TYPOLOGY OF PRONOUNS AND L2 ACQUISITION OF THE OPC EFFECT IN JAPANESE

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1. PURPOSE

Test the Full Transfer/Full Access hypothesis (FT/FA) (Schwartz & Sprouse 1994, 1996) through investigating the acquisition of the Overt Pronoun Constraint (OPC) (Montalbetti 1984) by L1 English and L1 Spanish speakers of L2 Japanese.

2. The Overt Pronoun Constraint (OPC)

Overt pronouns cannot take quantified antecedents in null subject languages (Montalbetti 1984).

(1) English

a. Everyone$_i$ said that he$_{i/j}$ will come.
b. John$_i$ said that he$_{i/j}$ will come.

(2) Spanish

a. Nadie$_i$ sabe que él$_{*i/j}$/*pro*$_{i/j}$ vendra.
Nobody know:3S that he/pro come:3S.Fut
'Nobody$_i$ knows that he$_{*i/j}$/*pro*$_{i/j}$ will come.'

b. Juan$_i$ cree que él$_{i/j}$/*pro*$_{i/j}$ es inteligente.
John believe:3S that he/pro is:3S intelligent
'John$_i$ believes that he$_{i/j}$/pro$_{i/j}$ is intelligent.'

Sources: Alonso-Ovalle & D'Introno 2001, Montalbetti, 1984

(3) Japanese

a. Dare-ga$_i$ [kare$_{*i/j}$-ga/*pro*$_{i/j}$ kuruma-o katta to] itta-no?
Who-Nom he-Nom /pro car-Acc bought that say-Pst-Q
‘Who$_i$ said that he$_{*i/j}$/*pro*$_{i/j}$ bought a car?’

b. Jon-ga$_i$ [kare$_{i/j}$-ga/*pro*$_{i/j}$ kuruma-o katta to] itta
Jon-Nom he-Nom /pro car-Acc bought that say-Pst
‘John$_i$ said that he$_{i/j}$/*pro*$_{i/j}$ bought a car.’

Table 1. Interpretive differences of pronouns

language	English		Spanish/Japanese			
antecedents	referential	quantified	referential		quantified	
pronouns	overt		overt	null	overt	null
bound variable interpretation	-	Yes	-	-	No*	Yes
co-referential interpretation	Yes	-	Yes	Yes	-	-

* Spanish overt pronouns exceptionally can take quantified antecedents when a null/overt alternation does not occur, such as in PPs, Focus and possessives. In contrast, Japanese overt pronouns consistently cannot take quantified antecedents.

3. PREVIOUS STUDIES

L2 Japanese: Kanno (1997), Marsden (1998)
L2 Spanish: Pérez-Leroux & Glass (1999), Rothman & Iverson (2007), Rothman (2009)

The OPC in Japanese and Spanish is acquired by L1 English speakers at early stages.

→No previous study exists on Japanese and Spanish as a L2-L1 combination.

RQ: Do L1 English speakers and L1 Spanish speakers acquire the OPC in Japanese in the same way? If they do not, is their L2 knowledge attributable to their L1s?

4. PREDICTION

FT/FA (Schwartz & Sprouse 1996)

FT: The initial state of L2 grammar is the end state of L1 grammar. All L1 properties can be transferred to the L2.

FA: L2 properties can be acquired by means of UG.

Prediction

L1 Spanish speakers should outperform L1 English speakers in observing the OPC at lower levels of proficiency.

5. STUDY

Participants: 15 Native Japanese speakers
30 L1 English speakers of L2 J (15 adv. 15 int.)
30 L1 Spanish speakers of L2 J (14 adv. 16 int.)

Table 2. L2ers' proficiency

L2 groups	J proficiency test [%] (mean (range))	Age of onset [years old] (mean (range))	Naturalistic exposure to J [years] (mean (range))	Use of J [hours per week]
EA	80 (71-91)	18 (11-23)	2.3 (0.1-6)	31
EI	52 (37-66)	20 (14-26)	2.6 (0.1-11)	19
SA	78 (69-97)	21 (14-33)	3.2 (0-11)	51
SI	50 (40-63)	24 (17-32)	1.4 (0-4)	22

Table 3. Production of null subject pronouns in the translation task

group	J-proficiency (%)	Production of null subjects		Mean (%) (range)
		Matrix clause (%)	Complement clause (%)	
EA	80	67	76	70 (25-100)
EI	52	57	67	61 (25-100)
SA	78	91	95	93 (25-100)
SI	50	88	85	70 (50-100)

All L2ers produced null subject pronouns at least 25% of the time

5.1 Task1: coreference judgment task

(4) Quantified antecedents (*everyone, someone*)

Minna$_i$-ga kinoo kare$_{*i/j}$-ga/pro$_i$-ga konpyuutaa-o tukatta to itteimasita

'Everyone$_i$ was saying that he$_{*i/j}$/pro$_i$ used a computer yesterday.'

Q. 'Who used a computer?'
A. (a) 'Same as everyone' (bound interpretation)
(b) 'Another person' (disjoint interpretation)
(c) 'I don't know'

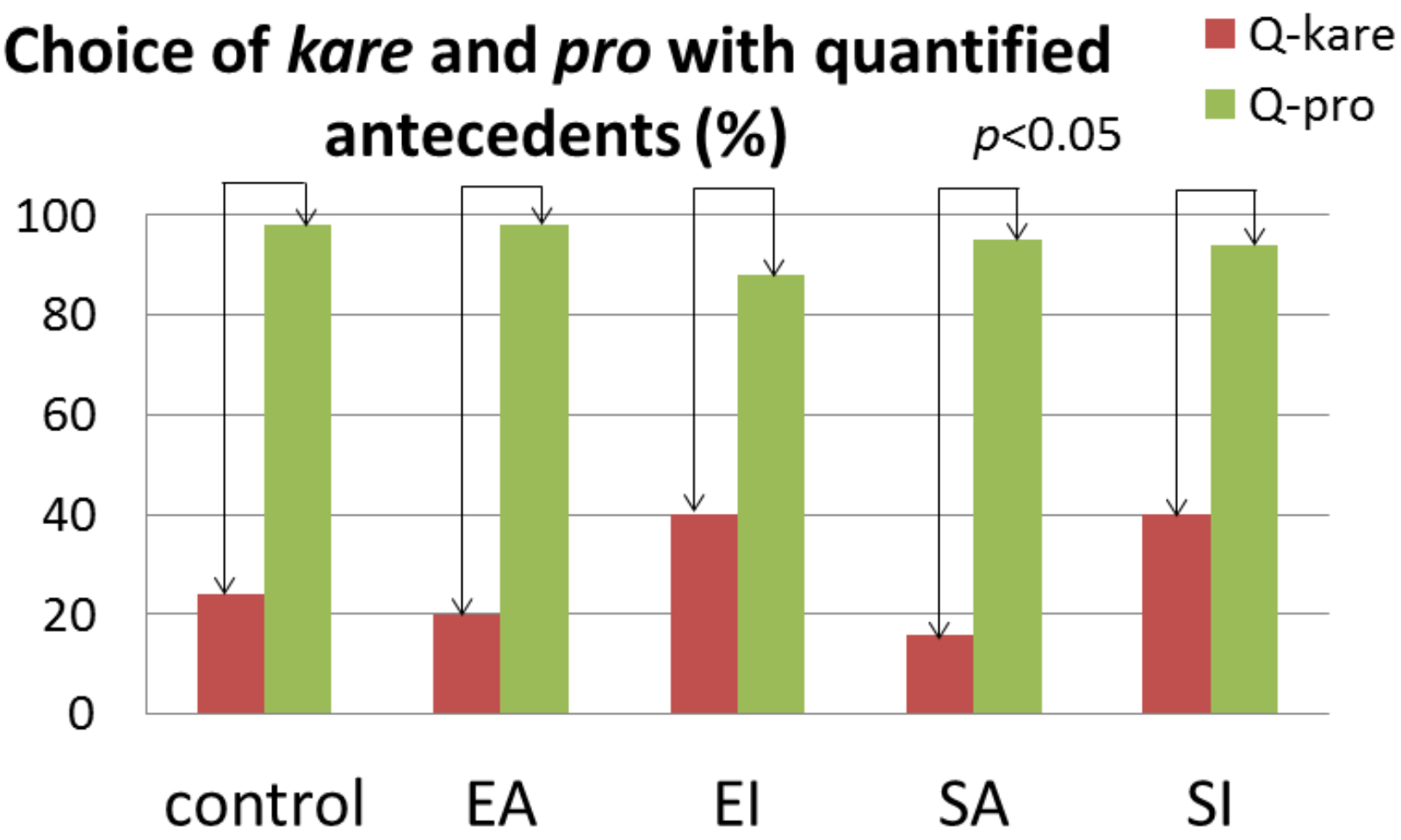
(5) Referential antecedents

Hayasi$_i$-san-wa atode kare$_{i/j}$-ga/pro$_i$ denwa-o kakeru to itteimasita

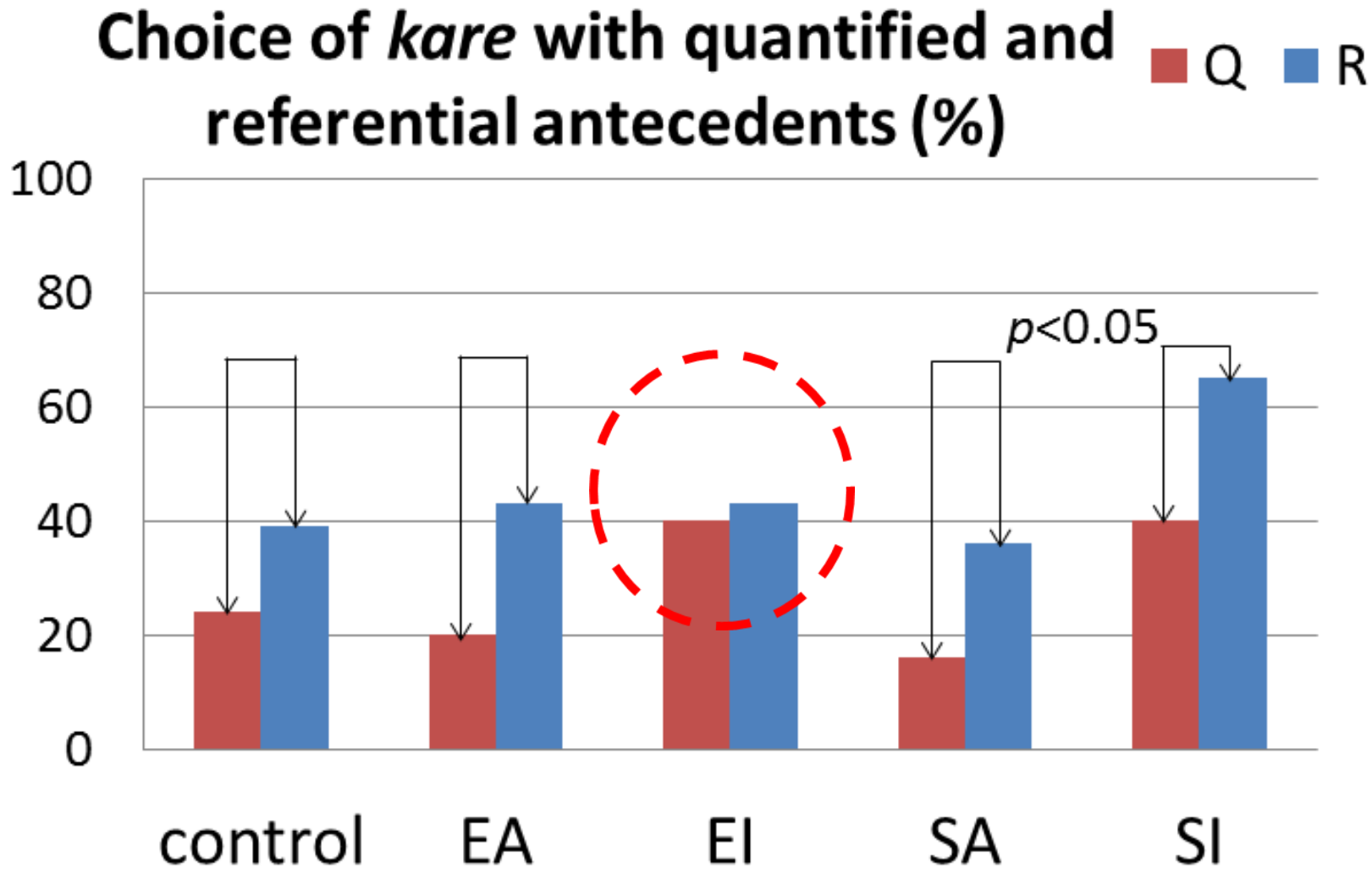
'Mr. Hayashi$_i$ was saying that he$_{i/j}$/pro$_i$ would call later.'

4 conditions, n=4 for each condition

Group results (Task1)

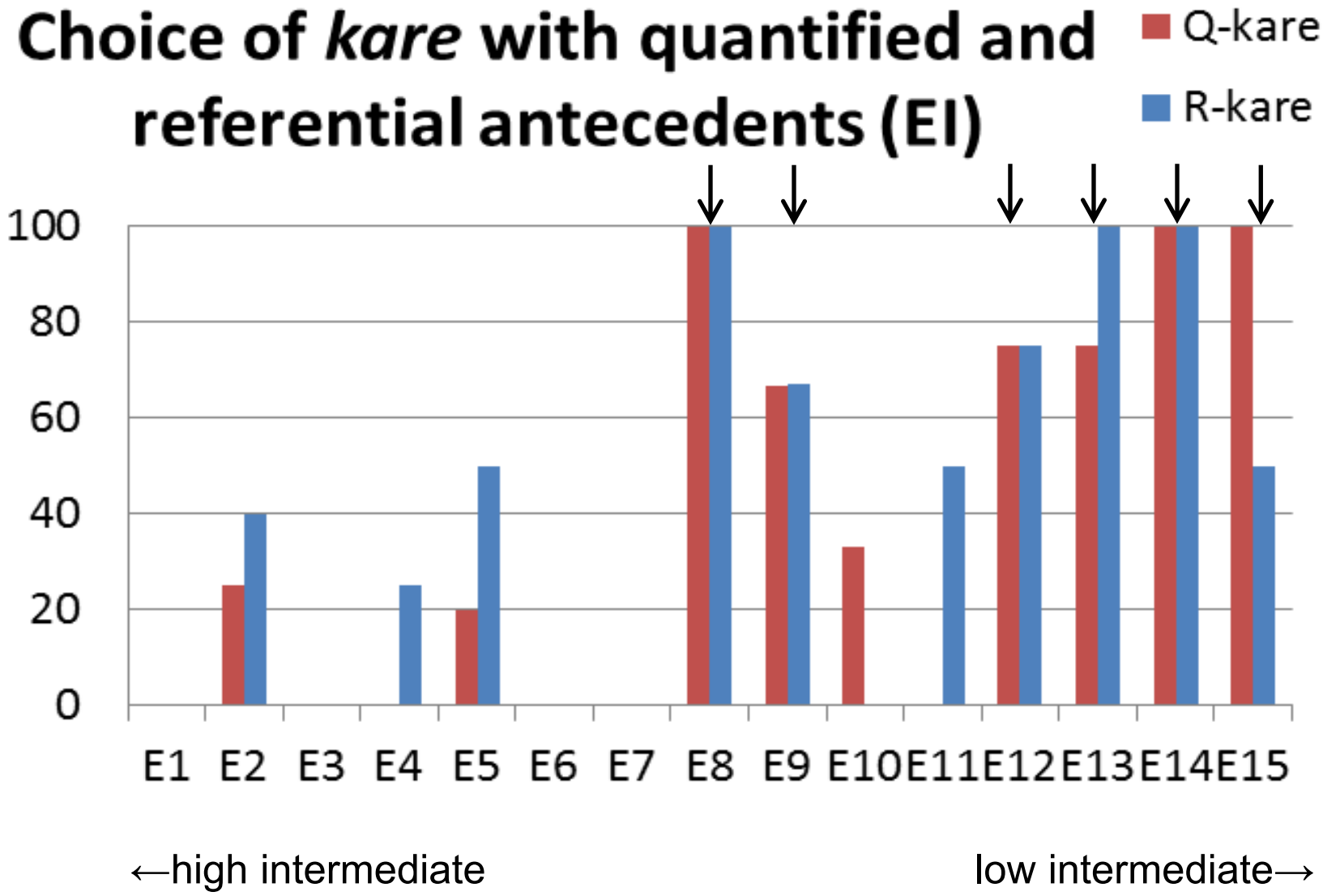


No difference between the controls and the L2 groups in rejecting bound variable interpretations of *kare.* A two-way ANOVA comparing the English groups with Spanish groups showed no significant main effect of L1 ($F(1,56)=0.135$, $p>0.05$) and a significant main effect of proficiency ($F(1,56)=5.20$, $p<.05$).



Only the EI group did not make a distinction between the antecedents for *kare* ($t(14)=0.61$, $p=0.55$)

Individual results (Task1)



6 out of the 15 EI L2ers allowed both antecedents over 50 % of the time.

Summary of Task1

- All L2 groups chose *kare* with quantified antecedents less frequently than *pro* with quantified antecedents, just like the controls.

- However, the EI group failed to make a distinction between quantified and referential antecedents for *kare*.

5.2 Task2: truth value judgment task

(6) Quantified antecedents (*everyone*)

Minna$_i$-ga kinoo kare$_{*i/j}$-ga/pro$_i$-ga konpyuutaa-o tukatta to itteimasita

'Everyone$_i$ was saying that he$_{*i/j}$/pro$_i$ used a computer yesterday.'

Q. 'Does the picture match the meaning of the sentence?'
(a) 'True' (b) 'False' (c) 'I don't know'

Figure 1. Bound variable context

(7) Referential antecedents

Hayasi$_i$-san-wa atode kare$_{i/j}$-ga/pro$_i$ denwa-o kakeru to itteimasita

‘Mr. Hayashi$_i$ was saying that he$_{i/j}$/pro$_i$ would call later.’

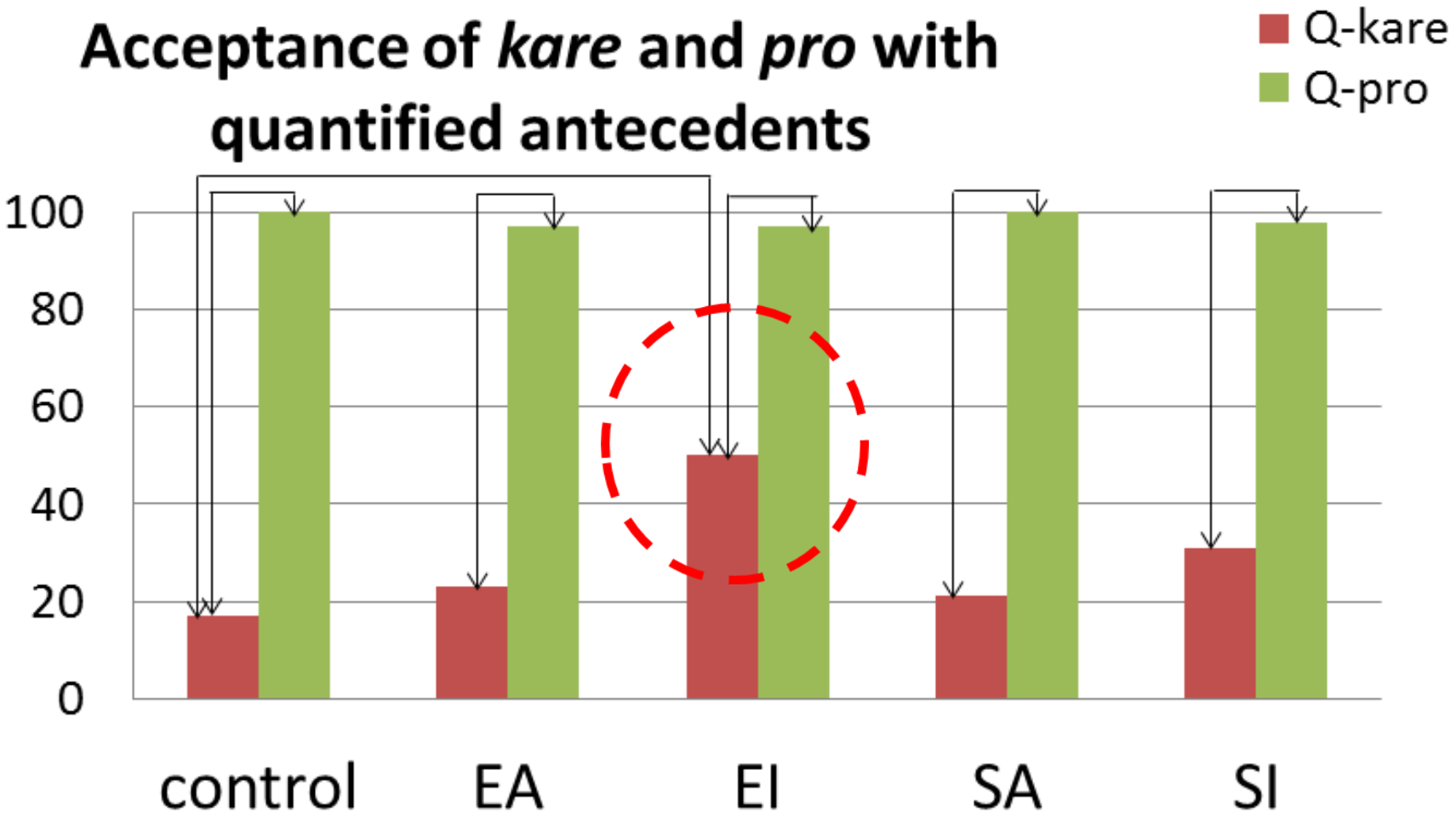
Q. ‘Does the picture match the meaning of the sentence?’

(a) ‘True’ (b) ‘False’ (c) ‘I don’t know’

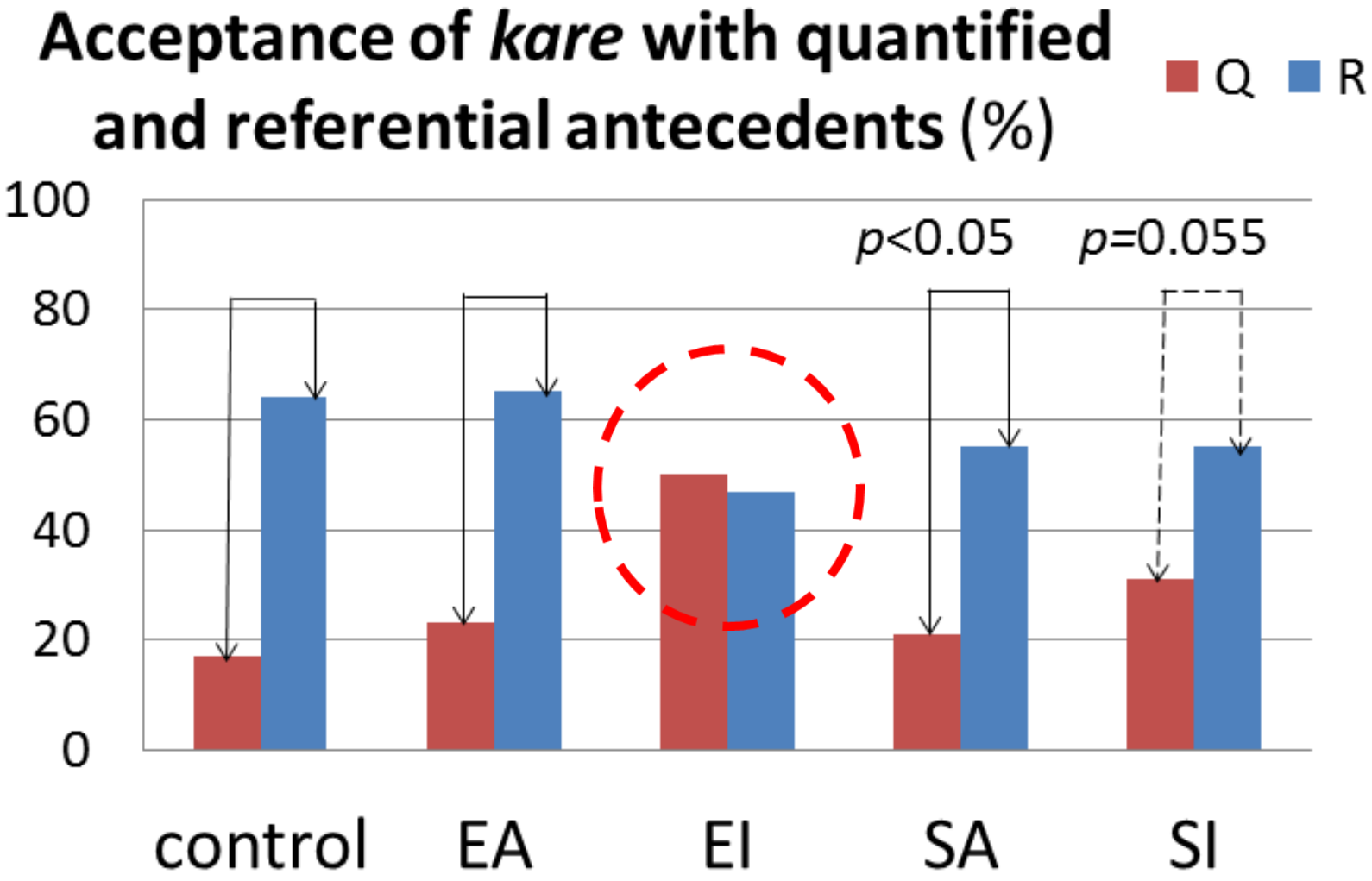
Mr. Hayashi

Figure 2. Coreferential context

Group results (Task2)

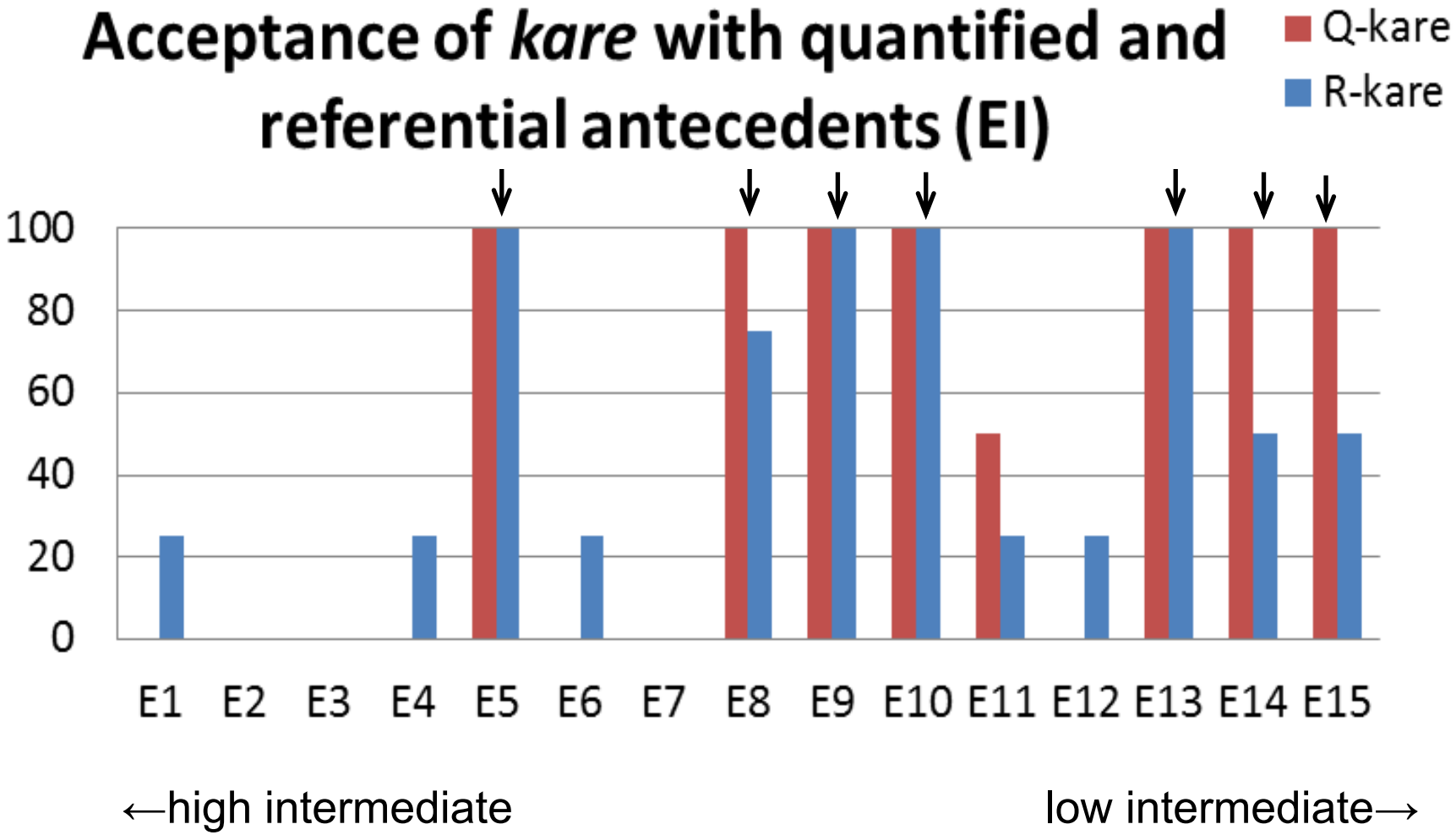


The EI group accepted *kare* with quantified antecedents more often than the controls ($t(25)=2.09$, $p<0.05$).



The EI group also failed to make a distinction between quantified and referential antecedents for *kare* ($t(14)=0.52$, $p=0.61$).

Individual results (Task2)



7 out of the 15 EI L2ers allowed both antecedents over 50 % of the time

Summary of Task2

- **The EI group accepted *kare* with quantified antecedents more frequently than the controls.**

- **The EI group also failed to make a distinction between quantified and referential antecedents for *kare*.**

6. DISCUSSION

The prediction: L1 Spanish speakers should outperform L1 English speakers in observing the OPC at lower levels of proficiency. → supported

Finding 1: The SI group performed better than the EI group.

(The EI group accepted *kare* with quantified antecedents more often than the controls in the TVJ. The EI group also failed to make a distinction between the antecedents in both tasks. In contrast, the SI group had target-like interpretations.)

→This is attributable to the L2ers' L1s: the OPC is operative in Spanish, but not English.

Finding 2: The EA group had target-like interpretations while the EI group did not.

→This result supports FA.

L2ers acquire the correct interpretation as their proficiency improves. Given that the L2 interpretation is not easy to determine from naturalistic input or L1, the result suggests that UG is operative in L2 acquisition, which supports FA.

7. CONCLUSION

This study investigated whether the OPC is acquired by L1 English and L1 Spanish speakers of L2 Japanese in the same way.

The results suggest that the OPC is not fully operative in L1 English speakers' L2 grammar at earlier stages due to L1 transfer. However, it becomes operative as L2ers' proficiency improves, which supports the FT/FA.

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Thank you!