Appendix A: The picture stimuli list

Chinese	Frequency[1] (per million words)	English	Frequency[2] (per million words)	French	Frequency[3] (per million words)
mao /mɑʊ̯/	37.48	cat /kat/	144.64	chat /ʃa/	59.26
gou /koʊ̯/	114.89	dog /dȯg/	58.76	chien /ʃiɛ̃/	117.64
chuang /tʂʰu̯ɑŋ/	99.41	bed /bed/	127.23	lit /li/	340.60
shu /ʂu/	391.96	book /bu̇k/	435.38	livre /li:vr/	161.15
xin /ɕin/	672.28	heart /hart/	193.04	coeur /kœʀ/	380.07
qiche /tɕʰi, tʂʰə/	163.79	car /kär/	244.44	voiture /vwaty:r/	221.62
chuanghu /tʂʰu̯ɑŋ, xu/	178.46	window /windō/	90.33	fenêtre /f(ə)nɛtr/	199.39
jiao	144.23	foot	60.00	pied	248.18

/tɕi̯au̯/   /fʊ̀t/   /pje/

feiji	647.83	plane	54.06	avion	46.82

/feɪ̯, tɕi/   /plān/   /avjɔ̃/

Note:

1. The frequency data on Chinese names for the pictures was based on Sun HL, Huang JP, Sun DJ, Li DJ and Xing HB (1997) *Introduction to language corpus system of modern Chinese study*. Beijing: Peking University Publisher.

2. The frequency data on English names for the pictures was based on the English lexicon project, Balota DA, Yap MJ, Hutchison KA, Cortese MJ, Kessler B, Loftis B, Neely JH, Nelson DL, Simpson GB and Treiman R (2007) The English Lexicon Project. *Behavior Research Methods* 39, 445–459.

3. The frequency data on French names for the pictures was based on the French lexicon project, Ferrand L, New B, Brysbaert M, Keuleers E, Bonin P, Meot A, Augustinova M and Pallier C (2010) The French lexicon project: Lexical decision data for 38,840 French words and 38,830 pseudowords. *Behavior Research Methods* 42, 488-498.

Appendix B: The familiarity rating of the picture stimuli

Chinese	Familiarity score	English	Familiarity score	French	Familiarity score
mao	6.70	cat	6.30	chat	5.10
/mɑʊ̯/	(SE=0.48)	/kat/	(SE=0.67)	/ʃa/	(SE=0.57)
gou	6.90	dog	6.30	chien	4.90
/koʊ̯/	(SE=0.31)	/dòg/	(SE=0.67)	/ʃiɛ̃/	(SE=0.57)
chuang	6.70	bed	6.20	lit	4.90
/tʂʰu̯ɑŋ/	(SE=0.48)	/bed/	(SE=0.63)	/li/	(SE=0.57)
shu	6.70	book	6.20	livre	5.30
/ʂu/	(SE=0.48)	/bʊk/	(SE=0.63)	/li:vr/	(SE=0.94)
xin	6.60	heart	5.90	coeur	4.80
/ɕin/	(SE=0.51)	/hart/	(SE=0.31)	/kœʀ/	(SE=0.63)
qiche	6.50	car	6.30	voiture	4.70
/tɕʰi, tʂʰə/	(SE=0.52)	/kär/	(SE=0.67)	/vwaty:r/	(SE=0.67)
chuanghu	6.60	window	6.20	fenêtre	4.20
/tʂʰu̯ɑŋ, xu/	(SE=0.51)	/windō/	(SE=0.42)	/f(ə)nɛtr/	(SE=0.42)
jiao	6.90	foot	6.20	pied	4.90
/tɕi̯ɑʊ̯/	(SE=0.31)	/fʊt/	(SE=0.91)	/pje/	(SE=0.57)

feiji	6.70	plane	5.90	avion	4.20
/feɪ̯ tɕi/	(SE=0.48)	/plān/	(SE=0.31)	/avjɔ̃/	(SE=0.42)

Appendix C: The digit stimuli list

Chinese	English	French
yi [i]	one [wʌn]	un [œ̃] une [yn]
er [ʯɔ]	two [tu]	deux [dø]
san [san]	three [θɹi]	trois [trwɑ(a)]
si [sɿ]	four [fɔːɹ]	quatre [katr]
wu [u]	five [faiv]	cinq [sɛ̃:k]
liu [l̺i̯oʊ̯]	six [siks]	six [sis]
qi [tɕʰi]	seven [sɛvən]	sept [sɛt]
ba [pa]	eight [eit]	huit [ɥit]
jiu [tɕ i̯ɑʊ̯]	nine [nain]	neuf [nœf]

Appendix D: Maximal and final main model for the RTs and error rates analyses.

Maximal (and final) model for the RTs analysis:

RT ~ Stimulus * Trial * Experiment + (1 | Subject) + (1 | Subject : Stimulus) + (1 | Subject :

Trial) + (1 | Subject : Experiment) + (1 | Subject : Stimulus : Trial) + (1 | Subject : Stimulus :

Experiment) + (1 | Subject : Experiment : Trial) + (1 | Subject : Experiment : Stimulus : Trial)

Maximal model for the error rate analysis:

Accuracy ~ Stimulus * Trial * Experiment + (1 | Subject) + (1 | Subject : Stimulus) + (1 |

Subject : Trial) + (1 | Subject : Experiment) + (1 | Subject : Stimulus : Trial) + (1 | Subject :

Stimulus : Experiment) + (1 | Subject : Experiment : Trial) + (1 | Subject : Experiment :

Stimulus : Trial)

Final model for the error rate analysis:

Accuracy ~ Stimulus * Trial * Experiment + (1 | Subject) + (1 | Subject : Stimulus) + (1 |

Subject : Trial) + (1 | Subject : Experiment) + (1 | Subject : Stimulus : Experiment)

Appendix E: Table with the summary of final model for the analysis of RTs, including

intercept and factors and their coefficients, standard errors, t-values, and p-values.

	Coefficient	Std. Error	t-value	p-value
Intercept	825.84	8.56	96.44	< 0.001
Trial	-46.04	4.70	-9.80	< 0.001
Stimulus	-133.87	5.92	-22.60	< 0.001
Language pair	-68.61	7.72	-8.89	< 0.001
Trial by Stimulus	-2.38	5.69	-0.42	0.68
Trial by Language pair	3.86	6.19	0.62	0.53
Stimulus by Language pair	-36.81	7.15	-5.15	< 0.001
Trial by Stimulus by Language pair	-21.43	5.67	-3.78	< 0.001

Appendix F: Table with the summary of final model for the analysis of error rates, including intercept and factors and their coefficients, standard errors, t-values, and p-values.

	Coefficient	Std. Error	t-value	p-value
Intercept	3.52	0.11	32.52	< 0.001
Trial	0.23	0.09	2.75	< 0.01
Stimulus	-0.17	0.09	-1.86	0.06
Language pair	-0.43	0.12	-3.43	< 0.01
Trial by Stimulus	0.14	0.17	0.83	0.41
Trial by Language pair	0.33	0.17	2.00	< 0.05
Stimulus by Language pair	0.44	0.17	2.58	< 0.01
Trial by Stimulus by Language pair	-0.48	0.33	-1.45	0.15