Appendices to "Speaking in the first-person singular or plural: A multifactorial, speech corpus-based analysis of institutional interpreters"

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Appendix A. Analyses of the interaction models

A1. Comparisons of results obtained from the MuPDAR(F) and interaction models

Two interaction models were separately fitted on OC and IE, and NE and IE, the results of which were compared to those of the MuPDAR(F) analyses in sections 5.2 and 5.3 in the text. Both models allow VARIETY to interact with non-source, non-referent, fixed-effect variables to predict the FPP FORM. The threshold of the generalised variance-inflation factor (GVIF) was set at 10 (Levshina 2015). The model and variable selection procedures described in section 4.3 were used. The best-fit models are referred to as IM_{OC-IE} and IM_{NE-IE} .

The analyses of IM_{OC-IE} considered 1,674 cases. The final model includes four interaction terms. No problems regarding multicollinearity (corrected GVIFs < 1.77), residual uniformity, dispersion, or outliers were found (see the diagnostic plots in Figure A11 and the full statistical report in Table A1). Note that FPP and RPW2 PROMINENCE could not be considered here because they cause quasi-complete separation. VERB TYPE, TOPIC, RPW1 BREAK, and CLAUSE TYPE were removed because of high collinearity. As a result, IM_{OC-IE} is not in a position to estimate the topic-specific effects on FPP choices by VARIETY. The confirmatory goal of this study therefore cannot be achieved. The effects plots of IM_{OC-IE} are shown in Figures A1–A4.



Note. *** p < 0.001, ** $p \le 0.01$, . p < 0.1







Figure A1. The effects of VARIETY*ASPECT on FPP FORM in OC and IE; p values of less than 0.1 are summarised with a period.

The results support Hypothesis 2. The left panel of Figure A1 shows significant differences in the predicted choice between the singular and the plural when ASPECT is simple and when it is perfect or progressive, with the plural being preferred in complex aspect in both OC and IE.

The right panel indicates a lower probability of the IE plural in the progressive aspect than that in OC, but the confidence interval of such an effect is rather large, indicating the sparsity of data. The right panel also shows that the interpreters used the simple aspect with the plural more frequently compared to the source speakers. The patterning indicates that, compared to the source speakers, the interpreters preferred the plural in the simple morphology to avoid grammatical and cognitive complexity.

The patterns identified in the left panel are similar to those reported in Figure 3a in the text. The patterns are also supported by the absence of the effect of ASPECT on the deviation in FPP choices between OC and IE in section 5.3.1. The effects in the right panel are reported in Figures 7a and 8b (note the large confidence bands of the effects of the progressive aspect in Figure 8b).





IE

Non-Declarative

ref

Declarative

Note. ** $p \le 0.01$, * p < 0.05



The left panel of Figure A2 indicates a significant difference in the predicted choice between the singular and the plural when the sentence is a simple declarative and when it is nondeclarative.

The right panel shows that, in the complex non-declarative, a significant difference in the predicted probability of the plural exists between IE and OC: the interpreters produced more plural forms in the complex syntax than the source speakers. The cases of non-declarative sentences are few in IE, as seen in the large confidence interval.

A comparable finding is reported in section 5.4.1 of the text with reference to Figure 7d.





Figure A3. The effects of VARIETY*SELF-PRIMING on FPP FORM in OC and IE

The left panel of Figure A3 shows a significant difference in the predicted choice between the singular and the plural when priming occurs and when it does not in both OC and IE. The right panel indicates a significantly higher probability of the plural in IE being associated with priming than that in OC. The effects reported here are consistent with those in Figures 3f, 7g, and 8e in the text.



Figure A4. The effects of VARIETY*FPP BREAK on FPP FORM in OC and IE

The left panel of Figure A4 shows the higher probability of the plural when FPP BREAK is 0 or 2 than when FPP BREAK is 1 in both OC and IE. However, the effects of FPP BREAK being 2 on the FPP choice should be taken with a grain of salt, given the large confidence intervals. The right panel shows that if an FPP has undergone phonetic reduction (FPP BREAK = 0), then it is probably the plural in IE.

The effects of the left panel of Figure A4 are identical to those shown in Figure 3i. Although FPP BREAK does not emerge as a significant predictor in R_{OC-IE} , the deviation model shows the de-accentuation of the plural and its RPW2 (Figure 5b). This indicates the higher degree of grammaticalisation of plural constructions in IE than those in OC.

The analyses of IM_{NE-IE} considered 1,735 cases. The final model includes six interaction terms. No multicollinearity (corrected GVIFs < 1.93), residual uniformity, dispersion, or outlier problems were found (see the diagnostic plots in Figure A12 and the statistical results in Table A2). Note that MATCH, MODALITY, VERB TYPE, SENTENCE TYPE, and MOOD could not be considered here because they cause complete separation; and FPP PROMINENCE and RPW2 BREAK were removed because of their high collinearity. The effect plots of IM_{NE-IE} are shown in Figures A5–A10.



Note. *** *p* < 0.001, . *p* < 0.1

Figure A5. The effects of VARIETY*ASPECT on FPP FORM in NE and IE; p values of less than 0.1 are summarised with a period.

The results of IM_{NE-IE} support Hypothesis 2. The left panel of Figure A5 shows a higher predicted probability of the plural when ASPECT is progressive than when it is simple in both NE and IE.

The right panel indicates that the probability of the plural in the progressive aspect may be lower in IE than in NE, but progressive cases are rare in IE overall, as seen from the large confidence intervals.

The effects identified in Figure A5 accord with those in Figures 4a and 7a in the text.



Note. *** *p* < 0.001, . *p* < 0.1

Figure A6. The effects of VARIETY*CLAUSE TYPE on FPP FORM in NE and IE; *p* values of less than 0.1 are summarised with a period.

The left panel of Figure A6 shows the high probability of the plural in complex syntax (coordinate and subordinate) compared to the simple main clause in both NE and IE. No significant differences in the predicted choice between the singular and plural in NE and IE were found in the right panel. An inspection of the underlying data reveals that, overall, the interpreters preferred main clauses over coordinate and subordinate clauses to a greater extent than the NE-speaker.

The patterns identified with reference to Figure A6 are compatible with those shown in Figures 4b and 6a in the text.



Note. *** *p* < 0.001, * *p* < 0.05



The left panel of Figure A7 shows a higher probability of the plural than of the singular being associated with priming in both IE and NE. As seen from the right panel, the predicted probability of the plural in cases of priming is higher in IE than in NE. Identical effects with those in Figure A7 are discussed with reference to Figures 4c and 6b in the text.









Figure A8. The effects of VARIETY*TENSE on FPP FORM in NE and IE

The left panel of Figure A8 shows no significant differences in the predicted choice between the singular and the plural when TENSE is present and when it is past or future in NE and IE.

The right panel shows the higher probability of the plural to co-occur with future-tense auxiliaries in IE than in NE.

The effects of the left panel of Figure A8 are identified, given the absence of the effect of TENSE on the predicted choice between the singular and the plural in R_{NE} (see Figure 4). The effects shown in the right panel are discussed with reference to Figures 7b and 8f.



Note. *** *p* < 0.001

Figure A9. The effects of VARIETY*FPP BREAK on FPP FORM in NE and IE

The left panel of Figure A9 shows no significant differences in the predicted choice between the singular and the plural as a function of FPP BREAK in IE and NE.

The right panel shows a significant linear decreasing trend of the predicted probability of the plural as a function of FPP BREAK in IE relative to NE. This signifies that if the FPP had undergone phonetic erosion, then it was probably produced by the interpreters rather than the US President.

The effects reported here are consistent with those in sections 5.2.2 and 5.3.2, evidenced by the absence of the effect of FPP BREAK in predicting the FPP choice in NE (see Figure 4),

and the higher probability of phonetic erosion being associated with the plural in IE than that in NE, as reported in section 5.3.2.



Note. *** p < 0.001, ** $p \le 0.01$

Figure A10. The effects of VARIETY*RPW2 PROMINENCE on FPP FORM in NE and IE

The left panel of Figure A10 shows significant differences in the predicted choice between the singular and the plural when RPW2 is nuclear or prenuclear and when it is non-prominent. The right panel demonstrates a lower probability of the plural's RPW2 being prenuclear in IE than in NE, but the confidence interval is large, which precludes a reliable conclusion. The right panel also indicates a higher probability of the plural's RPW2 being the nucleus in IE than NE. In this case, the preceding plural in IE is unlikely to attract stress – a sign of phonetic erosion. Identical patterns to those shown in Figure A10 are reported with reference to Figures 4g and 7i in the text.



A2. Diagnostics plots and statistical reports for interaction models

Figure A11. *IM*_{OC-IE} diagnostics

AIC	BIC	logLik	deviance	df.resid			
1878.5	1959.8	-924.2	1848.5	1659			
Scaled residuals:							
Min	1Q	Median	3Q	Max			
-2.8783	-0.5711	0.1192	0.5991	3.8667			
Random effects:							
Groups	Name	Variance	Std. Dev.				
audio ID	(Intercept)	1.872	1.368				
Number of obs:	1674,	groups:	audio ID	539			
Fixed effects:							
	Estimate	Lower Bound	Upper Bound	Std. Error	z value	Pr(> z)	
(Intercept)	-0.475	-0.779	-0.435	0.162	-2.933	0.003	**
VarietyIE	0.431	0.258	0.752	0.255	1.695	0.09	•
AspectPerfect	0.687	0.323	1.286	0.344	1.999	0.046	*
AspectProgressive	4.58	3.637	6.19	1.114	4.111	< 0.001	***
SentenceTypeNon-Declarative	-2.419	-4.133	-1.325	1.095	-2.209	0.027	*

Table A1. IM_{OC-IE} results: the predicted level is plural and the reference level is singular

FPPBreak.L	0.659	0.304	1.028	0.226	2.921	0.003	**
FPPBreak.Q	0.63	0.341	0.988	0.214	2.936	0.003	**
SelfPrimingYes	0.956	0.607	1.199	0.332	2.882	0.004	**
VarietyIE:AspectPerfect	-0.132	-0.603	0.182	0.48	-0.275	0.784	
VarietyIE:AspectProgressive	-3.852	-5.67	-2.92	1.285	-2.998	0.003	**
VarietyIE:SentenceTypeNon-Declarative	3.529	2.096	4.08	1.342	2.63	0.009	**
VarietyIE:FPPBreak.L	-1.597	-1.899	-0.951	0.419	-3.816	< 0.001	***
VarietyIE:FPPBreak.Q	0.125	-0.123	0.495	0.31	0.404	0.687	
VarietyIE:SelfPrimingYes	1.492	1.225	1.515	0.404	3.692	< 0.001	***



Figure A12. *IM*_{NE-IE} diagnostics

AIC	BIC	logLik	deviance	df.resid			
1639.5	1765	-796.7	1593.5	1712			
Scaled residuals:							
Min	1Q	Median	3Q	Max			
-6.0538	-0.4695	0.1583	0.4114	4.5249			
Random effects:							
Groups	Name	Variance	Std. Dev.				
audio ID	(Intercept)	2.084	1.444				
Number of obs:	1735,	groups:	audio ID	585			
Fixed effects:							
	Estimate	Lower Bound	Upper Bound	Std. Error	z value	Pr(> z)	
(Intercept)	0.098	0.064	0.378	0.298	0.328	0.743	
VarietyIE	-0.289	-0.657	-0.086	0.362	-0.798	0.425	
AspectPerfect	0.238	-0.226	0.746	0.478	0.498	0.619	
AspectProgressive	2.853	2.053	3.53	0.842	3.389	0.001	***
ClauseTypeCoordinate	0.57	0.307	0.752	0.3	1.901	0.057	

Table A2. IM_{NE-IE} results: the predicted level is plural and the reference level is singular

16							
ClauseTypeSubordinate	1.244	0.645	1.431	0.332	3.743	< 0.001	***
TensePast	-0.44	-1.013	-0.115	0.497	-0.885	0.376	
TenseFuture	0.36	-0.35	0.748	0.395	0.914	0.361	
SelfPrimingYes	1.605	1.257	1.993	0.33	4.862	< 0.001	***
FPPBreak.L	0.293	0.009	0.247	0.292	1.002	0.317	
RPW2ProminenceNuclear	-1.209	-1.441	-0.924	0.31	-3.907	< 0.001	***
RPW2ProminencePrenuclear	2.55	2.592	2.969	0.431	5.919	< 0.001	***
VarietyIE:AspectPerfect	0.327	-0.015	0.913	0.597	0.548	0.584	
VarietyIE:AspectProgressive	-1.942	-2.301	-0.708	1.098	-1.769	0.077	•
VarietyIE:ClauseTypeCoordinate	-0.635	-0.969	-0.387	0.405	-1.57	0.116	
VarietyIE:ClauseTypeSubordinate	-0.338	-0.991	0.262	0.416	-0.813	0.416	
VarietyIE:TensePast	-0.389	-1.094	0.185	0.576	-0.674	0.5	
VarietyIE:TenseFuture	2.764	2.048	3.032	0.635	4.35	< 0.001	***
VarietyIE:SelfPrimingYes	1.03	0.595	1.232	0.414	2.491	0.013	*
VarietyIE:FPPBreak.L	-1.447	-1.338	-0.817	0.359	-4.032	< 0.001	***
VarietyIE:RPW2ProminenceNuclear	1.161	0.772	1.649	0.399	2.91	0.004	**
VarietyIE:RPW2ProminencePrenuclear	-2.592	-2.947	-2.694	0.611	-4.246	< 0.001	***

Appendix B. Monofactorial models (see section 5.1)

		Model Likelihood Rat	io Test	Discrimination Indexes		Rank Discrim. Inde	exes
Obs	1688	LR chi2	31.61	R2	0.025	С	0.566
Singular	798	d.f.	1	g	0.267	Dxy	0.133
Plural	890	Pr(> chi2)	< 0.0001	gr	1.306	gamma	0.276
max deriv	< 0.0001			gp	0.066	tau-a	0.066
				Brier	0.245		
	Coef	Upper Bound	Lower Bound	S.E.	Wald Z	Pr(> Z)	
Intercept	-0.243	-0.399	-0.086	0.08	-3.04	0.002	
Variety=IE	0.567	0.369	0.766	0.101	5.6	< 0.0001	

Table B1. M_{la} results: the predicted level is plural and the reference level is singular

Table B2. M_{lb} results the predicted level is plural and the reference level is singular

		Model Likelihood Ratio Test		Discrimination Inc	lexes	Rank Discrim. Indexes	
Obs	1596	LR chi2	70.51	R2	0.059	С	0.608
Singular	574	d.f.	1	g	0.447	Dxy	0.217
Plural	1022	Pr(> chi2)	< 0.0001	gr	1.563	gamma	0.42
max deriv	< 0.0001			gp	0.1	tau-a	0.1
				Brier	0.22		

18							
	Coef	2.50%	97.50%	S.E.	Wald Z	Pr(> Z)	
Intercept	1.081	0.916	1.245	0.084	12.870	< 0.0001	
Variety=IE	-0.896	-1.109	-0.507	0683	-8.240	< 0.0001	

Table B3. M_2 results: the predicted level is plural and the reference level is singular

		Model Likelihood	Ratio Test	Discrimination In	dexes	Rank Discrim. Inc	lexes
Obs	2139	LR chi2	31.56	R2	0.02	С	0.567
Singular	815	d.f.	2	G	0.271	Dxy	0.135
Plural	1324	Pr(> chi2)	< 0.0001	Gr	1.311	gamma	0.203
max deriv	< 0.0001			Gp	0.064	tau-a	0.064
				Brier	0.232		
	Coef	2.50%	97.50%	S.E.	Wald Z	Pr(> Z)	
Intercept	0.129	-0.042	0.299	0.087	1.48	0.14	
Variety=NE	0.637	0.413	0.862	0.115	5.57	< 0.0001	
Variety=IE	0.318	0.095	0.542	0.114	2.79	0.0053	

Appendix C. Models of source/recipient languages (see section 5.2)

C1. R_{OC} results (see section 5.2.1)



Figure C1. *R*_{OC} diagnostics

²⁰ **Table C1.** R_{OC} results: the predicted level is plural and the reference level is singular

AIC	BIC	logLik	deviance	df.resid			
534.1	680.9	-234.1	468.1	599			
Scaled residuals:							
Min	1Q	Median	3Q	Max			
-1.306	-0.181	-0.043	0.163	1.572			
Random effects:							
Groups	Name	Variance	Std. Dev.				
Match:Lemma	(Intercept)	3.745	1.935				
audio ID	(Intercept)	3.244	1.801				
Lemma	(Intercept)	4.509	2.124				
Number of obs:	632	groups:					
Match:Lemma	310	audio ID	259	Lemma	181		
Fixed effects:							
	Estimate	Lower Bound	Upper Bound	Std. Error	z value	Pr(> z)	
(Intercept)	-2.589	-4.365	-2.734	1.670	-1.550	0.121	
AspectPerfect	2.614	1.558	3.814	1.020	2.562	0.010	*

							21
AspectProgressive	7.082	4.266	7.441	2.822	2.510	0.012	*
TensePast	-1.923	-1.957	-1.133	0.844	-2.279	0.023	*
TenseFuture	6.463	5.041	7.613	2.074	3.116	0.002	**
ModalityObligation	5.319	4.265	7.111	1.612	3.300	0.001	***
ModalityPossibility	2.406	1.05	5.734	1.407	1.710	0.087	•
ModalityVolition	-2.479	-2.683	-1.813	1.065	-2.329	0.020	*
VerbTypeAspect	3.487	2.737	6.82	2.303	1.514	0.130	
VerbTypeCausation	1.130	-1.168	0.499	1.983	0.570	0.569	
VerbTypeCognition	-0.556	-1.375	0.45	0.911	-0.610	0.542	
VerbTypeCommunication	-2.271	-3.146	-1.944	1.109	-2.048	0.041	*
VerbTypeEmotion	-3.586	-5.574	-2.335	2.376	-1.509	0.131	
VerbTypeExistence	-3.607	-4.609	-2.156	1.886	-1.912	0.056	
VerbTypeWish	-2.105	-2.815	-1.285	2.629	-0.801	0.423	
ClauseTypeCoordinate	1.675	0.334	1.965	0.915	1.831	0.067	
ClauseTypeSubordinate	2.830	2.715	4.044	0.853	3.319	0.001	***
SelfPrimingYes	2.166	1.986	2.672	0.789	2.744	0.006	**
log(DeliveryRate+1)	2.417	0.862	4.665	1.489	1.624	0.104	
FPPBreak.L	0.138	-1.34	0.567	0.446	0.309	0.757	
FPPBreak.Q	0.910	0.664	1.681	0.448	2.030	0.042	*
RPW1Break.L	0.708	0.322	1.464	0.510	1.387	0.166	

22							
RPW1Break.Q	0.041	-0.553	0.919	0.450	0.090	0.928	
RPW1Break.C	0.605	0.685	1.282	0.429	1.412	0.158	
RPW2ProminenceNuclear	1.473	1.152	2.252	0.506	2.912	0.004	**
RPW2ProminencePrenuclear	-0.297	-0.541	1.751	0.811	-0.367	0.714	
TopicTW_vs_nonTW	2.034	0.89	2.701	1.086	1.874	0.061	•
TopicINT_vs_nonINT	-0.963	-2.001	-0.728	0.760	-1.266	0.206	
TopicGOV_vs_nonGOV	0.198	-1.507	1.458	0.931	0.212	0.832	
TopicPH_vs_nonPH	0.900	-0.545	0.714	1.395	0.646	0.519	



Figure C2. Co-occurrence frequencies of FPPs and matches/lemmas by MODALITY and VERB TYPE in NE. Only cases with lemmas that occurred more than twice in the NE dataset were used for legibility. Matches are colour-coded by the type of MODALITY, whereas lemmas are coded by VERB TYPE.



Figure C3. *R_{NE}* diagnostics

C3. R_{NE} results (see section 5.2.2)

Table C2. R_{NE} results: the predicted level is plural and the reference level is singular

AIC	BIC	logLik	deviance	df.resid		
484.7	576.8	-222.4	444.7	719		

							25
Scaled residuals:							
Min	1Q	Median	3Q	Max			
-8.908	0.009	0.091	0.240	4.244			
Random effects:							
Groups	Name	Variance	Std. Dev.				
audio ID	(Intercept)	2.129	1.459				
Number of obs:	739	groups:	audio ID	306			
Fixed effects:							
	Estimate	Lower Bound	Upper Bound	Std. Error	z value	Pr(> z)	
(Intercept)	-1.318	-2.522	-0.305	2.392	-0.551	0.582	
AspectPerfect	-0.958	-2.655	-0.528	0.556	-1.722	0.085	•
AspectProgressive	1.410	0.511	3.573	0.925	1.524	0.127	
ClauseTypeCoordinate	0.955	0.459	1.064	0.388	2.463	0.014	*
ClauseTypeSubordinate	2.372	2.159	2.612	0.512	4.629	< 0.001	***
SelfPrimingYes	1.558	0.973	1.858	0.433	3.599	< 0.001	***
log(DeliveryRate+1)	2.321	2.119	3.895	1.740	1.334	0.182	
FPPProminenceNuclear	-3.502	-6.636	-2.006	1.179	-2.971	0.003	**

20							1
FPPProminencePrenuclear	1.703	1.358	2.682	0.727	2.343	0.019	*
RPW1ProminenceNuclear	-4.755	-6.557	-4.199	0.747	-6.362	< 0.001	***
RPW1ProminencePrenuclear	-0.577	-0.887	-0.121	0.395	-1.462	0.144	
RPW2ProminenceNuclear	-2.778	-3.291	-1.685	0.694	-4.003	< 0.001	***
RPW2ProminencePrenuclear	1.230	0.248	1.219	0.537	2.291	0.022	*
RPW2Break.L	2.468	1.429	3.157	0.794	3.108	0.002	**
RPW2Break.Q	-0.082	-1.418	0.65	0.810	-0.101	0.920	
RPW2Break.C	2.026	1.862	3.555	0.463	4.375	< 0.001	***
RPW2Break^4	-0.420	-0.316	1.874	0.895	-0.469	0.639	
TopicIW_vs_nonIW	0.711	0.526	1.142	0.308	2.308	0.021	*
TopicINT_vs_nonINT	0.292	-0.341	0.704	0.407	0.717	0.474	

Appendix D. Models of source/recipient languages applied to the interpreted speech (see section 5.3)

D1. R_{OC-IE} results (section 5.3.1)

Table D1.	Roc-IE fitted	on SOURCE-LIKE: 1	he predic	ted level is u	insource-like	and the	reference	level i	s source-lik	e
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AIC	BIC	logLik	Deviance	df.resid		

							27
994.5	1049	-486.3	972.5	1031			
Scaled	residuals:						
Min	1Q	Median	3Q	Max			
-1.702	-0.634	-0.294	-0.133	8.554			
Random effects							
Groups	Name	Variance	Std. Dev.				
Lemma	(Intercept)	0.272	0.521				
Number of obs:	1042,	groups:	Lemma,	265			
Fixed effects:							
	Estimate	Lower Bound	Upper Bound	Std. Error	z value	Pr(> z)	
(Intercept)	-0.416	-0.595	-0.443	0.181	-2.297	0.022	*
ModalityObligation	-3.153	-4.185	-2.399	0.476	-6.631	< 0.001	***
ModalityPossibility	-0.471	-1.469	0.002	0.359	-1.310	0.19	

20							
ModalityVolition	-1.787	-2.077	-1.514	0.283	-6.321	< 0.001	***
TopicTW_vs_nonTW	0.147	-0.647	0.328	0.364	0.404	0.686	
TopicINT_vs_nonINT	-0.212	-0.570	-0.033	0.210	-1.013	0.311	
TopicGOV_vs_nonGOV	0.712	0.564	0.732	0.302	2.354	0.019	*
TopicPH_vs_nonPH	2.030	1.447	2.001	0.547	3.713	< 0.001	***
RPW2ProminenceNuclear	0.281	0.077	0.679	0.200	1.405	0.16	
RPW2ProminencePrenuclear	-0.744	-1.018	-0.441	0.405	-1.838	0.066	•

Table D2. R_{OC-IE} fitted on DEVIATION SCORE

Scaled residuals:						
Min	1Q	Median	3Q	Max		
-4.491	-0.235	-0.009	0.207	4.549		
Random effects:						
Groups	Name	Variance	Std. Dev.			
Match:Lemma	(Intercept)	0.983	0.992			

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audio ID	(Intercept)	0.156	0.395					
Lemma	(Intercept)	0.222	0.471					
Residual		1.009	1.005					
Number of obs:	1042,	groups:	Match:Lemma,	502;	audio ID,	280;	Lemma,	265
Fixed effects:								
	Estimate	Lower Bound	Upper Bound	Std. Error	df	t value	Pr(> t)	
(Intercept)	0.18	0.05	0.29	0.13	571.05	1.39	0.164	
ModalityObligation	-0.21	-0.25	0.12	0.17	485.75	-1.27	0.204	
ModalityPossibility	-0.44	-0.67	0.05	0.25	525.36	-1.74	0.083	
ModalityVolition	-0.04	-0.17	0.04	0.16	481.42	-0.24	0.807	
TopicTW_vs_nonTW	-0.69	-0.79	-0.51	0.21	177.98	-3.21	0.002	**
TopicINT_vs_nonINT	0.19	0.20	0.32	0.12	293.70	1.54	0.125	
TopicGOV_vs_nonGOV	0.06	-0.19	0.16	0.17	338.87	0.33	0.745	
TopicPH_vs_nonPH	0.91	0.64	1.29	0.30	651.79	3.05	0.002	**
RPW2ProminenceNuclear	-0.39	-0.48	-0.33	0.10	840.20	-4.05	< 0.001	***

30								
RPW2ProminencePrenuclear	-0.06	-0.30	0.30	0.17	896.84	-0.38	0.705	
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D2. $R_{NE'-IE}$ results (section 5.3.2)

Table D3. *R*_{NE'-IE} fitted on RECIPIENT-LIKE: the predicted level is unrecipient-like and the reference is recipient-like

AIC	BIC	logLik	deviance	df.resid		
1365.1	1399.5	-675.5	1351.1	998		
Scaled residuals:						
Min	1Q	Median	3Q	Max		
-1.485	-0.875	-0.669	1.054	1.570		
Random effects:						
Groups	Name	Variance	Std. Dev.			
Lemma	(Intercept)	0.1538	0.3921			

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Number of obc	1005	groups:	Lemma	264			
	1005	groups.	Lemma	204			
Fixed effects:	·						
	Estimate	Lower Bound	Upper Bound	Std. Error	z value	Pr(> z)	
(Intercept)	-0.184	-0.274	-0.030	0.123	-1.490	0.136	
SelfPrimingYes	-0.430	-0.658	-0.374	0.147	-2.924	0.003	**
ClauseTypeCoordinate	-0.016	-0.319	0.203	0.176	-0.089	0.929	
ClauseTypeSubordinate	-0.388	-0.584	-0.170	0.173	-2.248	0.025	*
RPW1ProminenceNuclear	0.408	0.397	0.463	0.177	2.312	0.021	*
RPW1ProminencePrenuclear	0.484	0.471	0.834	0.233	2.081	0.037	*

Table D4. $R_{NE'-IE}$, fitted on DEVIATION SCORE

Scaled residuals:						
Min	1Q	Median	3Q	Max		
-2.606	-0.442	-0.002	0.444	4.146		

32								
Random effects:								
Groups	Name	Variance	Std. Dev.					
Match:Lemma	(Intercept)	0.241	0.491					
audio ID	(Intercept)	0.252	0.502					
Lemma	(Intercept)	0.267	0.517					
Residual		1.243	1.115					
Number of obs:	1005,	groups:	Match:Lemma,	494;	audio ID,	279;	Lemma,	264
Fixed effects:								
	Estimate	Lower Bound	Upper Bound	Std. Error	df	t value	Pr(> t)	
(Intercept)	0.236	0.162	0.405	0.092	449.57	2.548	0.011	*
SelfPrimingYes	-0.029	-0.096	0.028	0.1	937.774	-0.287	0.774	
ClauseTypeCoordinate	-0.552	-0.808	-0.475	0.112	943.421	-4.944	< 0.001	***
ClauseTypeSubordinate	-0.915	-1.086	-0.898	0.106	951.797	-8.63	< 0.001	***
RPW1ProminenceNuclear	1.899	1.801	2.071	0.11	940.142	17.197	< 0.001	***
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RPW1ProminencePrenuclear	0.197	-0.092	0.27	0.146	946.854	1.349	0.178	

Appendix E. Models of the interpreted speech (see section 5.4)

E1. R_{plural} results (section 5.4.1)



Figure E1. *R*_{plural} diagnostics



34							
Deviance Residuals:							
Min	1Q	Median	3Q	Max			
-2.235	-0.574	-0.199	0.617	3.412			
Coefficients:							
	Estimate	Lower Bound	Upper Bound	Std. Error	z value	Pr(> z)	
(Intercept)	-2.193	-3.099	-1.290	0.462	-4.748	< 0.001	***
AspectPerfect	-0.475	-0.953	0.000	0.243	-1.957	0.050	•
AspectProgressive	-2.267	-3.014	-1.593	0.360	-6.293	< 0.001	***
TensePast	-1.159	-1.649	-0.678	0.247	-4.687	< 0.001	***
TenseFuture	-0.325	-0.719	0.068	0.200	-1.621	0.105	
MoodIrrealis	2.760	1.282	4.152	0.715	3.861	< 0.001	***
SentenceTypeNon-Declarative	3.223	1.332	5.369	0.989	3.259	0.001	**
FPPBreak.L	1.276	-0.298	3.003	0.848	1.505	0.132	
FPPBreak.Q	1.053	-0.153	2.365	0.647	1.628	0.103	
FPPBreak.C	2.006	1.332	2.727	0.357	5.615	< 0.001	***
RPW1Break.L	-0.980	-2.481	0.498	0.741	-1.322	0.186	
RPW1Break.Q	-0.489	-1.749	0.741	0.620	-0.789	0.430	
RPW1Break.C	-0.827	-1.637	-0.035	0.402	-2.056	0.040	*
RPW1Break^4	0.227	-0.259	0.713	0.247	0.917	0.359	

RPW1ProminenceNuclear	-0.701	-1.222	-0.179	0.266	-2.640	0.008	**
RPW1ProminencePrenuclear	-0.902	-1.381	-0.435	0.241	-3.744	< 0.001	***
RPW2ProminenceNuclear	-0.899	-1.257	-0.546	0.181	-4.963	< 0.001	***
RPW2ProminencePrenuclear	-1.820	-2.320	-1.341	0.250	-7.293	< 0.001	***
SelfPrimingYes	1.015	0.717	1.319	0.153	6.615	< 0.001	***
BondednessDeictic	0.085	-0.491	0.669	0.296	0.287	0.774	
BondednessAdjQuant	-0.473	-0.823	-0.125	0.178	-2.661	0.008	**
BondednessNonNP	-0.426	-0.835	-0.019	0.208	-2.046	0.041	*
GroupExclusive	3.423	3.003	3.868	0.220	15.534	< 0.001	***

E2. Lexical biases of FPPs towards matches/lemmas by MODALITY and VERB TYPE in IE (see section 5.4.2)



Figure E2. Co-occurrence frequencies of FPPs and matches/lemmas by MODALITY and VERB TYPE in IE. Only cases with lemmas that occurred more than twice in the IE dataset were used for legibility. Matches are colour-coded by the type of MODALITY, whereas lemmas are coded by VERB TYPE.

E3. R_{IE} results (section 5.4.2)



Figure E3. *R_{IE}* diagnostics

Table E2.	R_{IE} results: the	predicted level is	plural and the reference	level is singular
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AIC	BIC	logLik	deviance	df.resid		
470.3	711.8	-186.1	372.3	973		
Scaled residuals:						

Min	1Q	Median	3Q	Max			
-2.1877	-0.045	0.003	0.048	10.428			
Random effects:							
Groups	Name	Variance	Std. Dev.				
audioID	(Intercept)	5.573	2.361				
Number of obs:	1022,	groups:	audioID,	266			
Fixed effects:							
	Estimate	Lower Bound	Upper Bound	Std. Error	z value	Pr(> z)	
(Intercept)	0.912	-0.76	2.272	1.194	0.764	0.445	
AspectPerfect	2.143	1.033	4.975	0.812	2.638	0.008	**
AspectProgressive	1.032	0.003	3.070	1.298	0.795	0.427	
ModalityObligation	5.035	4.056	5.823	1.279	3.937	< 0.001	***
ModalityPossibility	1.786	0.543	3.572	0.850	2.101	0.036	*
ModalityVolition	-1.553	-2.328	-0.878	0.988	-1.571	0.116	
TensePast	0.217	-0.18	0.727	0.614	0.354	0.724	

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TenseFuture	6.006	4.183	8.454	1.426	4.212	< 0.001	***
VerbTypeAspect	1.526	1.024	3.506	1.510	1.010	0.312	
VerbTypeCausation	-0.973	-2.099	-0.434	1.198	-0.812	0.417	
VerbTypeCognition	-2.300	-3.543	-2.252	0.790	-2.912	0.004	**
VerbTypeCommunication	-2.121	-3.084	-1.145	0.809	-2.622	0.009	**
VerbTypeEmotion	-3.550	-6.151	-3.483	2.100	-1.691	0.091	
VerbTypeExistence	-0.445	-0.947	0.528	0.766	-0.581	0.561	
VerbTypeWish	-2.419	-3.836	-1.69	1.082	-2.236	0.025	*
RPW1Break.L	-0.471	-0.249	0.986	0.560	-0.842	0.400	
RPW1Break.Q	0.815	-0.009	1.700	0.487	1.672	0.095	•
RPW1Break.C	-0.551	-1.082	-0.334	0.459	-1.199	0.230	
SelfPrimingYes	2.986	2.689	4.782	0.718	4.159	< 0.001	***
SourceClauseTypeCoordinate	1.329	0.715	2.524	0.719	1.849	0.065	•
SourceClauseTypeSubordinate	2.165	2.031	4.801	0.606	3.574	< 0.001	***
SourceModalityObligation	3.428	2.691	4.152	1.178	2.910	0.004	**
SourceModalityPossibility	-0.028	-0.166	2.015	1.097	-0.026	0.980	
SourceModalityVolition	0.345	-0.404	1.251	0.851	0.406	0.685	

40							
OtherPrimingNP	-0.100	-1.168	1.976	0.951	-0.106	0.916	
OtherPrimingZero	-0.607	-1.1	0.415	0.900	-0.675	0.500	
OtherPrimingPluralFPP	4.277	3.600	7.717	1.142	3.745	< 0.001	***
OtherPrimingSingularFPP	-5.656	-8.331	-5.279	1.174	-4.818	< 0.001	***
SourceSelfPrimingYes	2.383	1.185	4.839	1.043	2.284	0.022	*
TopicTW_vs_nonTW	1.429	-0.473	3.249	1.393	1.026	0.305	
TopicINT_vs_nonINT	-0.526	-0.876	0.503	0.582	-0.903	0.366	
TopicGOV_vs_nonGOV	-0.377	-3.071	1.113	1.640	-0.23	0.818	
SourceVerbTypeCognition	-1.018	-1.844	-0.114	0.990	-1.028	0.304	
SourceVerbTypeCommunication	-2.203	-5.04	-1.393	0.942	-2.34	0.019	*
SourceVerbTypeEmotionWish	1.897	0.481	2.906	1.145	1.657	0.098	•
SourceVerbTypeExistence	-1.302	-1.66	0.149	1.029	-1.266	0.205	
TopicTW_vs_nonTW:SourceVerbTypeCognition	0.380	0.092	3.011	1.924	0.197	0.844	
TopicINT_vs_nonINT:SourceVerbTypeCognition	-0.488	-2.957	-0.84	1.019	-0.478	0.632	
TopicGOV_vs_nonGOV:SourceVerbTypeCognition	3.039	1.129	7.283	2.230	1.363	0.173	
TopicTW_vs_nonTW:SourceVerbTypeCommunication	-1.656	-3.975	-1.411	1.608	-1.03	0.303	1
TopicINT_vs_nonINT:SourceVerbTypeCommunication	0.268	-2.903	1.504	1.060	0.252	0.801	

						4	1
TopicGOV_vs_nonGOV:SourceVerbTypeCommunication	0.431	-2.826	0.532	2.026	0.213	0.831	
TopicTW_vs_nonTW:SourceVerbTypeEmotionWish	2.272	0.830	4.542	2.153	1.055	0.291	
TopicINT_vs_nonINT:SourceVerbTypeEmotionWish	4.691	3.223	6.016	1.458	3.218	0.001	**
TopicGOV_vs_nonGOV:SourceVerbTypeEmotionWish	-0.530	-3.5	0.658	2.717	-0.195	0.845	
TopicTW_vs_nonTW:SourceVerbTypeExistence	-2.645	-3.466	-0.68	2.247	-1.177	0.239	
TopicINT_vs_nonINT:SourceVerbTypeExistence	0.318	-1.56	1.330	0.917	0.347	0.729	
TopicGOV_vs_nonGOV:SourceVerbTypeExistence	-0.232	-1.992	1.268	2.131	-0.109	0.913	