

On the (non-)relation between perceived acceptability and production of L2 English subject relative clauses

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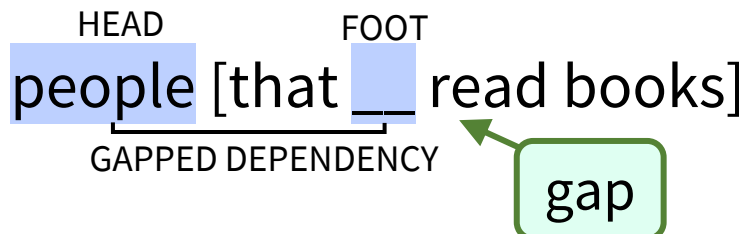
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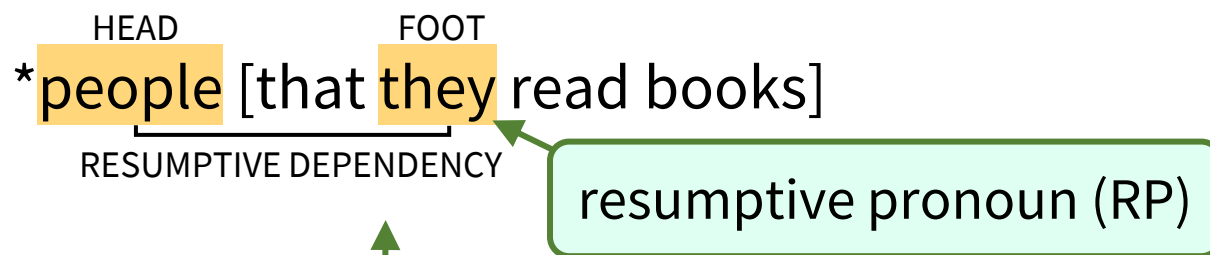
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Gapping vs. Resumption in Relative Clauses (RCs)

Gapping (unpronounced foot)



Resumption (overt nominal foot)



Common in RCs produced by L2 learners (L2ers)

"Sometimes I typed an article, an adjective, or an adverb [that I thought it would fit into the context]" —an L1-Korean L2er of English

Distribution of Gapped and Resumptive RCs

Subject RCs (SRCs)

Table 1. Distribution of grammatical gapping (–), resumption (+), and unrelativizable positions (0) in single-clause RCs

Language	SU	DO	IO	OBL	GEN	OCOMP
English	–	–	–	–	–	–
Korean	–	–	–	–	+	0
Mandarin	–	±	+	+	+	+

SU = subject; DO = direct object; IO = indirect object; OBL = oblique; GEN = genitive; OCOMP = object of comparison; adapted from Keenan & Comrie, 1977, p. 93, Table 2

Ongoing debate about the distribution of resumptive RCs in Korean (see Han, 2013; Kwon, 2008; Song, 2003) and Mandarin (see Hitz & Francis, 2016; Pan, 2016)

Experimental Research on L2 Resumption in RCs

- Frequent in L2 production

(e.g., Algady, 2013; Gass, 1979; Hyltenstam, 1984; Kim, 2013; Pavesi, 1986)

- More common in positions that are more difficult for relativization (e.g., Algady, 2013; Gass, 1979; Hyltenstam, 1984)

- Occurs even when ungrammatical in both L1 and target language (TL)

(e.g., Hyltenstam, 1984; Pavesi, 1986)

Hyltenstam (1984)

- **Materials:** Production task eliciting relativization from the six positions on Keenan & Comrie's (1977) hierarchy
- **Participants:** 45 adult L2ers of Swedish (no resumption) from four L1s: Finnish (no resumption), Greek (some resumption), Persian (some resumption), Spanish (no resumption)
- **Key Findings:**
 - L2ers systematically produce resumptive RCs even when they are ungrammatical in both L1 and TL
 - Production patterns for gapping vs. resumption align closely with Keenan & Comrie's hierarchy

L2ers produce resumptive RC “as a means to reduce processing load where it is largest” (p. 55)

Syntactic Environments and Processing Difficulty

- SU > DO > IO > OBL > GEN > OCOMP

(Keenan & Comrie, 1977)

- Short-Distance > Long-Distance > *Wh*-Island

- Short-Distance:

the man [that ___ borrowed a book]

- Long-Distance:

the man [that I think [___ borrowed a book]]

- *Wh*-island:

*the man [that I wonder [which book ___ borrowed ___]]

(see Hawkins, 1999, p. 263; Hawkins, 2004, p. 192ff; Morgan & Wagers, 2018; O'Grady, 2012, p. 497; O'Grady, 2022, p. 73, 133)

A Common Assumption in L2 Research on Resumption

Production patterns reliably reflect grammatical representations



the man [that I met his mother]

The speaker must consider resumption grammatical in genitive RCs
(see Algady, 2013; Eckman, 2004; Hyltenstam, 1984)

But L1 English speakers...

- readily produce resumptive RCs in environments that are difficult or inaccessible to gapping
(e.g., Ferreira & Swets, 2005; Morgan & Wagers, 2018; Zukowski & Larsen, 2004)
- consistently assign low acceptability ratings to resumptive RCs in the same environments

Resumptive RCs are ill-formed in English even though native speakers produce them under certain conditions

Research Questions (RQs) for the Present Study

RQ1: Does resumption facilitate L2 production of SRCs under processing strain?

Elicited Production Task ← Modeled on Ferreira & Swets (2005)

RQ2: Do L2ers who produce resumptive SRCs necessarily regard them as a licit option for relativization?

Elicited Production Task \rightleftharpoons Acceptability Judgment Task

Participants



Adult English native speakers (ENSs)



Adult L1-Korean L2ers of English (KLEs)

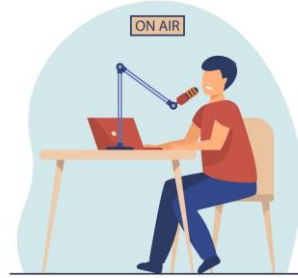


Adult L1-Mandarin L2ers of English (MLEs)

Table 2. Participant information (means and ranges)

Group	<i>n</i>	Age at Testing	C-test Score	Age of Onset	Years in Anglosphere
ENS	61	26.43 (18–58)	42.85 (22–50)	—	—
KLE	66	25.38 (19–36)	32.05 (11–46)	9.23 (8–13)	0.17 (0–8)
MLE	73	29.51 (18–46)	28.80 (11–48)	10.29 (8–14)	0.04 (0–14)

Note. 50-item C-test (Zenker, in prep.) used to measure English proficiency.



Elicited Production Task (EPT)

Probed for processing effects in the production of gapped vs. resumptive SRCs

Experimental Design

- 3 conditions (short-distance vs. long-distance vs. *wh*-island SRCs)
- 15 critical items (6 conditions \times 5 tokens, Latin-squared)
- 15 fillers eliciting short-distance SRCs from biclausal sentences

(Standard data cleaning performed prior to analysis)

Critical Conditions

Table 3. Critical conditions in the EPT

Environment	Target Response with Gapping vs. Resumption
Short	the man [that { /* he } borrowed a book last month]
Long	the man [that Mary thinks [{ /* he } borrowed a book last month]]
Island	the man [that I wonder [which book {* /* he } borrowed last month]]

↑
Increasingly difficult relativization environments

Example Trial in the Island condition



Mary wonders which book this man borrowed last month.

Test sentence



Lisa wonders which book this man borrowed last month.

Foil sentence



Which man is this?

Question



Lisa wonders which book this man borrowed last month.

Recording...

6 seconds

See Ferreira
and Swets
(2005) for a
similar
procedure

“the man [that Mary wonders [which book {/he} borrowed last month]]”

Response Categories

1. Gap (gapped SRC of the target type)

“the man [that Mary wonders [which book borrowed last month]]” (KLE21)

2. Resumption (resumptive SRC of the target type)

“the man [that Mary wondered [which book he borrowed last month]]” (ENS10)

3. Other (any other RC containing relevant information)

“the man [who borrowed a book [that Mary wonders about]]” (ENS34)

4. Nontarget (anything else; mostly repetitions of target sentence)

“Mary wonders [which book he borrowed last month]” (MLE47)

(Examples shown in the Island condition)



RQ1: Does resumption facilitate L2 production of SRCs under processing strain?

→ *Examine how rates of resumption vary across conditions*



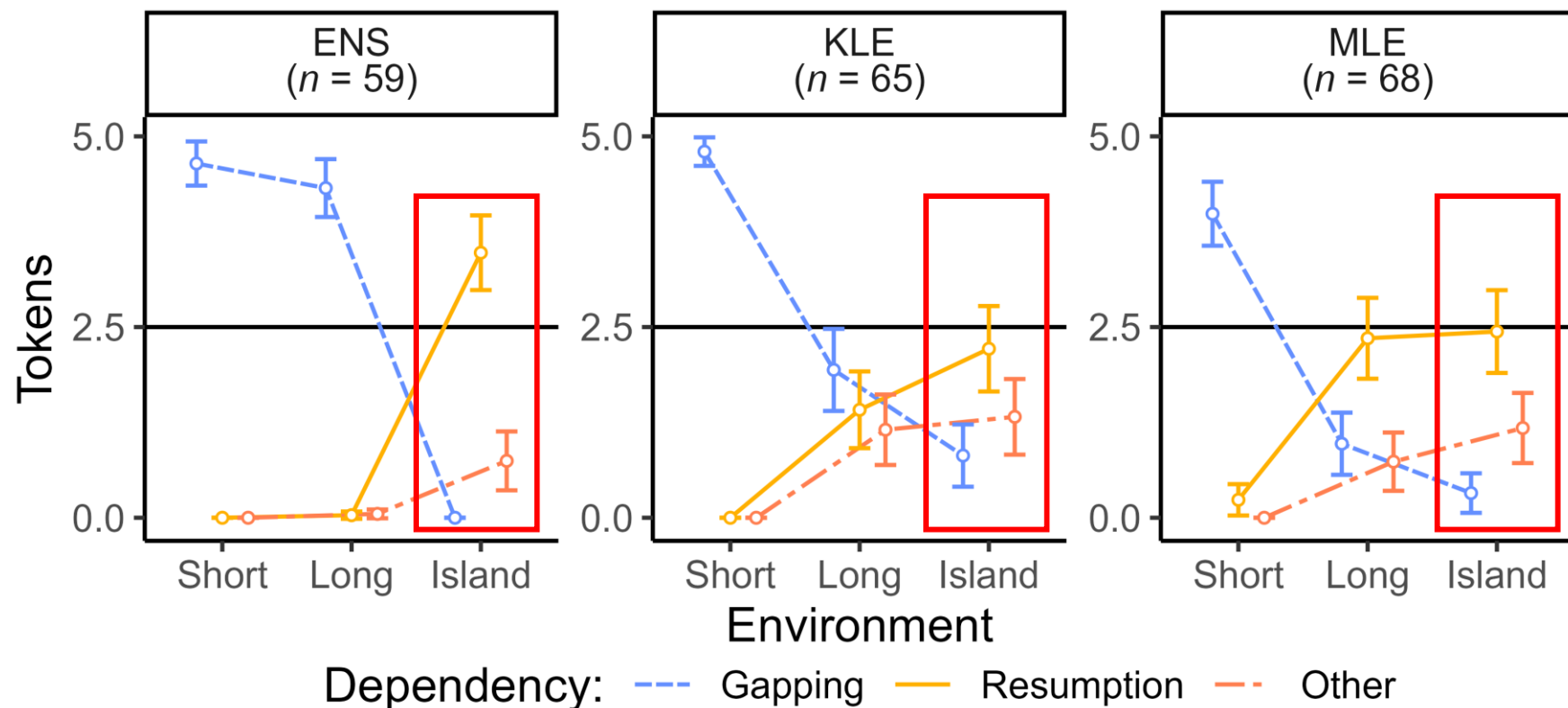
If resumption responses increase across conditions
(Short < Long < Island)...



If resumption responses do not increase across conditions...

Response Data

Figure 1. Mean response tokens per participant in the EPT



Note. Error bars are 95% CIs; center line corresponds to a 50% response rate; responses in the nontarget category are not included in the plots.



Findings

Resumption rates for each group were lowest in the Short (easiest) condition and highest in the Island (hardest) condition

→ Indicates that resumption facilitates production of SRCs under processing strain



Acceptability Judgment Task (AJT)

*Tested the offline acceptability of
gapped vs. resumptive SRCs*




Experimental Design

- English, Korean, and Mandarin versions
- 2×3 design crossing DEPENDENCY (gapping vs. resumption) and ENVIRONMENT (short-distance vs. long-distance vs. *wh*-island)
- 30 critical items (6 conditions \times 5 tokens, Latin-squared)
- 42 fillers (28 grammatical; 14 ungrammatical)

(Standard data cleaning performed prior to analysis)

Critical Conditions

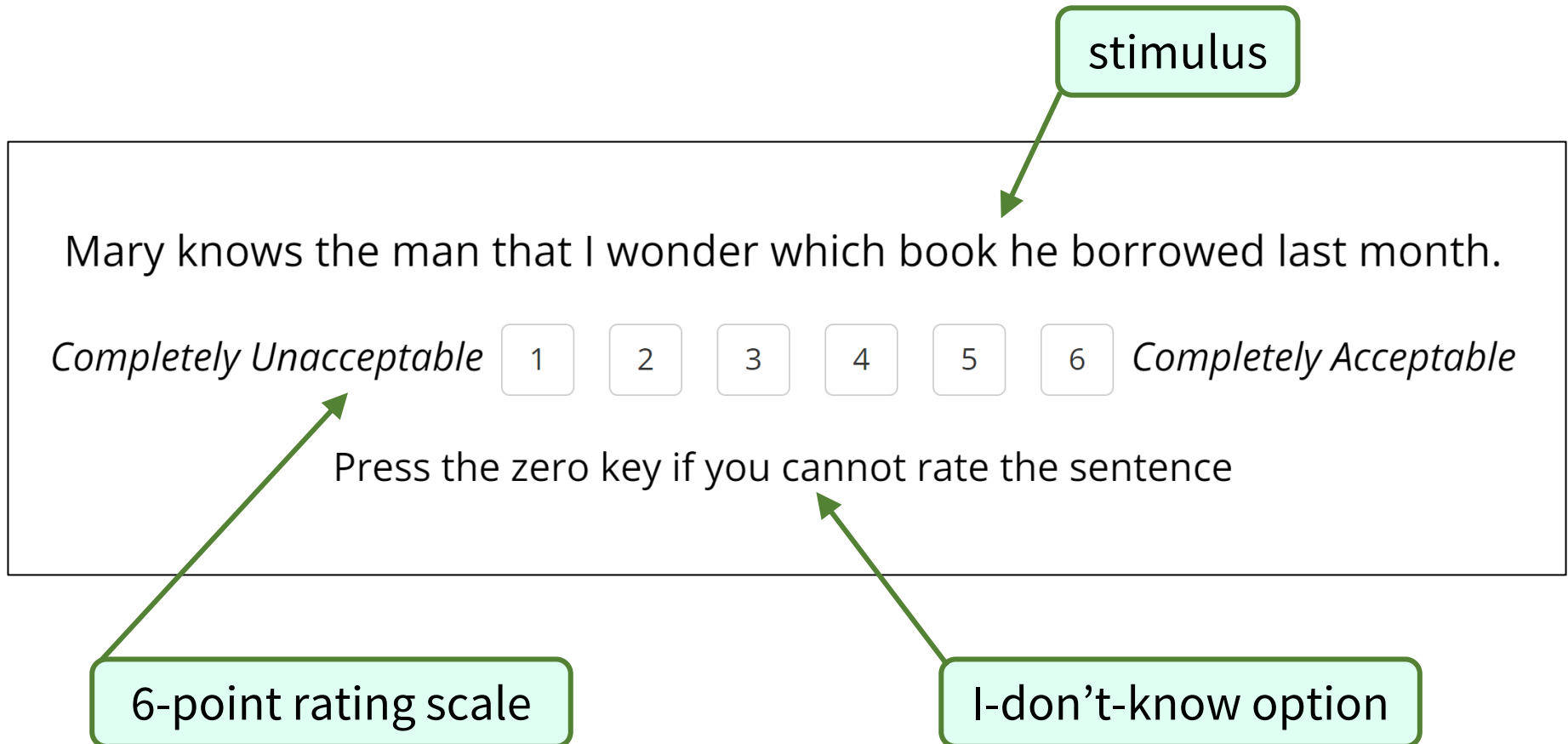
Table 4. Critical conditions in the English AJT

Environment	Example in the Gapping and Resumption conditions
Short	I think Mary knows the man [that {  /*he} borrowed this book last month]].
Long	Mary knows the man [that I think [{  /*he} borrowed this book last month]].
Island	Mary knows the man [that I wonder [which book {*  /*he} borrowed last month]].

Korean and Mandarin AJTs

- Closely-translated versions of the English stimuli
- ‘Island’ conditions not assumed to be syntactic islands

Example Trial in the [Island + Resumption] Condition





RQ2: Do L2ers who produce resumptive SRCs necessarily regard them as a licit option for relativization?

→ Identify participants who consistently accepted or rejected trials with resumptive pronouns (RPs)

→ Reexamine EPT production data **with consistent RP acceptors removed**

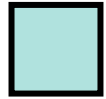


If RP non-acceptors do not produce resumptive SRCs under processing strain...



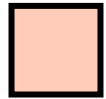
If RP non-acceptors do produce resumptive SRCs under processing strain...

Participant Categories



RP Acceptors

Those who gave “acceptable” ratings (4, 5, 6) for $\geq 80\%$ of resumption trials **in at least one** of the environments tested



RP Rejectors

Those who gave “unacceptable” ratings (1, 2, 3) for $\geq 80\%$ of resumption trials **across all three** of the environments tested

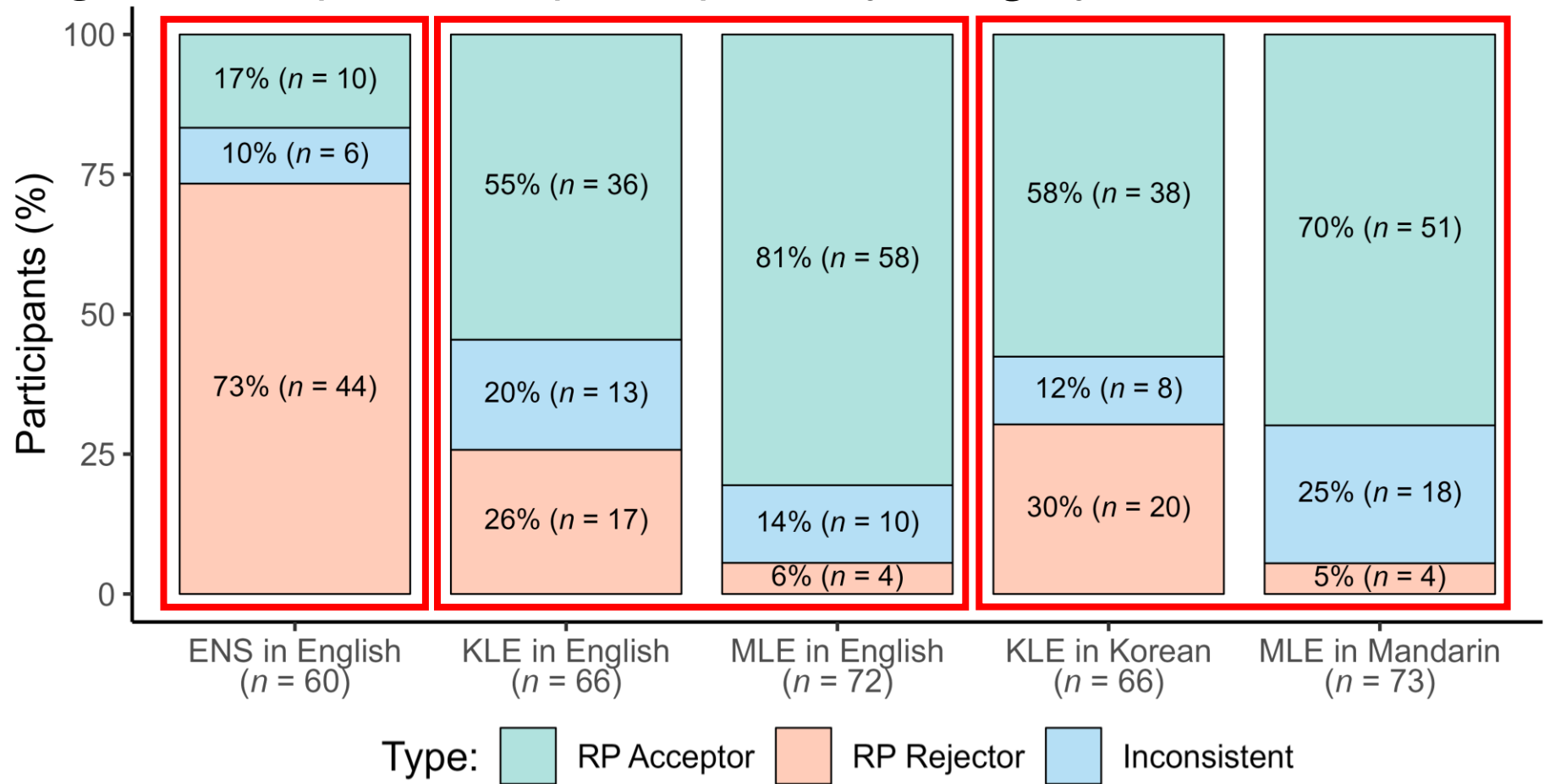


Inconsistent Raters

Everyone else

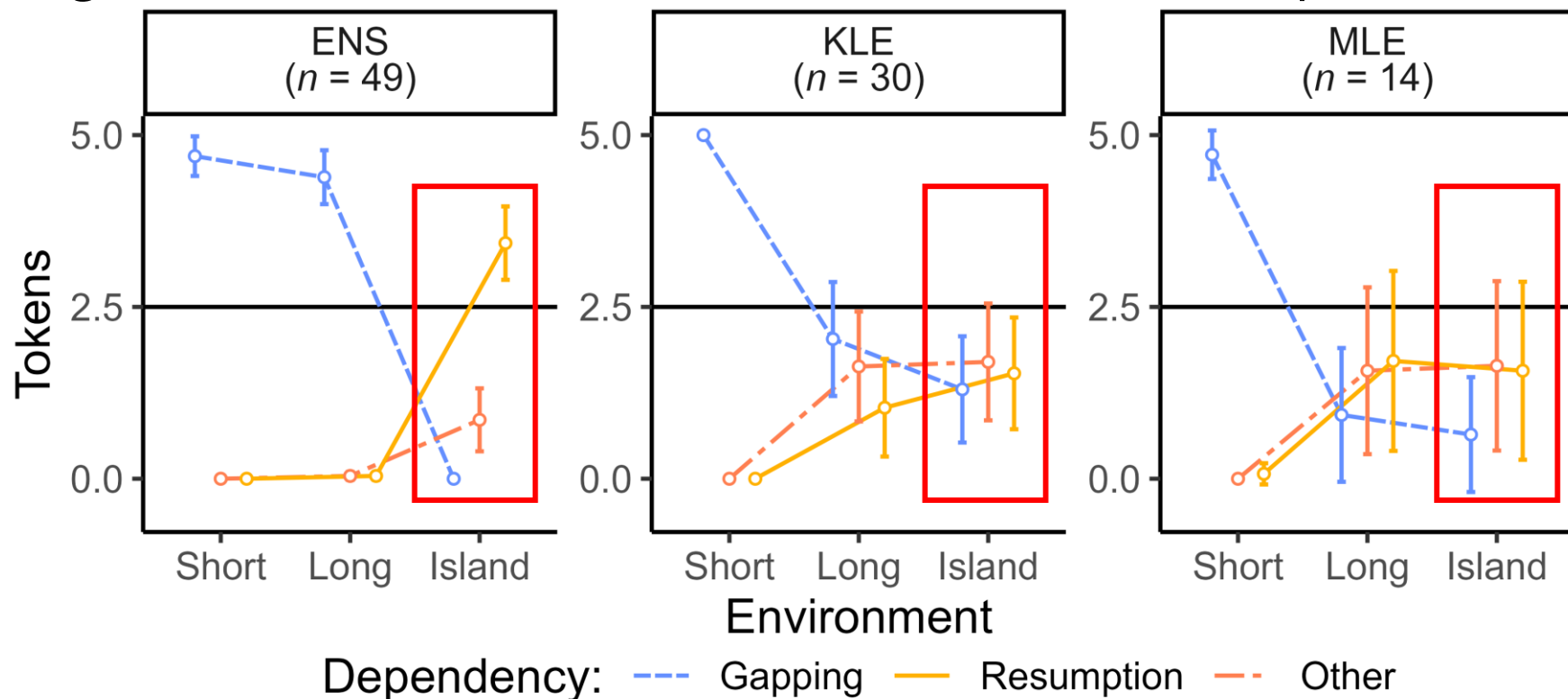
RP Acceptors, RP Rejectors, and Inconsistent Raters

Figure 2. Proportion of participants by category the AJTs



Reanalysis of the EPT Data for RP Non-Acceptors

Figure 3. Production rates in the EPT for RP non-acceptors



Note. Error bars are 95% CIs; center line corresponds to a 50% response rate; responses in the nontarget category are not included in the plots.



Findings


The proportion of resumption responses increased across conditions, even after consistent RP acceptors were removed

→ Indicates that individuals who produce resumptive RCs do not necessarily regard them as well-formed



Discussion

RQ1: Does resumption facilitate L2 production of SRCs under processing strain?

-  Resumption rates in the EPT increased for all groups across conditions, from short-distance to long-distance and *wh*-island

RQ2: Do L2ers who produce resumptive SRCs necessarily regard them as a licit option for relativization?

-  Resumption rates in the EPT increased across conditions even when consistent RP acceptors from the English AJT were removed

→ For RP non-acceptors, resumptive RCs are produced for purely processing-based reasons (they do not represent a licit option for relativization in the IL grammar)

Future Directions

- Are RP acceptors lower in proficiency than RP rejectors?
- Why did some L2ers have RP acceptance than could not be traced to either L1 transfer or yes bias?
- Does resumption facilitate long-distance RC processing in L1/L2 Korean and Mandarin?
- Why were so many KLEs RP acceptors in the Korean AJT?

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