

Introduction

- Resumption is sometimes claimed to be island-rescuing (Ross, 1967; *et seq.*)
- In GRAMMATICALIZED RESUMPTION languages, resumption is claimed to be island-insensitive (McCloskey, 2006) and/or required in island contexts (Shlonsky, 1992)
- Acceptability tests of this claim have been confined to non-grammaticalized resumption languages like English (Polinsky, *et al.*, 2013; *i.a.*)
- FACTORIAL DEFINITION of island effects provides a quantitative definition of islandhood well-suited for testing resumption (Sprouse, *et al.*, 2012)
- MODERN STANDARD ARABIC (فصحى) has grammaticalized resumption like Irish/Hebrew

Items

- WHETHER ISLANDS**
 - ماذا يتساءل الشرطي ما إذا كان محمود سرق؟
maaḏaa_i ʔitasaaʔal al-ʃart^ʃi [maa iḏaa kaana mahmuud saraqa t_i]
what_i wonder the-policeman [whether had Mahmoud stole t_i]
“What_i does the policeman wonder [whether Mahmoud stole t_i]?”
- ADJUNCT ISLANDS**
 - ماذا تقلق إذا نسي المحامي في المكتب؟
maaḏaa_i ʔaqlaqa [iḏaa al-muhaami nasii t_i fi-l-maktab]
what_i you.worry [if the-lawyer forgot t_i in-the-office]
“What_i do you worry [if the lawyer forgot t_i at the office]?”
- COMPLEX NP (CNPC) ISLANDS**
 - ماذا أنكرت الحقيقة أن أحمد أكل؟
maaḏaa_i ʔaankarta [al-ħaqiiqa ʔan aahmed ʔakal t_i]
what_i you.denied [the-rumor that Ahmed ate t_i]
“What_i did you deny [the rumor that Ahmed ate t_i]?”

Experiment 1: Bare wh-Phrases

- Design:** 2 × 2 + 2 crossing:
- LENGTH: long vs. short extraction
 - ISLAND: island structure present vs. not present
 - RESUMPTION: gap vs. resumptive (only in LONG) conditions

- Who_i t_i thinks that Mahmoud stole the wallet? SHORT, NO ISLAND, NO RESUMPTION
- What_i does the policeman think Mahmoud stole t_i? LONG, NO ISLAND, NO RESUMPTION
- What_i does the policeman think Mahmoud stole it? LONG, NO ISLAND, RESUMPTION
- Who_i t_i wonders whether Mahmoud stole the wallet? SHORT, ISLAND, NO RESUMPTION
- What_i does the policeman wonder whether Mahmoud stole t_i? LONG, ISLAND, NO RESUMPTION
- What_i does the policeman wonder whether Mahmoud stole it? LONG, ISLAND, RESUMPTION

- 6 sentences per 3 islands
- Latin Squared into 6 lists
- Presented with 63 fillers (1.75:1 filler:item ratio)

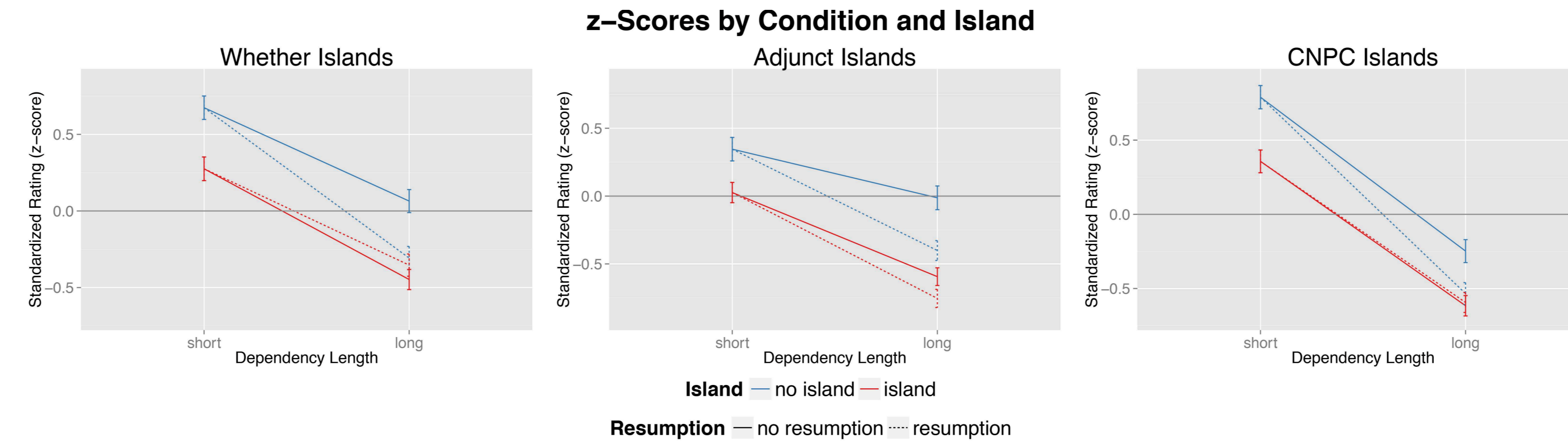
- Procedure:**
- 123 participants (82 female; mean age 22.6 years)
 - Tested on paper at UAEU or NYUAD
 - 7-point Likert acceptability, normalized by participant before analysis

Experiment 2: d-Linked wh-Phrases

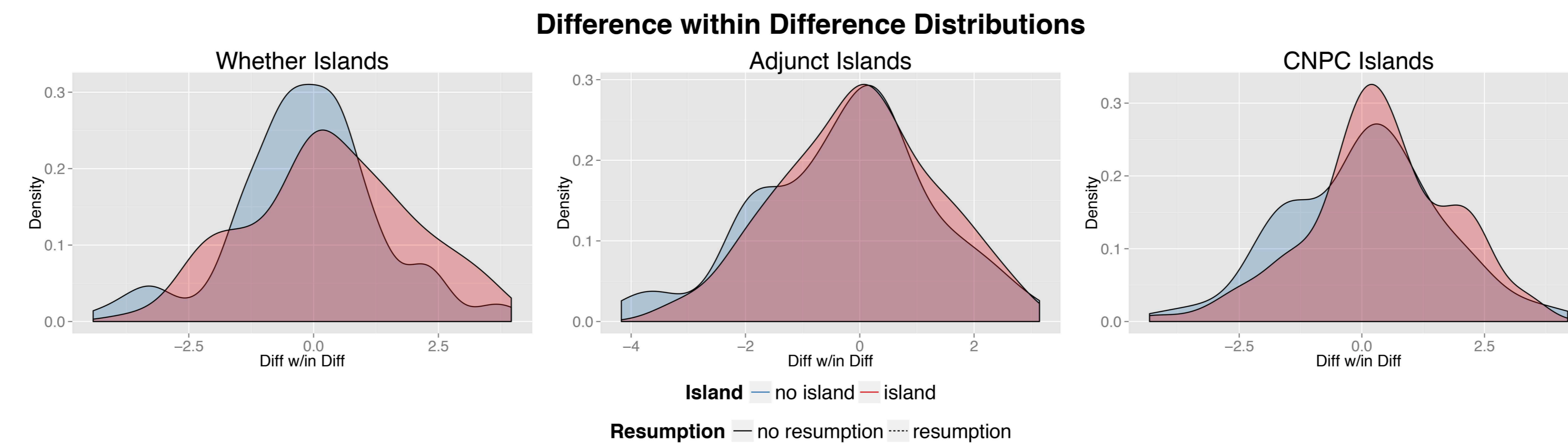
- Resumption is claimed to be better with d-linked fillers (*e.g.*, Aoun, *et al.*, 2010).
- Same design as Exp. 1, but with maaḏaa replaced with d-linked DPs using ʔayya + NP

- Procedure:**
- 55 participants (16 female; mean age 30.6 years)
 - Conducted online via Qualtrics
 - Participants recruited from NYU(AD) and UAEU
 - Collection and analysis still ongoing (preliminary results here)

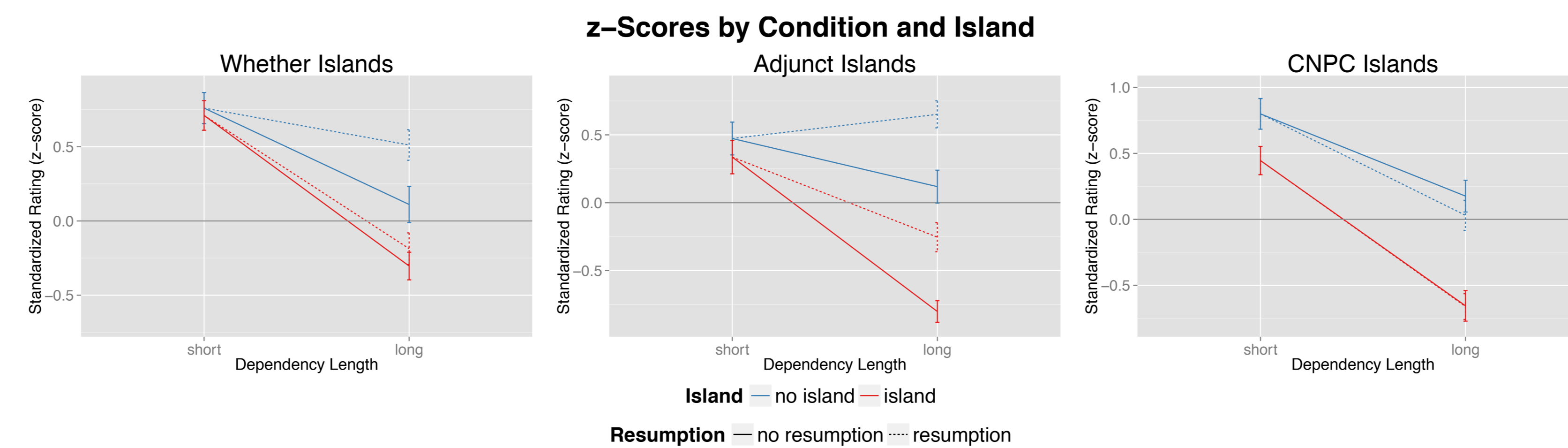
Results: Bare wh-Phrase Questions



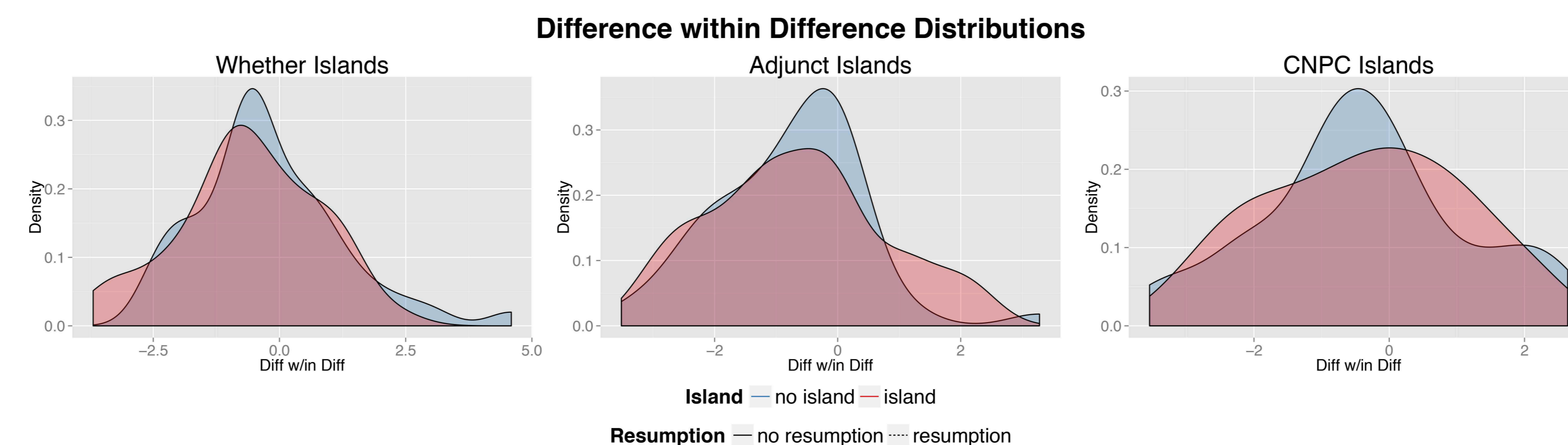
Island Effects:	Island Effects:	Island Effects:
NO RESUMPTION: $\hat{\beta} = -0.11; p = 0.44$	NO RESUMPTION: $\hat{\beta} = -0.26; p = 0.09$	NO RESUMPTION: $\hat{\beta} = 0.06; p = 0.67$
RESUMPTION: $\hat{\beta} = 0.35; p = 0.02$	RESUMPTION: $\hat{\beta} = -0.03; p = 0.82$	RESUMPTION: $\hat{\beta} = 0.37; p = 0.01$
Resumption Effect:	Resumption Effect:	Resumption Effect:
RESUMPTION: $t(121) = -1.17; p = 0.24$	RESUMPTION: $t(122) = 2.03; p = 0.04$	RESUMPTION: $t(122) = -0.23; p = 0.82$



Results: d-Linked wh-Phrase Questions



Island Effects:	Island Effects:	Island Effects:
NO RESUMPTION: $\hat{\beta} = -0.37; p = 0.08$	NO RESUMPTION: $\hat{\beta} = -0.78; p = 0.0007$	NO RESUMPTION: $\hat{\beta} = -0.48; p = 0.04$
RESUMPTION: $\hat{\beta} = -0.65; p = 0.002$	RESUMPTION: $\hat{\beta} = -0.77; p = 0.0008$	RESUMPTION: $\hat{\beta} = -0.33; p = 0.12$
Resumption Effect:	Resumption Effect:	Resumption Effect:
RESUMPTION: $t(44) = 0.48; p = 0.64$	RESUMPTION: $t(45) = 4.57; p < 0.0001$	RESUMPTION: $t(45) = -0.03; p = 0.97$



Analysis Details

- No participant exclusions or sub-population analysis (yet)
- Each island type analyzed separately
- Acceptability Ratings:**
 - z-Transformed ratings analyzed with two mixed-effects regressions:
 - No Resumption: 2 × 2 without RESUMPTION conditions
 - Resumption: 2 × 2 without NO RESUMPTION conditions
- Random effects included subjects (only)
- ISLAND EFFECT defined as interaction of LENGTH and ISLAND with a negative $\hat{\beta}$ — the SUPER-ADDITIVE component of Sprouse, *et al.*, 2012
- Resumption amelioration assessed with planned comparisons between RESUMPTION conditions in the LONG, ISLAND conditions only

Difference-within-Differences

- Used as a measure of island strength/existence (Sprouse, *et al.*, 2012)
- Involves the difference ($DD = D_1 - D_2$) of two differences:
 - D_1 : $\zeta_{\text{No Island, Long}} - \zeta_{\text{Island, Long}}$
 - D_2 : $\zeta_{\text{No Island, Short}} - \zeta_{\text{Island, Short}}$
- Here, too, computed twice: with LONG, RESUMPTION and LONG, NO RESUMPTION
- If no ISLAND EFFECTS then $DD = 0$

Discussion

- CNPCs may not be islands in Arabic
 - Very difficult to find NPs that take CP complements in this way; might simply be lexical/grammatical
- Resumption somewhat marked with bare wh-fillers
- d-Linking improves resumption in adjunct/whether-islands...
- ... in some cases non-d-linked resumptives are worse than islands alone
- In some cases, resumption improves long extraction alone
- For Whether-islands, resumption helps remove the marginally present super-additive component only
- Resumption never results in $z > 0$ for any island
- Results (islands & resumption) clearly subtle and may depend on population

Conclusions

Big Picture:

- LAST RESORT might be the best characterization of resumption...
- ... but resumption is not ameliorative of island violations

Future Directions:

- Relative clause extractions in addition to wh-questions
- Arguments vs. adjuncts?
- Spoken varieties of Arabic
- Other putative wh-movement constructions (comparatives, *etc.*)

Acknowledgments & Selected References

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