

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

- (1) **WHETHER ISLANDS**
 - ماذا يتساءل الشرطي ما إذا كان محمود سرق؟
 - maaḏaa_i jitasaaʔal al-fart^ʕii [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*]?”
- (2) **ADJUNCT ISLANDS**
 - ماذا تقلق إذا نسي المحامي في المكتب؟
 - maaḏaa_i taqlaqa [iḏaa al-muhaamii 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]?”
- (3) **COMPLEX NP (CNPC) ISLANDS**
 - ماذا أنكرت الحقيقة أن احمد أكل؟
 - maaḏaa_i ʔaankarta [al-haqiiqa ʔan aahməd 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 <i>t_i</i> thinks that Mahmoud stole the wallet?	SHORT, NO ISLAND, NO RESUMPTION
▶ What _i does the policeman think Mahmoud stole <i>t_i</i> ?	LONG, NO ISLAND, NO RESUMPTION
▶ What _i does the policeman think Mahmoud stole it _i ?	LONG, NO ISLAND, RESUMPTION
▶ Who _i <i>t_i</i> wonders whether Mahmoud stole the wallet?	SHORT, ISLAND, NO RESUMPTION
▶ What _i does the policeman wonder whether Mahmoud stole <i>t_i</i> ?	LONG, ISLAND, NO RESUMPTION
▶ What _i does the policeman wonder whether Mahmoud stole it _i ?	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

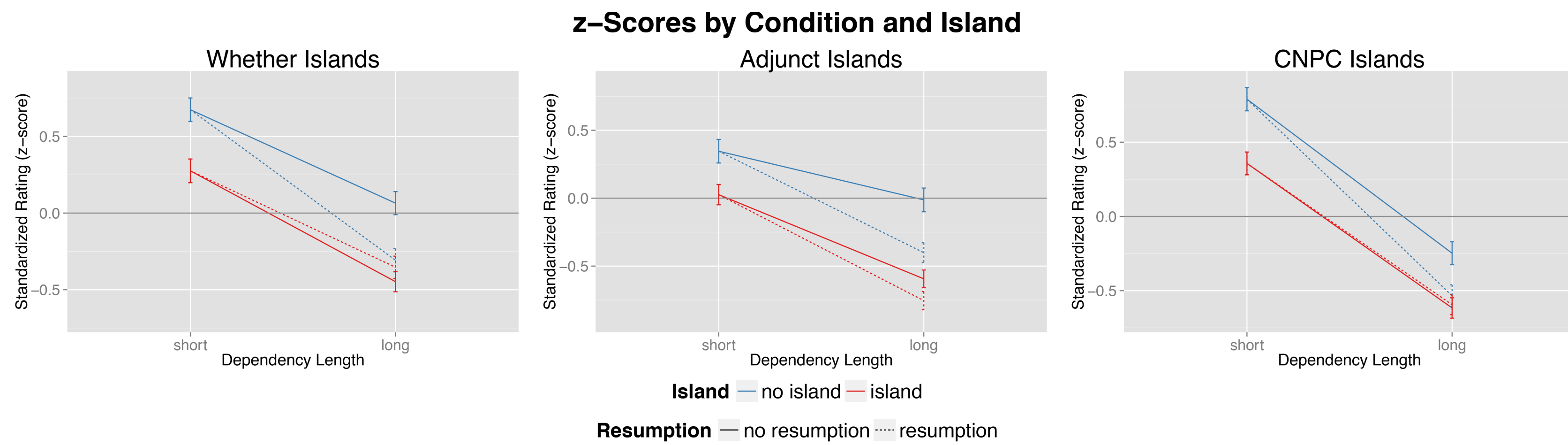
Experiment 2: d-Linked wh-Phrases

- ▶ 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

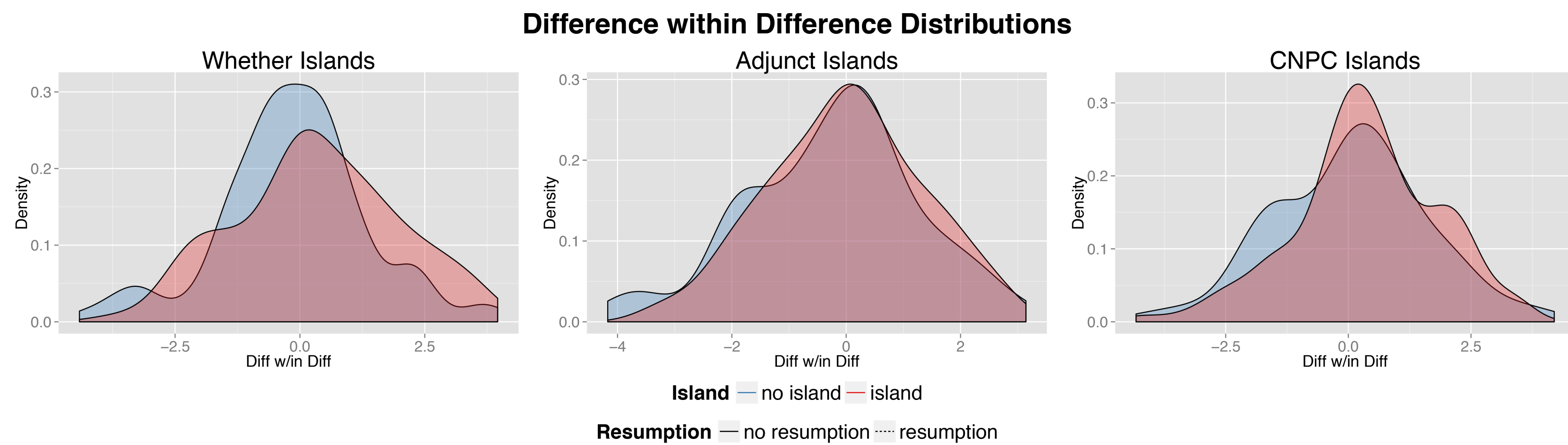
Procedure:

- ▶ 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)

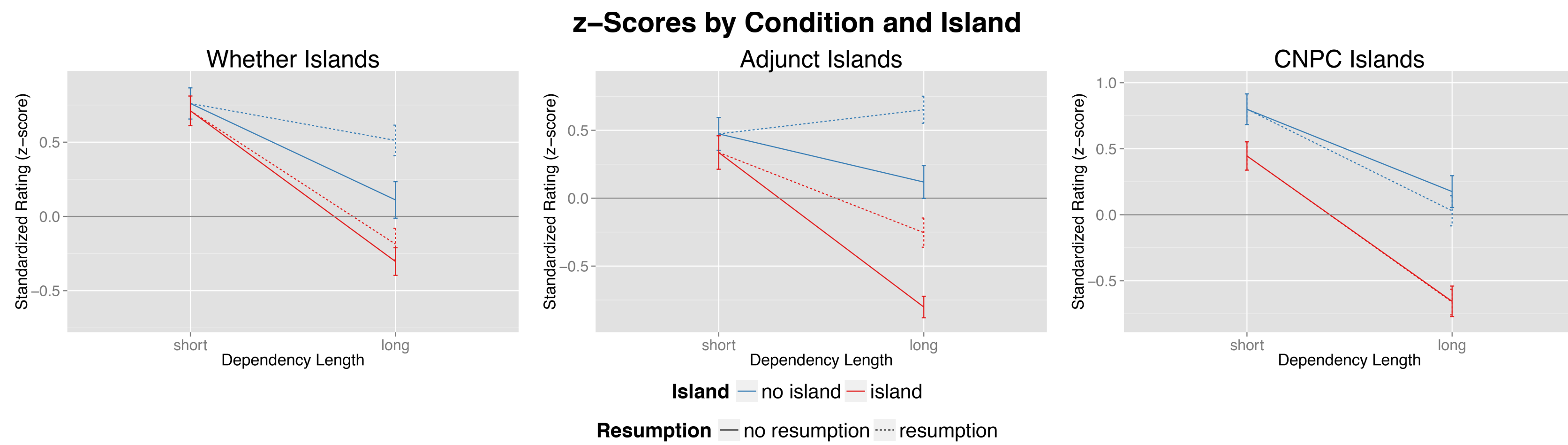
Results: Bare wh-Phrase Questions



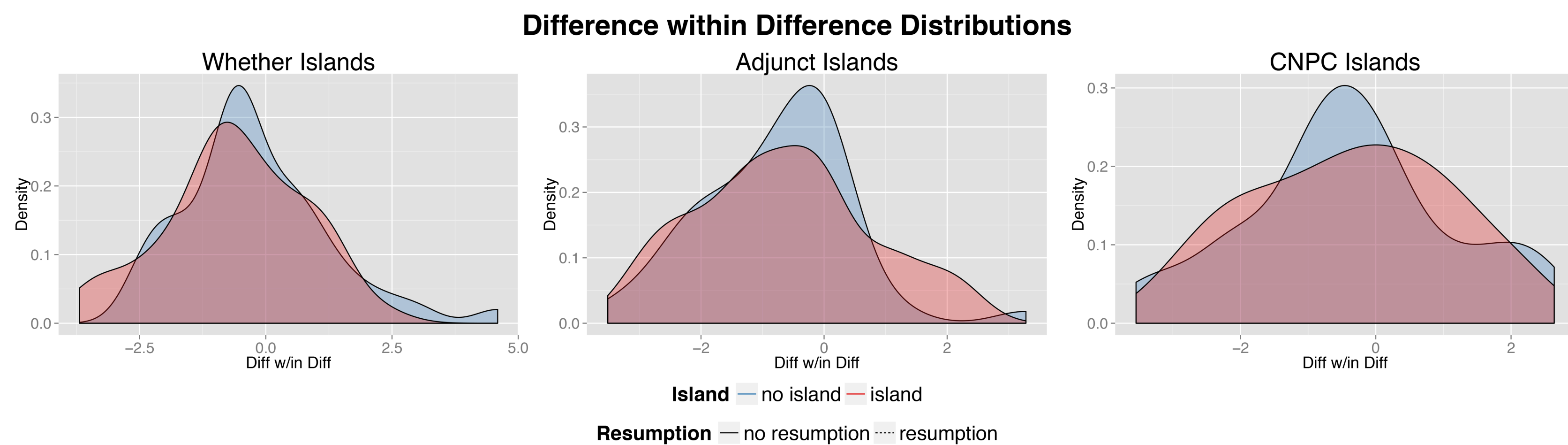
Island Effects:	Island Effects:	Island Effects:
NO RESUMPTION: $\hat{\beta} = -0.11; p = 0.44$	NO RESUMPTION: $\hat{\beta} = -0.26; p = 0.09$	NO RESUMPTION: $\hat{\beta} = 0.06; p = 0.67$
RESUMPTION: $\hat{\beta} = 0.35; p = 0.02$	RESUMPTION: $\hat{\beta} = -0.03; p = 0.82$	RESUMPTION: $\hat{\beta} = 0.37; p = 0.01$
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 : $z_{\text{No Island, Long}} - z_{\text{Island, Long}}$
- D_2 : $z_{\text{No Island, Short}} - z_{\text{Island, Short}}$

- ▶ 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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