

A Supplementary Material

A.1 Adjunct island stimuli

A.1.1 Adaptation set

- *What did he hear that I hired someone because a rumour has been?
- *What did she go to buy a gift because she is?
- *What did they not like that you were a teacher when they heard about you?
- *Where did they scold me when I went?
- *What did you go home because you needed to do?
- *What does Alex like the woman who wears?
- *Which topic did you leave because Mary talked about?
- *What will I eat my hat if John buys?
- *What will I buy a cup of coffee when I get?
- *What have they been circulating because she wears?
- *What did she say that I was waiting for someone who might get for Christmas?
- *What did they not like that I am likely to go because you are?
- *What did he hear that they gave a guitar to him when you gave to me?
- *What does he speak a Balkan language because I speak?
- *What did he hear that they solved the second problem because she read?

A.1.2 Test set

- *What did I buy a guitar for myself because they heard?
- *What will they fail the test if they do not?
- *Whom will he hire someone if I need?
- *What has he been circulating who he thought was?
- *What will he try to call you if she buys?
- *What did she say she would like the man if he read?
- *Where did I buy a coffee for myself because I went?
- *What will he circulate a call if she buys?
- *Whom did she say that she gave a guitar to me when I hired?
- *What did he get a new phone for Christmas because she saw?
- *What did you need to do that if you were to go and buy?
- *What did she eat the broccoli because they announced?
- *Where did she say that he will hear a rumour if she is?
- *What does he speak a Balkan language because

you were?

- *Who did she say that she wears extravagant rings when she is waiting for?
- *What does Jim eat a yellow candy whenever Pam watches?
- *Whom did the pregnant teddy bear assert that Julia Roberts came because Susan hired?
- *What did Eric solve problems by Fourier analysis because Will loaned him?
- *What did Elnar dance a ballet when the pretty agent stole?
- *What will I eat scandalous broccoli if the extravagant woman sings?
- *What will the blue brothers date Susan and direct the crafty movie if he gets?
- *What does Julia Roberts like the discreet agent who robbed?
- *Where did Sam announce a party boat when I went?
- *Where did Jim quip that the pretty window was silly when Susan arrived?
- *What will Fred wait for a homework if he sings?

A.2 Wh island stimuli

A.2.1 Adaptation set

- ??What does John wonder where Eric went to buy?
- *Whom did Susan ask why Sam was waiting for?
- *What did they not like that Will asked how Sam speaks?
- *What did Will ask why John read?
- *Who did he hear that Eric asked where Sam is waiting for?
- *Whom did Sam ask what Elnar told?
- *How did they forget which problem they should solve?
- *What did Sam wonder who solved?
- *What did I forget who directed that I saw yesterday?
- *Where did he hear that my sister asked which direction to take for?
- *What does Sam wonder why Will buys?
- *What did he hear that Sam asked when Alexa directed that I saw yesterday?
- *What did Fred think how Eric is likely to do?
- *Whom did they not like that Fred wondered why Elnar hired?
- *What did Sam wonder what Elnar has been?

A.2.2 Test set

- *Where did Alex ask who Elnar took?
- *What did she say that John asked who will read?
- *Where did Elnar ask how John went?

- *What did Will ask why Alex wears?
- *What did she say that Will thinks he knows where Sam announced?
- *What did they not like that Elnar wonders how Alex was?
- *What did Alex ask when Eric ate?
- *What does Sam wonder where Susan buys?
- *What does Will wonder how he will read?
- *How did he hear that Sam thinks he knows where Elnar gets?
- *Whom does Eric wonder how Susan is waiting for?
- *What did Alex ask why Susan is?
- *What did Elnar ask who Will is for?
- *Whom did Fred ask where Sam loaned a trumpet to?
- *What did he hear that Sam asked who Eric heard about?
- *What did Jim ask why a discreet rumour was?
- *What does Pam wonder when the blue homework will eat?
- *Where did Julia Roberts ask who took the expensive picture to?
- *How did she hear that Elnar thinks he hires where Julia Roberts buys?
- *Whom did the expensive experience ask what the lucky teddy bear told?
- *What did the English essays ask when the probable account made?
- *What did the espresso wonder who announced?
- *What did the party think how the boat is unrealistic to do?
- *What did the brothers ask why the crafty story plays?
- *Where did the scandalous girls ask how the salad went?

A.3 Subject island stimuli

A.3.1 Adaptation set

- *Who is that went home likely?
- ??Whom was the story about funny?
- *What has a rumor that you read been circulating?
- *What was the account about difficult?
- *Who is that announced a plan possible?
- *Who is that speaks a Balkan language funny?
- *What was about her difficult?
- *Who is that he has met unlikely?
- *Whom did someone who knows meet them?
- *What was that would be made unrealistic?
- *Who was that directed the movie that I saw yesterday claimed by Susan?

- *Whom did one story about buy a cup of coffee?
- *What was that they announced about speaking a Balkan language?
- *Whom were the books about waiting for someone?
- *What does that John wears make the plan difficult?

A.3.2 Test set

- *Who was that quipped about Fourier Analysis funny?
- *Whom were two rumours about waiting?
- *Who does that wears extravagant rings make the plan unrealistic?
- *Whom loaned that Fred heard the claim a trumpet to you?
- *Who is that is a teacher unlikely?
- *Whom does one story about claim the possibility is unrealistic?
- *What was that she likely heard true?
- *Who was that knows someone probable?
- *Who does that got a new phone for Christmas not make sense?
- *Whom did an account for buy a gift?
- *What is that come to our party likely?
- *Who does the extravagant rings that takes to school are funny?
- *Who is that Elnar is trying to call unrealistic?
- *Who was that they loaned a trumpet to funny?
- *Who was that heard the claim funny?
- *Who is that went to the discreet candy store expensive?
- *Whom was the lucky party about circulating?
- *What is that John is scandalous?
- *What were two pregnant girls from dating?
- *Whom was one claim about funny to Julia Roberts?
- *What was that they robbed an experience?
- *Who was that they loaned a lucky guitar to unrealistic?
- *What was the blue window that announced was crafty?
- *What does one agent of like the aria?
- *What was that Mary ate difficult for you?

A.4 Object island stimuli

A.4.1 Adaptation set

- Whom did he tell that his mother is a teacher?
- Who is it important to invite to our party?
- Who is it probable that Bill likes?
- Which book did John hear a rumor that you had read?

Which car did John announce a plan to fix?
 Who does he like that their boat hired?
 Who is it important that Eric call about?
 Who did he hear that it is important to invite?
 Whom did she say that it is probable Alex saw?
 What is it important that Fred ate?
 What did they not like that Eric claimed that his story is?
 Which experience did Susan write a story to share?
 What do you hate that their story buys?
 What did she say that Eric thinks that their cat wears?
 Who is it important to call to our party?

A.4.2 Test set

Who did he hear that it is important to see?
 What is it important that John buys?
 Who did he hear that it is important that Fred knows?
 Where did Alex tell you that she went?
 What did he hear that Sam does not do?
 What did he hear that Alex thinks their car needed to do?
 Who is it probable that Alex helped?
 What did they not like that you read that Susan is trying to give you?
 Who did they not like that it is probable that Sam met?
 Who is it probable that the account is waiting for?
 Who did they not like that it is important to fix?
 Who did they not like that it is probable that Susan called?
 What did Alex buy you?
 What did she say that John thinks that their rumour was?
 What is it important that Sam eats for Christmas?
 Who is it scandalous that the silly candy store is demanding for?
 Who did they quip that it is expensive to date?
 What did they not like that it is circulating that Fourier analysis solved?
 What does Alex not whisper that you robbed?
 Where is it unrealistic that Pam goes to for Christmas?
 What did he hear that it is extravagant to claim?
 What is it likely that the teacher buys?
 What did he hear that it is funny that a cup of coffee solves?
 Who did the book tell me went to the expensive store?
 Who did the TV experience assert watched a ballet on Broadway?

A.5 Left branch island stimuli

A.5.1 Adaptation set

*Whose does Susan like account?
 *How expensive did he buy a boat?
 *Whose does Eric like boat?
 *How yellow did they not like that Eric loaned a trumpet?
 *How silly did they not like that he told me?
 *How good did he hear that is she a teacher?
 *Whose did she buy book?
 *Which (man's) did you see picture?
 *How large did Alex eat a salad for lunch?
 *Whose does my sister like shows?
 ??How good does Elnar like possibilities?
 ??How fair is Sam a teacher?
 *How pretty did she say that you are waiting for a woman?
 *How second did John solve the problem?
 ??How new did she say that Will went to buy a gift?

A.5.2 Test set

*How crafty did she say that he directed the movie that I saw yesterday?
 ??How discreet did Susan hire an agent?
 ??How pretty does Susan like the woman?
 *How difficult did he hear that you failed the test?
 *Whose did she say that John eats hat?
 ??How crafty did she say that he announced a plan?
 ??How pretty did he hear that she read the Sandman comics?
 *What kind does Susan speak a language?
 *How expensive did they not like that she wears rings?
 *How pretty did she say that Susan likes the woman?
 *How blue did he hear that Eric loaned a trumpet to you?
 *How extravagant did they not like that Will wears rings?
 *Whose did they not like that I ate old hat?
 *How scandalous did he hear that Eric heard a rumour?
 ??How blue did Alex give a guitar to me?
 *How circulating did she hear that he buys candy stores?
 *How crafty did Julia Roberts not demand that I hire a teddy bear?
 *How difficult does the blue agent do math homework?
 *How important is she dating the broccoli brothers?

??How unrealistic is the funny man singing an aria?
 *How discreet does the TV wonder why he hired a tiramisu?
 *How silly did the lucky girls ask how she found a boat on the way to Broadway?
 ??How large did Julia Roberts invite a party to the city?
 ??How likely did he announce a plan to buy a bean?
 ??How important does the TV experience like the possibility?

A.6 Coordinate structure island stimuli

A.6.1 Adaptation set

*What does Alex like and beans?
 *What did they not like that Fred likes cars and?
 *What did Sam eat beans and?
 What did Sam give to me and loan to you?
 Whom is he waiting for and trying to call?
 What did my sister hear that Susan danced for me and sang for you?
 Who did they say that Sam helped and took care of?
 *Which beverage did they order tiramisu and?
 *Which dessert did he hear that they ordered and espresso?
 Which tasks did she say that he has in math and in English?
 What did I buy for him and take for him?
 *What did Will whisper or car?
 *What did she say that Sam whispered rumour and?
 *What did Elnar buy and boats?
 *What did you not study or?

A.6.2 Test set

*What did they not like that John likes and accounts?
 Who did she hear a rumour about and wait for?
 *What did he hear that Eric ate accounts and? What did Will buy?
 What things did you read about and announce about?
 *What did he announce a plan and speak?
 Which subjects did she not study for or fail the test for?
 What did Sam order for me and borrow for you?
 *What does Will like and girls?
 *What did they not like that Will bought tiramisu and?
 *What did he hear that Elnar ate and story?
 Which things did she solve and give?
 *What did he announce a plan and solve by?
 *What does Susan like and mothers?

What did she hear about me and take about you?
 *What did Julia Roberts demand the scandalous rumour and whisper?
 *What does the unrealistic brother like and silly parties?
 *What does the crafty possibility eat probable windows and?
 *What does the directed candy store like circulating salads and?
 *What did the expensive Fourier analysis not like that the difficult study bought and discreet ballet?
 *What did he rob a silly possibility and date?
 *What does the lucky street hire and accounts?
 What did the pretty experience assert for me and hire for you?
 What did the extravagant cup of coffee quip for me and solve for you?
 *What does the Balkan language like Christmas and?

A.7 Complex noun phrase island stimuli

A.7.1 Adaptation set

*What did you hear the claim that Fred solved?
 *What does she like the possibility that she might get for Christmas?
 *What Balkan language did they hire someone who speaks?
 *What candy store did they meet someone who robbed yesterday?
 *Which direction did you see a sign that Susan pointed us in?
 *What did we hear a rumour that Sam thinks?
 *How many cities does Bill have brothers who live in?
 *What does Frank believe the rumour that Susan sleeps with?
 *Who don't I believe the claim that Jim likes?
 *Who did my sister say that Alex is the only person who knows?
 *How does she believe that Eric solves?
 *What did we hear the claim that Will thinks that he will buy?
 *What subjects does Susan have students who failed tests in?
 *What don't they believe the claim that Elnar speaks?
 *What did my sister hear that Susan likes?

A.8 Test set

*Who don't we believe the rumour that Sam is dating?

*How does Will think that she is dating someone who solves?

*What does she believe the rumour that she might have this year?

*How many cities does he know brothers who live in?

*Who do they believe the claim that he likes?

*What did she hear a rumour that Susan sleeps with?

*How did my sister say that Julia Roberts thinks that Eric solves?

*What does she like the possibility that Susan dances?

*What do they not believe the rumour that he will buy?

*Where do they have a window that opens?

*What did Elnar meet someone who likes?

*What does Susan believe the claim that he robbed yesterday?

*Who doesn't Sam believe the rumour that Sam is dating?

*What did he hear that he believes that he will buy?

*What did they rob someone who bought yesterday?

*What do they whisper the extravagant claim that the blue trumpet likes?

*What does the expensive gift believe that Mary fluently speaks?

*How many blue guitars does the scandalous teddy bear have agents who live in?

*What does the second problem believe the announcement that the Fourier analysis hires?

*What don't the unrealistic Sandman comics quip the plan that the difficult English test likes?

*Who did my likely trumpet say that the crafty party is the only place that knows?

*What does the pregnant girl like the pretty agent that Julia Roberts sings?

*What does the silly car believe the experience that the yellow trumpet did?

*Where does the discreet boat have a funny ring that sings?

*How many cups of coffee does the fair teacher have sleepy hats that direct in?

A.9 Bridge verb island stimuli

A.9.1 Adaptation set

How does she think that he died?
 How did she know that he had died?
 How does he claim that he got a perfect score on the test?

How did my sister hear that Alex says that he is tired today?
 How does she know that she is pregnant?
 How does someone who speaks a Balkan language believe that this is easy?
 How did he say that today is his last day?
 Where does Alex think that Bill fell asleep?
 Where did Alex hear that Bill fell asleep?
 How does Susan know that the sign pointed us in the right direction?
 How does he know that he bought a boat yesterday?
 How does Will claim that he solves by Fourier analysis?
 How does Sam believe that he is dating someone?
 How did he know that he got a perfect score on the test?
 How does Susan think that she met someone who robbed a candy store yesterday?

A.9.2 Test set

How did Bill claim that today is his last day?
 How does Elnar claim that he has a boat and a car?
 How did she think that she bought beans and broccoli?
 How does Alex claim that he can make tiramisu and espresso?
 How does she know that she failed the test?
 How did he say that he went to school?
 How does Will think that Bill is pregnant in class?
 How did Sam claim that he fell asleep in class today?
 How does someone who speaks a Balkan language solve by Fourier analysis?
 How does Susan claim that she sleeps with a teddy bear?
 How does someone who speaks a Balkan language know beans and broccoli?
 How does Elnar hear tiramisu and espresso?
 How does Elnar believe tiramisu and espresso?
 How did she know that he bought a boat yesterday?
 How did Alex claim that he got a perfect score on the test?
 How does the discreet party think that the blue trumpet met someone who circulated a teddy bear?
 How did Mary think that the movie is directed by Fourier analysis?
 How does the open window claim that it has a ring and a salad?
 How did the circulating rumour claim an experience that she bought a cup of coffee?

How does Mary claim that she can buy a story and possibilities?

How does the wonder know that it asked for an announced plan?

How did the extravagant gift claim that it went to the sleepy Christmas store?

How does the scandalous phone think that the new girl is discreet in school?

How did the funny bean think that it went home today?

How does someone who eats a silly phone wonder by Broadway?

A.10 Statistical Analyses of Results

Throughout this paper, we compared within-class adaptation effects to cross-class adaptation effects. In this section, we describe how the classes were defined for each analysis and give the two sample t-test reports for each analysis.

A.10.1 Priming Filler-Gap Existence

In Section 7.2, we found that filler-gap existence primed subsequent filler-gap existence across acceptability categories significantly more than shuffled sentences within an acceptability category. Acceptable sentences were defined as: the full sets of object extractions and bridge verb extractions, as well as d-linked left-branch extractions and across-the-board coordinate structure extractions. The rest of the sentences were defined as unacceptable. For processing simplicity, we adapted the models to full construction sets, so *acceptable adapted* models were adapted to either the object extraction set or the bridge verb extraction set. For *acceptable testing*, we included acceptable items from any construction set.

Acceptable adapted

$$\mu_{\text{shuffled}} = 0.64 \quad \mu_{\text{unacceptable}} = 1.32 \\ |t| = 14.5 \quad p < 2.2e^{-16}$$

Unacceptable adapted

$$\mu_{\text{shuffled}} = 0.60 \quad \mu_{\text{acceptable}} = 1.58 \\ |t| = 34.0 \quad p < 2.2e^{-16}$$

To ensure that this testing setup didn't drive our results, we also reran the analysis after classifying all left-branch and coordinate structure items as acceptable for both adaptation and testing, which produced very similar results.

A.10.2 Priming Filler-Gap Constraints

In Section 8.2, we conducted two types of analyses, which we label Baseline and Directional. In Base-

line analyses, we compared matched adherence priming (adherence on adherence and violation on violation) to the lower-bound baseline of adapting to unrelated filler-gap sentences. In the Directional analyses, we compared matched adherence priming (adherence on adherence and violation on violation) to mismatched adherence priming (adherence on violation and violation on adherence).

Subjacency Baseline Analysis

$$\mu_{\text{baseline}} = 1.51 \quad \mu_{\text{matched}} = 1.33 \\ |t| = 4.64 \quad p = 3.6e^{-6}$$

D-Linking Baseline Analysis

$$\mu_{\text{baseline}} = 1.64 \quad \mu_{\text{matched}} = 1.80 \\ |t| = 2.87 \quad p = 0.004$$

ECP Baseline Analysis

$$\mu_{\text{baseline}} = 1.21 \quad \mu_{\text{matched}} = 1.52 \\ |t| = 5.86 \quad p = 6.8e^{-9}$$

ECP Directional Analysis

$$\mu_{\text{mismatched}} = 1.75 \quad \mu_{\text{matched}} = 1.52 \\ |t| = 3.93 \quad p = 9.0e^{-5}$$

L-Marking Baseline Analysis

$$\mu_{\text{baseline}} = 1.21 \quad \mu_{\text{matched}} = 1.27 \\ |t| = 1.01 \quad p = 0.31$$

L-Marking Directional Analysis

$$\mu_{\text{mismatched}} = 1.76 \quad \mu_{\text{matched}} = 1.27 \\ |t| = 7.39 \quad p = 4.6e^{-13}$$