

Appendix

Sample of critical items (i.e., “no” trials) in Mandarin (M) and English (E)

Note: Target, Semantic, and Unrelated items were the same for both groups while Form-related items differed across the two languages given the group’s dominant language.

Target		Semantic		Form-related		Unrelated 1		Unrelated 2	
M	E	M	E	M	E	M	E	M	E
房东	landlord	租金	rent	方式	lantern	题目	topic	负担	burden
考试	test	学生	student	烤肉	tempo	白菜	cabbage	文件	document
汽车	car	街道	street	气氛	card	专业	major	市场	market
太阳	sun	月亮	moon	态度	support	研究	research	骨头	bone
牙齿	tooth	舌头	tongue	压力	tool	银行	bank	战争	war
钱包	wallet	硬币	coin	前面	walnut	生活	life	竹子	bamboo
报纸	newspaper	杂志	magazine	保证	neighbor	名牌	brand	石头	stone
护照	passport	签证	visa	呼吸	password	爱情	love	乌龟	turtle

Mixed-effects regression models

All models were built in R (version 3.3) using the *lme4* package (version 1.1-20) and the *lmerTest* package (version 3.1-0).

Correct translation (‘yes’ trials) models:

Group as a contrast coded variable (1, -1)

Stroop and O-span as continuous variables

Accuracy model:

`glmer(accuracy ~ Group + Ospan + Stroop + (1+Ospan+Stroop|participants) + (1|items), family="binomial")`

	Estimate	SE	z	p
(Intercept)	2.97	0.44	6.70	< .001
Group	1.13	0.23	4.85	< .001
O-span	-0.67	0.60	-1.12	0.25
Stroop	1.39	2.83	0.49	0.62

RT model:

`lmer(RT ~ Group + Ospan + Stroop + (1+Ospan+Stroop|participants) + (1|items))`

	Estimate	SE	t	p
(Intercept)	824.68	69.12	11.93	< .001
Group	-222.83	35.59	-6.26	< .001
O-span	163.06	103.33	1.57	0.12
Stroop	-372.05	457.74	-0.81	0.42

Incorrect semantic translation (‘no’ trials) models:

Group as a contrast coded variable (1, -1)

Related as a contrast coded variable (1, -1)

Stroop and O-span as continuous variables

Accuracy model:

`glmer(accuracy ~ Group + Related+ Ospan + Stroop + (1+Ospan+Stroop|participants) + (1+Related|items), family="binomial")`

	Estimate	SE	z	p
(Intercept)	2.65	0.25	10.24	< .001
Group	0.60	0.13	4.33	< .001
Related	-1.00	0.09	-10.66	< .001
O-span	-0.58	0.34	-1.68	0.10
Stroop	0.10	1.55	0.06	0.94

RT model:

`lmer(RT ~ Group + Related + Ospan + Stroop + (1+Ospan+Stroop|participants) + (1+Related|items))`

	Estimate	SE	t	p
(Intercept)	963.05	105.70	9.11	< .001
Group	-285.58	55.02	-5.19	< .001
Related	89.43	13.98	6.39	< .001
O-span	104.64	158.15	0.66	0.51
Stroop	-344.81	698.96	-0.49	0.62

Incorrect form-related translation ('no' trials) models:

Note: Separate form-related models were built for each group due to the distinct items used

Related as a contrast coded variable (1, -1)

Stroop and O-span as continuous variables

Classroom bilinguals

Accuracy model:

`glmer(accuracy ~ Related + Ospan + Stroop + (1+Ospan+Stroop|participants) + (1+Related|items), family="binomial")`

	Estimate	SE	z	p
(Intercept)	-1.94	3.36	-0.58	0.56
Related	-0.20	0.18	-1.11	0.26
O-span	4.68	2.88	1.62	0.10
Stroop	-1.94	2.89	-0.67	0.50

RT model:

`lmer(RT ~ Related + Ospan + Stroop + (1+Ospan+Stroop|participants) + (1+Related|items))`

	Estimate	SE	t	p
(Intercept)	641.63	276.63	2.31	0.03
Related	-10.60	6.48	-1.63	0.10
O-span	48.88	292.00	0.16	0.86
Stroop	-315.68	258.28	-1.22	0.23

Heritage bilinguals

Accuracy model:

`glmer(accuracy ~ Related + Ospan + Stroop + (1+Ospan+Stroop|participants) + (1+Related|items), family="binomial")`

	Estimate	SE	z	p
(Intercept)	2.54	0.33	7.64	< .001
Related	-0.38	0.15	-2.48	0.01
O-span	1.57	0.99	1.58	0.11
Stroop	-8.47	5.40	-1.56	0.11

RT model:

`lmer(RT ~ Related + Ospan + Stroop + (1+Ospan+Stroop|participants) + (1+Related|items))`

	Estimate	SE	t	p
(Intercept)	1130.83	115.83	9.76	< .001
Related	-17.48	19.78	-0.88	0.37
O-span	-56.11	398.95	-0.14	0.89
Stroop	1039.19	2246.08	0.46	0.64