

# Structural and Non-structural Constraints in Advanced L2 Speakers of English

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## INTRODUCTION

What **type of structures** are acquirable and what type of structures are more difficult to acquire to a native-like level for second language (L2) speakers? What are the **sources** of non-convergence between advanced L2 speakers and native speakers with regard to those more vulnerable structures?

The **Interface Hypothesis** (Sorace & Filiaci, 2006): very advanced L2 speakers seem have difficulties in structures involving an interface of syntax and other cognitive domains (e.g. semantics, discourse).

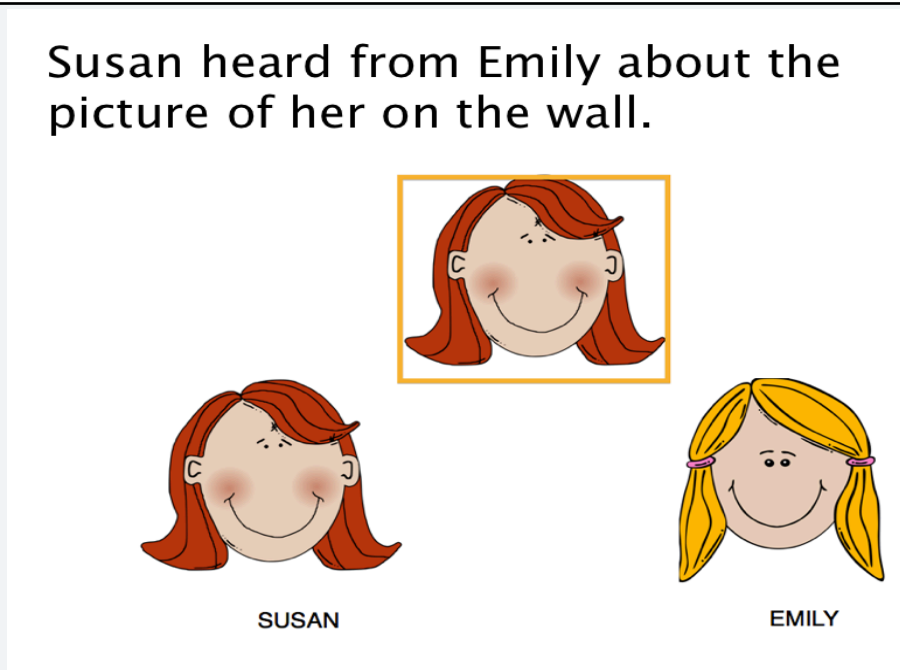
In English, it is commonly assume that the choice of a referent for **reflexives** (e.g. himself) <- **syntactic/structural** configuration of the sentence (Chomsky, 1981)  
for **pronouns** (e.g. him) <- **non structural factors** such as semantics & discourse factors (Hobbs, 1979; Kehler, 2002)

## AIMS

- To what extent are non-native speakers sensitive to information from syntactic and semantic levels?
- Does their first language (L1) make a difference in their comprehension of English with regards to this sensitivity?
- I tested these questions with Picture Noun Phrases (PNPs, e.g. *John heard from Peter about picture of him.*) (Kaiser et al., 2009).

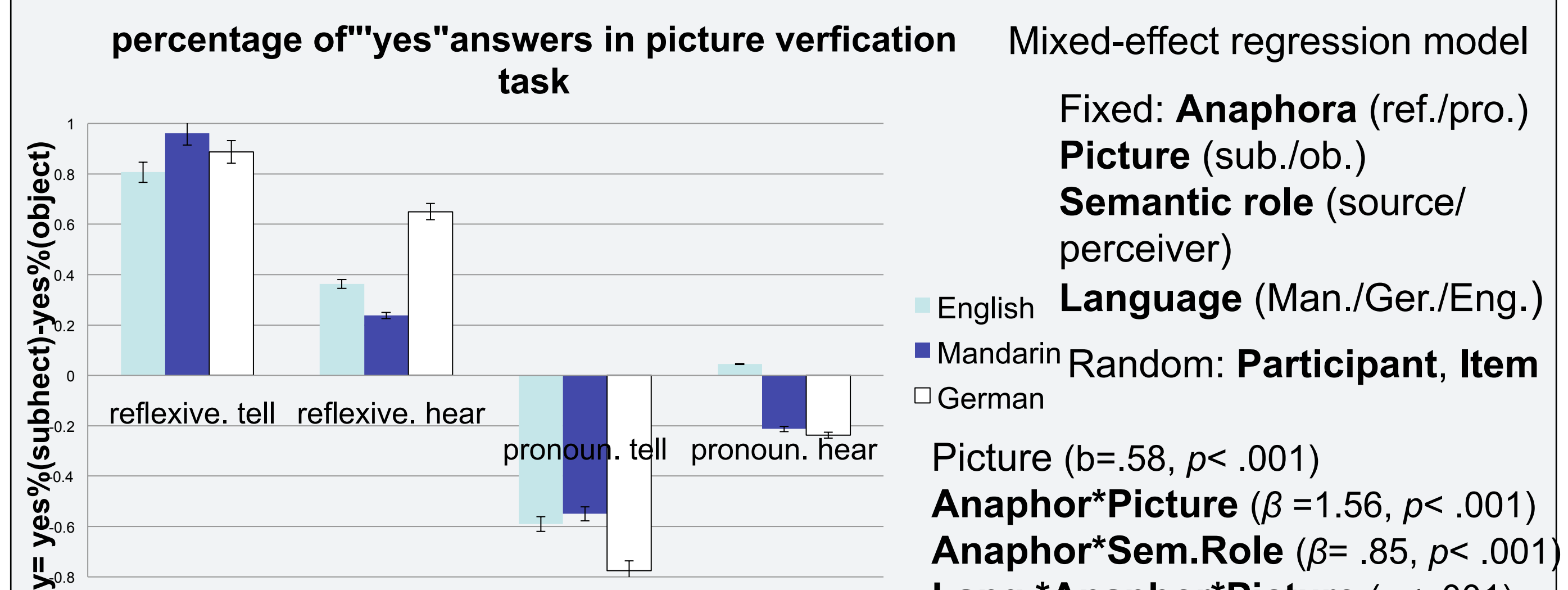
## METHODS

- Participants:
  - L1 Mandarin, L1 German L2 English speakers
  - L1 English speakers
- Tasks : Picture verification task (PVT)
- Materials:

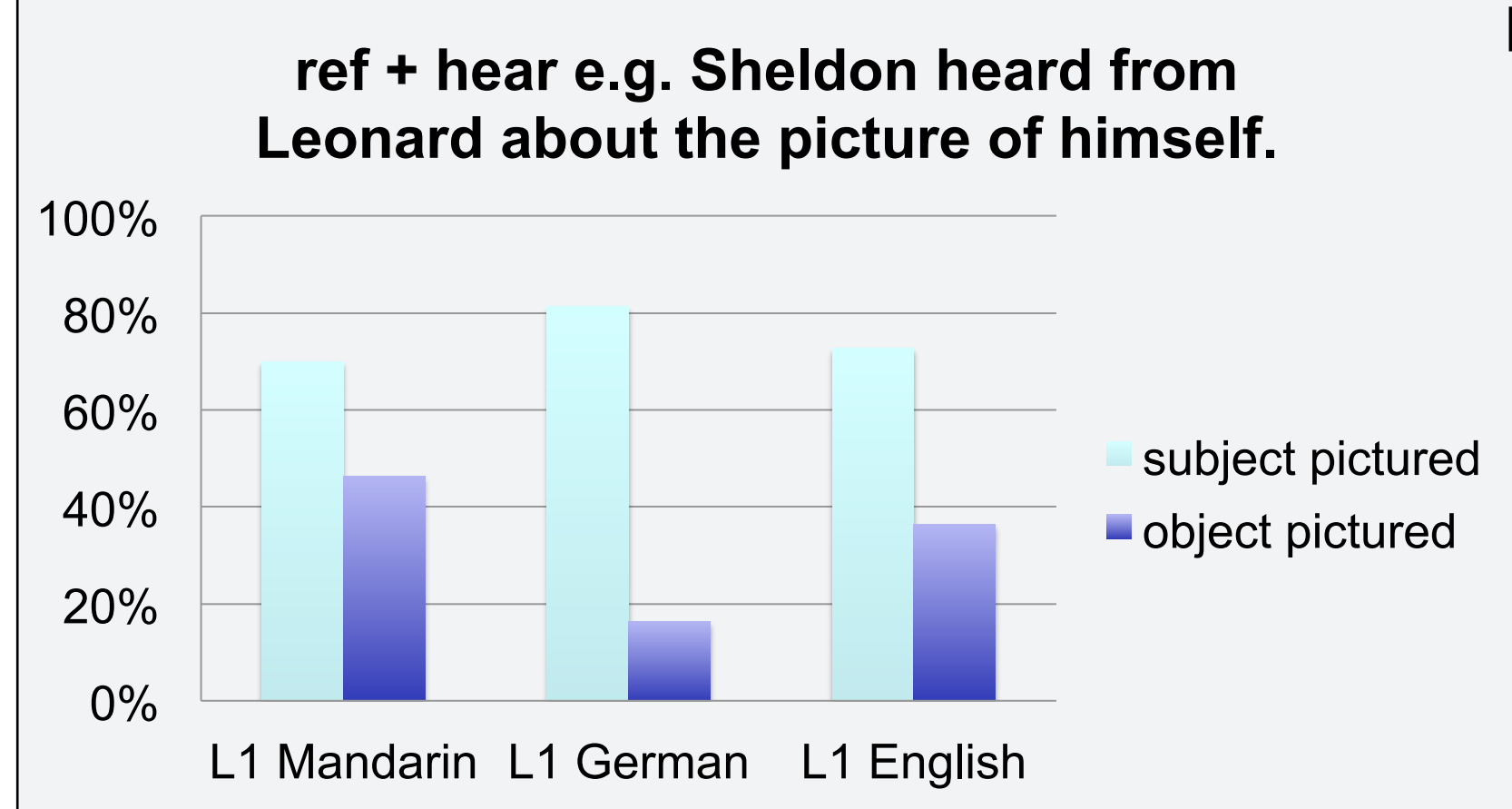


Sample sentences	Structural bias	Non-structural bias	Conflict?
Sheldon told Leonard about the picture of himself.	Sheldon	Sheldon	no
Sheldon heard from Leonard about the picture of himself.	Sheldon	Leonard	yes
Sheldon told Leonard about the picture of him.	Leonard	Leonard	no
Sheldon heard from Leonard about the picture of him	Leonard	Sheldon	yes

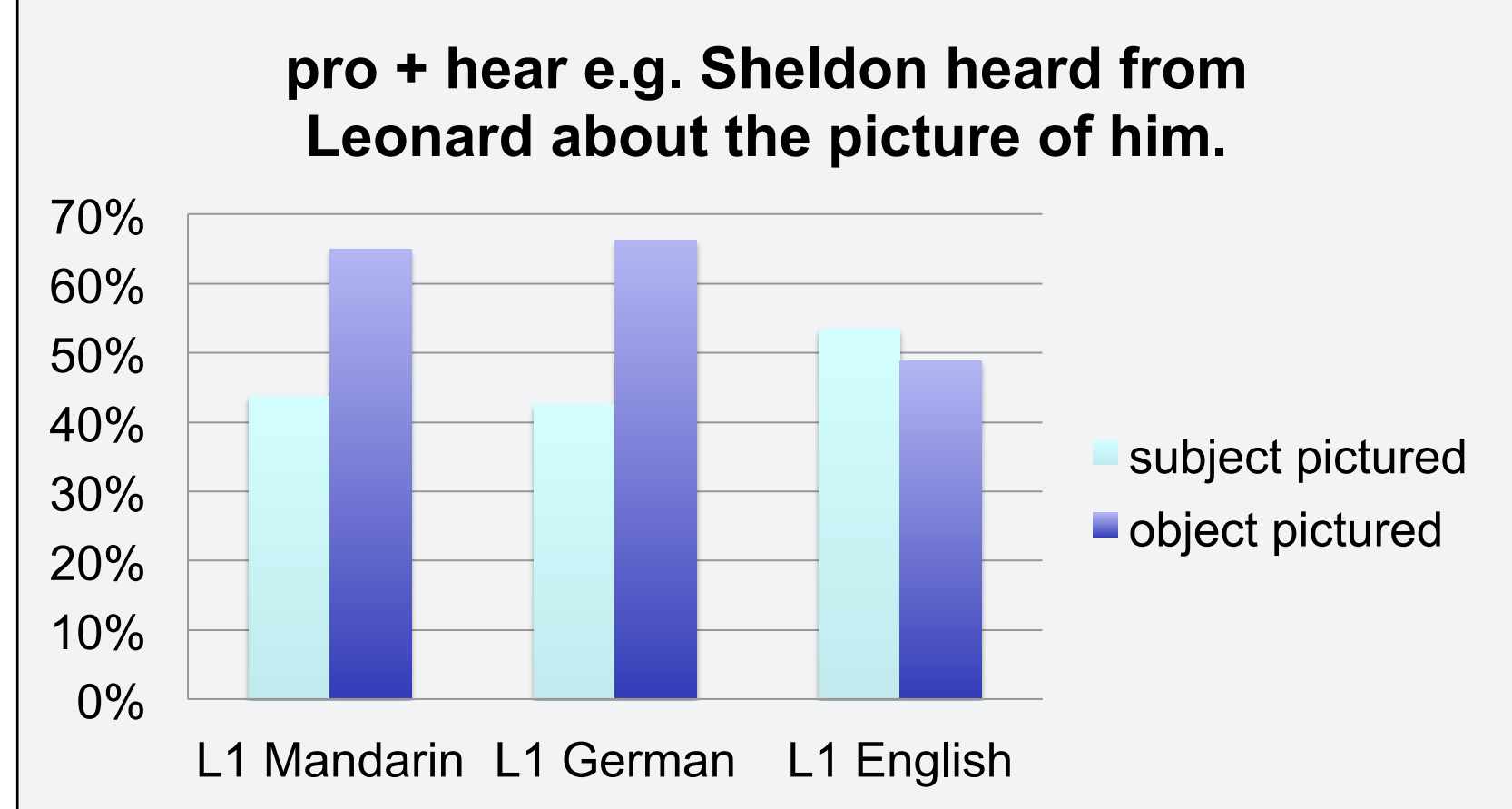
## RESULTS



Mixed-effect regression model  
Fixed: **Anaphora** (ref./pro.)  
**Picture** (sub./ob.)  
**Semantic role** (source/perceiver)  
**Language** (Man./Ger./Eng.)  
Random: **Participant, Item**  
Picture (b=.58, p<.001)  
**Anaphor\*Picture** (β=1.56, p<.001)  
**Anaphor\*Sem.Role** (β=.85, p<.001)  
**Lang.\*Anaphor\*Picture** (p<.001)  
**Lang.\*Anaphor\*Sem.Role** (p<.01)

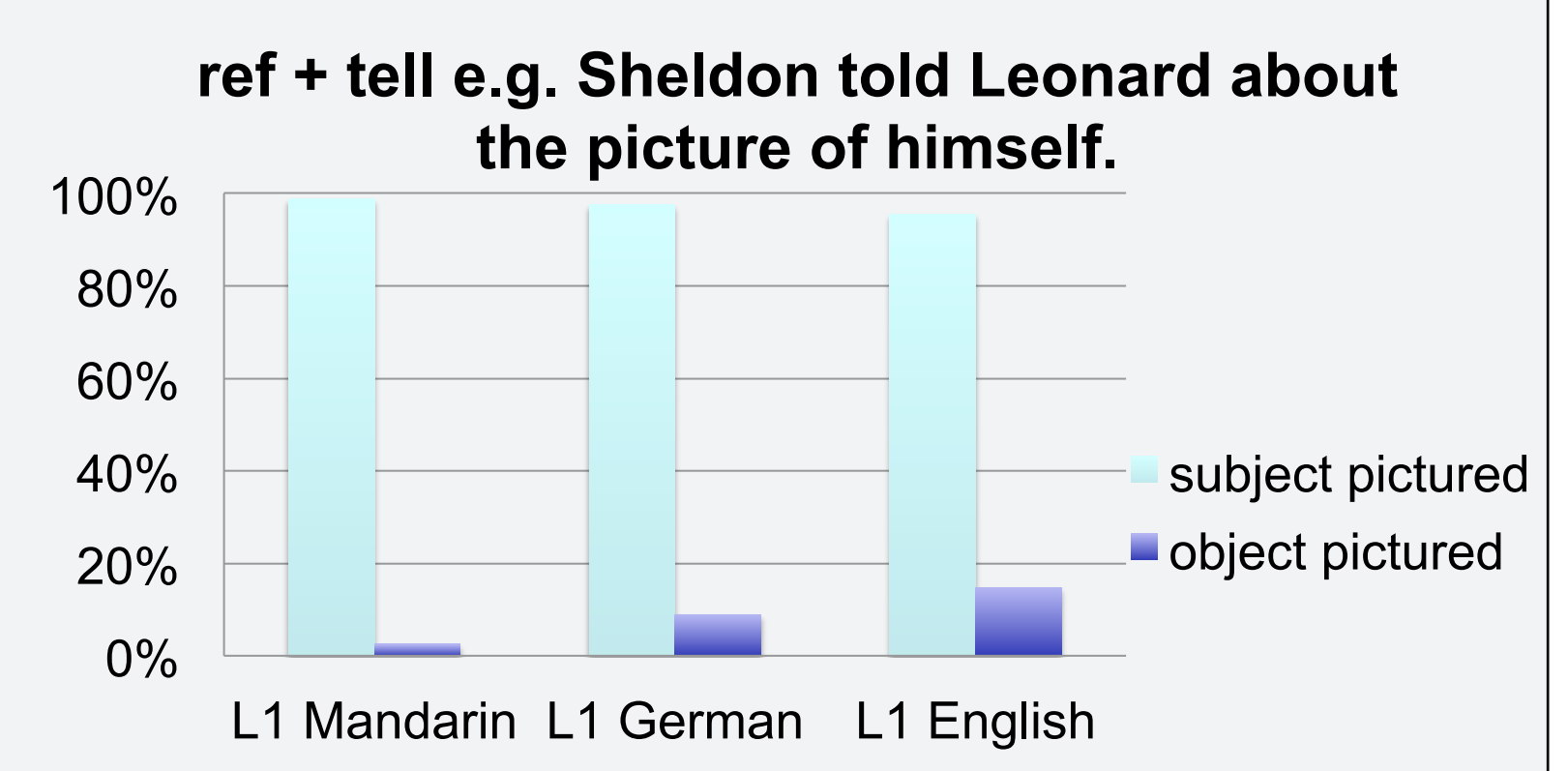


<-Conflict condition  
L2 speakers vs. L1 English **Different**  
L1 Mandarin vs. L1 German: **Different** (at least not the same)  
Lang.\*Picture (p=.09)  
**Potential crosslinguistic influence from L1**

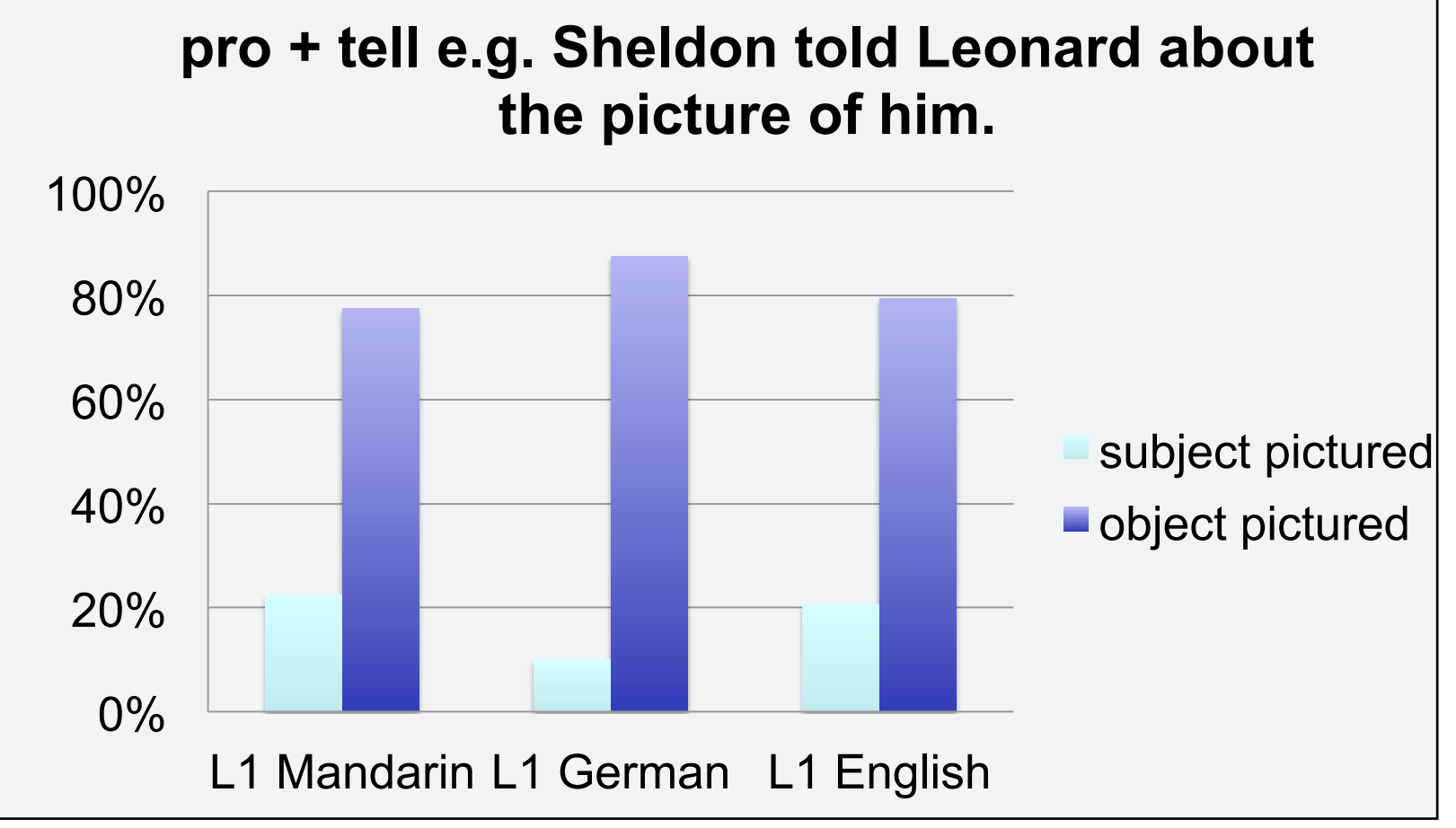


<-Conflict condition  
L2 speakers vs. L1 English **Different**  
L1 Mandarin vs. L1 German: **Similar**  
Picture (β=-.70, p<.05)  
**Potential general L2 processing inefficiency**

Non-conflict condition ->  
L2 speakers vs. L1 English: **Similar**  
Picture (β=3.10, p<.001)



Non-conflict condition ->  
L2 speakers vs. L1 English **Similar**  
Picture (β=-2.22, p<.001)



## CONCLUSIONS

- Non-convergence between advanced L2 speakers and native speakers only occurs in **conflict** conditions.
- This non-convergence is not due to interface *per se*. It is the conflicts of different kinds of information that contribute to the non-convergence at interface conditions.
- The interface provides the **possibility** of having conflicts of different kinds of information and various types of interface conditions predict various **degrees** of non-convergence.
- The non-convergence in conditions that are more **syntactically** constrained (e.g. reflexive conditions) likely reflects **crosslinguistic influence**, and this non-convergence may **disappear** as L2 speakers reach a near-native level of proficiency.
- The non-convergence in conditions that are more **contextually** constrained (e.g. pronoun conditions) likely reflects more general L2 **processing inefficiency**, and this non-convergence may remain **permanent** even at a very advanced stage.

## SELECTED REFERENCES

Chomsky, N. (1981). *Lectures on Government and Binding*. Dordrecht:Foris.  
Hobbs, J. R. (1979). Coherence and coreference. *Cognitive science*, 3(1), 67-90.  
Kaiser, E., Runner, J. T., Sussman, R. S., & Tanenhaus, M. K. (2009). Structural and semantic constraints on the resolution of pronouns and reflexives. *Cognition*, 112(1), 55.  
Sorace, A., & Filiaci, F. (2006). Anaphora resolution in near-native speakers of Italian. *Second Language Research*, 22(3), 339-368.

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