



Chinese Wh-in-situ and Islands: a Formal Acceptability Judgment Study

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Introduction

- Observations in previous literature (Huang, 1982):

a. Argument wh-in-situ in complex-NP island:

Akiu kan-bu-qi [NP[CP e_i zuo shenme de] ren_i]?
 Akiu look-not-up [NP[CP e_i do what REL] person_i]?
 “What is the thing/job x such that Akiu despises [people [who do x]]?”

b. Adjunct wh-in-situ in complex-NP island:

* Akiu xihuan [NP[CP Luxun weishenme xie e_i de] shu_i]?
 Akiu like [NP[CP Luxun why write e_i REL] book_i]?
 “What is the reason x that Akiu likes [books [that Luxun wrote for x]]?”

- Processing evidence for covert movement of wh-in-situ (Xiang, Wang & Cui, 2015)

- Different approaches to this problem:

- Empty Category Principle (ECP) (Huang, 1982; Lasnik & Saito, 1984)
- No covert movement of wh-in-situ (Tsai, 1999)
- Q-movement in overt syntax (Watanabe, 1992; Aoun & Li, 1993)

Research Goals

- Verify argument/adjunct asymmetry using formal acceptability judgment paradigm;
- Look for island effect as supper-additive interaction effect of *Embedded Structure* and *Dependency Length* (Sprouse & Hornstein, 2013);
- Examine different theories regarding Chinese wh-in-situ;

Method

- Participants:** 56 native Mandarin Chinese speakers living in greater Chicago area.
- Materials:** (Each list with 24 test sentences and 72 filler sentences)

	Non-Island	
	Argument	Adjunct
Short	Yuehan xiangzhidao shei shuo nyuhai chi le shousi John wonders who say girl eat ASP sushi “John wonders who said that the girl ate sushi.”	Yuehan xiangzhidao Bier weishenme shuo nyuhai chi le shousi John wonders Bill why say girl eat ASP sushi “John wonders why Bill says t that the girl ate sushi.”
	Yuehan xiangzhidao Bier shuo nyuhai chi le shenme John wonders Bill say girl eat ASP what “John wonders what Bill said that the girl ate.”	Yuehan xiangzhidao Bier shuo nyuhai weishenme chi le shousi John wonders Bill say girl why wat ASP sushi “John wonders why Bill says that the girl ate sushi t.”
	Island	
	Argument	Adjunct
Short	Yuehan xiangzhidao shei jianle chi shousi de nyuhai John wonders who meet ASP eat sushi REL girl “John wonders who met the girl that ate sushi.”	Yuehan xiangzhidao Bier weishenme jian le chi shousi de nyuhai John wonders Bier why meet ASP eat sushi REL girl “John wonders why Bill met the girl that ate sushi.”
	Yuehan xiangzhidao Bier yudao le chi shenme de nyuhai John wonders Bill meet ASP eat what REL girl “John wonders what Bill met the girl that ate.”	Yuehan xiangzhidao Bier jian le weishenme chi shousi de nyuhai John wonders Bier meet ASP why eat sushi REL girl “John wonders why Bill met the girl that eat sushi.”

Table 1: 2×2×2 Factorial Design and a sample set of stimuli

- Procedure:**
 - Eight survey lists created following a Latin square design;
 - 1-7 Likert scale; Paper Questionnaire;

Results (continued)

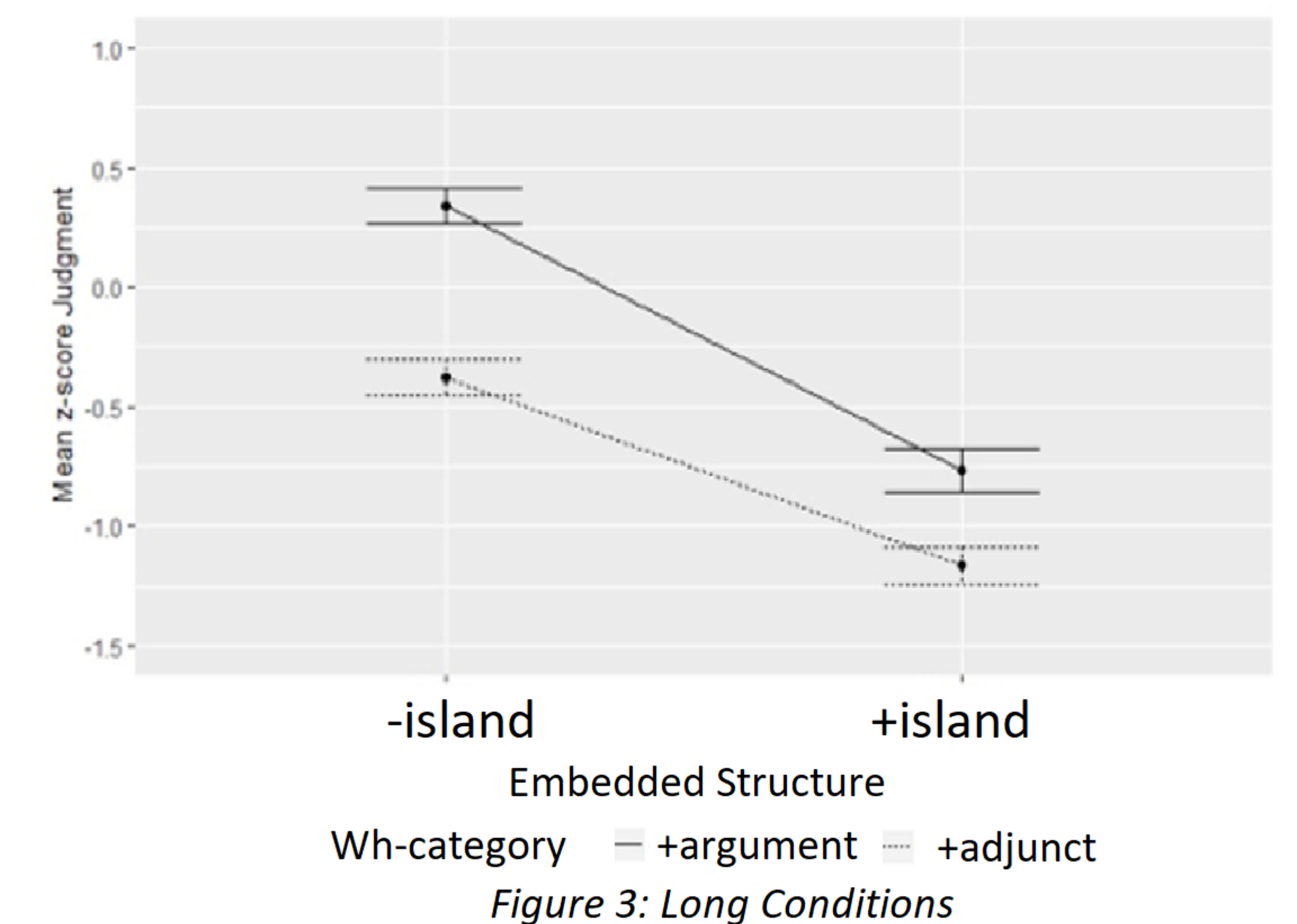


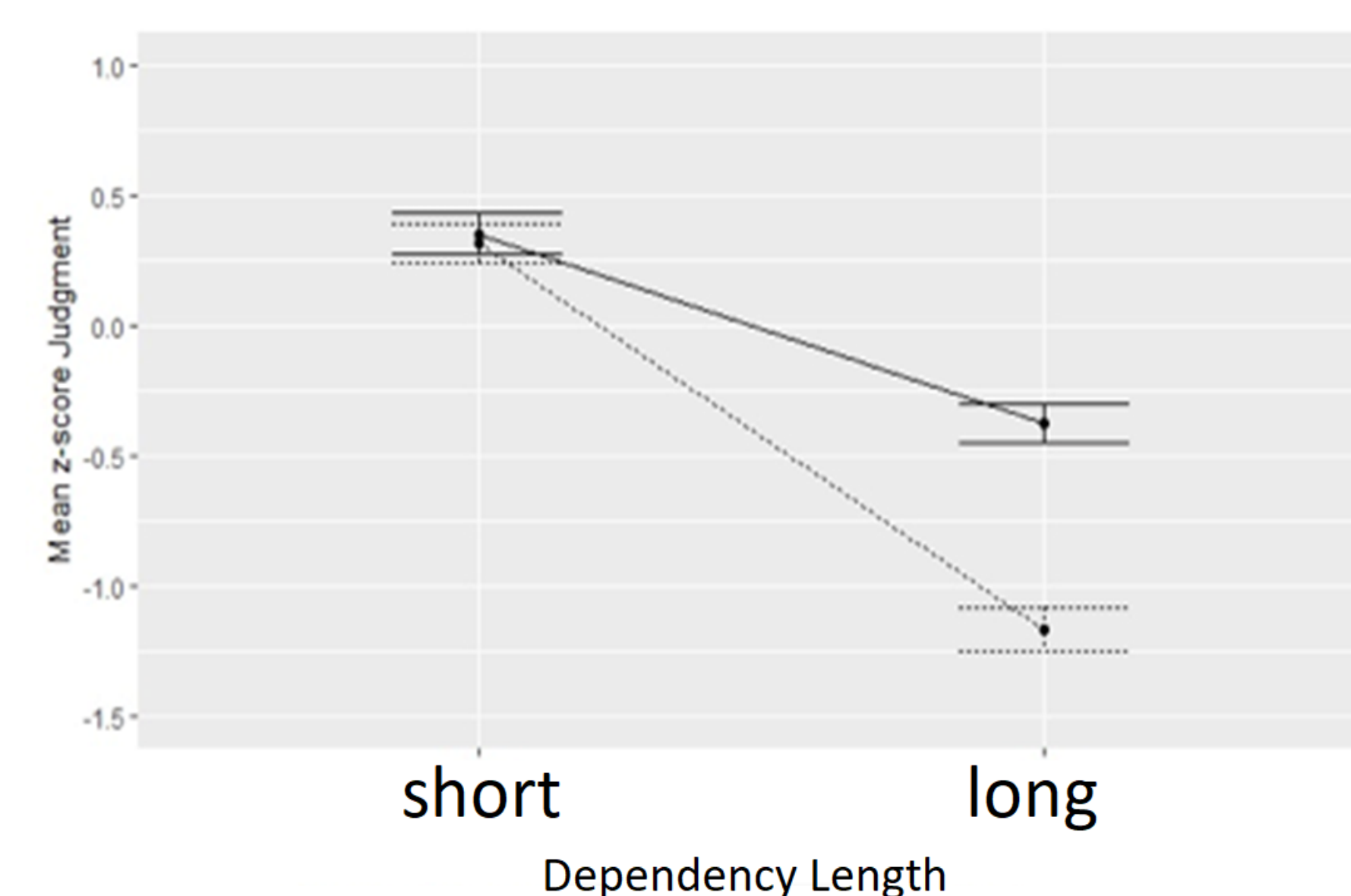
Figure 1 & 2:

Significant interactions of Dependency Length × Embedded Structure in both adjunct ($t = 4.362, p < 0.001$) and argument ($t = 6.890, p < 0.001$)

Figure 3:

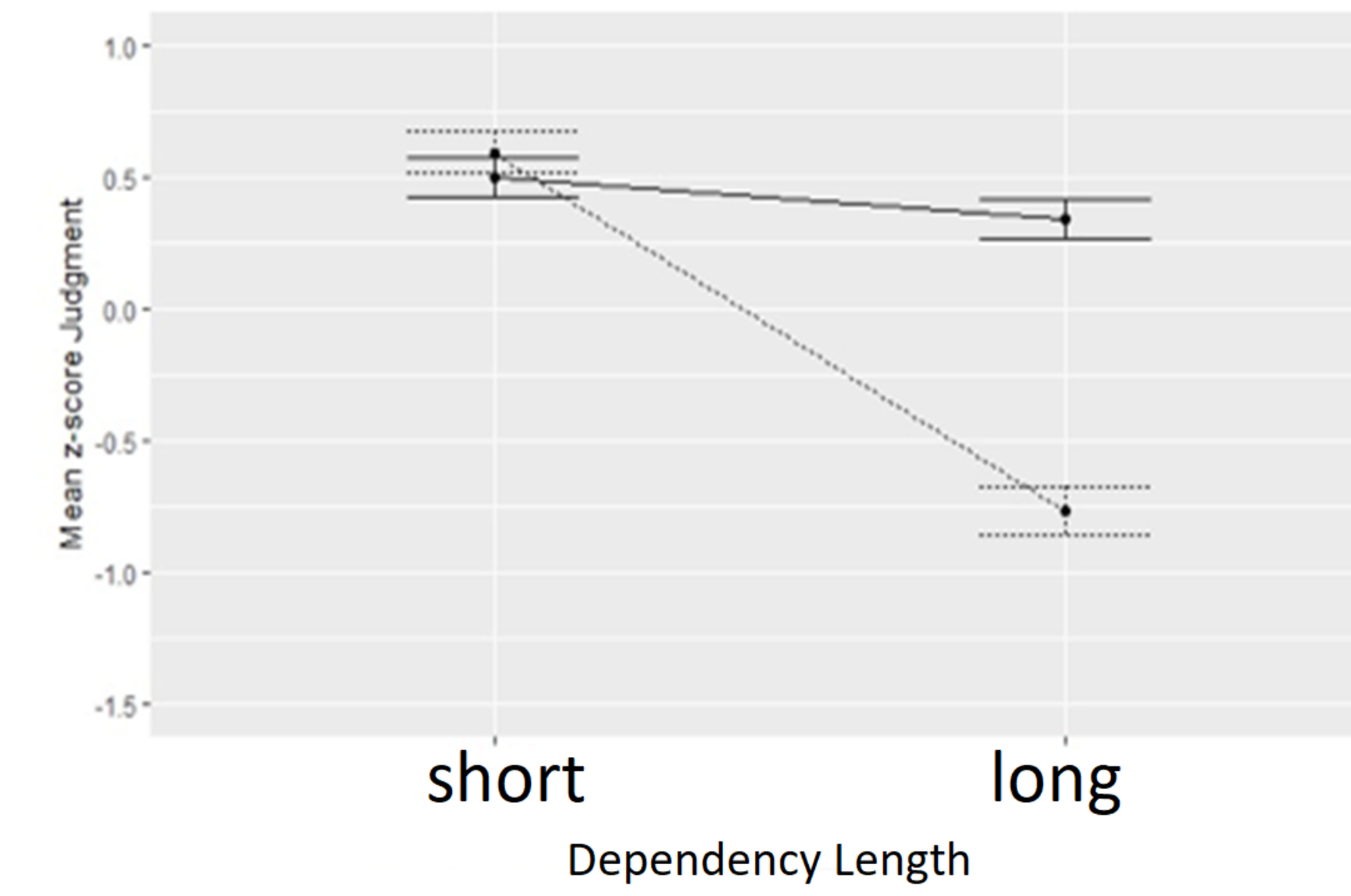
No significant interaction of Embedded Structure × Wh-category in the long conditions ($t = 0.400, p = 0.690$); significant main effect of Wh-category ($t = 3.694, p < 0.001$);

Results



Embedded Structure — -island — +island

Figure 1 +Adjunct conditions



Embedded Structure — -island — +island

Figure 2 +Argument conditions

Conclusions

- Both adjunct and argument wh-in-situ in Chinese are sensitive to complex-NP islands;
- There is no difference in island sensitivity between the two.
- Covert LF-movement analysis of wh-in-situ is supported.

References

Aoun, Joseph, and Yen-hui Audrey Li. 1993. “Wh-Elements in Situ: Syntax or LF?” *Linguistic Inquiry* 24 (2): 199–238.
 Huang, C. T. James. 1982. “Move Wh in a Language Without Wh-Movement.” *The Linguistic Review* 1 (4): 369–416.
 Lasnik, Howard, and Mamoru Saito. 1984. “On the Nature of Proper Government.” *Linguistic Inquiry* 15 (2): 235–89.
 Sprouse, Jon, and Norbert Hornstein. 2013. *Experimental Syntax and Island Effects*. Cambridge University Press.
 Tsai, Wei-Tien Dylan. 1999. “On Lexical Courtesy.” *Journal of East Asian Linguistics* 8: 39–73.
 Watanabe, Akira. 1992. “Wh-in-Situ, Subadjacency and Chain Formation.” *MIT Occasional Papers in Linguistics* 2.
 Xiang, Ming; Wang, SP.; and Cui, YL.. 2015. Constructing covert dependencies—the case of wh-in-situ processing. *Journal of Memory and Language*, 84, 139-166.