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► **To cite this version:**

Ruihua Mao, Barbara Hemforth, Anne Abeillé. An Empirical Investigation of Mandarin Island Constraints. *Architectures and Mechanisms of Language Processing*, Aug 2023, San Sebastian, Spain. hal-04368238

HAL Id: hal-04368238

<https://hal.science/hal-04368238>

Submitted on 10 Jan 2024

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An Empirical Investigation of Mandarin Subject Island Constraint

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Introduction

Constraints on long-distance dependencies have been crucial for linguistic theories, with three main approaches:

- **Syntactic approach:** "Island" constraints are syntactic in nature and should generalize across languages and across constructions (e.g. Huang 1982, Chomsky 1986). Extraction from subjects is more difficult than extraction from objects (subject island)
- **Processing approach:** Processing factors such as low frequency and high working memory load play a role (Klunder 1991, Hofmeister & Sag 2010)
- **Discourse-based approach:** Based on Goldberg (2006, 2013)'s "Backgrounded Constructions are Islands", Abeillé et al (2020) propose that the discourse function of the construction plays a role: the infelicity to extract an element out of a backgrounded constituent is worse when the extracted element is focalized (as in wh-questions or it-clefts). If most subjects are backgrounded, it is uninfelicitous to extract out of them with a focalizing construction.

Previous Studies

Regarding the phenomenon that a possessor of a subject can be realized at the sentence-initial position, but sentences with a possessor of an object sitting at the sentence-initial position show variable judgments, Hsu(2009) argued that it is legitimate to derive Mandarin sentence-initial subject possessors via either A or A-bar movement, but that object possessors are only derived via A-bar movement

Mao et al. (2022) compared sub-extraction from subjects and objects in Mandarin relative clauses, and did not find a subject penalty.

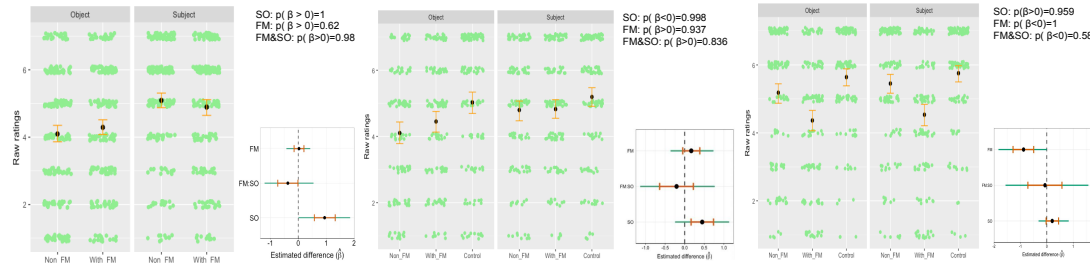
Three Mandarin Experiments(Acceptability Judgment Experiment)

	Exp1 Wh-extraction in Mandarin Clefts without resumptive pronouns(4 conditions) 24 items=32 distractors; 1-7 Likert scale; 39 Mandarin natives	Exp2 Wh-extraction in Mandarin Clefts with resumptive pronouns "qi" (6 conditions) 24 items=30 distractors; 1-7 Likert scale; 36 Mandarin natives	Exp 3 Wh-in-situ in Mandarin Questions (6 conditions) 24 items=30 distractors; 1-7 Likert scale; 37 Mandarin natives
a. -FM&S	Na-ge daxue paiming (qi) kekaoxing kunrao jiaoshi xiehui ? Which-CL university ranking (RP) credibility distress teacher union	Nage daxue paiming de kexindu kunrao jiaoshi xiehui ? Which-CL university ranking DE credibility distress teacher union	Nage daxue paiming de kexindu kunrao jiaoshi xiehui ? Which-CL university ranking DE credibility distress teacher union
b. +FM&S	Shi na-ge daxue paiming (qi) kekaoxing kunrao jiaoshi xiehui ? Focus Marker which-CL university ranking (RP) credibility distress teacher union	Zhiyou na-ge daxue paiming de kexindu kunrao jiaoshi xiehui ? Only(FM) Which-CL university ranking DE credibility distress teacher union	Zhiyou na-ge daxue paiming de kexindu kunrao jiaoshi xiehui ? Only(FM) Which-CL university ranking DE credibility distress teacher union
c. -FM&O	na-ge daxue paiming, jiaoshi xiehui zhiyi (qi) kekaoxing? which-CL university ranking teacher union question (RP) credibility	jiaoshi xiehui zhiyi na-ge daxue paiming de kexindu? teacher union question which-CL university ranking DE credibility	jiaoshi xiehui zhiyi na-ge daxue paiming de kexindu? teacher union question which-CL university ranking DE credibility
d. +FM&O	Shi na-ge daxue paiming, jiaoshi xiehui zhiyi (qi) kekaoxing? Focus Marker which-CL university ranking teacher union question (RP) credibility	Jiaoshi xiehui zhiyi DE zhiyou na-ge daxue paiming de kexindu ? teacher union question DE only(FM) Which university ranking DE credibility	Jiaoshi xiehui zhiyi DE zhiyou na-ge daxue paiming de kexindu ? teacher union question DE only(FM) Which university ranking DE credibility
e. Control&S		2019 nian daxue paiming de kexindu kunrao jiaoshi xiehui ma? 2019-year university ranking DE credibility distress teacherunion Question marker	
f. Control&O		Jiaoshi xiehui zhiyi 2019 nian daxue paiming de kexindu ma teacher union question 2019-year university ranking DE credibility QM	

Predictions

- Syntactic approach: subject penalty in Exp 1 and 2 (subject island), and also subject penalty in Exp 3 if there is covert movement in Mandarin wh-in-situ questions.
- Processing approach: shorter linear distance between filler and gap might favor extraction from subjects in Exp1, Exp 2 and Exp 3.
- Discourse approach: If most subjects are backgrounded, focalized elements cannot be extracted (a subject penalty when extracting focalized wh-elements in all experiments).

Results



- Exp 1:**
- o a high probability for a main effect of syntactic function (lower acceptability in Object conditions)
 - o low probability for a main effect of Focus Marker
 - o a high probability for an interaction
- Exp 2:**
- o a high probability for a main effect of syntactic function (lower acceptability in Object conditions)
 - o a high probability for a main effect of focus marker
 - o Low probability for an interaction
- Exp 3:**
- o a high probability for a main effect of syntactic function (lower acceptability in Object conditions)
 - o a high probability for a main effect of focus marker
 - o Low probability for an interaction

Discussion

- No subject penalty in three Mandarin wh-question experiments, which is not compatible with the traditional syntactic approach.
- Although lack of subject penalty in these three experiment supports the processing approach, there is no syntactic function difference in our previous sub-extraction from subject/object in Mandarin relative clause experiment (processing approach predicts an object preference).
- No significant effect of FM in Exp1 & higher acceptability of focalized extraction conditions do not support the discourse approach.

Conclusion: Mandarin does not show subject island constraints Expected for in situ questions (Jin 2016, Chaves & Putnam 2020)
Hypothesis for ex situ questions: a silent pro is always in situ (Drubig 2000).

Selected References

[1]Abeillé et al (2020) Extraction from subjects: Differences in acceptability depend on the discourse function of the construction; [2] Goldberg (2013) Backgrounded constituents cannot be "extracted"; [4]Myers (2012). Testing adjunct and conjunct island constraints in Chinese; [3] Mao et al (2022) Testing subject preference and subject island in Mandarin Chinese relative clauses[Oral Talk]. Proceedings of Linguistic Evidence 2022; [4] Hsu (2009) Possessor Extraction in Mandarin Chinese [5] Drubig, H. B. (2000). Towards a typology of focus and focus constructions.

