

## Appendix A

### Final models selected by *buildmer*

All models began fully specified with the fixed effects of Block Type, Sentence Type, and their interaction, and the random effects of participant and item with the random slopes of Block Type, Sentence Type, and their interaction. Final models are presented below. In all cases, the random slopes were simplified until model convergence; no further simplification was conducted.

#### *Accuracy to comprehension questions*

```
buildmer(question_acc ~ block_type*sentence_type + (1 | item),
  data = acc_data, family = "binomial", ddf = "Wald", REML = FALSE,
  reduce.fixed = FALSE, reduce.random = FALSE,
  control = glmerControl(optimizer = "bobyqa"))
```

#### Summary of fixed effects for accuracy to comprehension questions.

	Estimate	Standard Error	Z-value	p-value
<i>With control condition as reference level:</i>				
Sentence Type (CS v Control)	0.99	0.13	7.55	< .01*
Sentence Type (Uni v Control)	1.58	0.16	10.00	< .01*
Block Type (ND)	-0.14	0.15	-0.94	.35
Sentence Type (CS v Control) by Block Type	0.05	0.26	0.17	.87
Sentence Type (Uni v Control) by Block Type	-0.18	0.31	-0.56	.57
<i>With unilingual condition as reference level (duplicate comparisons excluded):</i>				
Sentence Type (Uni vs CS)	-0.61	0.17	-3.50	< .01*
Sentence Type (Uni v CS) by Block Type	0.21	0.35	0.61	.54

#### *Reaction time to comprehension questions*

```
buildmer(question_rt ~ block_type*sentence_type +
  (1 + block_type*sentence_type | participant) +
  (1 + block_type + sentence_type | item),
  data = rt_data_clean, ddf = "Satterthwaite", REML = FALSE,
  reduce.fixed = FALSE, reduce.random = FALSE,
  control = lmerControl(optimizer = "bobyqa"))
```

#### Summary of fixed effects for reaction times to comprehension questions.

	Estimate	Standard Error	t-value	p-value
<i>With control condition as reference level:</i>				

Sentence Type (CS v Control)	-158.61	38.69	-4.10	< .01*
Sentence Type (Uni v Control)	-182.52	34.97	-5.22	< .01*
Block Type (ND)	5.23	42.88	0.12	.90
Sentence Type (CS v Control) by Block Type	-28.03	59.83	-0.47	.64
Sentence Type (Uni v Control) by Block Type	33.02	44.36	0.74	.46
<i>With unilingual condition as reference level (duplicate comparisons excluded):</i>				
Sentence Type (Uni vs CS)	23.91	34.13	0.70	.49
Sentence Type (Uni v CS) by Block Type	-61.06	50.15	-1.22	.23

### ***First fixation duration***

```
buildmer(first_fixation_duration ~ block_type*sentence_type +
  (1 | participant) + (1 + block_type | item),
  data = question_data_clean, ddf = "Satterthwaite", REML = FALSE,
  reduce.fixed = FALSE, reduce.random = FALSE,
  control = lmerControl(optimizer = "bobyqa"))
```

#### **Summary of fixed effects for first fixation duration.**

	<b>Estimate</b>	<b>Standard Error</b>	<b>t-value</b>	<b>p-value</b>
<i>With control condition as reference level:</i>				
Sentence Type (CS v Control)	-3.67	3.47	-1.06	.29
Sentence Type (Uni v Control)	-14.48	3.49	-4.15	< .01*
Block Type (ND)	8.02	5.10	1.57	.10
Sentence Type (CS v Control) by Block Type	-10.81	6.98	-1.55	.12
Sentence Type (Uni v Control) by Block Type	-12.86	7.06	-1.82	.07
<i>With unilingual condition as reference level (duplicate comparisons excluded):</i>				
Sentence Type (Uni vs CS)	10.82	3.51	3.08	< .01*
Sentence Type (Uni v CS) by Block Type	2.05	7.09	0.29	.77

### ***Gaze duration***

```
buildmer(gaze_duration ~ block_type*sentence_type +
  (1 | participant) + (1 + block_type | item),
  data = question_data_clean, ddf = "Satterthwaite", REML = FALSE,
  reduce.fixed = FALSE, reduce.random = FALSE,
  control = lmerControl(optimizer = "bobyqa"))
```

**Summary of fixed effects for gaze duration.**

	<b>Estimate</b>	<b>Standard Error</b>	<b>t-value</b>	<b>p-value</b>
<i>With control condition as reference level:</i>				
Sentence Type (CS v Control)	-4.75	4.61	-1.03	.30
Sentence Type (Uni v Control)	-15.12	4.63	-3.26	< .01*
Block Type (ND)	5.03	7.43	0.68	.50
Sentence Type (CS v Control) by Block Type	-7.21	9.28	-0.78	.44
Sentence Type (Uni v Control) by Block Type	-16.06	9.38	-1.71	.09
<i>With unilingual condition as reference level (duplicate comparisons excluded):</i>				
Sentence Type (Uni vs CS)	10.38	4.66	2.23	.03*
Sentence Type (Uni v CS) by Block Type	8.85	9.42	0.95	.35

**Total duration**

```
buildmer(total_duration ~ block_type*sentence_type + (1 | participant) + (1 |
item),
data = question_data_clean, ddf = "Satterthwaite", REML = FALSE,
reduce.fixed = FALSE, reduce.random = FALSE,
control = lmerControl(optimizer = "bobyqa"))
```

**Summary of fixed effects for total duration.**

	<b>Estimate</b>	<b>Standard Error</b>	<b>t-value</b>	<b>p-value</b>
<i>With control condition as reference level:</i>				
Sentence Type (CS v Control)	-133.72	15.06	-8.88	< .01*
Sentence Type (Uni v Control)	-145.13	15.15	-9.58	< .01*
Block Type (ND)	61.53	21.37	2.88	< .01*
Sentence Type (CS v Control) by Block Type	-86.79	30.30	-2.86	< .01*
Sentence Type (Uni v Control) by Block Type	-96.39	30.66	-3.14	< .01*
<i>With unilingual condition as reference level (duplicate comparisons excluded):</i>				
Sentence Type (Uni vs CS)	11.42	15.25	0.75	.45
Sentence Type (Uni v CS) by Block Type	9.60	30.78	0.31	.76