

Appendix 1

1. Predicting aspectual choice in authentic samples with:

1.1. Unigram general aspectual preferences:

```
> GLM_auth_ug<-glm(formula = aspect ~ ug_pref, family = "binomial", data = a_all)
> summary(GLM_auth_ug)
```

Call:

```
glm(formula = aspect ~ ug_pref, family = "binomial", data = a_all)
```

Deviance Residuals:

Min	1Q	Median	3Q	Max
-1.713	-1.319	1.042	1.042	1.448

Coefficients:

	Estimate	Std. Error	z value	Pr(> z)	
(Intercept)	-0.6174	0.1791	-3.448	0.000565	***
ug_prefimpf/pf	1.8214	0.4987	3.652	0.000260	***
ug_prefpf	0.9446	0.1966	4.804	1.56e-06	***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 1082.7 on 785 degrees of freedom
Residual deviance: 1052.8 on 783 degrees of freedom
AIC: 1058.8

Number of Fisher Scoring iterations: 4

Analysis of Deviance Table

Model: binomial, link: logit

Response: aspect

Terms added sequentially (first to last)

	Df	Deviance	Resid. Df	Resid. Dev	Pr(>Chi)
NULL			785	1082.7	
ug_pref	2	29.882	783	1052.8	3.244e-07 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```
> exp(cbind(OR = coef(GLM_auth_ug), confint(GLM_auth_ug))) #checking odds ratios
Waiting for profiling to be done...
```

	OR	2.5 %	97.5 %
(Intercept)	0.5393258	0.3769933	0.7620924
ug_prefimpf/pf	6.1805556	2.4501467	17.8512002
ug_prefpf	2.5716794	1.7571324	3.8035037

```
> LRM_auth_ug = lrm(aspect ~ ug_pref, data = a_all, x=T, y=T)
> LRM_auth_ug
```

Logistic Regression Model

```
lrm(formula = aspect ~ ug_pref, data = a_all, x = T, y = T)
Model Likelihood Discrimination Rank Discrim.
```

	Ratio Test		Indexes		Indexes		
Obs	786	LR chi2	29.88	R2	0.050	c	0.579
impf	356	d.f.	2	g	0.328	Dxy	0.158
pf	430	Pr(> chi2)	<0.0001	gr	1.389	gamma	0.447
max deriv	1e-11			gp	0.079	tau-a	0.079
				Brier	0.238		

	Coef	S.E.	Wald Z	Pr(> Z)
Intercept	-0.6174	0.1791	-3.45	0.0006
ug_pref=impf/pf	1.8214	0.4987	3.65	0.0003
ug_pref=pf	0.9446	0.1966	4.80	<0.0001

1.2. Unigram legal aspectual preferences:

```
> GLM_auth_ul<-glm(formula = aspect ~ ul_pref, family = "binomial", data = a_all)
```

Call:

```
glm(formula = aspect ~ ul_pref, family = "binomial", data = a_all)
```

Deviance Residuals:

Min	1Q	Median	3Q	Max
-1.4894	-1.0033	0.8947	0.8947	1.3621

Coefficients:

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	-0.4243	0.1160	-3.658	0.000254 ***
ul_prefimpf/pf	0.6184	0.2385	2.593	0.009506 **
ul_prefpf	1.1332	0.1590	7.125	1.04e-12 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 1082.7 on 785 degrees of freedom

Residual deviance: 1029.9 on 783 degrees of freedom

AIC: 1035.9

Number of Fisher Scoring iterations: 4

Analysis of Deviance Table

Model: binomial, link: logit

Response: aspect

Terms added sequentially (first to last)

	Df	Deviance	Resid. Df	Resid. Dev	Pr(>Chi)
NULL			785	1082.7	
ul_pref	2	52.718	783	1029.9	3.568e-12 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```
> exp(cbind(OR = coef(GLM_auth_ul), confint(GLM_auth_ul)))
```

waiting for profiling to be done...

	OR	2.5 %	97.5 %
(Intercept)	0.6542553	0.5201643	0.8199479
ul_prefimpf/pf	1.8559814	1.1647804	2.9721320
ul_prefpf	3.1054330	2.2783597	4.2511527

```
> LRM_auth_u1 = lrm(aspect ~ ul_pref, data = a_all, x=T, y=T)
> LRM_auth_u1
```

Logistic Regression Model

```
lrm(formula = aspect ~ ul_pref, data = a_all, x = T, y = T)
```

	Model Likelihood	Discrimination	Rank Discrim.
	Ratio Test	Indexes	Indexes
Obs	786	LR chi2 52.72	R2 0.087
impf	356	d.f. 2	g 0.554
pf	430	Pr(> chi2) <0.0001	gr 1.740
max deriv	5e-13		gp 0.134
		Brier	0.231

	Coef	S.E.	Wald Z	Pr(> Z)
Intercept	-0.4243	0.1160	-3.66	0.0003
ul_pref=impf/pf	0.6184	0.2385	2.59	0.0095
ul_pref=pf	1.1332	0.1590	7.13	<0.0001

1.3. Chunk general apsectual preferences:

```
> GLM_auth_cg<-glm(formula = aspect ~ cg_pref, family = "binomial", data = a_all)
```

Call:

```
glm(formula = aspect ~ cg_pref, family = "binomial", data = a_all)
```

Deviance Residuals:

Min	1Q	Median	3Q	Max
-1.7379	-0.9125	0.7065	0.7065	1.7663

Coefficients:

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	-1.3241	0.2089	-6.337	2.34e-10 ***
cg_prefimpf/pf	0.6631	0.2507	2.645	0.00817 **
cg_prefna	0.2254	1.1735	0.192	0.84765
cg_prefpf	2.5846	0.2403	10.754	< 2e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 1082.65 on 785 degrees of freedom
 Residual deviance: 879.08 on 782 degrees of freedom
 AIC: 887.08

Number of Fisher Scoring iterations: 4

Analysis of Deviance Table

Model: binomial, link: logit

Response: aspect

Terms added sequentially (first to last)

	Df	Deviance	Resid. Df	Resid. Dev	Pr(>Chi)
NULL			785	1082.65	

```
cg_pref 3 203.56 782 879.08 < 2.2e-16 ***
```

```
---
```

```
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
> exp(cbind(OR = coef(GLM_auth_cg), confint(GLM_auth_cg)))
```

```
Waiting for profiling to be done...
```

	OR	2.5 %	97.5 %
(Intercept)	0.266055	0.17352375	0.3948626
cg_prefimpf/pf	1.940726	1.19780724	3.2089022
cg_prefna	1.252874	0.06075197	10.2004476
cg_prefpf	13.258431	8.38094763	21.5511366

```
> LRM_auth_cg = lrm(aspect ~ cg_pref, data = a_all, x=T, y=T)
```

```
> LRM_auth_cg
```

```
Logistic Regression Model
```

```
lrm(formula = aspect ~ cg_pref, data = a_all, x = T, y = T)
```

	Model Likelihood	Discrimination	Rank Discrim.				
	Ratio Test	Indexes	Indexes				
Obs	786	LR chi2	203.57	R2	0.305	C	0.759
impf	356	d.f.	3	g	1.155	Dxy	0.519
pf	430	Pr(> chi2)	<0.0001	gr	3.173	gamma	0.731
max deriv	7e-10			gp	0.257	tau-a	0.257
				Brier	0.187		

	Coef	S.E.	wald Z	Pr(> z)
Intercept	-1.3241	0.2089	-6.34	<0.0001
cg_pref=impf/pf	0.6631	0.2507	2.64	0.0082
cg_pref=na	0.2254	1.1735	0.19	0.8477
cg_pref=pf	2.5846	0.2403	10.75	<0.0001

```
1.4. Chunk legal aspectual preferences:
```

```
> GLM_auth_cl<-glm(formula = aspect ~ cl_pref, family = "binomial", data = a_all)
```

```
Call:
```

```
glm(formula = aspect ~ cl_pref, family = "binomial", data = a_all)
```

```
Deviance Residuals:
```

Min	1Q	Median	3Q	Max
-2.0237	-1.1433	0.5256	1.2120	1.8676

```
Coefficients:
```

	Estimate	Std. Error	z value	Pr(> z)	
(Intercept)	-1.5518	0.2202	-7.048	1.81e-12	***
cl_prefimpf/pf	1.4709	0.2435	6.042	1.53e-09	***
cl_prefna	2.3562	0.3655	6.446	1.15e-10	***
cl_prefpf	3.4614	0.2991	11.571	< 2e-16	***

```
---
```

```
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
(Dispersion parameter for binomial family taken to be 1)
```

```
Null deviance: 1082.65 on 785 degrees of freedom  
Residual deviance: 881.17 on 782 degrees of freedom  
AIC: 889.17
```

```
Number of Fisher Scoring iterations: 4
```

Analysis of Deviance Table

Model: binomial, link: logit

Response: aspect

Terms added sequentially (first to last)

```
          Df Deviance Resid. Df Resid. Dev  Pr(>Chi)
NULL                                785    1082.65
cl_pref  3    201.48      782    881.17 < 2.2e-16 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
> exp(cbind(OR = coef(GLM_auth_cl), confint(GLM_auth_cl)))
```

Waiting for profiling to be done...

	OR	2.5 %	97.5 %
(Intercept)	0.2118644	0.1345898	0.320251
cl_prefimpf/pf	4.3531606	2.7417862	7.144554
cl_prefna	10.5505882	5.2484430	22.105160
cl_prefpf	31.8600000	18.0607735	58.486759

```
> LRM_auth_cl = lrm(aspect ~ cl_pref, data = a_all, x=T, y=T)
```

```
> LRM_auth_cl
```

Logistic Regression Model

```
lrm(formula = aspect ~ cl_pref, data = a_all, x = T, y = T)
```

	Model	Likelihood	Discrimination	Rank	Discrim.		
	Ratio	Test	Indexes	Indexes	Indexes		
Obs	786	LR chi2	201.48	R2	0.302	C	0.761
impf	356	d.f.	3	g	1.282	Dxy	0.521
pf	430	Pr(> chi2)	<0.0001	gr	3.604	gamma	0.726
max deriv	1e-12			gp	0.259	tau-a	0.259
				Brier	0.190		

	Coef	S.E.	wald Z	Pr(> Z)
Intercept	-1.5518	0.2202	-7.05	<0.0001
cl_pref=impf/pf	1.4709	0.2435	6.04	<0.0001
cl_pref=na	2.3562	0.3655	6.45	<0.0001
cl_pref=pf	3.4614	0.2991	11.57	<0.0001

2. Predicting aspectual choice in translated samples with:

2.1. Unigram general aspectual preferences:

```
> GLM_trans_ug<-glm(formula = aspect ~ ug_pref, family = "binomial", data = t_all)
```

Call:

```
glm(formula = aspect ~ ug_pref, family = "binomial", data = all_trans)
```

Deviance Residuals:

Min	1Q	Median	3Q	Max
-1.266	-1.266	1.091	1.091	1.356

Coefficients:

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	-0.4106	0.1600	-2.567	0.010267 *
ug_prefimpf/pf	0.6047	0.3948	1.532	0.125551
ug_prefpf	0.6168	0.1846	3.342	0.000833 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 929.67 on 670 degrees of freedom
Residual deviance: 918.14 on 668 degrees of freedom
AIC: 924.14

Number of Fisher Scoring iterations: 4

Analysis of Deviance Table

Model: binomial, link: logit

Response: aspect

Terms added sequentially (first to last)

	Df	Deviance	Resid. Df	Resid. Dev	Pr(>Chi)
NULL			670	929.67	
ug_pref	2	11.523	668	918.14	0.003147 **

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```
> exp(cbind(OR = coef(GLM_trans_ug), confint(GLM_trans_ug)))
```

Waiting for profiling to be done...

	OR	2.5 %	97.5 %
(Intercept)	0.6632653	0.4828306	0.9050807
ug_prefimpf/pf	1.8307692	0.8458902	4.0214630
ug_prefpf	1.8529116	1.2933206	2.6686963

```
> LRM_trans_ug = lrm(aspect ~ ug_pref, data = t_all, x=T, y=T)
```

```
> LRM_trans_ug
```

Logistic Regression Model

```
lrm(formula = aspect ~ unigram_gen, data = t_all, x = T, y = T)
```

	Model	Likelihood	Discrimination	Rank	Discrim.		
	Ratio Test		Indexes		Indexes		
Obs	671	LR chi2	11.52	R2	0.023	C	0.556
impf	326	d.f.	2	g	0.228	Dxy	0.113
pf	345	Pr(> chi2)	0.0031	gr	1.256	gamma	0.255
max deriv	3e-11			gp	0.056	tau-a	0.056
				Brier	0.246		

	Coef	S.E.	wald Z	Pr(> Z)
Intercept	-0.4106	0.1600	-2.57	0.0103
ug_pref=impf/pf	0.6047	0.3948	1.53	0.1256
ug_pref=pf	0.6168	0.1846	3.34	0.0008

2.2. Unigram legal aspectual preferences:

```
> GLM_trans_ul<-glm(formula = aspect ~ ul_pref, family = "binomial", data = t_all)
```

Call:

```
glm(formula = aspect ~ unigram_leg, family = "binomial", data = all_trans)
```

Deviance Residuals:

Min	1Q	Median	3Q	Max
-----	----	--------	----	-----

-1.3815 -1.2018 0.9862 0.9862 1.3830

Coefficients:

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	-0.4713	0.1322	-3.567	0.000361 ***
unigram_legimpf/pf	0.5285	0.2358	2.242	0.024990 *
unigram_legna	-13.0947	378.5929	-0.035	0.972408
unigram_legpf	0.9393	0.1749	5.372	7.8e-08 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 929.67 on 670 degrees of freedom
Residual deviance: 897.11 on 667 degrees of freedom
AIC: 905.11

Number of Fisher Scoring iterations: 12

Analysis of Deviance Table

Model: binomial, link: logit

Response: aspect

Terms added sequentially (first to last)

	Df	Deviance	Resid. Df	Resid. Dev	Pr(>Chi)
NULL			670	929.67	
unigram_leg	3	32.556	667	897.11	3.995e-07 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```
> exp(cbind(OR = coef(GLM_trans_ul), confint(GLM_trans_ul)))
```

Waiting for profiling to be done...

	OR	2.5 %	97.5 %
(Intercept)	6.241611e-01	0.4803089	8.068968e-01
ul_prefimpf/pf	1.696395e+00	1.0692377	2.698365e+00
ul_prefna	2.056059e-06	NA	1.329395e+20
ul_prefpf	2.558273e+00	1.8197124	3.613253e+00

Warning messages:

1: glm.fit: fitted probabilities numerically 0 or 1 occurred

```
> LRM_trans_ul = lrm(aspect ~ ul_pref, data = t_all, x=T, y=T)
```

```
> LRM_trans_ul
```

Logistic Regression Model

```
lrm(formula = aspect ~ unigram_leg, data = t_all, x = T, y = T)
```

	Model	Likelihood	Discrimination	Rank	Discrim.
	Ratio Test	Indexes	Indexes		Indexes
Obs	671	LR chi2	32.55	R2	0.063
impf	326	d.f.	3	g	0.490
pf	345	Pr(> chi2)	<0.0001	gr	1.633
max deriv	0.001			gp	0.113
				Brier	0.238

	Coef	S.E.	wald Z	Pr(> Z)
Intercept	-0.4713	0.1322	-3.57	0.0004

```

ul_pref=impf/pf 0.5285 0.2358 2.24 0.0250
ul_pref=na -6.7317 25.9378 -0.26 0.7952
ul_pref=pf 0.9393 0.1749 5.37 <0.0001

```

2.3. Chunk general aspectual preferences:

```
> GLM_trans_cg<-glm(formula = aspect ~ cg_pref, family = "binomial", data = t_all)
```

Call:

```
glm(formula = aspect ~ chunk_gen, family = "binomial", data = all_trans)
```

Deviance Residuals:

```

      Min       1Q   Median       3Q      Max
-1.6263 -0.8954  0.7873  0.7873  1.7181

```

Coefficients:

```

              Estimate Std. Error z value Pr(>|z|)
(Intercept)    -1.2164    0.2324  -5.234 1.66e-07 ***
chunk_genimpf/pf  0.5095    0.2734   1.863  0.0624 .
chunk_genna      0.3001    0.6356   0.472  0.6368
chunk_genpf      2.2290    0.2633   8.466 < 2e-16 ***

```

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

```

Null deviance: 929.67 on 670 degrees of freedom
Residual deviance: 793.47 on 667 degrees of freedom
AIC: 801.47

```

Number of Fisher Scoring iterations: 4

Analysis of Deviance Table

Model: binomial, link: logit

Response: aspect

Terms added sequentially (first to last)

```

              Df Deviance Resid. Df Resid. Dev Pr(>Chi)
NULL                670      929.67
chunk_gen    3     136.19      667      793.47 < 2.2e-16 ***

```

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```
> exp(cbind(OR = coef(GLM_trans_cg), confint(GLM_trans_cg)))
```

Waiting for profiling to be done...

```

              OR      2.5 %      97.5 %
(Intercept)  0.2962963 0.1839782 0.4595076
cg_prefimpf/pf 1.6643836 0.9843430 2.8851652
cg_prefna     1.3500000 0.3459708 4.4462225
cg_prefpf     9.2907303 5.6239853 15.8395027

```

```
> LRM_trans_cg = lrm(aspect ~ cg_pref, data = t_all, x=T, y=T)
```

```
> LRM_trans_cg
```

Logistic Regression Model


```

lrm(formula = aspect ~ chunk_gen, data = t_all, x = T, y = T)

```

	Model Likelihood	Discrimination	Rank Discrim.
	Ratio Test	Indexes	Indexes
Obs	671	LR chi2 136.19	R2 0.245
impf	326	d.f. 3	g 1.002
pf	345	Pr(> chi2) <0.0001	gr 2.723
max deriv	1e-10		gp 0.230
			tau-a 0.230
		Brier	0.201

	Coef	S.E.	Wald Z	Pr(> Z)
Intercept	-1.2164	0.2324	-5.23	<0.0001
cg_pref=impf/pf	0.5095	0.2734	1.86	0.0624
cg_pref=na	0.3001	0.6356	0.47	0.6368
cg_pref=pf	2.2290	0.2633	8.47	<0.0001

2.4. Chunk legal aspectual preferences:

```

> GLM_trans_cl<-glm(formula = aspect ~ cl_pref, family = "binomial", data = t_all)

```

Call:

```

glm(formula = aspect ~ chunk_leg, family = "binomial", data = all_trans)

```

Deviance Residuals:

Min	1Q	Median	3Q	Max
-1.6861	-1.2031	0.7433	1.1520	1.3824

Coefficients:

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	-0.47000	0.25495	-1.844	0.0653 .
chunk_legimpf/pf	0.53022	0.27998	1.894	0.0583 .
chunk_legna	0.09932	0.29440	0.337	0.7358
chunk_legpf	1.61514	0.33478	4.824	1.4e-06 ***

 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 929.67 on 670 degrees of freedom
 Residual deviance: 887.40 on 667 degrees of freedom
 AIC: 895.4

Number of Fisher Scoring iterations: 4

Analysis of Deviance Table

Model: binomial, link: logit

Response: aspect

Terms added sequentially (first to last)

	Df	Deviance	Resid. Df	Resid. Dev	Pr(>Chi)
NULL			670	929.67	
chunk_leg	3	42.268	667	887.40	3.52e-09 ***

 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

> GLM_trans_cl<-glm(formula = aspect ~ cl_pref, family = "binomial", data = t_all)

```

```

> exp(cbind(OR = coef(GLM_trans_cl), confint(GLM_trans_cl)))

```

Waiting for profiling to be done...

OR	2.5 %	97.5 %
----	-------	--------

```
(Intercept) 0.625000 0.3745490 1.022934
cl_prefimpf/pf 1.699310 0.9875611 2.971739
cl_prefna 1.104425 0.6231789 1.983543
cl_prefpf 5.028571 2.6365091 9.826942
```

```
> LRM_trans_cl = lrm(aspect ~ cl_pref, data = t_all, x=T, y=T)
> LRM_trans_cl
```

Logistic Regression Model

```
lrm(formula = aspect ~ chunk_leg, data = t_all, x = T, y = T)
```

	Model Likelihood	Discrimination	Rank Discrim.
	Ratio Test	Indexes	Indexes
Obs	671	LR chi2 42.27	R2 0.081
impf	326	d.f. 3	g 0.532
pf	345	Pr(> chi2) <0.0001	gr 1.702
max deriv	3e-11		gp 0.124
		Brier	0.235

	Coef	S.E.	Wald Z	Pr(> Z)
Intercept	-0.4700	0.2550	-1.84	0.0653
cl_pref=impf/pf	0.5302	0.2800	1.89	0.0583
cl_pref=na	0.0993	0.2944	0.34	0.7358
cl_pref=pf	1.6151	0.3348	4.82	<0.0001