

## Appendix B: Result Details

Appendix B reports the model likelihood ratios for all investigated factors ranked by their odds ratio (given in the main text).

Before running the statistics, all input variables were checked for normal distribution. Further, all continuous variables (durational and pitch measures) were normalized. If not stated otherwise, loglinear modelling used only single input variables and random intercepts for rater, speaker and test sentence.

The report follows the order of the experiments as stated in section 3 of the main paper and makes use of the abbreviations introduced there, i.e.:

### *Familiar-language Condition*

1. PM\_PM\_p: PM sample rated by PM speakers for prominences
2. PM\_PM\_b: PM sample rated by PM speakers for boundaries
3. GE\_GE\_p: GE sample rated by GE speakers for prominences
4. GE\_GE\_b: GE sample rated by GE speakers for boundaries

### *Unfamiliar-language Condition*

5. GE\_PM\_p: GE sample rated by PM speakers for prominences
6. GE\_PM\_b: GE sample rated by PM speakers for boundaries
7. PM\_GE\_p: PM sample rated by GE speakers for prominences
8. PM\_GE\_b: PM sample rated by GE speakers for boundaries

## Familiar-language Condition Experiments

**PM\_PM\_p** (PM sample rated by PM speakers for prominences, cf. Figure 9)

Variable	Likelihood ratio of model	p-Value
Pause	$\chi^2(1) = 132.08$	$p < 2.2e^{-16}$
Part of speech – class	$\chi^2(1) = 272.97$	$p < 2.2e^{-16}$
Word duration	$\chi^2(1) = 669.56$	$p < 2.2e^{-16}$
Last verbal argument	$\chi^2(1) = 41.979$	$p = 9.23e^{-08}$
Syllable duration (mean)	$\chi^2(1) = 442.39$	$p < 2.2e^{-16}$
Syntactic boundary	$\chi^2(1) = 304.81$	$p < 2.2e^{-16}$
Realized syllable number	$\chi^2(1) = 164.09$	$p < 2.2e^{-16}$
b-score	$\chi^2(1) = 289.98$	$p < 2.2e^{-16}$
Range	$\chi^2(1) = 194.75$	$p < 2.2e^{-16}$
Maximum pitch	$\chi^2(1) = 39.917$	$p = 2.65e^{-10}$
Lexical syllable number	$\chi^2(1) = 50.014$	$p = 1.53e^{-12}$
Intonational category	$\chi^2(1) = 39.29$	$p = 3.65e^{-10}$
Duration of last syllable	$\chi^2(1) = 33.317$	$p = 7.83e^{-09}$
Minimum pitch	$\chi^2(1) = 12.29$	$p = 0.0004554$
Mean pitch	$\chi^2(1) = 3.0202$	$p = 0.08223$
Part of speech	$\chi^2(1) = 0.025$	$p = 0.8741$

**PM\_PM\_b** (PM sample rated by PM speakers for boundaries, cf. Figure 10)

Variable	Likelihood ratio of model	p-Value
Pause	$\chi^2(1) = 1158.8$	$p < 2.2e^{-16}$
Syntactic boundary	$\chi^2(1) = 1190.3$	$p < 2.2e^{-16}$
Syllable duration (mean)	$\chi^2(1) = 1003.1$	$p < 2.2e^{-16}$
Word duration	$\chi^2(1) = 873.34$	$p < 2.2e^{-16}$
Last verbal argument	$\chi^2(1) = 41.963$	$p = 9.3e^{-08}$
Range	$\chi^2(1) = 224.84$	$p < 2.2e^{-16}$
Maximum pitch	$\chi^2(1) = 60.025$	$p = 9.36e^{-15}$
Realized syllable number	$\chi^2(1) = 45.272$	$p = 1.72e^{-08}$
Duration of last syllable	$\chi^2(1) = 74.309$	$p < 2.2e^{-16}$
Mean pitch	$\chi^2(1) = 11.976$	$p = 0.000539$
Intonational category	$\chi^2(1) = 15.842$	$p = 6.89e^{-05}$
Part of speech	$\chi^2(1) = 44.742$	$p = 2.25e^{-08}$
Minimum pitch	$\chi^2(1) = 5.602$	$p = 0.01794$
Part of speech – class	$\chi^2(1) = 0.4398$	$p = 0.5072$
Lexical syllable number	$\chi^2(1) = 0.4079$	$p = 0.5231$

**GE\_GE\_p** (GE sample rated by GE speakers for prominences, cf. Figure 11)

Variable	Likelihood ratio of model	p-Value
Part of speech – class	$\chi^2(1) = 2068.2$	$p < 2.2e^{-16}$
Pause	$\chi^2(1) = 645.84$	$p < 2.2e^{-16}$
Last verbal argument	$\chi^2(1) = 876.12$	$p < 2.2e^{-16}$
Word duration	$\chi^2(1) = 2903.1$	$p < 2.2e^{-16}$
Syntactic boundary	$\chi^2(1) = 1729.8$	$p < 2.2e^{-16}$
Realized syllable number	$\chi^2(1) = 1142$	$p < 2.2e^{-16}$
Intonational category	$\chi^2(1) = 4506.6$	$p < 2.2e^{-16}$
Duration of stressed syllable	$\chi^2(1) = 1464.4$	$p < 2.2e^{-16}$
Lexical syllable number	$\chi^2(1) = 992.71$	$p < 2.2e^{-16}$
b-score	$\chi^2(1) = 1647.8$	$p < 2.2e^{-16}$
Range	$\chi^2(1) = 914.25$	$p < 2.2e^{-16}$
Maximum pitch	$\chi^2(1) = 257.45$	$p < 2.2e^{-16}$
Duration of last syllable	$\chi^2(1) = 400.51$	$p < 2.2e^{-16}$
Mean pitch	$\chi^2(1) = 124.72$	$p < 2.2e^{-16}$
Part of speech	$\chi^2(1) = 54.002$	$p = 2.00e^{-10}$
Minimum pitch	$\chi^2(1) = 0.8662$	$p = 0.3489$

**GE\_GE\_b** (GE sample rated by GE speakers for boundaries, cf. Figure 12)

Variable	Likelihood ratio of model	p-Value
Pause	$\chi^2(1) = 2311.9$	$p < 2.2e^{-16}$
Syntactic boundary	$\chi^2(1) = 2552.5$	$p < 2.2e^{-16}$
Word duration	$\chi^2(1) = 2114$	$p < 2.2e^{-16}$
Duration of stressed syllable	$\chi^2(1) = 1573$	$p < 2.2e^{-16}$
Part of speech – class	$\chi^2(1) = 526.46$	$p < 2.2e^{-16}$
Last verbal argument	$\chi^2(1) = 191.93$	$p < 2.2e^{-16}$
Duration of last syllable	$\chi^2(1) = 843.45$	$p < 2.2e^{-16}$
Realized syllable number	$\chi^2(1) = 328.99$	$p < 2.2e^{-16}$
Intonational category	$\chi^2(1) = 688.49$	$p < 2.2e^{-16}$
Range	$\chi^2(1) = 366.24$	$p < 2.2e^{-16}$
Lexical syllable number	$\chi^2(1) = 176.75$	$p < 2.2e^{-16}$
Maximum pitch	$\chi^2(1) = 129.01$	$p < 2.2e^{-16}$
Mean pitch	$\chi^2(1) = 53.76$	$p = 2.17e^{-10}$
Minimum pitch	$\chi^2(1) = 5.2252$	$p = 0.02226$
Part of speech	$\chi^2(1) = 34.528$	$p = 4.20e^{-09}$

## Unfamiliar-language Condition Experiments

**GE\_PM\_p** (GE sample rated by PM speakers for prominences, cf. Figure 17)

The loglinear model for the factor *pause* only contains random intercepts for rater and speaker, as it did not converge with a random intercept for *test sentence*.

Variable	Likelihood ratio of model	p-Value
Part of speech – class	$\chi^2(1) = 1213.1$	$p < 2.2e^{-16}$
Pause	$\chi^2(1) = 462.67$	$p < 2.2e^{-16}$
Last verbal argument	$\chi^2(1) = 500.63$	$p < 2.2e^{-16}$
Word duration	$\chi^2(1) = 1877$	$p < 2.2e^{-16}$
Syntactic boundary	$\chi^2(1) = 1428.5$	$p < 2.2e^{-16}$
Duration of stressed syllable	$\chi^2(1) = 1246.6$	$p < 2.2e^{-16}$
b-score	$\chi^2(1) = 1263$	$p < 2.2e^{-16}$
Realized syllable number	$\chi^2(1) = 512.7$	$p < 2.2e^{-16}$
Intonational category	$\chi^2(1) = 1349.2$	$p < 2.2e^{-16}$
Lexical syllable number	$\chi^2(1) = 461.62$	$p < 2.2e^{-16}$
Maximum pitch	$\chi^2(1) = 323.12$	$p < 2.2e^{-16}$
Range	$\chi^2(1) = 444.8$	$p < 2.2e^{-16}$
Duration of last syllable	$\chi^2(1) = 468.69$	$p < 2.2e^{-16}$
Mean pitch	$\chi^2(1) = 216.59$	$p < 2.2e^{-16}$
Minimum pitch	$\chi^2(1) = 51.82$	$p = 6.08e^{-13}$
Part of speech	$\chi^2(1) = 150.99$	$p < 2.2e^{-16}$

**GE\_PM\_b** (GE sample rated by PM speakers for boundaries, cf. Figure 18)

Variable	Likelihood ratio of model	p-Value
Pause	$\chi^2(1) = 1284.2$	$p < 2.2e^{-16}$
Syntactic boundary	$\chi^2(1) = 1012.2$	$p < 2.2e^{-16}$
Last verbal argument	$\chi^2(1) = 217.48$	$p < 2.2e^{-16}$
Part of speech – class	$\chi^2(1) = 295.95$	$p < 2.2e^{-16}$
Word duration	$\chi^2(1) = 755.47$	$p < 2.2e^{-16}$
Duration of stressed syllable	$\chi^2(1) = 629.64$	$p < 2.2e^{-16}$
Realized syllable number	$\chi^2(1) = 109.45$	$p < 2.2e^{-16}$
Duration of last syllable	$\chi^2(1) = 289.27$	$p < 2.2e^{-16}$
Maximum pitch	$\chi^2(1) = 101.91$	$p < 2.2e^{-16}$
Range	$\chi^2(1) = 179.3$	$p < 2.2e^{-16}$
Intonational category	$\chi^2(1) = 454.01$	$p < 2.2e^{-16}$
Mean pitch	$\chi^2(1) = 58.499$	$p = 2.03e^{-14}$
Lexical syllable number	$\chi^2(1) = 50.904$	$p = 9.7e^{-10}$
Minimum pitch	$\chi^2(1) = 10.746$	$p = 0.001045$
Part of speech	$\chi^2(1) = 19.433$	$p = 0.01042$

**PM\_GE\_p** (PM sample rated by GE speakers for prominences, cf. Figure19)

Variable	Likelihood ratio of model	p-Value
b-score	$\chi^2(1) = 4762.7$	$p < 2.2e^{-16}$
Pause	$\chi^2(1) = 236.2$	$p < 2.2e^{-16}$
Duration of last syllable	$\chi^2(1) = 709.49$	$p < 2.2e^{-16}$
Maximum pitch	$\chi^2(1) = 206.43$	$p < 2.2e^{-16}$
Last verbal argument	$\chi^2(1) = 39.938$	$p = 2.62e^{-07}$
Syllable duration (mean)	$\chi^2(1) = 357.83$	$p < 2.2e^{-16}$
Syntactic boundary	$\chi^2(1) = 209.62$	$p < 2.2e^{-16}$
Word duration	$\chi^2(1) = 291.15$	$p < 2.2e^{-16}$
Mean pitch	$\chi^2(1) = 88.269$	$p < 2.2e^{-16}$
Range	$\chi^2(1) = 216.84$	$p < 2.2e^{-16}$
Part of speech – class	$\chi^2(1) = 56.779$	$p = 4.88e^{-11}$
Intonational category	$\chi^2(1) = 138.6$	$p < 2.2e^{-16}$
Realized syllable number	$\chi^2(1) = 4.4484$	$p = 0.03493$
Part of speech	$\chi^2(1) = 180.84$	$p < 2.2e^{-16}$
Minimum pitch	$\chi^2(1) = 1.8359$	$p = 0.1754$
Lexical syllable number	$\chi^2(1) = 0.4559$	$p = 0.4995$

**PM\_GE\_b** (PM sample rated by GE speakers for boundaries, cf. Figure 20)

Variable	Likelihood ratio of model	p-Value
Pause	$\chi^2(1) = 1402.3$	$p < 2.2e^{-16}$
Syntactic boundary	$\chi^2(1) = 759.88$	$p < 2.2e^{-16}$
Word duration	$\chi^2(1) = 1324.1$	$p < 2.2e^{-16}$
Syllable duration (mean)	$\chi^2(1) = 1213.1$	$p < 2.2e^{-16}$
Range	$\chi^2(1) = 403.16$	$p < 2.2e^{-16}$
Intonational category	$\chi^2(1) = 117.96$	$p < 2.2e^{-16}$
Realized syllable number	$\chi^2(1) = 137.69$	$p < 2.2e^{-16}$
Duration of last syllable	$\chi^2(1) = 257.01$	$p < 2.2e^{-16}$
Maximum pitch	$\chi^2(1) = 82.189$	$p < 2.2e^{-16}$
Lexical syllable number	$\chi^2(1) = 48.939$	$p = 2.64e^{-12}$
Part of speech – class	$\chi^2(1) = 26.188$	$p = 3.10e^{-07}$
Mean pitch	$\chi^2(1) = 7.9614$	$p = 0.004778$
Part of speech	$\chi^2(1) = 86.923$	$p < 2.2e^{-16}$
Minimum pitch	$\chi^2(1) = 43.617$	$p = 3.99e^{-08}$
Last verbal argument	$\chi^2(1) = 0.0062$	$p = 0.937$