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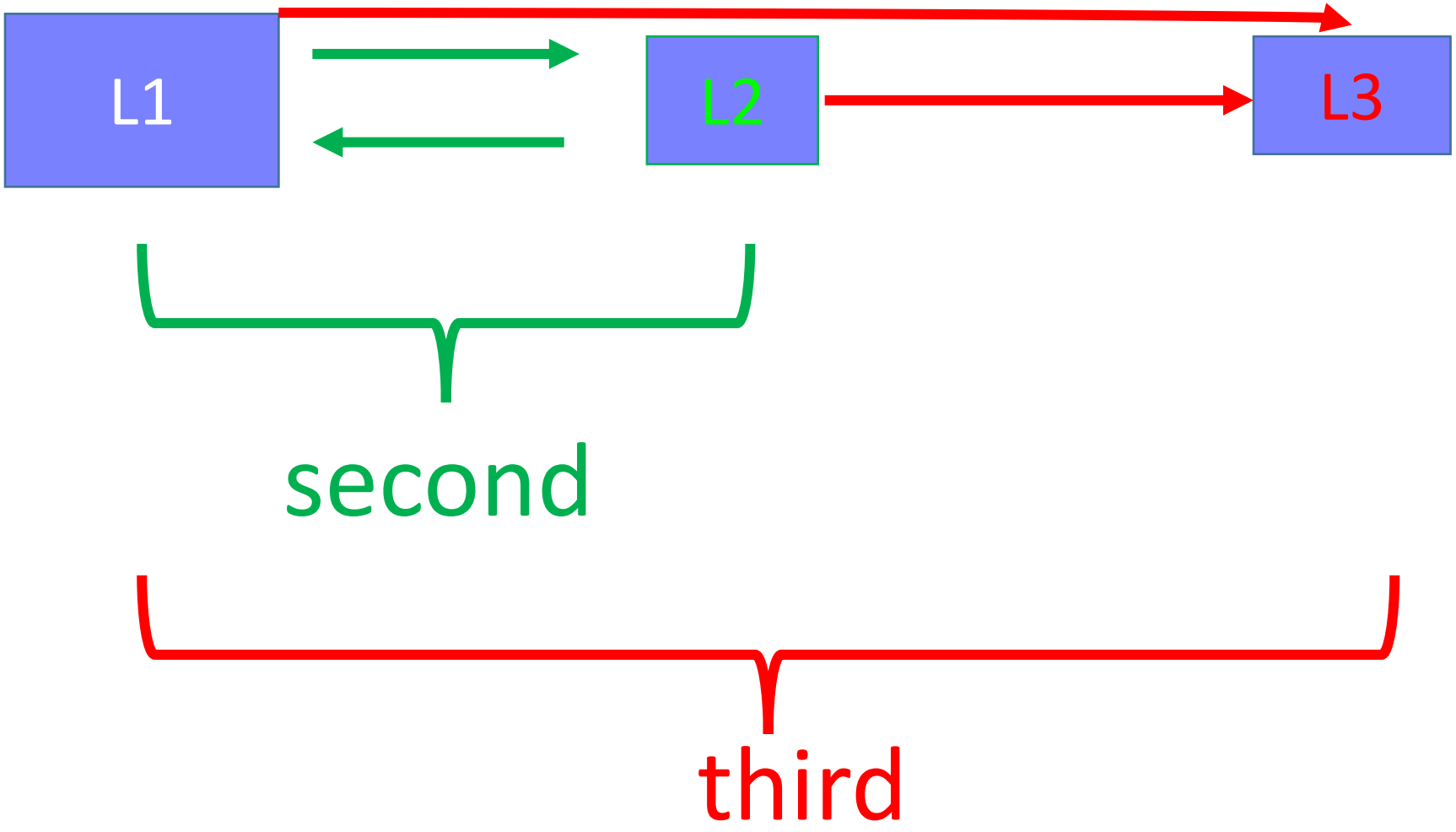
Sentence processing in the trilingual learner: theory and teaching practice

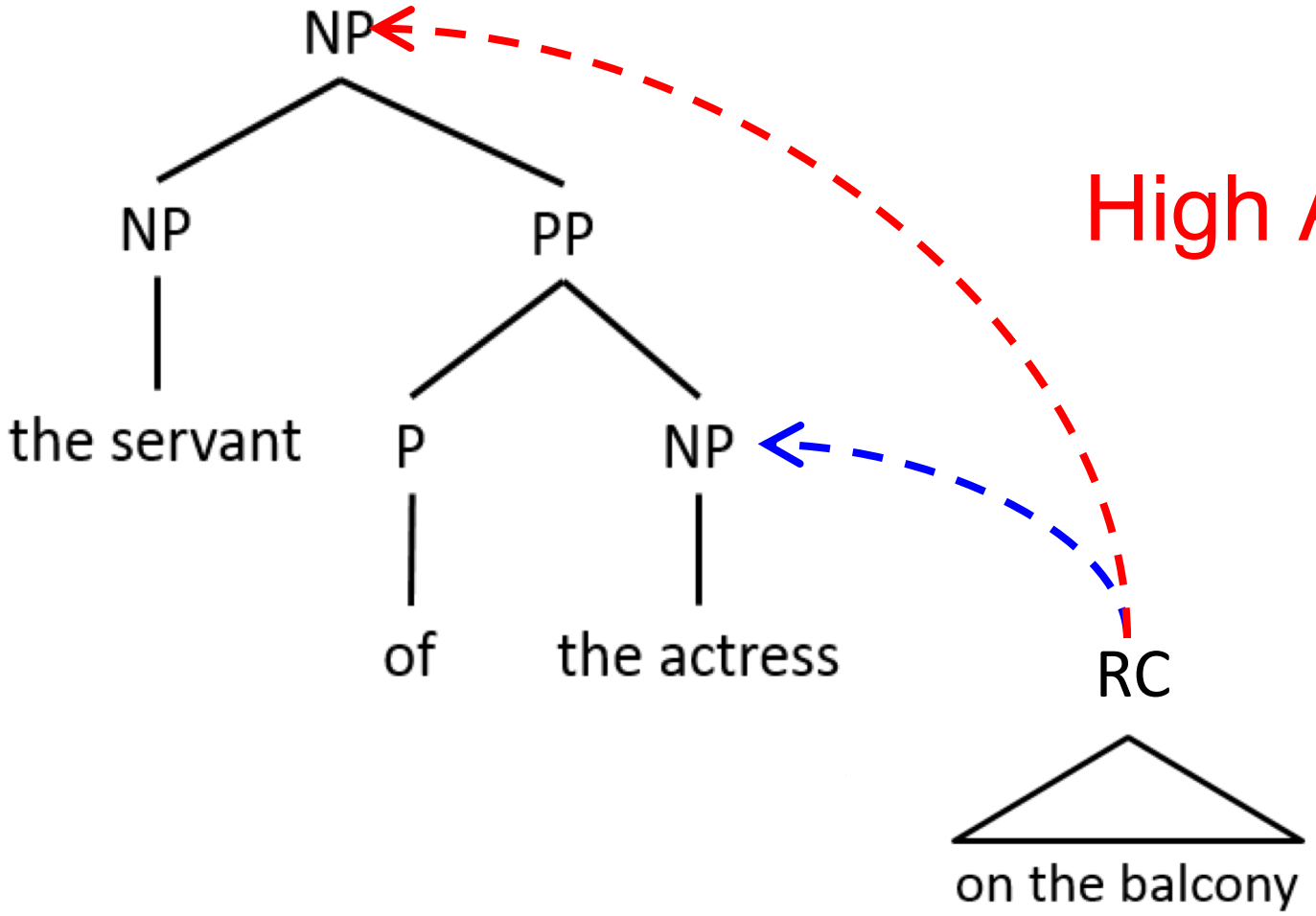
Chunhua BAI
chunhuabai@cgcs.c.u-tokyo.ac.jp

Different processing between second and third language learners



Relative clause Attachment ambiguity

Someone shot the servant of the actress [RC who was on the balcony]

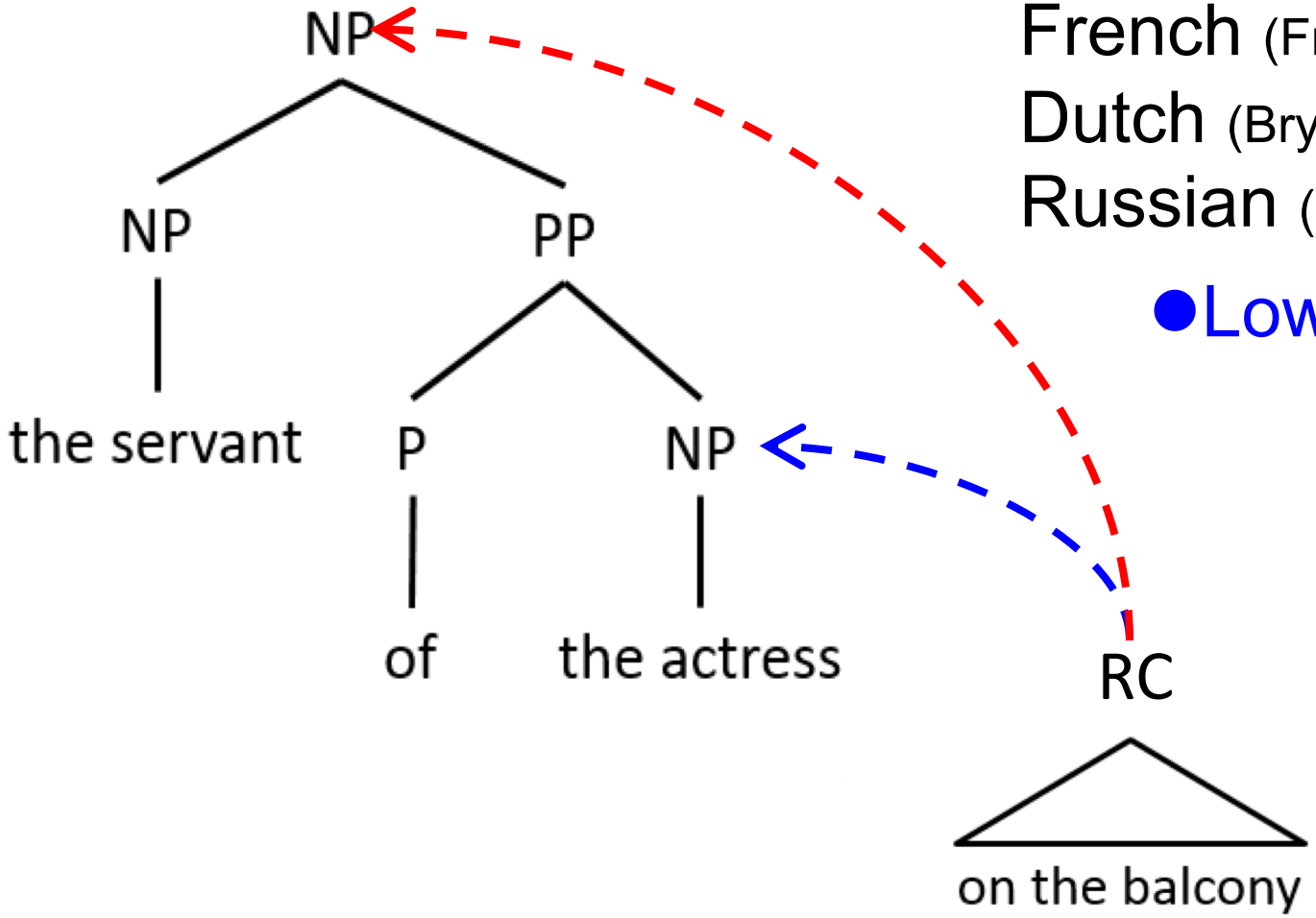


High Attachment

Low Attachment

Cuetos & Mitchell, 1988

Cross-linguistic differences in attachment preference



- High attachment:
  - Spanish (Cuetos & Mitchell, 1988),
  - French (Frec-Mestre & Pynte, 1997),
  - Dutch (Brysbaert & Mitchell,1996),
  - Russian (Sekerina,1997) etc.
- Low attachment :
  - English (Cuetos & Mitchell, 1988),
  - Romanian,
  - Norwegian,
  - Swedish (Ehrlich, Efenandez, Fodor, Stenshoel & Vinereanu, 1999) etc.

Influence of L1 on L2 processing

- Effect of L1 on L2:

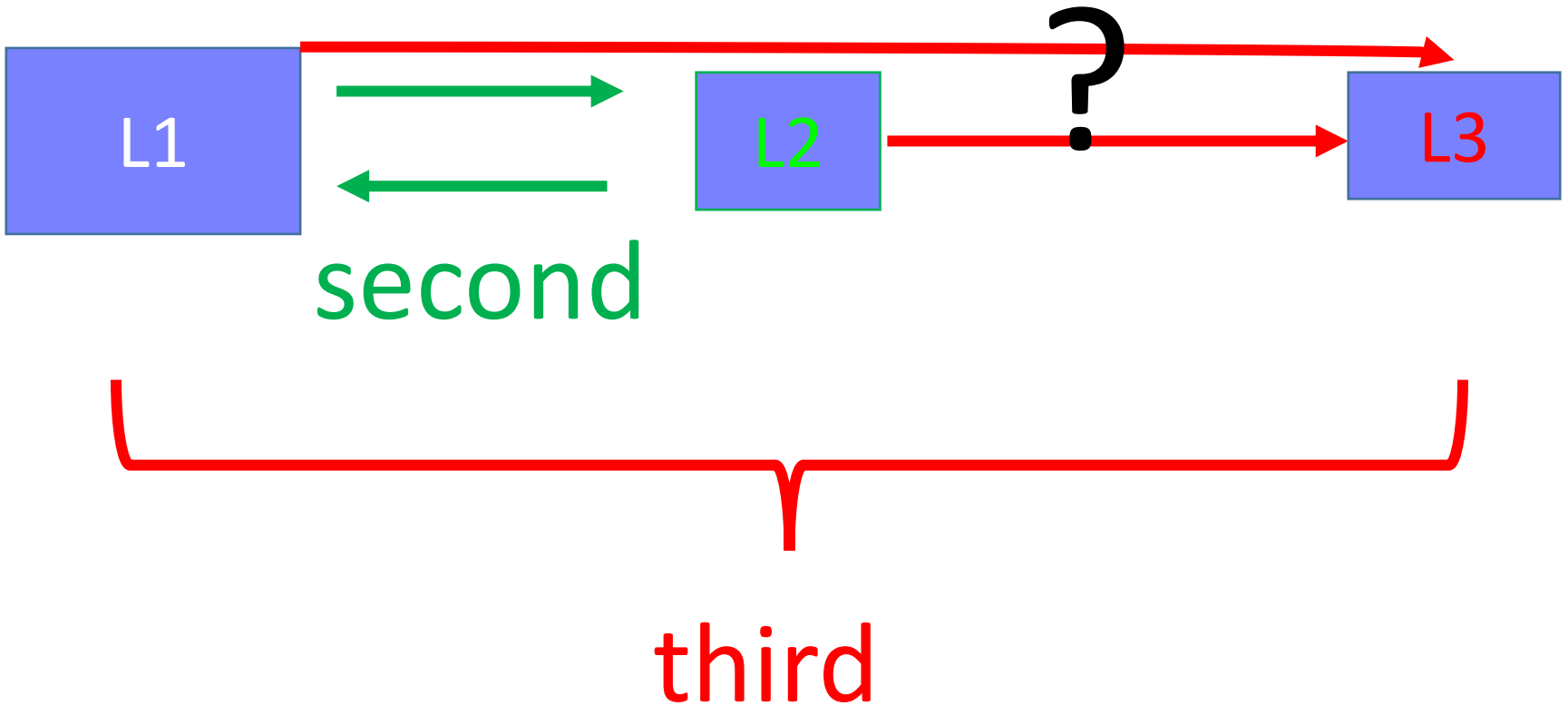
  Fernandez, 2002 (questionnaire);

  Frenck-Mestre & Pynte, 1997, 2002 (eye – tracking)

  Papadopoulou & Clahsen (2003) (self-paced reading)

Relative clause ambiguity sentence in L3

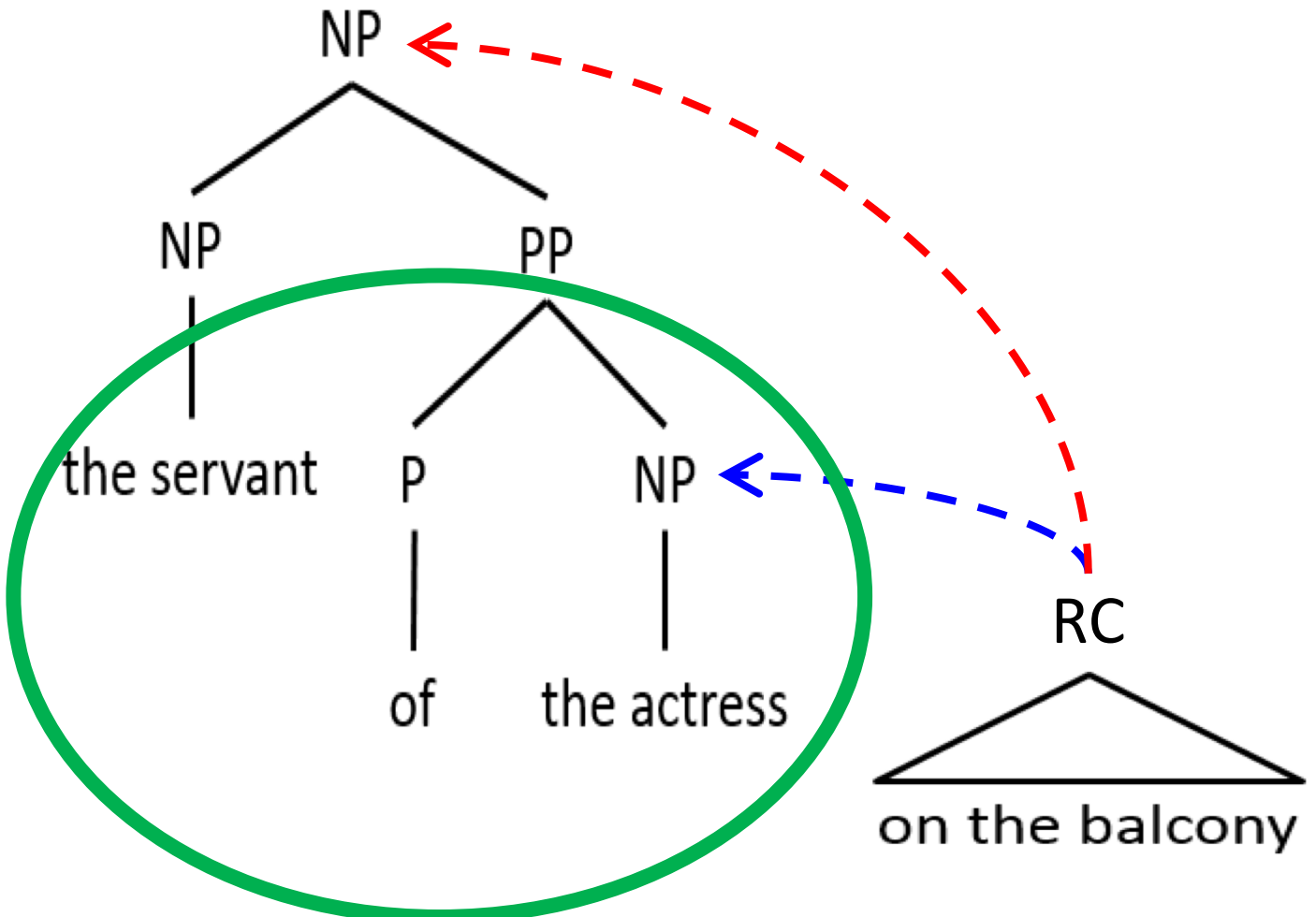
Someone shot the servant of the actress [RC who was on the balcony]

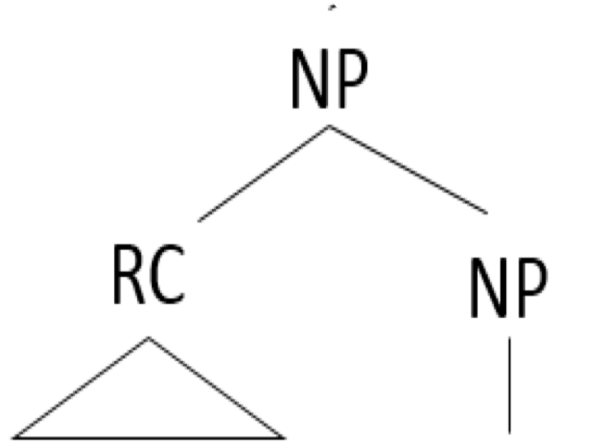


Different word order between English and Japanese

English
choice between two attachment sites

Japanese
Attachment sites do not occur until after the relative clause

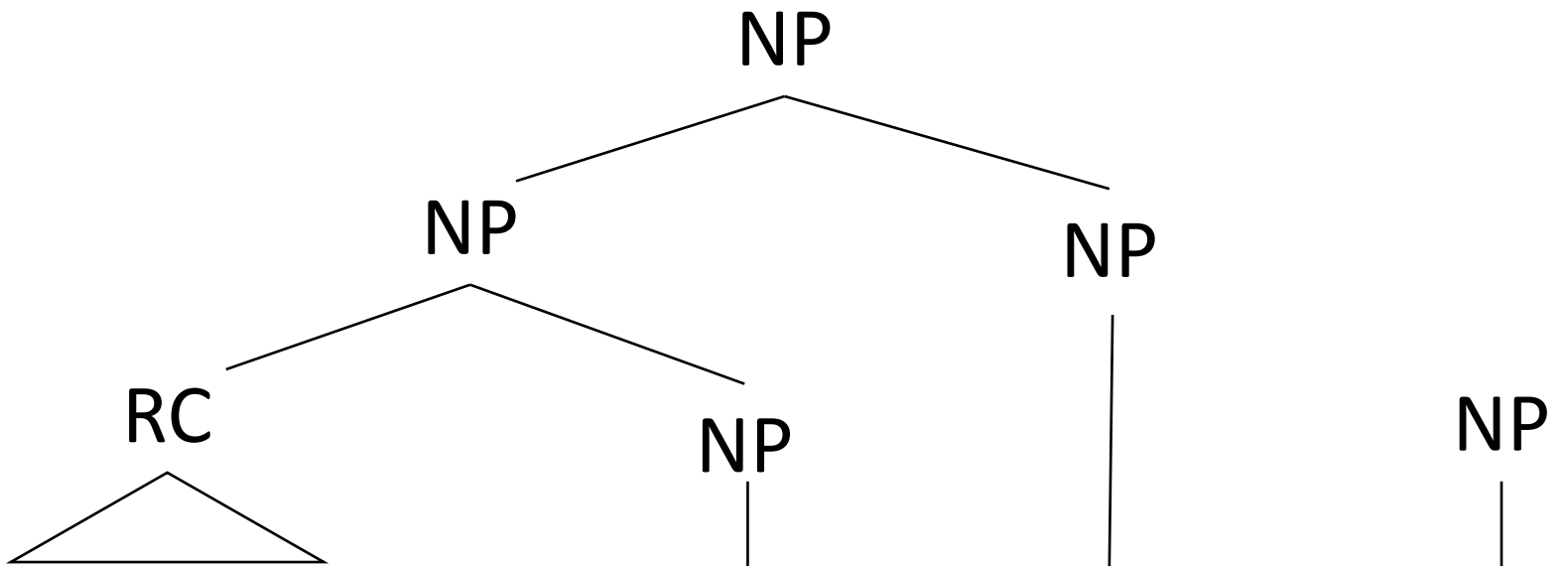




barukonii-ni iru joyuu-no

Attachment ambiguity in Japanese

Dareka-ga	[RC barukonii-ni	iru]	joyuu-no	mesitukai-o	utta.
Someone-Nom	balcony-Loc	was	actress-Gen	servant-Acc	shot



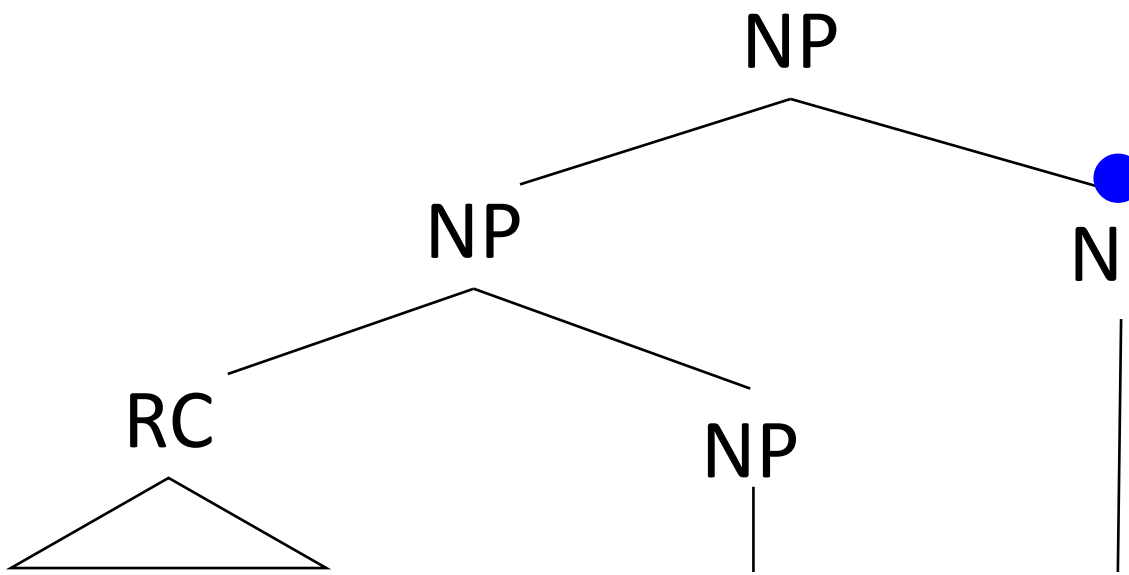
barukonii-ni iru joyuu-no mesitukai-o mesitukai-o

Cross-linguistic differences (Prenominal RCs)

● HA

Japanese (Kamide & Mitchell, 1997, etc.)

Mongolian (Bai & Hirose, 2016)



● LA

Chinese (Shen, 2006)

barukonii-ni iru joyuu-no mesitukai-o mesitukai-o

Experiment 1:
Verifying L1 attachment preference in Japanese, Chinese and Mongolian

Questionnaire (Japanese): Research method

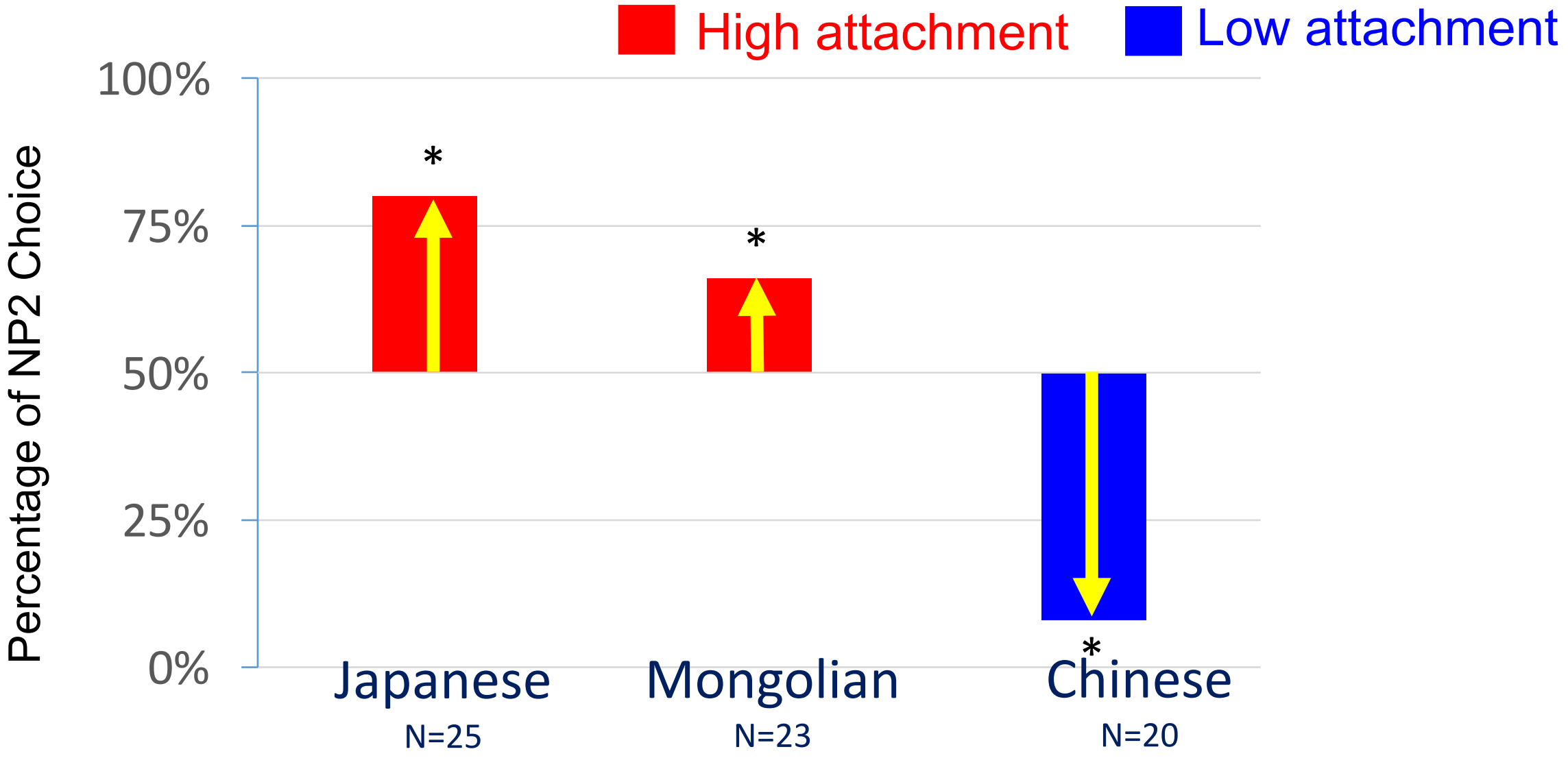
Material (target sentences =16 ; Fillers =32) × 3languages

yuumei-ni	natta	danseikyouin-no	oneesan-wa	totemo	kirei-da.
famous-DAT	became	male teacher-GEN	sister-TOP	very	beautiful

Question	Answer (one of the two options)
Dare-ga yuumei-ni natta-ka? *"Who became well-known?*	A. *danseikyouin* "male teacher"
	B. oneesan "sister"

All items are translational equivalents in both languages, pre-normed to be plausible in either of the two interpretations in both languages / cultures

Attachment biases for native speakers



Statistical test: Wilcoxon test comparison against 50/50 chance level

Experiment 2:
Investigation of influence of L1 on L2 attachment

Do low attachment biases from L1(Chinese) influence L2 (Japanese) processing in L2 learners?

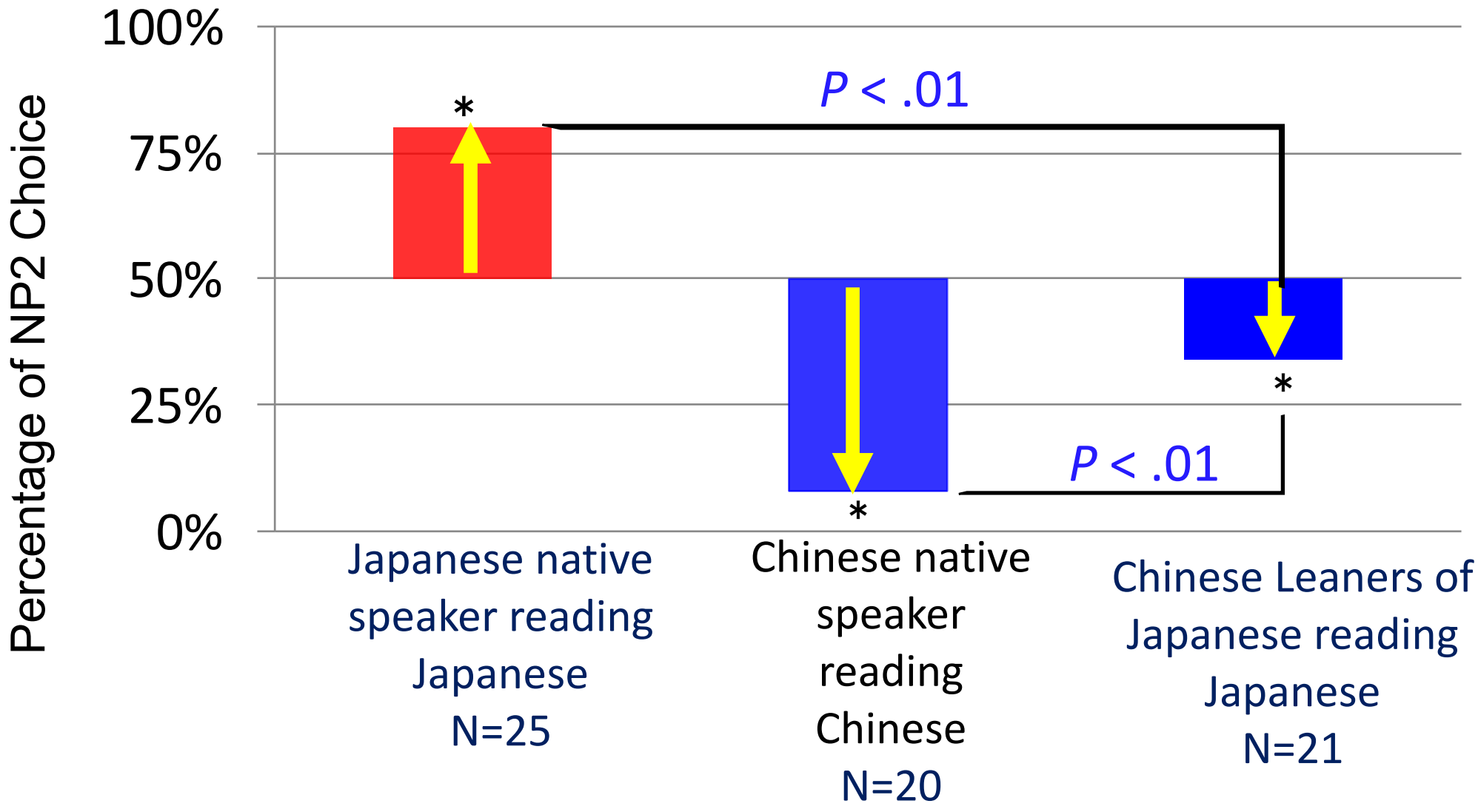
- N = 21(Chinese Learner)
- N =19(Mongolian Learner)

- **Proficiency**: Intermediate level

  N3~N2 (Japanese language proficiency test)
- **Material**

  the Japanese version of the questionnaire used in Experiment 1

Attachment biases for Chinese learner

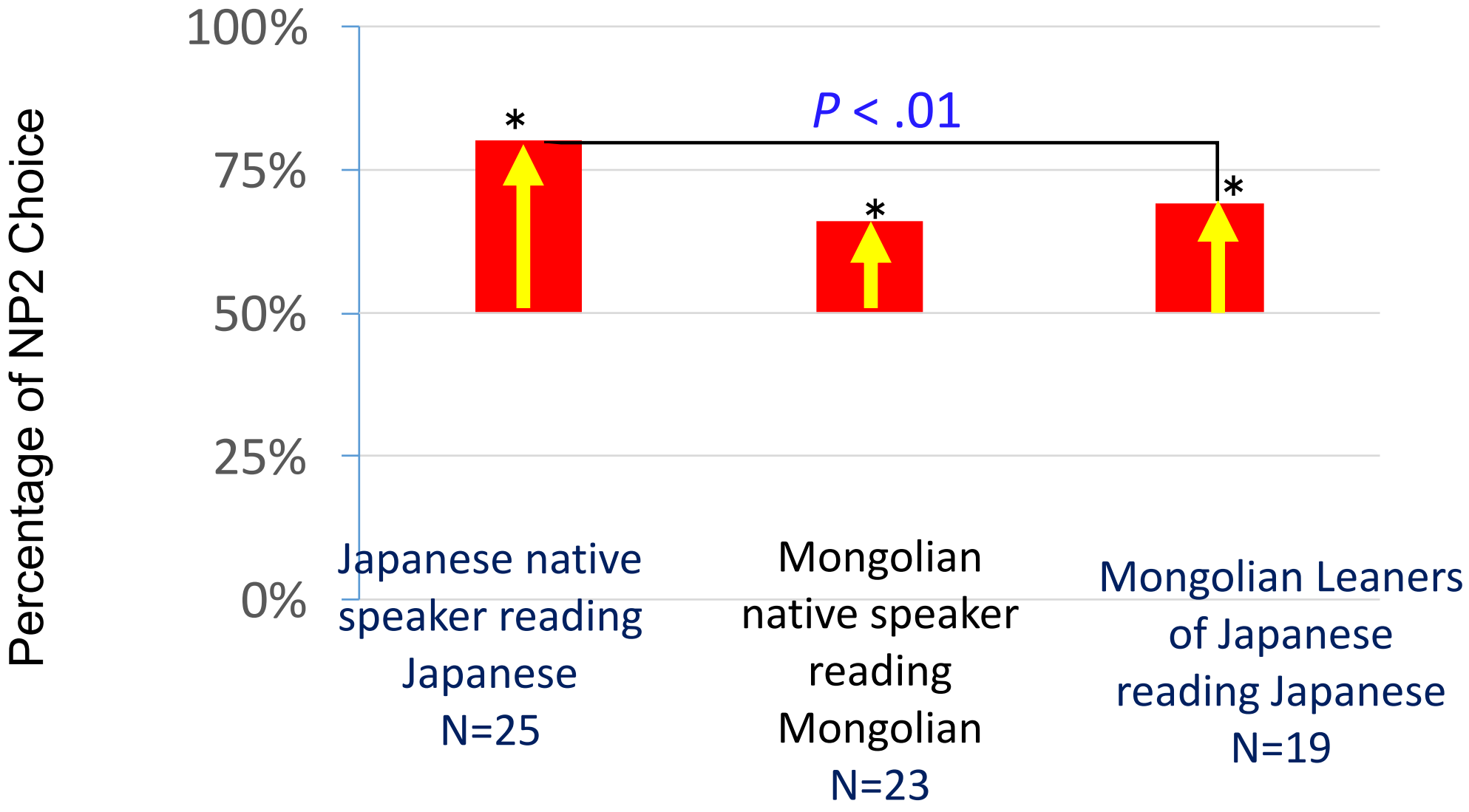


Summary of Chinese learner of Japanese

- Chinese learners of Japanese were more likely to choose low attachment analysis compared to Japanese native speakers in Japanese L1 reading, but less likely to do so than L1 Chinese reading

the attachment preference in L2 learners was hybrid between that of L1 Chinese and that of L1 Japanese readers

Attachment biases for Mongolian learner



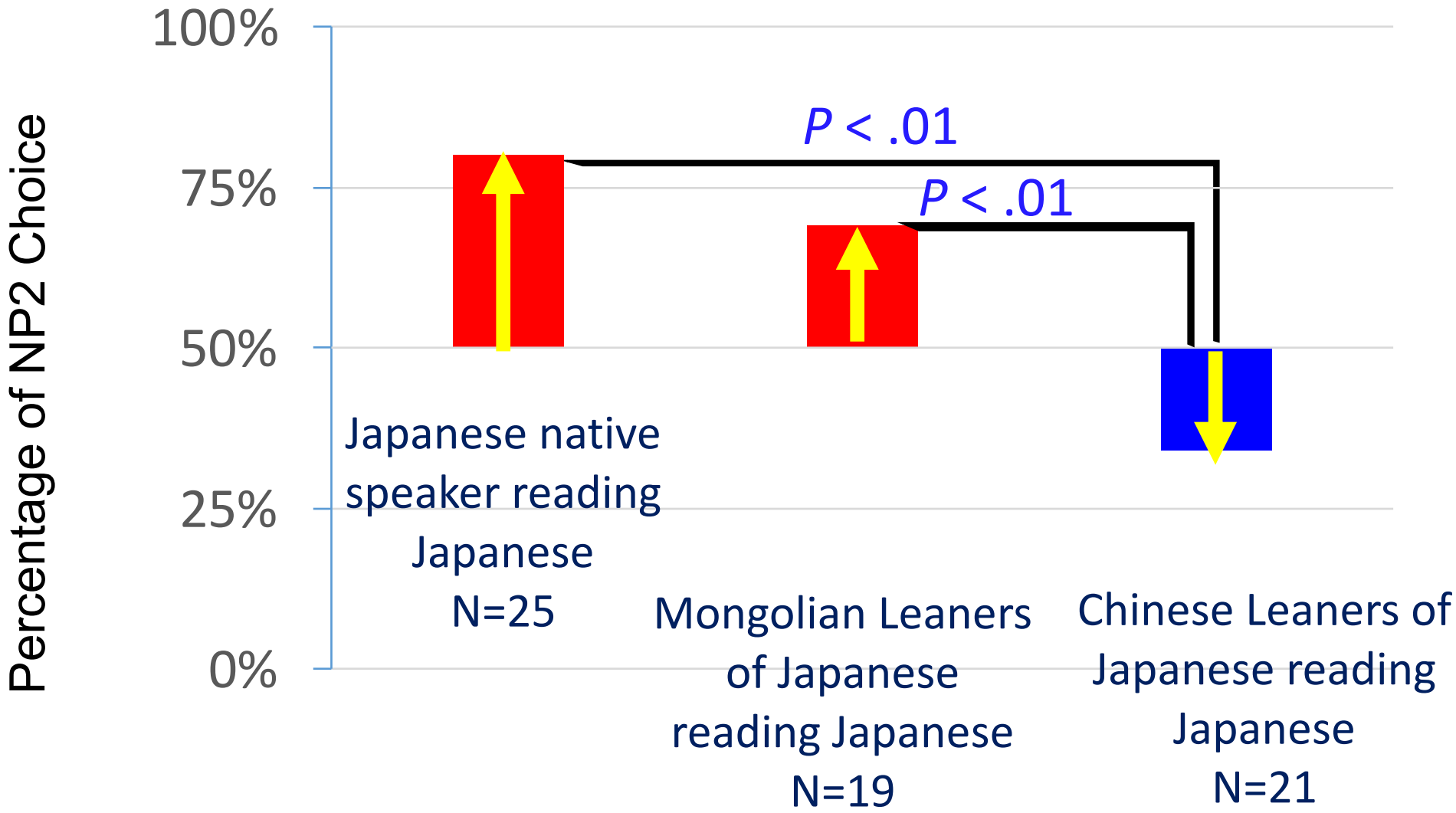
Summary of Mongolian learner of Japanese

- High attachment preference for Mongolian learners of Japanese, as like as L1 Mongolian, indicates the influence from L1.

→similar preference among L1 and L2 cause the influence from L1 to L2

?

Attachment biases among learners group



Discussion

- Learners might be influenced by the similarity of L1 and L2 processing:

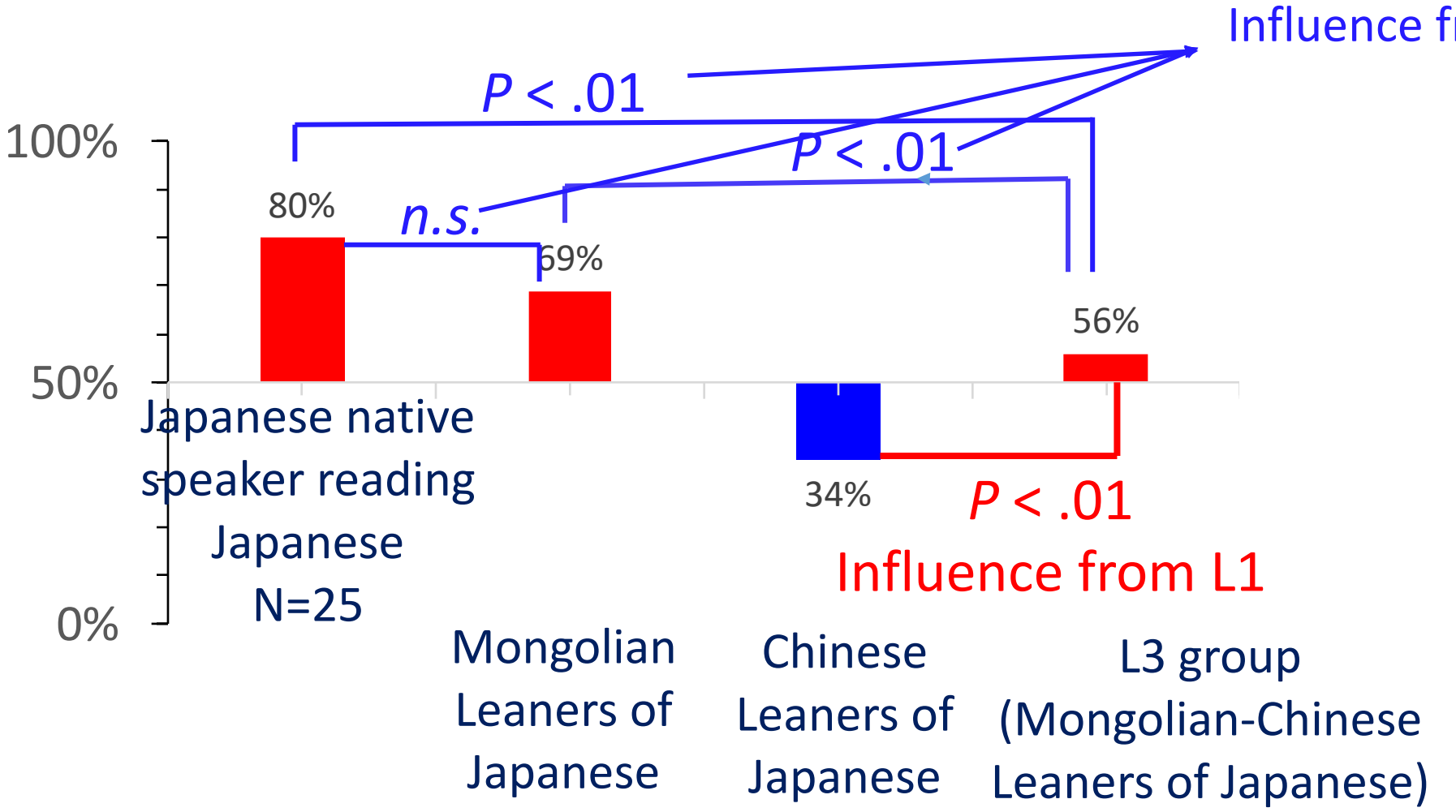
if the processing is likely to similar among L1 and L2, they might be more influenced by L1. Otherwise, the attachment preference in L2 learners was hybrid between L1 and L2

Experiment 3:
Investigation of influence of L1 and L2 on L3 attachment

What dose happen on L3 Japanese learner

- N = 24(Mongolian Chinese bilingual Learner of Japanese)
- **Proficiency**: Intermediate level
  N3~N2 (Japanese language proficiency test)
- **Material**
  the Japanese version of the questionnaire used in Experiment 1

Attachment biases for L3 learner



Both L1 & L2 influence L3 sentence preference

Discussion

- L3 Learners might be influenced by both L1 and L2, which also might be related to the similarity processing of L3 and other languages which they have already learned: L3 sentence processing may be more strongly influenced by languages which have features in common with L3.

Suggestion related to teaching practice

- SLA: Take native language into account
- TLP take L1 & L2 into account for TLP

- If learners understand the similarities and differences among their L1, L2, and L3, they might acquire relevant grammar points more rapidly and use them correctly.

Thank you for your listening

chunhuabai@ cgcs.c.u-tokyo.ac.jp

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