笤帚扫扫｝？"他回答："对，应该好好扫一遍！"（《人民日报》1965 年 4 月）
(7) 梅子跑过来悄悄的问道："明日去学校里参观，你同去么？"苏仲武道："你去不去？"梅子偏着头寻思了一会道："｛我去/#是的/#对｝。"（向恺然《留东外史》）
(8) "到底｛要紧不/*要紧吧₂｝？""不要紧！"（《人民日报》1949 年 6 月）
(9) 那么，小说究竟｛算艺术品不算/*算艺术品吧₂｝？（老舍《文学概论讲义》）

那么，"吧₂"问句对回答的肯定倾向是从何而来的呢？我们发现，"吧₂"和近代汉语句末"不是"的分布及功能相当一致。例如：

(10) 湘云笑道："幸而是个玩的东西，还是这么慌张。"说着，将手一撒，笑道："你瞧瞧，是这个不是？"宝玉一见，由不得欢喜非常。（《红楼梦》程乙本第 36 回）
(11) 宛英神色仓惶，关上门，就拿出那袋稿子交给姚宓说："你要的是这个吧₂？"姚宓点看了一下，喜出望外。（杨绛《洗澡》）

例（10）"不是"和例（11）"吧₂"都表达言者的肯定倾向，即"是这个"。

对此，本文提出语气词"吧₂"源自近代汉语句末"不是"合音的看法。跟以往的单源论或多源论思路相比，该观点可以解释"吧₂"表肯定偏向的来源。

文章其余章节的安排如下：第 2 节先简要介绍动态语义学的问句偏向理论，借此分析"吧₂"的肯定偏向以及句末"不是"从极性选择问句到偏向极性问句的过程；第 3 节列举"吧₂"和"不是"对应的形义证据；第 4 节给出从"吧₂"到"不是"的合音理据，重点论证满汉合璧文献等早期

北京话材料中的"罢咱/罢则/吧咋"等词是"不是"弱读的过渡音形；第 5 节总结全文。

2. 从问句偏向理论看语气词"吧₂"和句末"不是"的肯定偏向
2.1 问句偏向理论

　　极性问句（Polar Questions）是对命题真假的提问，言者关心的是对该命题的肯定或否定。形式上，极性问句主要用疑问助词、语调、语序和动词形态等来体现（Dryer, 2013）；"极性问句"在汉语研究中对应"是非问句"、"反复问句"，汉语的提问策略则包括"吗"问句、"吧"问句、A-not-A 问句、语调问句等（参见 Luo, 2016；叶述晁，2021 等）。例如：

　　（12）今天下雨吗？｜今天下雨吧₂？｜今天下不下雨？｜今天下雨⤴？

　　下文关注的"吧₂"问句和"……不是？"问句，既涉及极性问句，又涉及选择问句。选项语义学（Alternative Semantics）和动态语义学（Dynamic Semantics）及问句偏向（question bias）理论对极性问句和选择问句的语义关联的阐释颇为深入（参看袁梦溪、徐贝贝（2022）的评介），是本文分析的理论基础。

　　具体而言，Hamblin（1973）认为，疑问句的语义可看作是所有可能答案的选项集。其中，极性问句的语义是命题集 $\{p, \neg p\}$，如"*Is it raining?*"的回答是在肯定项 p"*It is raining*"或否定项 $\neg p$"*It is not raining*"中选择。但是，Hamblin（1973）的处理中，p 和 $\neg p$ 的地位平等，无法反映极性问句和选择问句的差异（Bolinger, 1978；van Rooy & ŠafáSrová, 2003 等）以及问句偏向，即不同问句形式及其语义是否涉及言者对命题真假的信念倾向。以汉语为例：

　　（13）问：你喜欢不喜欢语用学？答：#对 / #没错/#是的/喜欢。　[中性语境]
　　（14）问：你是不是喜欢语用学？答：对 / 没错/是的/#喜欢。　[肯定偏向]
　　（15）你是喜欢语用学还是不喜欢语用学？　　　　　　[中性选择问句]

　　（13）（14）两类极性问句（引自 Ye, 2020: 356）以及（15）的选择问句，其可能答案选项集都可表示为 $\{p, \neg p\}$。但是，Ye（2020）指出，（13）的 A-not-A 问句用于中性语境，言者对听者是否喜欢语用学是没有倾向的，听者不能用确证应答词来回答；（14）的"是不是"问句则表明言者对听者是否喜欢语用学有肯定倾向，可以用确证应答词。（15）的选择问句则与（13）一样是中性问句。因此，"是不是"问句具有肯定偏向（positive bias）；这类具有偏向性质的问句则被称作"偏向极性问句"（biased polar questions；参见 Romero（2024）的评述）。下文讨论的"吧₂"问句，也属于偏向极性问句。

　　再来看跟极性问句密切相关的一类选择问句，以汉语和英语为例：

　　（16）a. 李逵问老儿道："这个是夺你女儿的不是？"（《水浒传》第 73 回）
　　　　　b. *Are you coming **or not**?*（你来还是不来？）

在汉语"是……不是？"型选择问句和英语 *or not* 型选择问句中，系词"是"和 *be* 形成了跟是非判断相关的问句，而"不是"和 *or not* 都充任选择问句的简省式否定项，恰好分别作为"是"和 *be* 的否定式，造成了肯否形式选择问句。

　　本文将例（16）这类选择问句称为"极性选择问句"（polar alternative questions），即选择问句的两个并列选项分别是同一命题的肯定项和否定项，相当于对命题真假进行选择判断。在这一点上，极性选择问句和跟极性问句相通，都包含两个极性相反的选项（Karttunen, 1977: 15、Harris, 1978: 3）。

　　对极性选择问句来说，至少可以发展出两种后续功能。一是形成"逼问效应（cornering effect）"——逼迫对方选出答案（参看 Biezma, 2009 等）；二是极性选择问句简省式否定项的弱化，继而发展为偏向极性问句，即原本提问的是对 p 和 $\neg p$ 的选择，逐渐变为仅针对 p 的真假进行判断的确认，言者向听者表明 p 倾向于为真。本文讨论的句末"不是"即为第二类，"不

是"经历了由选择问句否定项发展为确认标记（史金生，1997 等）的过程，如：

> （17）您瞧不起我们不是？我们是黄连擦粉——苦捣扯。（蔡友梅《新鲜滋味》）

上例"不是"不代指否定项，而表明言者认为对方瞧不起自己的肯定偏向。

基于问句偏向理论，下面讨论"吧$_2$"和句末"不是"在问句中的功能。

2.2 语气词"吧$_2$"的肯定偏向

吕叔湘（1956）、陆俭明（1984）曾指出，"吧$_2$"问句的言者信念似在"信疑之间"。根据前人研究，"吧$_2$"在实际互动中是信大于疑，并体现为"期许听者赞同"（邵敬敏，2014：48）、"言者尝试性的承诺"（叶述晃，2024：45）、"求同示证"（汪敏锋，2022：84-90）等可能。

问句里的"吧$_2$"跟"确信度"（credibility degree，$0 \leq C \leq 1$；郭锐，2000）有关。本文借鉴确信度分类来考察"吧$_2$"。结果显示，"吧$_2$"表达"高确信度"和"全确信度"，即"吧$_2$"表明言者倾向于相信"吧$_2$"的前接命题内容（prejacent）；"吧$_2$"一般无中性倾向，也未对前接命题内容持否定信念。

首先，"吧$_2$"可用于表判断的测度问句，体现高确信度，多伴随句末降调（↘），常常和"大概、可能、好像、总（该）是"等或然表达共现。例如：

> （18）[她]只好<u>不确定</u>地问道："<u>那个</u>，你们是夫妻吧$_2$↘？"（王苏辛《白夜照相馆》）
> （19）现在都剪了发，又便利又好看，这<u>总是</u>一个证据吧$_2$↘？（张恨水《金粉世家》）
> （20）妈妈，父亲还没有回来吧$_2$↘？他的胡须<u>想来</u>长得更深更白了，牙齿<u>大概</u>都脱了吧$_2$↘？他还记念我不？（谢冰莹《望断天涯儿不归》）

此时言者想向听者确认自身推论是否为真。有意思的是，例（20）前两句表明言者肯定倾向，末句则对父亲是否仍记念无肯否倾向，改用"VP 不"中性问句。

其次，"吧$_2$"可用于无须言者回答的问句，体现全确信度，多伴随句末升调（↗），往往和"瞧、你看、又是、怎么样"等示证或诘问表达共现。例如：

> （21）<u>瞧</u>，今天果真下雨了吧$_2$↗？哎，真是……（《人民日报》1963 年 10 月）
> （22）<u>怎么样</u>？聪明吧$_2$↗？能听懂英语，多了不起！（《人民日报》2008 年 10 月）
> （23）哟，小姐哭哪！<u>又是</u>把头发烫坏了吧$_2$↗？（老舍《残雾》）

此时语境证据充分，句末升调问句传递强烈的肯定信念（Gunlogson，2003），有说服或纠正的"明知故问"效果（邵敬敏，2014：51；徐晶凝，2022：129）。

"吧$_2$"也可用于附加问句，体现言者对前附成分的高确信度或全确信度：

> （24）逃兵，是吧$_2$？有些块现大洋，想在北京藏起来，是吧$_2$？（老舍《茶馆》）
> （25）不要抵赖，一定有什么事使您不安，对吧$_2$！（《人民日报》1958 年 4 月）

但是，"吧$_2$"不用于"中确信度"、"低确信度"和"零确信度"语境，因此不能跟对应的"吗"问句进行替换（原例句转引自郭锐，2000：14）：

> （26）<中确信度>如今北京市民们见了面，倘是一段时间没遇上过，常问的是："家里买彩电了｛吗/*吧$_2$｝？"（刘心武《公共汽车咏叹调》）
> （27）<低确信度>我只想知道这要是个男歌星，你还会那么责任心十足｛吗/*吧$_2$｝？（《编辑部的故事·歌星双双》）
> （28）<零确信度>翠花的事，他抓得还不够｛吗/*吧$_2$｝！（陈建功等《皇城根》）

"中确信度"是中性问句语境，"低确信度"和"零确信度"是否定性反问语境。这表明"吧$_2$"不能否

定前接命题内容，不用于中性问句或否定性反问句。

总之，"*p* 吧₂？"对命题 *p* 真假进行提问，言者希望听者也能够肯定和认可 *p*（即回答"是 *p*"），所以"*p* 吧₂？"是偏向极性问句，具有肯定偏向。

除了问句，"吧₂"还可用于存疑叙述句（Chao, 1968: 808）或应答语，多伴随句末降调（）。此时言者是向听者提供信息而非求取信息。例如：

(29) 你看到过妖精在草地上跳舞吗？<u>肯定没有吧₂</u>。（1995 年《读者》）

(30) 今天还不至于冷到十度以下，<u>没必要穿白狐皮吧₂</u>！（岑凯伦《蜜糖儿》）

(31) "现在工作定了没？""<u>算是定了吧₂</u>，在北京的光线传媒。"（网络语料）

在"吧₂"所在的陈述句中，言者也倾向于相信该信息为真；所谓存疑意味，是因为言者不清楚对方的认识状态，这和问句中"吧₂"的求取确认意味一致。

因此，统摄"吧₂"的功能，关键在于肯定偏向性质。用于问句时，"吧₂"在具体语境中肯定偏向程度有别，比如示证诘问语境要比揣测判断语境的偏信程度更高；用于陈述句时，"吧₂"字句则已经是在表达一个明确的肯定判断了。

2.3 近代汉语句末"不是"：从极性选择问句到偏向极性问句

本文认为，"吧₂"的肯定偏向跟其来源"不是"相关，下面考察由句末"不是"组成的"（是）……不是？"问句的发展过程。

近代汉语句末"不是"原本用于极性选择问句，基本形式为"是……不是？"，否定项由"不是"代指。"是……不是？"问句宋元少见，明清广泛使用（史金生，1997；傅惠钧，2011；王世凯、张亮，2017 等）。例如：

(32) 听的今年水贼广，是那不是？（《朴通事》，引自傅惠钧，2011：370）

(33) 那妇人不懂得甚么叫是蓐妇，左右说："老爷问你是收生婆不是？"（《醒世姻缘传》第 20 回）

在选择问句中，言者对各个选项一般没有偏向。但是，明清时期，"是……不是？"问句逐渐由极性选择问句发展为偏向极性问句，言者倾向于认为肯定项为真，具有揣测确认功能。在演变的过渡语境中，问句虽仍为"是……不是？"的双选项形式，但上下文表明了言者偏向于选择问句的肯定项，例如：

(34) <u>贼奴才</u>，这个柑子是你偷吃了不是？（《金瓶梅词话》第 73 回）

(35) [燕青]向身边取出假公文，<u>劈面丢将去道</u>："你看，这是开封府公文不是？"那监门官听得，喝道："<u>既是开封府公文</u>，只管问他怎地？"（《水浒传》第 81 回）

例（34）潘金莲口中"贼奴才"的称呼，对应肯定项"是你偷吃"；例（35）燕青"取出公文"的自信动作骗取监门官的认同，对应肯定项"是开封府公文"。

"是"隐去后，"不是？"问句最终形成偏向极性问句，体现肯定偏向：

(36) 那个吃你的哩！能值几个钱？虚多实少的，在这里不是？（《西游记》第 39 回）

(37) 公公白瞧，他这一开脸，瞧着也还不算黑不是？（《儿女英雄传》第 40 回）

(38) 陈姐夫，楼上没人，你上来不是？（《金瓶梅词话》第 28 回）

例（36）（37）都反映了言者对自身认识的肯定信念，带有责备、反问意味；例（38）则说明"不是"还可用于建议祈使语境，不过实际上仍带有很强的反问色彩。在偏向极性问句中，"不是"已变为附属标记，只反映言者肯定偏向。

"是……不是？"问句由极性选择问句发展为偏向极性问句的原因在于，"是……不是？"问句的肯定项是完整形式，由"不是"代指的否定项是简省形式；完整形式比简省形式更容易突显，

肯定项直接传达言者信念而逐渐可以表示断言陈述，"不是"所代表的否定项的地位逐渐边缘化。

由上可知，18 世纪以前的句末"不是"已有肯定偏向。"是……不是？"从极性选择问句到偏向极性问句的转变，使"是"变为"强调标记"（王世凯、张亮，2017）、"不是"变为"确认标记"（史金生，1997）。其中，"是"可以重读，"不是"可以省略。这为句末"不是"虚化提供了句法语义条件。

3. 语气词"吧₂"和近代汉语句末"不是"的对应关系

3.1 语气词"吧₁"和"吧₂"的字形混同

要解释"吧₂"的肯定偏向，须观照历时来源。"吧₂"至迟在 18 世纪中期就已出现，较早的语例见于满汉合璧文献《清文启蒙》（1730 年）、《清话问答四十条》（1740 年），字形为｛罢｝（记作"罢₂"）。例如：

> （39） 《清文启蒙》：想必是往我们家来了罢₂。（5b1）｜忽然又要那们着，好没个定准罢₂。（7a2）｜阿哥你太心多，特仔细了罢₂。（19a6）
>
> （40） 《清话问答四十条》：这是故意的说玩话罢₂？（21b5-22a1）｜想是作难罢₂？（29a2）｜想必常打围罢₂？（52b4-5）

清代白话小说中，"罢₂"较早出现于 1754 年甲戌本《红楼梦》，例如：

> （41） 宝玉听了，笑道："这是怎么个原故？怎么林姑娘的到不同我的一样，到是宝姐姐的同我一样？<u>别是</u>传错了罢₂？"（《红楼梦》甲戌本第 28 回）

从清代白话小说如《镜花缘》《儿女英雄传》到早期北京话教材如《正音咀华》《语言自迩集》，直至清末民初小说等，"吧₂"仍多写为｛罢｝。例如：

> （42） <u>莫是</u>这弦也有嘴眼罢₂？（《镜花缘》第 73 回）｜<u>大约</u>也还配得上妹妹你罢₂？（《儿女英雄传》第 9 回）｜<u>只怕</u>这个话有点儿不对罢₂？（1886《语言自迩集》）｜不是姑子，<u>是</u>和尚、道士罢₂？（《官场现形记》第 24 回）

据考察，"吧₂"早期多跟"别是""大约""只怕""未免"等或然表达共现，或形成"是+NP/VP+吧₂？""都 VP 了吧₂？""还没 VP 吧₂？"等断言格式，主要用于问句。可见，"吧₂"在使用初期，已基本搭配静态谓语或断言表达，并反映言者肯定偏向。字形上，尽管"吧"这一写法在 18 世纪已经出现（孙锡信，1999），但自清末起才逐渐固定为"吧"。

清代中叶，"吧₁"也基本写作｛罢｝，"吧₁/₂"字形混同为｛罢/吧｝，却并无语义演变关系。"罢₂/吧₂"的本字是什么？这是接下来要回答的问题。

3.2 语气词"吧₂"源自近代汉语句末"不是"的形义证据

本文认为，"吧₂"来自近代汉语句末"不是"合音，"……吧₂？"即"……不是？"。"吧₂/罢₂"和"不是"在形式分布和意义功能上有对应性，现代汉语普通话"吧₂"的揣测用法和肯定偏向性质，源自近代汉语句末"不是"。下文将从功能分布、版本异文和词项共现情况等角度进行论证。

3.2.1 用于肯定判断语境

"不是"和"吧₂"都用于"是……"式肯定判断句。例如：

> （43） 贾环笑嘻嘻向彩云道："我也得了一包好的，送你擦脸。你常说蔷薇硝擦癣比外头买的银硝强，你看看<u>是</u>这个不是？"（《红楼梦》程乙本第 60 回）
>
> （44） 鸳鸯笑道："左边大四是个人。"刘老老听了，想了半日，说道："<u>是</u>个庄家人罢₂！"众人哄堂笑了。（《红楼梦》程乙本第 41 回）

例（43）的"你看看"，例（44）刘姥姥给出一个自认为合理的答案，都表达了言者的肯定判断，

又因为带有揣测意味而可以用于征询对方意见。
3.2.2 跟揣测表达的搭配
　　"不是"和"吧₂"都可以跟揣测表达共现，搭配情况大体如下：
　　跟"不是"共现：可是
　　跟"吧₂"共现：①可是/敢是；②别是/不要是/莫不是/不会是/怕不是……；
　　　　　　　　③大概/大约/也许/应该/可能/想必……
　　初看上述分布，似乎"不是"和"吧₂"所搭配的词项有较多差异，但这是由"不是"的自身构造和功能特点决定的，而且"可是"和"别是"之间可以建立紧密关联，能够反映"不是"和"吧₂"的功能继承关系。以下具体说明。
　　（一）"不是"和"吧₂"都能跟"可是"共现。
　　一方面，"可是……不是？"问句在清代白话小说中较为常见。例如：

（45）　史湘云道："提这个便怎么？我知道你的心病，恐怕你的林妹妹听见，又嗔我赞了宝姐姐了。<u>可是</u>为这个<u>不是</u>？"（《红楼梦》程乙本第 32 回）
（46）　"足下<u>可是</u>山东泰安州人么？"如玉道："我是泰安人。"那人道："<u>可是</u>姓温讳如玉的<u>不是</u>？"如玉着惊道："老兄何以知道贱名？"（《绿野仙踪》第 64 回）

　　另一方面，跟"可是……不是？"对应的是"可是/敢是……罢₂？"：

（47）a. 你大概<u>可是</u>不能了罢₂？不能了。（1886《四声联珠》第 37 章）
　　　　b. 神仙也有情人？这<u>可是</u>你做古的罢₂。（《八仙得道传》第 93 回）
（48）a. "你看那河里怎么象个人在黑影里去了，<u>敢是</u>个鬼罢₂？"湘云笑道："<u>可是</u>又见鬼了。我是不怕鬼的，等我打他一下。"（《红楼梦》庚辰本第 76 回）
　　　　b. 停不多大会ル，听人家说，谁家兄弟中了举了。又冒失问："是三爷家的五爷<u>不是</u>？"被人家说："你<u>敢是</u>迷了罢₂。"（《老残游记续》第 3 回）

其中，"可"和"敢"同为"疑问副词"，"敢"有"可、能、会"等义（江蓝生，1990：49）。有意思的是，（48a）的提问句式包含"敢是"，回答用的是"可是"，（48b）的提问句式为"……不是？"问句，回答则用了"敢是"，这也说明"可是""敢是""不是"三者关系之密切，故能共见于同一语境的问答互动，由此印证"不是"和"吧₂"的功能关联。
　　（二）"别是……罢₂？"的功能也相当于"可是……不是？"。
　　清代以降，"罢₂"和"别是/不要是/莫（不）是/莫非"等揣测表达共现是主流，后来又可以跟"不会是/怕（不）是"等表达搭配。略举数例如下：

（49）a. 邢夫人接着说道："<u>别是</u>喜罢₂？"（《红楼梦》庚辰本第 11 回）
　　　　b. 邢夫人接着说道："<u>不要是</u>喜罢₂？"（《红楼梦》程乙本第 11 回）
　　　　c. 紫芝道："<u>莫是</u>'说来的话儿不应口'罢₂？"（《镜花缘》第 65 回）
　　　　d. <u>莫非</u>不是个正道人罢₂？（《儿女英雄传》第 12 回）
（50）a. 我有些害怕，"<u>不会是</u>有坏人吧₂？"（《人民日报》1949 年 9 月）
　　　　b. <u>怕不是</u>俺老婆子做梦吧₂？真喜死那活人喽！（《人民日报》1979 年 6 月）

　　不过，句末"不是"并不跟上述揣测表达共现；但是，《红楼梦》的版本异文可以证明"别是……罢₂？"和"可是……罢₂？"的意义一致性：

（51）a. 宝玉将手一撒，与他看道："<u>别是</u>这两字罢₂？其实与'庚黄'相去不远。"众人都看时，原来是"唐寅"两个字。（《红楼梦》甲戌本、庚辰本第 26 回）
　　　　b. 宝玉将手一撒，与他看道："<u>可是</u>这两个字罢₂？其实与'庚黄'相去不远。"众人都看时，原来是"唐寅"两个字。（《红楼梦》程乙本第 26 回）

《红楼梦》第 26 回贾宝玉所说的话，1754 年甲戌本和 1760 年庚辰本写作"别是……罢₂？"，1792 年程乙本则写作"可是……罢₂？"。这说明"可是"和"别是"关系十分密切，再结合上文讨论，可以得到下列功能关联：

"可是……不是？" ↔ "可是……罢₂？" ↔ "别是……罢₂？"

那么，"不是"跟"可是"搭配，却不跟"别是"类表达共现，个中原因是什么？本文认为，这种分布差异是句法语义的限制约束带来的。

一方面，"不是"可以代指否定命题，"是/可是……不是？"在形式上仍算是选择问句，"是/可是"和"不是"分别引入正反两项论断；但是，"别是/不要是/莫不是/莫非"在形式上关联的是否定命题项，语义上其中的"是"已接近于词内成分（董秀芳，2004），"别是"类表达基本后接单一极性命题。"不是"引入正反两项论断，与这些否定性揣测表达不兼容，因此不能共现。

另一方面，"吧₂"作为语气词而附于单一小句命题之后，所在问句在形式上也只能看作极性问句；"别是/不要是/莫不是/莫非"只能后接单一极性命题，"吧₂"的前接成分也是单一极性命题，因此可以兼容。

可资比较的是从否定词"无"到语气词"吗"的形成过程，同样也经历了从引入正反两项论断到只涉及单一极性命题的过程：

（52）a. 世间羸瘦，有剧我者无？（《贤愚经》卷一，引自张敏，1990：108）
　　　b. 帐前莫有当直使者无？（《敦煌变文集》，引自吴福祥，1997：49）
　　　c. 直得趁着，还不丧身失命也无？（《祖堂集》，引自杨永龙，2003：34）

（52a）的"无"充当"有……无？"问句的否定项，跟"不是"早期用法相似。（52b）（52c）的"无"的前接命题中已包含揣测表达"莫"和否定词"不"，"无"不再代指否定项，虚化为语气词"吗"（参见吴福祥，1997；杨永龙，2003），因此"吗（无）"问句也只能包含单一极性命题。上文提到，"吧₂/罢₂"可以跟揣测表达共现，可以前接否定性命题，从而区别于"不是"，这跟语气词"吗"和否定项"无"的区别是同类现象。

由此可见，"吗"和"吧"在极性选择问句中作为句末否定项都容易向语气词发展，只能前接单一极性命题，在本质上是一致的。

（三）"罢₂"还能跟"大概/大约/也许/应该/想必"等或然表达共现。例如：

（53）a. 你大概没甚么推辞罢₂？（《儿女英雄传》第 9 回）
　　　b. 他们若拿住我，也许是讲论着甚么美味儿吃罢₂。（1879《伊苏普喻言》）
　　　c. 可不是呢。这可应该你赔了罢₂，还有甚么说的？（《儿女英雄传》第 9 回）

"吧₂"和"大概"等词项的共现，其语义本质是"不是"用于偏向极性问句而发展出的揣测功能和肯定偏向，并由语气词"吧₂"所继承。句末"不是"不跟"大概"等词语共现，也是因为"大概"类句式只允许后接单一极性命题。

3.2.3 用于其他肯定偏向语境

"不是"和"吧₂"在其他肯定偏向语境中的分布和功能也有对应。例如：

（54）a. "那人叫做什么刘铁嘴，测了一个字，说的很明白，回来依旧一找便找着了。"……"那刘铁嘴也不问，便说：'丢了东西不是？'"（《红楼梦》程乙本第 94 回）
　　　b. 测字的先生问道："你丢东西了吧₂？"这人一听，心说这是神仙，他怎么知道我丢东西啦？（冯不异、刘英男《中国传统相声大全》）
（55）a. 听听，果然应了我的话了不是？（《儿女英雄传》第 37 回）
　　　b. 怎么样？果然不出我所料吧₂？（严歌苓《穗子物语》）
（56）a. "和尚，还我头来！"连叫不止。那僧人慌了，颤笃笃的道："头在你家上三家铺架上不是？休要来缠我！"（《二刻拍案惊奇》卷 28）

b. 玉芬轻轻地道："隔壁院子里静悄悄的，新少奶奶在哪儿？"佩芳道："在母亲那边吧₂？"（张恨水《金粉世家》）

（57）a. 你给他说在理上，他没个不答应的不是？（《儿女英雄传》第 36 回）

b. 你给拍着点儿板还不行吗？大概不能不会吧₂。（尹箴明《评讲聊斋·胭脂》）

（58）a. 晴雯姐姐在这里住呢不是？（《红楼梦》程乙本第 77 回）

b. 好好干吧，你还年轻呢不是？来日方长嘛。（1994 年《作家文摘》）

c. 这别是我在镜子里头呢罢₂。（《红楼梦》庚辰本第 41 回）

d. 这两天正在是万寿寺呦，我们三小子还没逛过哪吧₂？（蔡友梅《小额》）

例（54）的语境表明测字先生已料定事情发生；例（55）的"果然"直接宣称当前情况符合言者预期；例（56）的"不是"和"吧₂"用于告知对方信息的应答句；例（57）的"没个"即"不能"之意；例（58）的"呢/哪"皆可后接"不是"或"吧₂"，这也表明"呢罢₂/哪吧₂"的连用实际上是"呢+不是"。

"不是"和"吧₂"还可用于建议祈请语境，留待第 4.2 节一并讨论。

3.2.4 用于附加问句

"不是"和"吧₂"都可以组成附加问句。例如：

（59）a. 这该环儿替他了，他又比他小了，是不是？（《红楼梦》程乙本第 88 回）

b. 德夫人又问："我瞧您没有留过客，是罢₂？"（《老残游记续》第 3 回）

"是不是"附加问句表达高确信度，"吧₂"的附加问形式是后起的[58]，在语义和分布上都反映了它跟"是不是"附加问句的关联。

3.3 小结

总之，将语气词"吧₂"还原为基础词形，须遵循形式和意义相结合原则，才能揭示本貌。上文从肯定判断语境、揣测表达搭配、肯定偏向语境、附加问句格式等几个方面，在形式和意义两方面探讨了"吧₂"和"不是"的分布共性及其继承关系。"吧₂"及其来源"不是"来自极性选择问句否定项标记，至今仍保留句末疑问语调，这是"吧₂"用于问句的本质基础。合音后的"吧₂"也继承了句末"不是"的性质：具有言者肯定偏向，涉及信息真假判断。

4. 语气词"吧₂"源自句末"不是"的合音理据

接下来要解决的一个关键问题是，"不"读为合口呼，"是"读为齐齿呼，"吧₂"则读为开口呼，从"不是"到"吧₂"的音变理据是什么？

4.1 尾字"是"的韵母 a 化

首先是句尾"是"字的音变可能性。

一方面，据郭锐等（2017：396-397）考察，早期北京话轻声造成的语音弱化常发生韵母 a 化现象，如句末助词有"呢 ni→哪 na"、"了 lo→啦 la"、"么 mo→ma"、"的 di→da"等变读，并不是跟"啊"合音的结果。又如，语气词"吗/么"变读也是因为"不（否）"久处句末、易读轻声（吴福祥，1997：47），完成了从合口呼到开口呼的音变过程。因此，句末"不是"的"是"从[ʅ]趋向于[a]的变读，也可据此平行推导，同处句末的"是"字韵母 a 化具有共性基础。

另一方面，句末"不是"发生语音轻化而读为[·pəɪ]的现象，在当代普通话口语和汉语方言中也仍很容易观察到。同时，书面记录的字形选用的是去声"罢"，而"不是"的"是"音变前也读为去声，超音段特征得到保留。

需要说明的是，韵母 a 化并不是说完全读为[a]，而是指往[a]靠拢的开口度变大的过程，在实际语流中可能会接近于[ə]，这也符合口语发音的省力原则。

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[58] "是/好/对+吧₂？"清末民初才出现（参见闫亚平，2021：105）。"好/对+吧₂？"等附加问形式应是"是吧₂？"类推的结果，因为"不对/不好"没有从选择问到偏向问的演变过程，也无法合音为"吧₂"。

4.2 从"不是"到"吧₂"的过渡音形"罢咱/不咱/罢则/不则"

再来看句末"不是"的整体音变。本文认为，早期北京话材料及汉语方言中的"罢咱/不咱/罢则/不则"等词形恰好能构建"不是→吧₂"的音变过渡。

太田辰夫（1988/1991∶241）很早就注意到，早期北京话材料中存在句末助词"罢咱/不咱/罢则/不则"用例。但是，这些词形的意义及本字是什么，仍悬而未决。因此，下文先论证"罢咱/不咱/罢则/不则"即"不是"。

4.2.1 满汉合璧文献里的"罢咱"及其对译

较早出现的词形是"罢咱"，见于清代满汉合璧文献《满汉成语对待》（1702 年），共有 14 例，另有 2 例变体"把咱"（竹越孝，2017∶139-140）。《满汉成语对待》满汉对译部分有助于理解"罢咱"含义。《满汉成语对待》跟"罢咱"对译的满语助词主要是-cina 和-kini，撷例如下（引自竹越孝，2017∶139）：

（60）你把口ﾞ张张罢咱。（卷一，37b4）
　　　　angga　be　majige juwa-*cina*.
　　　　口　（宾格）稍微　　开
（61）吊了肐淬ﾞ，就有些硬根子罢咱。（卷四，7a4）
　　　　huthe tuheke manggi. uthai majige hede da　bici bi-*kini*.
　　　　疮痂　掉了　之后　　就　稍微　　硬 根子 有的话 有

"罢咱"在例（60）中对应-*cina*，在例（61）中对应-*kini*。句末助词-*cina*（或作-*qina*）和-*kini*用于祈使句，表示愿望或祈请（王敌非，2009∶16 等）。

不过，本文认为，"罢咱"虽然对译-*cina* 和-*kini* 而用于祈使句，主要表达的却应是主观确认意愿语气，只是在此基础上有建议祈请功能。

一方面，先来看《清文启蒙·清文助语虚字》对-*cina*/-*qina* 的解释∶"*qina* 是呢字，罢字，在字尾联用，乃使令他人之词，此字向尊长言说不得。（卷三，31a1）"。其中，"罢字"、"乃使令他人之词"反映-*cina* 的祈请性质；但"是呢字"这一性质认定，则是关联本文所讨论的句末"不是"的切入点。"是呢"在满汉合璧文献中作为-*cina* 的音译兼意译词，体现清代满式汉语，这一表达不见于明清汉语内部材料，意思上可对应于汉语"才是/才好"（竹越孝，2015；祖生利、毕晓燕，2017；张俊阁，2022 等）。

张俊阁（2022）认为，"是呢"表示对祈愿的确认和强调语气，正如"才是/才好"可以前接祈使句但本身不表达祈使语气，而是表确认和强调。例如∶

（62）你也该让我往左边去回箇礼才是，怎么也就没箇遵让？（《醒世姻缘传》第 95 回）
（63）须得四位同去才好，切勿推调。（《西游记》第 92 回）

"才是/才好"是言者对所涉行为的主观评判，强调的是合理性和应然性，从听者角度观之，则是提议使令意味，因此"才是/才好"常出现在建议祈请语境。

由是观之，-*cina* 既译为"是呢"，又译为"罢咱"，说明"罢咱"和"是呢"一样是表确认和强调语气的助词，这跟本文讨论的"不是"的用法相关。

另一方面，再来看《清文启蒙·清文助语虚字》对-*kini* 的解释∶"*kini* 由其罢字，任凭他罢字，又教令使令他人意，在字尾联用。（30b2）"。同理，"由其罢"、"任凭他罢"也更多的是表达言者对所涉行为的主观评判，由此而有建议祈请意味。我们注意到，满汉合璧文献中不少用"罢咱"对译-*kini* 的句子里，-*kini* 后面有一个表示揣测的助词 *dere*，或是只有 *dere*，例如∶

（64）怎么那们憋不住，到跟前罢咱。（《满汉成语对待》卷一，19b1)
　　　　ai　tuttu šosiki. erin　de　isina-*kini* **dere**.
　　　　怎么 那样 着急　跟前 （处格）到来　　吧
（65）若是知道就告诉你罢咱的。（《清文启蒙》卷二，3b3)
　　　　saci　uthai sinde alambi **dere**.

知道的话　就　给你　告诉

（66）　离着老早的这会儿先发毛，等到跟前罢咱。（《庸言知旨》卷二，1b3-4、1b4）
　　　　atanggi nuka-ra bethe be te tukiye-mbi, erin-de isina-*kini* **dere**.
　　　　何时　扎刺-未　脚　宾　现在　抬起-现　时候-位　到达-祈　罢了

　　《清文启蒙·清文助语虚字》对 *dere* 的解释是："dere 想是罢字，使得罢字，耳字，乃想是这样罢猜度之语，在句尾单用联用俱可，此上必用 ainqi 字照应，亦有不用者，乃省文之意耳。（46b1-3）"。可见，*dere* 或说是"罢咱"，也相当于"吧₂"；上文提到，"吧₂"跟"不是"对应，因此，"罢咱"的揣测功能跟"不是"和"吧₂"也是对应的。

4.2.2 "罢咱/不咱/罢则/不则"与"不是"的对应关系

　　以上从满汉对译角度重探"罢咱"语义，说明"罢咱"在祈使语境和揣测语境中是表肯定、确认，下面来看"不是"如何对应"罢咱/不咱/罢则/不则"。

　　在《正音撮要》《儿女英雄传》《北京》等口语性较强的材料以及北京话辞书中，存在"罢则""不咱""不则"等词形，例如：

（67）　再其次，就是居家罢则，你是个有衣食的人、有体面的人，在乡族中年长、月长，乡情族事少不了……|使得罢则，等我穿上袍褂替你走一遭ㄦ就是了。|可不是吗？叫去罢则。这里现成的纸，就裱上罢哩。（1834《正音撮要》）
（68）　真个的，我也撒一泡不咱？（《儿女英雄传》第 9 回）|大爷没在屋里，你进来坐坐ㄦ不则？（第 33 回）|你只管坐下，咱们说话ㄦ不则。（第 38 回）
（69）　你们忙什么呀，天还早呢，再坐一会不咱？（1924 儒丐《北京》）
（70）　表示请求的语气，有"何妨……呢"的意味：你就去看看他吧则。
　　　　用在句尾也可读作 bù ze，含有"不如"或缓和语气的作用：屋里没人，你也进来坐坐不咱。（摘自陈刚等编，1999：7、34）

　　河南、山东等地方言中也有这类用法，多记为"吧咋/不咋"，例如：

（71）a. <山东博山>洗吧咋！吃吧咋！（钱曾怡，1993：184）
　　　b. <河南浚县>慌啥嘞，再住一天不咋。（辛永芬，2013：53）

　　可见，上文"罢咱/不咱/罢则/不则"以及"吧咋/不咋"的实际语例，基本用于建议祈请语境，前接成分多为谓词性结构。

　　这类"罢咱/不咱"等词的来源，有不同看法。冯春田（2006）主张"不咱"的"不"是劝止义"罢"音变，构拟"罢+怎么➔罢+咋/咱➔不咱、不则"的路径。不过，辛永芬（2013）指出，"罢怎么"只用于建议祈请，许多方言中"不咱/不则"还可用于陈述判断；因此，"不咱/不则"应是和"不是"对应，这不仅能解释建议祈请用法，还可覆盖用于陈述判断的"不咋/吧咋"，解释力更强。

　　关于陈述判断的"不咋/吧咋"的来源是"不是"，本文观点与辛永芬（2013）相合，辛永芬（2013）对方言的观察解释也为本文提供了有力佐证。

　　具体而言，句末"不是"也可用于建议祈请语境，前接成分也是谓词性结构。《近代汉语词典》（白维国主编，2015：125）将这类"不是"释为"表示商量、肯定、劝告等"。这类"不是"在明代小说中已出现，早于清代始见的"罢咱"等词，其分布跟"罢咱"等类似。举明清小说及现代方言语例如下：

（72）a. 房里无人，爹进来坐坐不是？（《金瓶梅词话》第 26 回）
　　　b. 我兄弟们点起兵，拿他不是！（《西游记》第 3 回，引自《近代汉语词典》）
　　　c. "你不嫌脏，进来逛逛不是。"（《红楼梦》第 26 回，同上）
　　　d. 这何妨！请他进来不是？我就同他吃酒。（《儒林外史》第 42 回）
（73）a. <河北魏县>高中生了，好好学习哩不是。（吴继章，2016：327）

b. <河北邯郸>价钱该涨点了不是？l放远点嘞不是。（王再超，2019：89）

将"不是"和上文"罢咱/不咱/罢则"等对照，可以发现功能是对应的。

4.2.3 表主观确认意愿的"不是"和"吧₂"的对应关系

那么，这类表主观确认意愿的"不是"跟"吧₂"是否也有对应关系呢？

王世凯、张亮（2017：56）认为，这类"不是"无祈使功能，与"吧"对立。本文则认为，这类"不是"的确区别于劝止义"吧₁"，但仍跟"吧₂"的确认义相契合：祈使意味来自"不是"前接小句，"不是"表明对前接祈使小句的肯定确认，带有反问色彩，语用增强为认同实施该行为。这类"不是？"意思接近于"要不要？"；相应地，"吧₂"也有类似用法，可以用"吧₂"跟"要"共现的语例来说明：

（74）你要看破些罢₂，如今的时候艰难。（《绿野仙踪》第 44 回）

（75）单靠"马扁ₙ"，如何供应得上，也要买点ₙ协济罢₂？（《镜花缘》第 70 回）

"要……吧₂？"意为"你得要……，不是吗？"，既向对方确认，也传达言者建议。劝止义"吧₁"意近于"算了"，"*要……算了"的组合在语义上说不通，故上引二例须理解为揣测义"吧₂"。这也跟"不是"功能相通，因为用于建议祈请的"不是"乃至"才是"也常跟"应""该""要"类助动词共现，因为"不是"和"才是"强调的都是合理性和应然性，例如：

（76）a. 他如今荣升，我们俱应专去拜贺才是。"（《醒世姻缘传》第 40 回）

b. 该换个大点嘞袋儿不是？（河北邯郸话，王再超，2019：89）

可见，"吧₂"也跟用于建议祈请语境的句末"不是"有对应关系。

4.2.4 小结

从汉字对音变的记录来看，音变过渡阶段的词项口语性极强，"罢咱/不咱/罢则/不则"等"不是"变体在书面语中不多见，但仍不同程度地保留在口语性较强的会话教材、白话小说以及方言语料中；因此，音变过程因时地而异，不同作品对过渡音形的记录是不同步的。之所以"是"会记作"咱""则"等，是因为"是"字轻读时声母[ʂ]受前字"不"的塞音声母影响而塞擦化，而且"是"字韵母脱落的合音形式[·ɻə]的[ɻ]的听感也跟塞擦音声母[ts]接近；之所以"不"会记作"罢"，是因为"不"字轻读时韵母受后字"是"韵母 a 化影响而也开口度变大，即使韵母开口度介于"不"和"罢"之间，也可以用"罢"来记录。

整体上，"罢咱"等词、"不是"和"吧₂"都是用于揣测或祈使语境两可，都表示肯定、确认。在出现顺序上，"不是"用于揣测和祈使语境都是在明代小说里已出现，"罢咱"至迟在 18 世纪初期出现，"罢₂"至迟在 18 世纪中期出现；因此，将"罢咱/不咱"等词看作从"不是"到"吧₂"的音变过渡，能更好地解释这些词的用法和来源，也能搭建起"不是➜吧₂"的合音理据。

4.3 "不是"合音现象的方言旁证

句末"不是"合音并非特设的孤例，在许多方言中都存在类似现象。例如，据笔者调查，广东平远客家话中，"吗"问句、"吧₂"问句和"吧₁"祈使句分别用"冇没有[mo²¹²]、"咩₌不是[mɛ²¹²]"和"好嗦好了[xo³¹ lɛ²¹²]表示：

（77）a. 转屋企冇？回家吗？　b. 转屋企咩？回家吧₂？　c. 转屋企好嗦！回家吧₁！

（78）a. 去北京嗦冇？去北京了吗？　　　b. 去北京嗦，係咩？去北京了，是不是/是吧₂？

可见，"吧₁"和"吧₂"不用同一个词来表示，对应于"吧₂"的"咩"是"唔係不是[m²¹² xɛ⁵⁵]合音，带有肯定偏向的"咩"问句也区别于中性"冇"问句。

又如，香港粤语"是不是"附加问句用"系唔系是不是"，也可合音为"系吗"：

（79）佢去，系唔系啊？[hɐi²² m²¹ hɐi²² a³³]=佢去，系吗？[hɐi²² ma¹³]（邓思颖，2024）

可见，"不是"因语义功能改变而轻化、变读、合音的现象较为普遍。[59]

4.4 句末"不是"合音为"吧₂"的过程
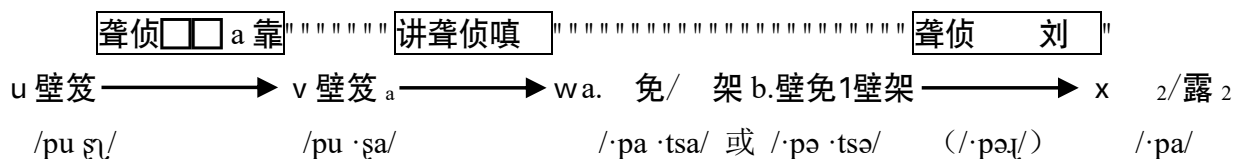
结合上文讨论，"不是→吧₂"的历时合音过程可构拟如下：

图 1 从句末"不是"到"吧₂"的音变过程

①→②阶段：句末"不是"为了发音省力而读音轻化，在早期北京话系统中的统一表现是后字韵母 a 化，后字[ʅ]开口度变大而趋于[a]（或是[ə]）。

②→③阶段：前字"不"和后字"是"都可以弱读，因此在书面材料中灵活记录为"罢咱/罢则"或"不咱/不则"，/·pa ·tsa/的韵母拟音也可以折中为/·pə ·tsə/；其中，后字擦音声母[ʂ]受前字塞音声母[p]语音同化而可以变读为塞擦音声母[ts]，前字因后字韵母影响以及读音轻化，开口度也变大而趋于[a]。

③→④阶段：后字轻声弱读、渐附前字，语流中"不是"后字脱落合音读为/·pəɹ/极其常见，又受语气词单音节化趋势影响，最终形成"罢₂/吧₂"。[60]

最后，再回看赵元任（1926）的"不啊"合音思路。诚然，方言中来自"否定词+语气词"合音的句末助词很常见。但是，以早期北京话为前身的现代汉语共同语中，极性选择问句多为"（是）p 不是（p）？"形式；"吧₂"在早期北京话材料中有迹可循，句末"不是"的肯定偏向跟"吧₂"契合，而方言"VP 不（啊）？"问句及其合音形式基本为中性问句（参见汪国胜、李瓒，2019 等）。因此，早期北京话语法系统自身有能力从"VP 不是？"发展出"VP 吧₂？"，"不是"的肯定偏向性质是普通话语气词"吧₂"的来源。

5. 结语

现代汉语普通话书面语的"吧（罢）"字形，兼有来自近代汉语劝止义"罢"的"吧₁"和来自近代汉语句末"不是"合音的"吧₂"。"吧₁""吧₂"同形的本质是偶然同音，二者不具有语义演变关系。

"吧₂"的肯定偏向性质，是"（是……）不是？"问句从极性选择问句发展为偏向极性问句、"不是"虚化为附属标记而最终合音为"吧₂"的结果。根据本文讨论，从"不是"到"吧₂"的语音、语义和结构变化的过程可总结如下：

i. 唐五代时期，近代汉语"（是）p 不是？"形式起初是极性选择问句，两个并列选项分别是同一命题的肯定项 p 和否定项¬p，问句语义是对命题真假进行选择判断。

ii. 明代以降，代指否定项¬p 的"不是"功能弱化，"（是）p 不是？"逐渐由极性选择问句变为偏向极性问句，言者倾向于认为肯定项 p 为真。

iii. 明代以降，句末"不是"具有肯定偏向性质，发展出揣测、确认、强调等功能。

iv. 清代以降，"不是"位于句末而逐渐轻读，存在"罢咱/罢则/不咱/不则/吧咋"等过渡音形，也有揣测、确认、强调等功能，最终合音为表示肯定偏向的语气词"吧₂"。

v. 语气词"吧₂"功能进一步扩展，但只能前接单极命题，可与"莫不是、别是、大概、也许"等揣测表达共现，也可用于存疑叙述句。

总之，语气词在口语互动中成形，形音义之间的复杂关系易造成同音语气词的多源性，尤

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[59] 另据魏培泉（2010：360、注43），全南客家话"渠是没你哥哥？"中"係没"的"没"应是"唔係"合音，香港粤语"系咪-V（N）P"和鄱县客家话"系密-V（N）P"的"咪"、"密"来自"唔""系"相拼。

[60] 诚然，不排除存在"①→②→④"一步到位的可能性；但是，设置"罢咱"等词形作为过渡阶段，则可以系统解释"罢咱"等句末助词的用法，也符合"罢咱"和"吧₂"实际出现的先后顺序。

其需要警惕的是莫被字形欺骗；同时，字形变化也受语音弱读、文体转变和社群更替等诸多因素交叠影响。因此，语气词溯源工作十分重要，这也有助于我们深入理解现代汉语语气词疑问句以及偏向问句系统。

引用文献 [References]

白维国主编，2015，《近代汉语词典》[*Dictionary of Early Modern Chinese*]。上海：上海教育出版社。

陈刚、宋孝才、张秀珍编，1997，《现代北京口语词典》[*Dictionary of Modern Spoken Beijing Dialect*]。北京：语文出版社。

邓思颖，2024，略论疑问尾句与叹词的语法问题[*Grammatical issues on tag questions and interjection*]，北京大学博雅语言学讲座，北京大学。

董秀芳，2004，"是"的进一步语法化：由虚词到词内成分[Further grammaticalization of "*shi*": From functional word to word-internal element]。《当代语言学》第 1 期，35-44 页。

冯春田，2006，汉语方言助词"吧咋／不咋"的来历[The origins of the Chinese dialectal auxiliary words "*Baza/Buza*"（吧咋/不咋）]，《古汉语研究》第 1 期，54-58 页。

傅惠钧，2011，《明清汉语疑问句研究》[*Mandarin Questions in Ming and Qing dynasties*]。北京：商务印书馆。

郭锐，2000，"吗"问句的确信度和回答方式[Certitude and reply pattern of MA sentences]，《世界汉语教学》第 2 期，13-23 页。

郭锐、陈颖、刘云，2017，从早期北京话材料看虚词"了"的读音变化[The phonetic alteration of the function word *le* in early Beijing dialect texts]，《中国语文》第 4 期，387-402 页。

胡明扬，1981，北京话的语气助词和叹词（下）[Modal particles and exclamatory particles in Beijing Mandarin]，《中国语文》第 6 期：416-423 页。

江蓝生，1990，疑问副词"可"探源[The origin of question of interrogative adverbs "*ke*"]，《古汉语研究》第 3 期，44-50 页。

李崇兴，2008，元代北方汉语中的语气词[The modal particle of the Northern Chinese in Yuan dynasty]，《历史语言学研究》第 1 辑。北京：商务印书馆。131-148 页。

陆俭明，1984，关于现代汉语里的疑问语气词[On the interrogative particles in Chinese]。《中国语文》第 5 期，364-376 页。

吕叔湘，1956，《中国文法要略》（修订本）[*An Outline of Chinese Grammar (Revised edition)*]。北京：商务印书馆。

吕叔湘主编，1999，《现代汉语八百词（增订本）》[*Eight Hundred Words in Modern Chinese (Revised edition)*]。北京：商务印书馆。

钱曾怡，1993，《博山方言研究》[*A Study on Boshan Dialect*]。北京：社会科学文献出版社。

邵敬敏，2014，《现代汉语疑问句研究（增订本）》[*A Study on the Interrogative Sentences in Contemporary Chinese (Revised edition)*]。北京：商务印书馆。

史金生，1997，表反问的"不是"[On rhetorical "*bushi*"]。《中国语文》第 1 期，25-28 页。

孙锡信，1999，《近代汉语语气词》[*Sentence-final Particles in Early Modern Chinese*]。北京：语文出版社。

太田辰夫著，蒋绍愚、徐昌华译，2003[1958]，《中国语历史文法》（修订译本）[*A Historical Grammar of Chinese Language (Revised edition)*]。北京：北京大学出版社。

太田辰夫著，江蓝生、白维国译，1991[1988]，《汉语史通考》[*A Historical Study of Chinese Language*]。重庆：重庆出版社。

汪国胜、李曌，2019，汉语方言的是非型正反问句[On the VP-neg interrogative in the form of a yes-no question in Chinese dialects]。《方言》第 1 期，18-28 页。

汪敏锋，2022，《语气词的人际语用功能研究》[*A Study on the Interpersonal and Pragmatic*

Functions of Modal Particles in Chinese]。北京：中国社会科学出版社。

王敌非，2009，满语语气词研究[Research on mood words from Manchu]。《满语研究》第 2 期，13-18 页。

王世凯、张亮，2017，句尾"不是"的来源、功能及其词汇化[The Source, Function and Lexicalization of Sentence-Final *Bushi*]。《语言教学与研究》第 6 期：53-60 页。

王再超，2019，"是 NP／VP 不是"结构及其句末"不是"的来源[The Structure of "Is NP/VP or Not" and the Source of "Or Not" at the End of the Sentence]。《河北师范大学学报》（哲学社会科学版）第 5 期，84-93 页。

魏培泉，2007，从否定词到疑问助词[The pathway from negatives to question particles]。《中国语言学集刊》第 1 卷第 2 期，23-57 页。

魏培泉，2010，"是否-V(N)P"句式的由来[The history of the interrogative structure *shi fou*-V(N)P]。《语言暨语言学》第 11 卷第 2 期，335-392 页。

吴福祥，1997，从"VP-neg"式反复问句的分化谈语气词"麽"的产生[On the production of modal particle "*me*" from the differentiation of "VP + neg" positive and negative questions]。《中国语文》第 1 期，44-54 页。

吴继章，2016，冀南方言中的三种问句[Three types of interrogatives in Jinan dialect]。张惠英、宗守云编《〈金瓶梅〉语言研究文集》。北京：中国社会科学出版社。

辛永芬，2013，豫北浚县方言句末语气词"不咋"[The modal particle *buza* at the end of a sentence in Xunxian dialect in Henan province]。《语文研究》第 3 期，51-55 页。

徐晶凝，2003，语气助词"吧"的情态解释[Modality interpretation for the tone particle *ba*]。《北京大学学报（哲学社会科学版）》第 4 期，143-148 页。

徐晶凝，2022，《现代汉语话语情态研究》（修订版）[A Study of Modality in Modern Chinese Discourse (*Revised edition*)]。上海：上海教育出版社。

闫亚平，2021，《现代汉语附加问句的浮现与发展》[*The Emergence and Development of Tag Questions in Modern Chinese*]。上海：上海教育出版社。

杨永龙，2003，句尾语气词"吗"的语法化过程[On the Grammaticalization of Mandarin interrogative particle "ma"]，《语言科学》第 1 期，29-38 页。

叶述冕，2021，《现代汉语偏向极性问句的意义和结构》[The meaning and structure of biased polar questions in Mandarin Chinese]。北京：北京大学博士学位论文。

叶述冕，2024，《偏向极性问句的动态语义研究》[Dynamic semantics of biased polar questions in Mandarin]。北京：北京大学博士后研究工作报告。

袁梦溪、徐贝贝，2022，非特指问句的形式语义研究：回顾与反思[Formal semantic studies on non-*wh* questions: A review]。《当代语言学》第 4 期，586-609 页。

张俊阁，2022，清代满汉合璧文献中句尾语气词"是呢"及相关问题研究[On the modal particle *shine* in Manchu-Chinese bilingual textbooks in Qing dynasty]。《汉语史学报》第 27 辑。上海：上海教育出版社。204-216 页。

张敏，1990，《汉语方言反复问句的类型学研究》[A Typological Study of Repeated Questions in Chinese Dialects]。北京：北京大学博士学位论文。

赵元任，1926，北京、苏州、常州语助词的研究[A study of function words in Beijing, Suzhou and Changzhou]。《清华学报》第 3 卷第 2 期，865-917 页。

赵元任，1952，李荣编译，《北京口语语法》[*Mandarin Primer: An Intensive Course in Spoken Chinese*]。北京：开明书店。

朱德熙，1982，《语法讲义》[*Lecture Notes on Chinese Grammar*]。北京：商务印书馆。

竹越孝，2015，从满语教材到汉语教材——清代满汉合璧会话教材的语言及其演变[From Manchu textbooks to Chinese textbooks: Linguistic feature and historical change of Manchu-Chinese bilingual conversation textbooks in the Qing dynasty]。《民族语文》第 6 期，66-75 页。

竹越孝，2017，《满汉成语对待》——现存最早的清代满汉合璧会话教材[*Manhan Chengyu Duidai* — The earliest Manchu-Chinese bilingual textbook in Qing dynasty]。《汉语史学报》第 18 辑。上海：上海教育出版社。132-142 页。

祖生利、毕晓燕，2017，清代句末语气助词"是呢""才是呢"[On the modal particles *shine* and *caishine* in Chinese of Qing dynasty]。《历史语言学研究》第 11 辑。北京：商务印书馆。278-288 页。

Biezma, María. 2009. Alternative vs. polar questions: The cornering effect. *SALT*, 19, 37–54.

Bolinger, Dwight. 1978. YES-NO questions are not alternative questions. In Henry Hiż, ed., *Questions*. Dordrecht: Reidel. Pp.87–105.

Chao, Yuen-Ren. 1968. *A Grammar of Spoken Chinese*. Berkeley, CA: University of California Press.

Dryer, Matthew S. 2013 Polar questions. In Matthew S. Dryer and Martin Haspelmath, eds, *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. Chapter 116. (Available online at http://wals.info, Accessed on 2025-01-17.)

Gunlogson, Christine. 2003. *True to Form: Rising and Falling Declaratives as Questions in English*. New York: Routledge.

Hamblin, Charles L. 1973 Questions in Montague English. *Foundations of Language*, 10, 1: 41–53.

Harris, Zellig. 1978. The interrogative in a syntactic framework. In Henry Hiż, ed., *Questions*. Dordrecht: D. Reidel. Pp.1–35.

Karttunen, Lauri. 1977. Syntax and semantics of questions. *Linguistics and Philosophy*, 1, 1: 3–44.

Law, Paul. 2008. The *wh/q*-polarity adverb *daodi* in Mandarin Chinese and the syntax of focus. *The Linguistic Review*, 25, 3-4: 297–345.

Luo, Tianhua. 2016. *Interrogative Strategies: An areal typology of the languages of China*. Amsterdam: John Benjamins Publishing Company.

Romero, Maribel. 2024. Biased Polar Questions. *Annual Review of Linguistics*, 10, 279–302.

van Rooy, Robert & Marie Šafářová. 2003. On Polar Questions. *SALT*, 13, 292–309.

Ye, Shumian. 2020. From maximality to bias: Biased A-not-A questions in Mandarin Chinese. *SALT*, 30, 355–375.

說"瀧"

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○ 引論

"瀧"字在《廣韻》中有三個音項：[61]

1、東韻籠小韻，盧紅切（*luwng*）　　　　　　瀧涷，沾漬。《說文》曰：雨瀧瀧也。
2、江韻瀧小韻，呂江切（*laewng*）　　　　　　南人名湍。亦州，在嶺南。
3、江韻雙小韻，所江切（*sraewng*）　水名，在郴州界。

以河流的通名作地名專名在世界語言中很常見，呂江切一讀的"南人名湍"與"亦州，在嶺南"也可看成是同一個詞的引申，因此可將三個音項分別視爲"瀧"字所記錄的三個不同的詞，記爲{瀧₁}{瀧₂}{瀧₃}。從詞義上看，{瀧₂}與{瀧₃}都與河流有關，顯然屬於同族詞，[62]而與{瀧₁}則僅文字形式相同，詞義則有別。有趣的是，{瀧₂}與{瀧₃}作爲同族詞，其語音均出現了超出中古漢語通例之處。

{瀧₂}的特殊之處在於其聲韻組合關係。從《切韻》系韻書內部的聲韻配合規律來看，來母一般不與二等韻相拼。前人雖然對來母與二等韻的關係已經研究的相當透徹，但對於{瀧₂}這類少數的來母與二等韻相拼的例外還缺少更爲直接清晰的分析。

{瀧₃}的特殊之處在於其諧聲。從諧聲系統來看，《廣韻》中基於"龍"的諧聲系列的中古聲母絕大多數爲來母，個別爲徹母，少量其它例外也可以通過錯誤類推和文字訛混等途徑解釋。只有{瀧₃}的生母一讀還未有合理的解釋，其來源有待進一步研究。

本文將從{瀧₂}和{瀧₃}超出語音通例之處出發，分別探討其例外的成因，並通過對不同方言與語言之間借詞的研究，揭示{瀧}的詞源及跨語系傳播的歷史。第一節首先簡要回顧來母與二等韻關係的研究，並重述《切韻》音系來母不與二等韻相拼的原因，最後分析{瀧₂}這一來母配二等韻例外的成因。第二節則從{瀧₃}所反映的來母和擦音的關聯入手，指出類似的現象也見於現代閩方言和鄉話，對應的音類可追溯至上古漢語*C.r-類音首，{瀧}的上古音則可以構擬爲*C.rˤoŋ，最後指出《廣韻》中{瀧₃}的語音形式可能是"來母讀擦音"這一現象目前所見最早的文獻記錄。第三節則先找出{瀧}在漢語內部的同族詞{江}，將{瀧}上古音首中的前置輔音確定爲*k-，之後則追溯其南亞語詞源，並分析其借入漢語時的兩種不同表層形式與文字形式。第四節則從《萬葉集》中"瀧"字的使用入手，結合日語與漢語語言文獻的接觸研究，討論{瀧}在中古早期的可能地域分佈。第五節將對全文進行總結概括，並以圖表形式描繪該族詞在東亞地區三個語系之間的借用與發展。

一　　　{瀧₂}讀音的來源——來母與二等韻關係的再回顧

{瀧₂}在語音上的最大特點是它屬於《切韻》音系中極少數來母與二等韻相拼的例外。《切韻》中來母與二等韻的組合極爲罕見，這一特殊分佈與組合對於理解上古漢語到中古漢語的音韻演變具有重要意義。因此，在探討{瀧₂}的特殊讀音來源之前，有必要回顧來母與二等韻之間

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[61] 如無特殊說明，本文上古音構擬與中古音轉寫均參考 Baxter & Sagart（2014）。又：本文採用">"表示語音演變，"→"表示不同語言或方言詞彙的借用。

[62] 下文無需作區分之處則統稱爲{瀧}。

的關係。

王力（1958/1988：101-132）最早爲上古漢語二等韻構擬了元音性質的介音*e/o，簡化了以往以主元音分等的上古漢語構擬。雅洪托夫（1960/1986）則根據中古漢語來母二等字的空格與來母字的諧聲關係將上古漢語二等介音改爲了輔音性質的*l，而後李方桂（1971/2001：15、22-23）從聲母的捲舌與主元音的央化的角度，進一步將介音構擬爲*r，雅洪托夫（1976/1986）也接受了這一改動。該構擬逐漸得到了大部分學者的認可。

需要注意的是，這一通行構擬的基礎之一就是《切韻》音系中來母一般不與二等韻相拼，然而前人對於這一現象背後原因的既有分析並不全面。普遍的觀點認爲來母聲母與二等介音存在衝突，如雅洪托夫（1960/1986）就說"這樣來解釋二等字的起源時，爲什麼聲母爲 l-的字不可能屬於二等就很清楚了：因爲在聲母 l-之後不可能還有介音 l"。類似地，潘悟雲（2000：290）也認爲"二等字與來母*l-(r-)有密切的關係，說明它的聲母是帶有介音 l 的複輔音。同時也可解釋二等字爲什麼缺少來母，因爲來母*l-(r-)後不能再帶介音*l(r)"。

然而這種分析至少面臨兩個問題。首先，雖然來母與二等韻的組合關係在《切韻》系韻書中極少存在，且大部分例外可以以連綿詞疊韻解釋，[63]但仍有包括{瀧 ₂}爲代表的個別例字有待解釋。鄭張尚芳（2003：408）將{瀧 ₂}的上古音構擬爲*r-rooŋ，前綴與聲母相同，有悖構擬通例。

其次，從漢語演變的規律來看，主元音受前接語音成分影響發生同化音變時，一般不區分前接語音成分是處於介音位置還是聲母位置。如韻圖山攝三四等字至《中原音韻》發展爲先天韻，其主元音一般構擬爲*ɛ（楊耐思 1981：44；甯繼福 1985：9），顯然是受主元音之前的前高元音同化的結果。而考察《中原音韻》收字就會發現，韻圖中的山攝三四等字無論其聲母是喻母（y-）還是其它聲母（Cy-/Cj-/Ci-），都發生此音變而進入《中原音韻》先天韻。換言之，前高元音所處的音節結構位置差異不會影響山攝三四等字的音變。同理可知，既然上古來母與二等介音音值相同皆爲*r，且二等介音*-r-同化後接非三等主元音在中古形成了獨立的二等韻，那麼單獨的來母*r-後接非三等主元音時，主元音也理應同化並形成類似的二等韻，但事實卻完全相反。由此可見，"來母後不能再帶介音"對《切韻》音系來母不與二等韻相拼原因的解釋顯然不夠全面，需要重新考慮。

直接生成《切韻》音系二等韻的音變是*rˤV- > -(r)ae-/-(r)ea-（Baxter & Sagart 2014：213-215）。周祖謨（1996：703）通過考察詩文用韻指出，《切韻》二等韻在劉宋時代還不獨立，而大部分在齊梁時代獨立成部，構成齊梁時期押韻最大特點。可見該音變大約發生在宋齊之交的 5 世紀末。

由該音變出發，如果希望出現來母二等韻，那麼在音變之前的形式應當是以下三種之一：①*rrˤV-；②*lrˤV-；③*rˤV-。形式①是前人研究主要聚焦的類型，該類型違反一般上古漢語配音律，可以直接排除。形式②似乎可以通過*lrˤV- > lae-/lea-產生來母二等韻的組合，然而上古漢語至中古漢語演變過程中還存在另一條音變規則*l(r)ˤ- > d(r)-，生成《切韻》音系的定母或澄母。沙加爾（1999/2019：36）指出，成書於 1 世紀的《白虎通義》中至少有 5 個上古邊音與舌齒塞音對應的聲訓，表明該音變至少在某些常用的漢語方言中已經完成了，時代遠遠早於二等韻的產生。因此*lrˤV-需要先經歷*l(r)ˤ- > d(r)-的音變才能進行*rˤV- > -(r)ae-/-(r)ea-的音變，最終只能生成 drae-/drea-而非 lae-/lea-。

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[63] 《廣韻》中來母二等字有 9 個小韻共 20 個，其中大部分用於連綿詞，爲保持疊韻而讀爲二等，如"瓓"*lean* 因用於連綿詞"斒瓓"*pean lean* 而讀爲二等，《切三》尚存有"瓓"的一等讀音 *lan*。

形式③似乎可以先進行*rˤV- > rae-/rea-之後再通過生成《切韻》音系來母的*r- > l-音變從而生成 lae-/lea-。但從文獻記錄來看，*r- > l-音變也早於*rˤV- > -(r)ae-/-(r)ea-。雅洪托夫（1976/1986）發現 5 世紀初的漢譯佛經在對譯梵語 ra 和 la 時有不同處理。較早的法顯譯《大般泥洹經》中以旁注"輕音"的"羅"對應 la，以無旁注的"羅"對應 ra，說明此時譯者認爲"羅"的讀音相對更接近 ra；較晚的天竺曇無讖譯《大般涅槃經》及其後的譯經則多以"羅"對應 la，而以"囉"對譯 ra，說明此時譯者認爲"羅"的讀音更接近 la，而 ra 相對是一個特殊的音。這表明*r- > l-的音變可能發生在 5 世紀初，也早於二等韻的產生。因此*rˤV-會先發生*r- > l-的音變變爲*lˤV-，而後失去了產生二等韻的條件，不會發生進一步音變。

三種期望可能產生《切韻》音系來母二等韻的上古漢語形式全部存在問題，這也就解釋了《切韻》音系來母不與二等韻相配的原因。除去前人所聚焦的配音律之外，更重要的是音首部分音變的結果阻斷了韻母部分音變的條件。

既然《切韻》祖語的音變規則決定了《切韻》音系來母二等不能相拼而產生空格，那麼包括{瀧₂}在內《切韻》中所記錄的個別來母二等韻特例就很可能是晚近基於音值相似而從其它方言借入的借詞。《廣韻》的釋義已經明確說{瀧₂}是南方方言詞。而從{瀧}作地名的區域來看，這一方言距離中原通語區較遠，在語音上則很可能未經歷通語的全部音變，特別是發生時代較晚的創新音變。在更早時期，{瀧₂}在其原方言中本來也是*rˤoŋ；但該方言並未經歷*r- > l-的創新音變，因此{瀧₂}仍得以保留了*rˤoŋ 的語音形式。後續該方言發生了與通語相同的*rˤV- > -(r)ae-/-(r)ea-音變，但與通語不同的是，來自更早時期的*rˤoŋ 此時仍有發生音變的條件，使得{瀧₂}的主元音受到*r-同化，變爲了聲母爲*r-的二等韻詞。之後{瀧₂}被借入到通語之中，在《切韻》以音值相似原則記錄時，韻母使用了音值相似的二等江韻；而《切韻》音系中缺乏日音聲母，因此選擇了邊音聲母 l-來記錄，[64]最終以 laewng 的形式被《切韻》記錄，填補了《切韻》中來母二等江韻的空格。

二 {瀧₃}讀音的來源——來母讀擦音現象的最早文獻記錄

上節已經論證{瀧₂}是來自於一支未發生晚近*r- > l-創新音變的南方方言的借詞並由此填補了《切韻》中的來母二等的空格，而本節將討論的{瀧₃}則是來自於一支與《切韻》關係更爲疏遠的南方方言的借詞，該方言與《切韻》祖語的分離時間和音韻演變與借入過程都與{瀧₂}的方言有別。

{瀧}採用的文字形式是基於"龍"的諧聲系列，該諧聲系列所記錄的詞的聲母在《廣韻》中可明顯分爲以下幾類：

1、來母 l-。絕大多數屬於此類，來源自上古*r-；

2、徹母 tr-。只有"寵（丑隴切）"，來源自上古*r̥-。另有讀澄母 dr-的"瀧（直隴切）"。"瀧"還有盧紅切和力董切兩個不別義的來母讀法。從早期小學文獻來看，"瀧"的來母讀法是主流，如《篆隸萬象名義》只注音"來公反"，澄母的直隴切一讀是根據基於"龍"的諧聲系列中古可以讀徹母錯誤類推出來的。

3、並母 b-。有"龐（薄江切）"和"驪（薄紅切）"。"龐"的薄江切一讀源自上古*br-，而"龍"這一概念所對應的詞在藏緬語中多有 b-，如書面藏語 འབྲུག 'brug"龍；雷"。[65]上古漢語同一

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[64] 如唐蕃會盟碑北面第二十行以"尚綺立熱貪通"對譯藏語 ཞང་ཁྲི་བཞེར་ལྷ་མཐོང་ zhang-khri-bzher-lha-mthong，-ri-b-以來母字"立"對應（Li & Coblin 1987：61）。另可參考普通話在對譯現代外語日音時的選字。

[65] Matisoff（2003：585）爲該詞項構擬了原始藏緬語形式*m-bruŋ ✕ m-bruk。

概念的{龍}可能也存在脣音的前置音節或前置輔音，[66]因此{龍}和{龐}的文字形式可以處於同一諧聲系列。"龐"在《集韻》中另有蒲蒙切一讀，[67]與"驢"作爲同一字頭的或體出現，對應《廣韻》"驢"的薄紅切一讀。可見在此音項下，"龐"和"驢"是同一個詞的不同文字形式，應當一起考慮。這一字詞對應關係則是形體訛變的結果。李建強（2006：102）認爲"龐"本作"庬"，屬於"龙"諧聲系列，後字形訛變作"龐"。王力（1982/1992：503）也指出表"雜亂"義的{龐}[68]的文字形式最初應爲"龙"，後來才寫作"龐"。北魏《寇臻墓志》將{龍驤}一詞寫作"驢驤"，爲這種訛混的產生提供了線索。這種訛混可能是類化和矯枉過正兩種因素先後作用所致。龍的右半部分本身不能單獨成字，爲了文字系統的經濟性，有時改寫成了形音皆近的龙；隨後基於正字意識的強化，此類類化後的字形又被修正爲從龍；然而矯枉過正，部分本應從龙的字形也被錯改作了從龍，從而導致了兩個諧聲系列的混淆。總而言之，"龍"諧聲系列中記錄的並母二等詞反映了{龍}一詞較早期的語音特徵，而記錄並母一等詞則是文字形體訛混所致。

4、生母 sr-。只有記錄{瀧 ₃}的"瀧"。對於{瀧 ₃}的諧聲問題，目前所見主要有兩種解釋。鄭張尚芳（2003：81）爲{瀧 ₃}構擬出上古音*srooŋ 以解釋其諧聲，然而{瀧 ₃}一詞未見有上古文獻記錄，同時中古生母字多與心母字出現在同一諧聲系列之中，極少與來母出現在同一諧聲系列，該構擬也有悖諧聲通例，不可取。凌宏惠、劉鎣（2024）則認爲"瀧水湍怒，舟船必須聯單爲雙、合二爲一才能平穩航行"，因此將"瀧船"訓讀爲"雙船"從而產生{瀧 ₃}。然而所舉有關"雙船"文獻爲屈大均《廣東新語》，成書已晚至清初，以此解釋中古讀音顯然說服力不足。{瀧 ₃}讀音的來源有待進一步研究。

《切韻》的生母 sr-一般構擬作*ʃ-（如王力 1958/1988：68）或*ʂ（如 Pulleyblank 1984：162）等擦音。這種來母與擦音的關聯很容易讓人聯想到現代部分漢語南方方言的來母讀擦音現象，[69]爲進一步討論{瀧 ₃}的來源提供了線索。

現代漢語方言中最知名的來母讀擦音現象見於內陸閩語。關於此現象的成因，學界大體上有對立說和層次說兩種意見。對立說認爲來母讀擦音現象不能用《切韻》來母讀邊音解釋，並且在更早階段與讀邊音的來母有對立，必須爲之構擬獨立來源。羅杰瑞、梅祖麟（1971/1998）找出了閩北方言中 17 個對應《切韻》來母的 s-聲母詞，推測其來源自*Cl-類的複輔音。羅杰瑞（1973/1985）結合對應詞的聲調表現爲原始閩語構擬了與常態邊音*l-對立的清邊音*lh-，並猜測其更早來源是清塞音加*l 組成的複輔音。李如龍（1983/2009）也支持該觀點，並將詞表擴展到 31 個。羅杰瑞（2005）結合苗瑤語和侗台語中的關係詞將共同閩語的*lh-追溯到了早期漢語中清塞音加響音的複輔音，而共同閩語中聲母是*l-和*t-的詞則來自於濁塞音加響音的複輔音；他還特別說明，能給出的包含清塞音的例子中，這個清塞音多半是舌根音。

層次說內部則有一定分歧，但都認爲內陸閩語中的來母讀擦音與來母讀邊音來源一致，只是層次不同。一派觀點認爲閩語中的來母讀擦音是《切韻》來母自身的演變。最有代表性的是張光宇（1989）提出的氣流換道音變，即*l > lh > s 或*l > z >s；王福堂（1999：98-99）也主張閩北方言來母讀擦音來自於 l > z > s 音變，即次濁音先變成濁擦音再變成清擦音。鄭張尚芳（2002；2003：43）爲代表的另一派觀點則認爲來母讀擦音是閩語早於中古漢語的層次，來

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66 Baxter & Sagart（2014：350）將之構擬爲*[mə]-roŋ。

67 該讀音亦見於其它小學文獻或注疏，如《詩·小雅·車攻》"四牡龐龐"釋文引徐邈音"扶公反"，原本《玉篇》注音"蒲公、蒲江二反"，《篆隸萬象名義》注音"薄公反"。

68 主要用於雙音節詞{龐雜}。

69 這種現象常被稱爲"來母 S 讀"等，秋谷裕幸（2011）根據邵將方言擦音聲母的對應關係將之改稱爲"來母 ʃ 聲"，沈瑞清（2019）將之稱爲"來母讀擦音"，以包含[s][ɬ][ɬ]等多種具體語音形式。本文採用"來母讀擦音"的命名。

自於上古漢語*r- > *z- > *s-，而來母讀邊音則是中古漢語層次。[70]

秋谷裕幸（2011）從朱口方言和和平方言（同屬邵將方言）的音類比較出發，指出兩者的共同原始方言存在*s、*ʃ 和*ɕ 三種舌齒擦音的對立，而與《切韻》來母對應的讀擦音的詞應屬於*ʃ 而非*s；在能區分 s 和 ʃ 的部分閩中方言中，讀擦音的來母也是 ʃ。這說明閩北方言所謂"來母 s 聲"本質是"來母 ʃ 聲"，部分方言今讀 s 是舌齒擦音對立中和的結果，閩北、閩中和邵將來母讀擦音的原始形式就是*ʃ，來自於同部位流音的音變。從這個角度看，所謂氣流換道的 l > z > s 音變就不能成立了。秋谷裕幸（2011）還從類型學的角度指出只有一種流音的音系很難產生流音的擦音化，必須要爲原始閩語系統構擬至少兩個流音才能解釋來母讀擦音現象，並最終根據調類表現爲原始閩語構擬了*l-、*l̥-、*r-、*r̥-四個流音與《切韻》來母對應，但並沒有明確說明這究竟是方言層次疊加的結果還是早期漢語不同的來源。

沈瑞清（2019）也根據邵將方言的聲母與聲調互動再次討論了相關問題。在邵將方言中，讀擦音的來母的聲調是陰調，與讀邊音的來母的陽調對立；而在去聲條件下，福清方言（屬閩東方言）和莆田方言（屬內陸閩南話）對應的同源詞雖然聲母是邊音，但聲調也是陰調，與一般的讀陽調的邊音對立，這說明部分閩方言來母讀擦音現象不是內陸閩語的後起音變，必須將其解釋爲共同閩語的兩個不同音類的對立。沈瑞清（2019）還引用了 Ohala 經典的語音學研究成果，認爲音變的相似性更多是聽感而非發音造成的，因此與《切韻》來母相對應的擦音 ʃ 應當是由聽感更接近的*lh-音變而來的，而非秋谷裕幸（2011）所構擬的同部位的*r-和*r̥-。

綜上所述，無論是從原始閩語的構擬還是更早期漢語的來源來看，以羅杰瑞（1973/1985）的構擬及羅杰瑞（2005）補充的外部證據爲代表的對立說仍然是內陸閩語來母讀擦音問題最好的解釋方案。Baxter & Sagart（2014：164、165、173）以此爲基礎，爲上古漢語構擬了一套帶緊密型前置輔音的聲首，其中*k.r-和*p.r-在《切韻》中主要表現爲來母 l-，而在原始閩語中即表現爲*lh-。[71]從內外部證據來看，這種構擬最爲合理。

閩語之外，鄉話中也有類似的來母讀擦音和塞擦音現象，不過因爲其詞數量較少且對應關係不很明顯，之前的研究多數將之視爲一個詞彙擴散式音變（瞿建慧 2016；李姣雷 2016）。但從詞彙對應上來看，鄉話中讀 ts-的來母的詞"聾""兩"在閩北方言中也都讀擦音。張振通（2024）首次嘗試將之與閩北方言及白語進行系統的歷史比較，認爲鄉話中來母讀不同擦音或塞擦音的形式反映的是上古漢語不同的前置輔音：

1、上古漢語*r->原始白語 ɣ-；閩北 l-；鄉話 z-；

2、上古漢語*C.r-（C 爲濁輔音或鼻音）>原始白語 g-；閩北 l-；鄉話 dz-；

3、上古漢語*C.r-（C 爲清輔音）>原始白語 k-；閩北 s-；鄉話 ts-。

綜上所述，構擬早期漢語中與*r-相對立的*C.r-（*C 爲清塞音）音首對於解釋閩語和鄉話中層次來源較早的來母讀擦音最有說服力。《切韻》祖語所經歷的*C.r-與*r-對立中和屬於語音

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[70] 學界一般將對此問題的解釋分爲原始說和後起說兩種，基本對應本文所分的對立說和層次說，唯一差異是將以鄭張尚芳（2002）爲代表的一派學說歸爲原始說。這種分類方法的核心判斷標準是是否承認來母讀擦音是來自於中古以前的讀音，如承認則爲原始說，如不承認則爲後起說。這種判斷標準過多著眼於各家學說對音值演變的路徑解說的異同，而對各家學說在音類分合上的異同關注不夠。從音類的角度來看，實際上王福堂（1999）和鄭張尚芳（2002）的方案差異絕沒有通行的分類法所暗示的那麼大。兩家的構擬都認爲閩方言對應《切韻》來母的詞讀邊音和擦音是層次差異，其分歧不過是前者認爲兩個層次都來自《切韻》來母讀邊音，而後者認爲兩個層次都來自於上古來母讀*r-，實質上都不承認兩類在漢語更早期的階段有對立，與羅杰瑞（2005）認爲兩類讀音在早期漢語中各有獨立來源截然不同。從歷史比較語言學的音類分合角度來看，明顯將羅杰瑞（1973/1985、2005）的方案分爲一類，王福堂（1999）和鄭張尚芳（2005）分爲一類更爲合適。

[71] 在 Baxter & Sagart（2014）的構擬中，帶不確定的緊密型前置輔音的音首*C.r-在《切韻》和原始閩語中的對應與*k.r-和*p.r-相同，但從配音律和演變規律來看，其它前置輔音都不能形成此種對應，因此*C.r-本質上也是*k.r-或*p.r-中的一種，不過限於目前的材料無法確定具體是哪一種。

創新，而地理語言學理論認爲創新的語言形式在擴張後將會使殘存的存古的語言形式不連續地分佈在邊緣地區（項夢冰、曹暉 2013：42）。現代閩語和鄉話的分佈也符合該理論的預期。而根據《廣韻》的釋義，作爲專名的{瀧}位於今湖南省郴州市與廣東省雲浮市，兩地在中古時期也無疑屬於邊緣地區，{瀧₃}的生母讀音很可能就是直接來自於當地未發生*C.r-與*r-對立中和的一支方言。因此可以將{瀧}的上古音構擬爲*C.rˤoŋ，一方面符合該詞以"龍"諧聲系列記錄的文字形式，另一方面可以解釋其在《廣韻》中的兩個異讀特別是{瀧₃}的讀音。

下面將簡要分析{瀧}在不同方言中發展的差異以及《廣韻》中異讀的產生。

在《切韻》音系的祖語中，首先發生了音首部分*C.r-與*r-對立中和的創新，即*C.rˤoŋ >
rˤoŋ。[72]之後在東漢時期先發生了#l- > *#j-的音變，爲後續音變提供了空格；大約 5 世紀初，發生了*#r- > *#l-的音變，即*rˤoŋ > *lˤoŋ，阻斷了後續*rˤV- > -(r)ae-/-(r)ea-的音變條件，因此應當直接演變爲《切韻》中的 luwng，與{瀧₁}語音相同；不過從《廣韻》釋義來看，兩者只是同形詞，文獻中也找不到讀 luwng 的{瀧}的實際用例，說明*C.rˤoŋ 在《切韻》祖語中已經丟失了。

{瀧₂}源自於一支與《切韻》關係較近的方言，與《切韻》祖語共同經歷了*C.r-與*r-對立中和的創新，但後續並未發生*#r- > *#l-的音變，因此在*rˤV- > -(r)ae-/-(r)ea-的音變發生前仍爲
*rˤoŋ，保留了後續音變發生的條件，最終在該音變發生後借入通語，被《切韻》以 laewng 的形式記錄。

{瀧₃}源方言則在譜系上與《切韻》更爲疏遠，未經歷*C.r-與*r-對立的中和，並發生了*C.r-
> *ʂ-的音變，即*C.rˤoŋ > *ʂˤoŋ。因爲聲母*ʂ-具有捲舌特徵，因此也發生了類似*rˤV- > -(r)ae-/-
(r)ea-的音變，最終在該音變發生後基於音值相似原則被借入通語，被《切韻》以 sraewng 的形式記錄。

確定{瀧₃}來自於上古漢語*C.rˤoŋ 至少有三個重要意義：

1、《切韻》中區分三個不同的清舌齒擦音：心母 s-、生母 sr-和書母 sy-。來自於*C.r-的{瀧₃}基於音值匹配原則被借入通語後被記錄爲生母 sr-，說明*C.r-音變的結果是*ʃ-或*ʂ-而非*s-，驗證了秋谷裕幸（2011）關於"來母 s 聲"的原始形式應當是 ʃ 的判斷。

2、閩語和鄉話都缺乏早期系統的文獻記錄，因此儘管可以通過歷史比較法爲來母讀擦音構擬出獨立的音類甚至追溯到早期漢語中的*C.r-，但各步音變的具體發生時間則難以確定。《廣韻》所記{瀧₃}讀生母是目前所見最早記錄了漢語方言中來母讀擦音的文獻材料，第一次爲相關音變錨定了一個時間下限，對研究其它方言來母讀擦音提供了一個重要參考。

3、白一平（2010）指出，《集韻》"𣹛"tsywijX 下釋義"閩人謂水曰𣹛"說明{水}*s.tur >
sywijX 在閩語中讀不送氣塞擦音，是上古漢語*s.t-發展爲原始閩語*ts-的文獻證據。本文又說明了《廣韻》{瀧₃}記錄了一則發生來母讀擦音變化的方言材料，爲該音變在一些方言中的發生時間錨定了下限。這些分析表明中古韻書等小學書中包含了不少可與現代方言研究相比較印證的古方言記音材料，值得未來作進一步的發掘研究。

三 {瀧}與{江}——漢語中的一組同源異形借詞
上節從{瀧₃}的讀音與現代漢語來母讀擦音現象入手，最終將{瀧}的上古音形式構擬爲
*C.rˤoŋ。本節將試圖通過內外部證據來確定{瀧}前置輔音的音值、詞族與詞源。

Baxter & Sagart（2014：162-163）主要通過內外兩種證據來確定*C.r-類音首中前置輔音

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[72] 該音變發生較早，具體時代有待研究。

的音值。從內部證據看，最重要的是文獻中所保留的上古不同方言中的同源詞。Baxter & Sagart（2014：162）引用了《方言》及郭璞注所記錄的不同方言中的{貔}的同源詞並做出了構擬：

貔，陳楚江淮之間謂之㹱，北燕朝鮮之間謂之貊，關西謂之狸。

注：今江南呼爲貊狸。

文字形式	上古漢語	中古漢語
貔	*[b]ij	bjij
㹱	*[r]ˤə	loj
貊	*[b]rə	bij
狸	*p.[r]ə	li
貊狸	*bə rə	bij li

通過{貔}、{貊}、{貊狸}等不同方言中同源詞所顯示的音首中的唇音成分，可以將{狸}音首中的前置輔音構擬爲*p。[73]

外部證據則是繼承羅杰瑞（2005）的方法，從苗瑤語、仡台語和南亞語中尋找可能的同源詞以判斷其前置輔音。如{露}的原始閩語聲母爲*lh-，上古漢語音首當爲*C.r-，從原始台語*p.raːk"被顯露"來看，上古漢語音首中的前置輔音應當爲*p。又如{六}的原始閩語聲母爲*lh-，上古漢語音首當爲*C.r-，從原始苗瑤語*kruk"六"來看，上古漢語音首中的前置輔音應當爲*k。

本節先從漢語內部證據看{瀧}的前置輔音。

從{貊}和{狸}的對應可以看出，上古漢語不同方言的同源詞之間會出現前置清塞音加*r 聲母的音首和清塞音聲母加*r 介音的音首的交替，即*C.r-與*Cr-的交替。既然{瀧}的上古音形式爲*C.rˤoŋ，那麼可以期待上古漢語中存在一個同族詞*Crˤoŋ。從上古至中古的音變規則來看，*Crˤoŋ 在中古應演變爲 paewng 或 kaewng。以此爲線索在韻書中檢索，能夠很容易地找到{瀧}的同族詞{江}。在語音上看，{江}在《切韻》江韻江小韻，音古雙切 kaewng，來自於上古漢語*krˤoŋ；從詞義上看，{瀧}作通名爲"湍流"義，與{江}作通名"河流"詞義極爲接近。由此可以根據{江}的語音，將{瀧}的上古音形式構擬爲*k.rˤoŋ。

{瀧}與{江}既然爲同源詞，詞義密切相關，上古音也十分接近，但兩者的音首結構並不完全相同，{瀧}的音首*k.r-屬於前置清塞音加*r 聲母，而{江}的音首*kr-則屬於清塞音聲母加*r 介音。這兩者的不同要從該詞族更早期的詞源說起。

Norman & Mei（1976）指出，漢語中的{江}不是漢藏語中原生的，而是先秦時期從南亞語借來的借詞，現代南亞語中至今存有同源詞，如越南語 sông、色當語（Sedang）krong 等。Norman & Mei（1976）舉出了三條主要證據：

1、{江}在漢語中最早是長江的專名，而南亞語中的同源詞則是河流的通名。一門語言中的通名被另一語言借爲專名符合一般語言借貸的規律，如英語 Mississippi 在奧吉布瓦語（Ojibwe）中就是"大河"之意，借入英語後成爲特定河流的專名；

2、{江}在漢語文獻中晚出，甲骨文中沒有，金文中才出現；

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[73] Baxter & Sagart（2014：162）似乎暗示不同方言同源詞之間形式的差異是同一原始形式在不同方言中發展差異導致的，這種分析並不合理：（1）從書中所舉的另一個{聿}和{筆}的例子來看，各方言同源詞之間的聲首差異較大，特別是前置輔音還存在鼻音*m 和塞音*p 的差異，在目前的框架下很難構擬出一個統一的原始形式以解釋其演變；（2）"聿，……楚謂之聿"似乎表明楚方言該音首的聲類是*m-]r- > *l-，而"貔，陳楚江淮之間謂之㹱"似乎又表明楚方言該音首的聲類是*r-，這說明上古漢語音首的*p.r-音類在楚方言中的形式是不可預測的。Hill（2019：247）在討論緬語支的類似問題時指出，同一語言內部這種不可預測的交替現象必須被構擬在原始語中並且將其解釋爲名詞屈折的一部分。因此更合理的解釋是漢語不同方言同源詞之間形式的差異是漢語更早階段形態變化的殘留，不同方言繼承了同一詞根的不同形態變化形式，從共時層面看屬於所謂"歷史上有關係的詞根"（Baxter & Sagart 2014：61）。

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3、《書·禹貢》"九江孔殷"疏："江以南，水無大小，俗人皆呼爲江。"說明{江}在漢語中帶有南方地域特色。

這一觀點得到了學界廣泛認可，Shorto（1979）、Pulleyblank（1983）與梅祖麟（2018）等都對{江}的問題進行了補充申說。不過限於時代因素，Norman & Mei（1976）僅從幾門現代南亞語中找到了幾個同源詞，對於上古漢語可能接觸到的南亞語形式沒有做具體研究。當然，根據 Norman & Mei（1976）與 Schussler（2023）的分析，上古時期南亞語系的分佈北界可抵長江流域，當時南亞語各分支的情況與分佈與現代南亞語一定大相徑庭，且幾乎完全不可考，因此目前比較合理且可行的分析是使用已經構擬到的最高層級的原始南亞語形式進行比較。該詞彙在南亞語系各分支中都有分佈，Shorto（2006：212）將其原始南亞語形式構擬爲*ruŋ ~ *ruuŋ ~ *rueŋ"河道，河流"，這似乎無法對應上漢語{江}和{瀧}音首的*k，爲處理借入留下了難題。但需要指出的是，該詞項的構擬其實不符合詞表前給出的輔音對應關係。Shorto（2006：45）認爲原始南亞語的*r-在大多數後代語言中得以保留，在越南語中則主要爲 r/z/，少部分爲 gi/z/，但詞表中所給出的越南語同源詞 *sông* 則明顯違反此對應關係，且現代越南語的 s 來自於原始越芒語中塞音加 r 的複輔音（Ferlus 1992），說明此詞不能簡單地構擬爲*r-。詞表中所給出的不同語支的同源詞中則多次出現了*k，如越芒語支（Viet-Mường）的芒語（Mường）*không*，孟語支（Mon）的古孟語（Old Mon）*kruṅ* /kruŋ/，巴拿語支（Bahnaric）的 Central Rölöm 語 kro:ŋ、巴拿語（Bahnar）krɔ:ŋ，克木語支（Khmuic）的 Kammu-Yuan 語 krɔ́:ŋ 等。一些其它語言中的借詞也顯示出詞首*k 的存在，如占語（Cham）krɔ:ŋ、亞齊語（Acehnese）kruəŋ 等。這些語言地理分佈較廣，且位於南亞語系的不同分支（Sidwell 2021），因此不能認爲是共同創新，應該將*k 構擬至該詞的原始南亞語層級。[74]

Sidwell & Alves（2023）與 Sidwell（2024）爲原始南亞語的每個詞分別構擬了形態詞形式（morphological words/m-ω）與語音詞形式（phonological words/p-ω），前者是詞根與形態語素的疊加，後者是對預期具體語音形式的近似描述，而"河道，河流"一詞也被構擬到了原始南亞語層級，形式爲*krɔ:ŋ/kə.'rɔ:ŋ；[75] 相較 Shorto（2006：212）的構擬，該構擬在處理對應關係時解釋力更強，也能更好解釋這個南亞語詞在借入上古漢語後是如何出現兩個同源異形詞的。如果一名上古漢語使用者同時十分熟悉南亞語，則可以較好地分析南亞語詞的音節結構，並將主要以音系匹配的方式借入南亞語詞，那麼上古漢語使用者心目中被借詞的形式將會是形態詞形式的*krɔ:ŋ，在借用時會把*k 借爲聲母*k-，*r 借爲介音*-r-，韻母借爲帶標記的*-ˤoŋ，最終得到的上古漢語形式即是*krˤoŋ{江}，在文字上以基於"工"的諧聲系列記錄；相反，如果上古漢語使用者並不熟悉南亞語，他就只能以音值相似的方式將該南亞語詞借入，那麼上古漢語使用者心目中被借詞的形式將會是音韻詞形式的 kə.'rɔ:ŋ，就更有可能將*kə 借爲前置輔音*k.-，[76] 而將*r 借爲主要音節的聲母*r-，韻母借爲帶標記的-ˤoŋ，最終得到的上古漢語形式即是*k.rˤoŋ{瀧}，在文字上以基於"龍"的諧聲系列記錄。這兩種不同的借入途徑最終導致了同一

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[74] 遺憾的是，Shorto（2006）關於輔音部分的對應關係只完成至清塞音+喉化輔音（Voiceless plosive + glottalized consonant）部分就戛然而止，無法得知 Shorto 爲原始南亞語清塞音+r 在現代各支南亞語中建立起了何種對應關係，也無法得知 Shorto 爲何不爲原始南亞語的"河道，河流"一詞構擬清塞音。

[75] Sidwell & Alves（2023）只給出了這個詞的語音詞形式*kə.'rɔ:ŋ，形態詞形式是本文參考 Sidwell & Alves（2023）與 Sidwell（2024）中其它詞兩種形式的對應關係構擬的。

[76] Baxter & Sagart（2014）構擬了兩種不同的主要音節前的次要音節，分別是不帶元音的*C.（或稱"緊密附著的""前置輔音"）和帶元音的*Cə.（或稱"鬆散附著的""前置音節"），而在與*r 相關的音節中則驚人地有*Cr-、*C.r-和*Cə.r-（*C 爲清塞音）的三重對立，其中關於*Cə.r-（C 爲清塞音）的唯一例子是{落}在廈門話和平遙話中分別有/ka-lauʔ8/和/kʌʔ-lʌʔ/的形式（Baxter & Sagart 2014：185）。孫景濤（2008：106）從福州話/ko³¹ lou⁵⁵/與"滑"/kou⁵⁵/的對應出發，指出廈門話的/ka-lauʔ8/也是"滑"在某個層次的裂變重疊，推翻了*Cə.r-存在的孤證。由此可以認爲*Cə.r-與*C.r-至少在*C 爲清塞音的前提下不構成對立。

個南亞語詞在漢語中出現了一組同源異形詞。

本節最後附論一下越南語中{江}{瀧}的同源詞及其文字形式問題。現代越南語中常使用的"河流"義詞有 *sông* 與 *giang*，前者是來自於原始越語*k-roːŋ < 原始南亞語*krɔːŋ/kəˈrɔːŋ（Ferlus 2007；Sidwell & Alves 2023），後者是漢越語"江"（如上文所述，追根溯源也來自於原始南亞語*krɔːŋ/kəˈrɔːŋ），這兩個形式很明顯也是同源異形詞。有趣的是，*sông* 的喃字一般也寫作"瀧"或"㳥"（Nguyễn et al. 2009：1128），與漢語的{瀧}在文字形式上相同，又與{瀧₃}音近。但從越南語歷史演變來看，這一相同只是雙方巧合造出了同樣的形聲字，並不是越南語使用者因爲詞音相近而借用了{瀧₃}的字形。

喃字"瀧"出現的時間非常早，刻於 1174 年的《奉聖夫人黎氏墓誌》中即有"㳞㳥"一詞，對應現代越南語 *bến sông*"河邊的碼頭"（吳德壽 2015）。而越南語的*Cr-型複輔音中的*C 保存時間則非常長，Ferlus（1992）認爲越南語的*Cr-型複輔音在 15-16 世紀時仍爲*kʂ-，至 17 世紀才變爲*ʂ-。從同時期對越南語"河流"義詞的記錄來看，這個判斷基本符合事實。在明朝會同館於 16 世紀所編寫的《安南國譯語》中，"河流"義詞採用"龍""空""生"三種漢字記錄，說明其聲母音值可能仍爲*kʂ-或*kɬ-（江佳璐 2024）；直至 17 世紀的《越葡拉詞典》，該詞才被記爲與現代文字形式相似的 *fôŭ* (de Rhodes 1651：305)。這說明在該喃字在 12 世紀時不可能有與{瀧₃}相似的讀音，越南語使用者當時應當是以"龍"*-roːŋ 作爲聲符以記錄*k-roːŋ。

四 {瀧}的分佈範圍

上文已論證{瀧}與{江}爲同源異形詞，都是來自南亞語的借詞。從《廣韻》所記錄的詞義看，{瀧}作通名是"南人語"，作專名是南方地名。從語音上看，{瀧₃}經歷了只見於一些南方方言的音變。從文獻上看，以通語爲主的傳世文獻幾乎不見{瀧}的記錄。這些都暗示了{瀧}強烈的南方地域特色。{瀧}是否僅是一個南方部分方言借入的借詞？該詞是否曾進入通語或其它方言？日語材料或許可以提供一些不一樣的線索。

儘管{瀧}幾乎不見於中古以前的中土文獻，但令人驚訝的是，《萬葉集》中"瀧"字卻出現多達 30 次，全部用來記錄上古日語 *takî*"瀑布"（萬葉假名作"多伎""多吉"等）。{瀧₂}的"湍流"義與"瀑布"義很接近，顯然日語使用者了解{瀧₂}的詞義並以之其文字形式"瀧"訓讀上古日語 *takî*。《萬葉集》用例中，時代可確定最早者爲卷一 1.36 柿本人麻呂所撰《幸於吉野宮之時，柿本朝臣人麻呂作歌》第 25、26（Vovin 2017：106-108）：

本文：（25）水　　　　激　　　　　　　　　　（26）**瀧**之　　　　　　　宮子　　　　波

轉寫：（25）MÎNA PAYA-KÎ　　　　（26）**TAKÎ**-NÖ　　　MÎYAKÔ　　　pa

標注：（25）water　　　be.rapid-ATTR　（26）**waterfall**-GEN capital　　　TOP

譯文：（26）The capital by **the waterfall** （25） with rapid water

柿本人麻呂爲日本飛鳥時代歌人，此詩約作於 689 年至 691 年之間（Vovin 2017：3）。值得注意的是，今所見《切韻》等韻書在日本最早的記錄爲日僧信睿撰於 773 年《成唯識論了義燈抄》所存《切韻》書名，後日僧圓仁（794-864）撰《唐韻略》，是最早改編《切韻》系韻書的日本學人（賈智 2024）。這些文獻資料說明《切韻》等韻書在日本的廣泛通行不早於 8 世紀末，活躍於飛鳥時代的柿本人麻呂及其它歌人是無緣普遍閱讀《切韻》等韻書的。而從傳世文獻看，{瀧}屬於絕對的僻詞，不見於經史之中。因此日語使用者所能接觸到該詞的唯一可能性就是該詞出現在與日語使用者接觸的漢語使用者口語之中。

當時與日語接觸的漢語使用者爲日本漢字音留下了吳音一層。從地域上看，一般認爲吳音

是從中國東南傳入的（李香 2013：2-3）。因此，用以記錄{瀧}的"瀧"也應存在於當時的東南方言之中。從《萬葉集》的使用情況來看，"瀧"應當在這種東南方言之中並不生僻，因此可以被眾多歌人所借用。這說明{瀧}的地理分佈在隋唐以前不僅限於《廣韻》中專名所暗示的嶺南周邊地區，而是一直延伸到東南沿海，甚至通語中可能在很長時間內仍保存有與{瀧₁}同形的{瀧}。但隨著{瀧}在包括通語在內諸多方言中詞彙競爭的失敗，[77]其分佈範圍逐漸縮小，最後在《切韻》時代只在個別區域殘存，徹底淪爲了一個小眾的方言形式。

<p style="text-align:center">五 結語</p>

本文的基本結論是：（1）{瀧₂}與{瀧₃}超出通例的讀音都來自於上古漢語*k.rˤoŋ，後在不同方言中發生了不同的音變，之後基於音值近似原則借入了《切韻》音系之中；（2）{瀧₃}在《廣韻》中讀生母 *sr-* 是來母讀擦音現象最早的文獻記錄；（3）{瀧}和{江}是同源異形詞，都借自原始南亞語*krɔːŋ/kə.ˈrɔːŋ，其語音差異和借入時不同的語音形式有關；（4）從上古日語使用"瀧"的文字形式訓讀 *taki* 一詞來看，{瀧}曾經的分佈範圍比《廣韻》所描述的更廣，不僅限於南方部分方言。本文所涉及的三個語系中的多個相關詞彙的發展如下圖所示：

PAA *krɔːŋ ~ kə.ˈrɔːŋ > PV *k-roːŋ　　　　　> MV *fou˘*　　　　> *sông*
　　　➜ OC 江*krˤoŋ　　　　> MC 江 *kaewng*
　　　　　➜ OC 瀧*k.rˤoŋ　　　> MC*瀧 *luwng*
　　　　　　　> MC 瀧 *laewng*
　　　　　　　> MC 瀧 *sraewng*
　　　　　　　　　　➜OJ 瀧 *taki₁*

<p style="text-align:center">參考文獻</p>

白一平（2010）"執"、"勢"、"設"等字的構擬和中古 sy-（書母=審三）的來源，《簡帛》第五輯，上海：上海古籍出版社。
賈 智（2024）《切韻》在日本的傳承与傳播，《社會科學報》第 1895 期。
江佳璐（2024）《安南國譯語》所反映的近代漢語聲母現象，《漢學研究》第 1 期。
李方桂（1971/2001）《上古音研究》，北京：商務印書館。
李建強（2006）《來母字及相關聲母字的上古音研究》，北京大學博士學位論文。
李姣雷（2016）湘西鄉話來母讀擦音塞擦音現象——兼論閩語來母讀 s 聲母的來源，《中國語文》第 4 期。
李如龍（1983/2009）閩西北方言"來"母字讀 s 的研究，《漢語方言研究文集》，北京：商務印書館。
李 香（2013）《日譯吳音的讀音層次與六朝南音》，廣州：世界圖書出版廣東有限公司。
凌宏惠、刘鋆（2024）"瀧"字讀音疏證——兼談日本姓氏瀧川讀音，《黃岡師范學院學報》第 3 期。
羅杰瑞（1973/1985）閩語聲調的演變，《中南民族學院學報》第 4 期。
羅杰瑞（2005）閩方言中的來母字和早期漢語，《民族語文》第 4 期。
羅杰瑞、梅祖麟（1971/1988）試論幾個閩北方言中的來母 S-聲字，趙秉璇、竺家寧編《古漢語複聲母論文集》，北京：北京語言文化大學出版社。

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[77] 競爭對手可能就是{渢}。

梅祖麟 （2018） 再論南亞民族在遠古中國東南沿海地區的分佈——以"黃浦江"的"浦"和"江"爲例，《語言研究集刊》第 21 輯，上海：上海辭書出版社。

甯繼福 （1985） 《中原音韻表稿》，長春：吉林文史出版社。

潘悟雲 （2000） 《漢語歷史音韻學》，上海：上海教育出版社。

秋谷裕幸 （2011） 閩語中"來母 S 聲"的來源，《語言學論叢》第四十三輯，北京：商務印書館。

瞿建慧 （2016） 湘西鄉話來母讀擦音塞擦音的研究，《中國語文》第 4 期。

沙加爾 （1999/2019） 《上古漢語詞根》，龔群虎譯，上海：上海教育出版社。

沈瑞清 （2019） 早期邵將方言響音聲母的聲調演變——重訪羅杰瑞先生的"邵武假說"，《語言研究集刊》第二十一輯，上海：上海辭書出版社。

孫景濤 （2008） 《古漢語重疊構詞法研究》，上海：上海教育出版社。

王福堂 （1999） 《漢語方言語音的演變和層次》，北京：語文出版社。

王 力 （1958/1988） 《王力文集 第九卷 漢語史稿》，濟南：山東教育出版社。

王 力 （1982/1992） 《王力文集 第八卷 同源字典》，濟南：山東教育出版社。

吳德壽 （2015） 越南喃字形成的發展略程及越南漢字數位化的一些考量，《古今論衡》第二十七期，臺北：中央研究院歷史語言研究所。

項夢冰、曹 暉 （2013） 《漢語方言地理學——入門與實踐》，北京：中國書籍出版社。

雅洪托夫 （1960/1986） 上古漢語的複輔音聲母，謝·葉·雅洪托夫著，唐作藩、胡雙寶編選《漢語史論集》，北京：北京大學出版社。

雅洪托夫 （1976/1986） 上古漢語的起首輔音 L 和 R，謝·葉·雅洪托夫著，唐作藩、胡雙寶編選《漢語史論集》，北京：北京大學出版社。

楊耐思 （1981） 《中原音韻音系》，北京：中國社會科學出版社。

張振通 （2024） 論鄉話中來母讀擦音、塞擦音聲母現象的成因，第九屆音韻與方言青年學者論壇。

鄭張尚芳 （2002） 漢語方言異常音讀的分層及滯古層次分析，何大安主編《南北是非：漢語方言的差異與演化》，臺北：中央研究院語言學研究所籌備處。

鄭張尚芳 （2003） 《上古音系》，上海：上海教育出版社。

周祖謨 （1996） 《魏晉南北朝韻部之演變》，臺北：東大圖書公司。

Baxter, William H. and Laurent Sagart. 2014. *Old Chinese: A New Reconstruction*. New York: Oxford University.

De Rhodes, Alexandre. 1651. *Dictionarivm annamiticvm, lvsitanvm et latinvm*. Rome: Sacrae Congregationis de Propaganda Fide.

Ferlus, Michel. 1992. *Histoire abrégée de l'évolution des consonnes initiales du vietnamien et du sinovietnamien. Mon-Khmer Studies 20*.

Ferlus, Michel. 2007. *Lexique de racines Proto Viet-Muong (Proto Vietic Lexicon)*. Unpublished Ms. cited from http://sealang.net/monkhmer/dictionary.

Hill, Nathan. 2019. *The Historical Phonology of Tibetan, Burmese, and Chinese*. Cambridge: Cambridge University Press.

Li, Fang-kuei and W. South Coblin. 1987. *A Study of the Old Tibetan Inscriptions*. Taipei: Institute of History and Philology, Academia Sinica.

Matisoff, James A. 2003. *Handbook of Proto-Tibeto-Burman: System and philosophy of Sino-Tibetan reconstruction*. Berkeley, Los Angeles, London: University of California Press.

Nguyễn, Hữu Vinh et al. 2009. *Từ Điển Chữ Nôm Trích Dẫn*. Westminster, California: Viện Việt-Học.

Norman, Jerry and Mei Tsu-lin. 1976. *The Austroasiatics in ancient south China: Some lexical evidence. Monumenta Serica 32*.

Pulleyblank, E.G. 1983. *The Chinese and Their Neighbors in Prehistoric and Early Historic Times*. In Keightley D. (eds.), *The Origins of Chinese Civilization*. Berkeley and Los Angeles: University of California Press.

Pulleyblank, E.G. 1984. *Middle Chinese: A Study in Historical Phonology*. Vancouver: University of British Columbia Press.

Schuessler, Axel. 2023. *Tigers, and the Ancient Languages of Chǔ, Wú and Yuè. Bulletin of Chinese Linguistics Volume 16, Number 2*.

Shorto, H.L. 1979. *The Linguistic Protohistory of Mainland South East Asia*. In R.B.Smith and W.Watson (eds.), *Early South East Asia: Essays in Archaeology, History and Historical Geography*. Oxford: Oxford University Press.

Shorto, H.L. 2006. *A Mon-Khmer comparative dictionary*. Camberra: Pacific Linguistics, Research School of Pacific and Asian Studies, The Australian National University.

Sidwell, Paul. 2021. *Classification of MSEA Austroasiatic languages*. In Paul Sidwell and Mathias Jenny (eds.), *The Languages and Linguistics of Mainland Southeast Asia: A Comprehensive Guide*. Berlin/Boston: De Gruyter.

Sidwell, Paul. 2024. *500 Proto Austroasiatic Etyma: Version 1.0. Journal of the Southeast Asian Linguistics Society 17.1*. Honolulu: University of Hawai'i Press.

Sidwell, Paul and Mark Alves. 2023. *Re-Evaluating Shorto's MKCD Reconstructions*. In Paul Sidwell and Mark Alves (eds.), *JSEALS Special Publication No.12: Papers from the Ninth and Tenth International Conferences on Austroasiatic Linguistics*. Honolulu: University of Hawai'i Press.

Vovin, Alexander. 2017. *Man'yoshu Book 1: a new English translation containing the original text, kana transliteration, romanization, glossing and commentary*. Leiden: Brill.

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