

Appendix 1

Stimuli and lexical characteristics for AX **Word** Discrimination Task (Experiment 1).

Key: Word = English word; Sp. Trans = Spanish translation; Condition = Condition within the experiment; Eng. Log. Freq. = Log frequency in English (CLEARPOND); Eng. Ortho. N. = English Orthographic Neighborhood Size (CLEARPOND); Eng. Letters = Number of English letters; Sp. Log. Freq. = Log frequency in Spanish (CLEARPOND); Sp. Ortho. N. = Spanish Orthographic Neighborhood Size (CLEARPOND); Sp. Letters = Number of Spanish letters. * indicates a cognate between English and Spanish.

Word	Sp. Trans	Condition	Eng. Log. Freq.	Eng. Ortho. N.	Eng. Letters	Sp. Log. Freq.	Sp. Ortho. N.	Sp. Letters
spa	balneario	S+Cons	3.67	7	3	2.97	0	9
space*	espacio	S+Cons	4.82	7	5	4.90	2	7
speaker	altavoz	S+Cons	3.84	2	7	3.05	0	7
special*	especial	S+Cons	5.17	1	7	5.22	3	8
specific*	específico	S+Cons	4.25	1	8	4.01	2	10
spider	araña	S+Cons	4.00	2	6	4.18	1	5
spiral*	espiral	S+Cons	3.25	1	6	3.53	1	7
spirit*	espíritu	S+Cons	4.69	1	6	4.75	1	8
split	dividido	S+Cons	4.58	5	5	3.48	2	8
sponge*	esponja	S+Cons	3.83	1	6	3.85	1	7
spotless	inmaculado	S+Cons	3.07	0	8	2.83	1	10
spread	difundir	S+Cons	4.50	1	6	3.05	0	8
stable*	estable	S+Cons	4.12	5	6	4.11	3	7
starch	almidón	S+Cons	3.13	1	6	2.95	0	7
station*	estación	S+Cons	4.90	1	7	4.75	0	8
stench	hedor	S+Cons	3.35	0	6	3.39	0	5
stereo*	estéreo	S+Cons	3.78	1	6	3.56	0	7
stocking	media	S+Cons	3.42	4	8	4.96	5	5
stoic*	estoico	S+Cons	2.61	0	5	2.23	0	7
stricken	afligido	S+Cons	3.17	0	8	3.12	1	8
strict*	estricto	S+Cons	3.85	0	6	3.62	2	8
strong	fuerte	S+Cons	4.94	2	6	5.29	4	6
study*	estudiar	S+Cons	4.69	3	5	4.56	3	8
stumble	trastabillar	S+Cons	3.29	4	7	2.16	0	12

Running head: SPEECH PERCEPTION IN BILINGUALS

edge	borde	E+Onset	4.37	5	4	4.23	4	5
egg	huevo	E+Onset	4.42	2	3	4.28	6	5
elder	mayor	E+Onset	3.85	4	5	5.26	1	5
elevator	ascensor	E+Onset	4.39	1	8	4.30	1	8
effort	esfuerzo	E+Onset	4.29	1	6	4.50	2	8
ember	brasa	E+Onset	2.34	2	5	2.90	4	5
embrace	abrazo	E+Onset	3.88	2	7	4.31	4	6
empty	vacío	E+Onset	4.67	0	5	4.49	2	5
enable	permitir	E+Onset	3.17	3	6	4.44	3	8
enact	promulgar	E+Onset	2.26	1	5	2.23	0	9
elbow	codo	E+Onset	3.79	1	5	3.73	16	4
encroach	invadir	E+Onset	1.78	0	8	3.60	1	7
endeavor	esfuerzo	E+Onset	3.17	1	8	4.50	2	8
ending	finalizando	E+Onset	4.20	8	6	2.66	0	11
endless	interminable	E+Onset	3.82	0	7	3.46	1	12
enforcement	aplicación	E+Onset	3.82	0	11	3.43	0	10
engaged	comprometido	E+Onset	4.42	3	7	4.04	2	12
engine	motor	E+Onset	4.50	1	6	4.46	2	5
enjoy	disfrutar	E+Onset	4.92	2	5	4.25	5	9
essay	ensayo	E+Onset	3.79	1	5	4.38	1	6
enroll	inscribir	E+Onset	2.82	0	6	2.89	0	9
ensure	asegurar	E+Onset	3.70	3	6	4.22	4	8
envelope	sobre	E+Onset	4.00	1	8	6.05	6	5
exchange	intercambiar	E+Onset	4.31	2	8	3.68	0	12
acorn	bellota	control	2.86	3	5	2.70	0	0
afford	permitirse	control	4.65	0	6	3.37	3	10
aisle	pasillo	control	3.87	2	5	4.51	2	7
alley	callejón	control	4.21	7	5	4.19	0	8
annoy	bendición	control	3.40	1	5	4.19	7	8
apology	disculpa	control	4.20	0	7	5.10	7	8
argue	discutir	control	4.30	3	5	4.55	2	8
arise	surgir	control	3.47	3	5	3.37	1	6
ashes	cenizas	control	3.99	6	5	4.09	1	7
assignment	tarea	control	4.25	1	10	4.62	5	5
award	premio	control	4.11	3	5	4.60	4	6
beginning	principio	control	4.80	1	9	4.90	1	9
behavior	comportamiento	control	4.35	1	8	4.39	1	14
blessing	bendición	control	3.99	1	8	4.17	1	9
blind	ciego	control	4.66	7	5	4.39	6	5
breadth	ancho	control	2.63	1	7	3.73	4	5

Running head: SPEECH PERCEPTION IN BILINGUALS

century	siglo	control	4.32	0	7	4.47	5	5
clearance	liquidación	control	3.84	1	9	3.36	0	11
clingy	dependiente	control	2.77	2	6	3.19	0	11
crumble	desmoronarse	control	3.14	3	7	2.86	0	0
cross	cruzar	control	4.74	6	5	4.33	4	6
desk	mesa	control	4.64	5	4	5.04	12	4
demand	exigir	control	4.23	1	6	3.24	1	6
frozen	congelado	control	4.19	1	6	3.83	4	9
flatten	aplastar	control	3.09	2	7	3.52	2	8
flavor	sabor	control	3.70	2	6	4.29	3	5
furnish	amueblar	control	2.97	0	7	1.98	0	10
friend	amigo	control	5.62	3	6	5.85	2	5
hammer	martillo	control	4.08	4	6	4.08	1	8
imprison	encarcelar	control	2.59	0	8	2.97	0	10
improve	mejorar	control	3.91	2	7	4.35	4	7
injure	herir	control	3.00	3	6	3.89	2	5
intrude	meterse	control	3.40	1	7	4.12	3	7
issue	asunto	control	4.53	3	5	5.14	3	6
itch	picazón	control	3.62	9	4	3.29	0	7
lawyer	abogado	control	4.90	3	6	5.08	3	7
lazy	perezoso	control	4.06	4	4	3.45	2	8
leisure	ocio	control	3.40	0	7	3.08	4	4
little	pequeño	control	2.26	0	0	5.36	2	7
narrow	escaso	control	6.16	0	6	3.16	3	6
nickname	apodo	control	3.83	2	8	3.94	3	5
nightmare	pesadilla	control	4.35	1	9	4.49	1	9
old	viejo	control	5.78	12	3	5.53	3	5
onward	adelante	control	3.19	2	6	5.43	5	8
open	abierto	control	5.51	5	4	4.66	3	7
outfit	traje	control	4.40	2	6	5.11	5	5
outline	contorno	control	3.31	3	7	2.76	0	8
overcome	vencer	control	3.79	8	8	4.20	7	7
owner	dueño	control	4.37	3	5	4.63	4	5
propeller	hélice	control	3.18	1	9	3.12	0	6
quirk	manía	control	2.59	5	5	3.21	4	5
rascal	pillo	control	3.60	2	6	3.14	0	6
record	grabar	control	4.93	1	6	4.06	3	6
thrive	prosperar	control	3.24	2	6	2.87	0	6
topping	cobertura	control	2.95	8	7	3.57	1	12
target	blanco	control	4.58	1	6	5.05	5	6

Running head: SPEECH PERCEPTION IN BILINGUALS

trade	intercambio	control	4.55	5	5	4.20	0	11
travel	viajar	control	4.52	3	6	4.23	2	6
umbrella	paraguas	control	3.87	1	8	3.55	0	8
unable	incapaz	control	4.01	2	6	3.93	0	7
unlock	abrir	control	3.74	0	6	4.81	4	5
unpack	deshacer	control	3.51	0	6	3.67	2	8
untangle	desenredar	control	2.46	1	8	2.34	0	10
update	actualización	control	3.69	2	6	3.35	0	13
upper	superior	control	4.08	3	5	4.48	0	8
understand	comprender	control	5.68	1	10	4.20	4	10
village	pueblo	control	4.53	2	7	5.16	1	6
wallow	revolcarse	control	3.21	5	6	2.70	0	0
woman	mujer	control	5.64	2	5	5.72	0	5
window	ventana	control	4.93	2	6	4.86	2	7
worker	trabajador	control	4.04	4	6	3.91	2	10
wrangler	pendenciero	control	2.30	0	1	2.61	0	0

Appendix 2

Stimuli and lexical characteristics for Vowel Detection and Lexical Decision Tasks (Experiment 2 and 3). Key: Word = English word; Sp. Trans = Spanish translation; Condition = Condition within the experiment; Eng. Log. Freq. = Log frequency in English (CLEARPOND); Eng. Ortho. N. = English Orthographic Neighborhood Size (CLEARPOND); Eng. Letters = Number of English letters; Sp. Log. Freq. = Log frequency in Spanish (CLEARPOND); Sp. Ortho. N. = Spanish Orthographic Neighborhood Size (CLEARPOND); Sp. Letters = Number of Spanish letters. Nonword = Nonword; Length = Number of letters; TotalND = Total neighborhood density (English). * Indicates a cognate between English and Spanish.

Word	Sp. Trans	Condition	Eng. Log. Freq.	Eng. Ortho. N.	Eng. Letters	Sp. Log. Freq.	Sp. Ortho. N.	Sp. Letters
spa	balneario	S+Cons	3.67	7	3	2.97	0	9
space*	espacio	S+Cons	4.82	7	5	4.90	2	7
speaker	altavoz	S+Cons	3.84	2	7	3.05	0	7
special*	especial	S+Cons	5.17	1	7	5.22	3	8
specific*	específico	S+Cons	4.25	1	8	4.01	2	10
spider	araña	S+Cons	4.00	2	6	4.18	1	5
spiral*	espiral	S+Cons	3.25	1	6	3.53	1	7
spirit*	espíritu	S+Cons	4.69	1	6	4.75	1	8
split	dividido	S+Cons	4.58	5	5	3.48	2	8
sponge*	esponja	S+Cons	3.83	1	6	3.85	1	7
spotless	inmaculado	S+Cons	3.07	0	8	2.83	1	10
spread	difundir	S+Cons	4.50	1	6	3.05	0	8
stable*	estable	S+Cons	4.12	5	6	4.11	3	7
starch	almidón	S+Cons	3.13	1	6	2.95	0	7
station*	estación	S+Cons	4.90	1	7	4.75	0	8
stench	hedor	S+Cons	3.35	0	6	3.39	0	5
stereo*	estéreo	S+Cons	3.78	1	6	3.56	0	7
stocking	media	S+Cons	3.42	4	8	4.96	5	5
stoic*	estoico	S+Cons	2.61	0	5	2.23	0	7
stricken	afligido	S+Cons	3.17	0	8	3.12	1	8
strict*	estricto	S+Cons	3.85	0	6	3.62	2	8
strong	fuerte	S+Cons	4.94	2	6	5.29	4	6

Running head: SPEECH PERCEPTION IN BILINGUALS

study*	estudiar	S+Cons	4.69	3	5	4.56	3	8
stumble	trastabillar	S+Cons	3.29	4	7	2.16	0	12
behavior	comportamiento	control-cons	4.35	1	8	4.39	1	14
blessing	bendición	control-cons	3.99	1	8	4.17	1	9
breadth	ancho	control-cons	2.63	1	7	3.73	4	5
friend	amigo	control-cons	5.62	3	6	5.85	2	5
hammer	martillo	control-cons	4.08	4	6	4.08	1	8
lawyer	abogado	control-cons	4.90	3	6	5.08	3	7
nickname	apodo	control-cons	3.83	2	8	3.94	3	5
quirk	manía	control-cons	2.59	5	5	3.21	4	5
rascal	pillo	control-cons	3.60	2	6	3.14	0	6
thrive	prosperar	control-cons	3.24	2	6	2.87	0	6
topping	cobertura	control-cons	2.95	8	7	3.98	0	9
travel	viajar	control-cons	4.52	3	6	4.23	2	6
village	pueblo	control-cons	4.53	2	7	5.16	1	6
window	ventana	control-cons	4.93	2	6	4.86	2	7
worker	trabajador	control-cons	4.04	4	6	3.91	2	10
yeast	levadura	control-cons	2.94	4	5	2.66	0	9
beginning	principio	control-cons	4.80	1	9	4.90	1	9
century	siglo	control-cons	4.32	0	7	4.47	5	5
clearance	liquidación	control-cons	3.84	1	9	3.36	0	11
clingy	dependiente	control-cons	2.77	2	6	3.19	0	11
crumble	desmoronarse	control-cons	3.14	1	9	2.86	0	0
cross	cruzar	control-cons	4.74	6	5	4.33	4	6
propeller	hélice	control-cons	3.18	1	9	3.12	0	6
toying	jugando	control-cons	3.05	4	6	4.84	2	7
afford	permitirse	control-vowel	4.65	0	6	3.37	3	10
acorn	bellota	control-vowel	2.86	3	5	2.70	0	0
aisle	pasillo	control-vowel	3.87	2	5	4.51	2	7
alley	callejón	control-vowel	4.21	7	5	4.19	0	8
annoy	bendición	control-vowel	3.40	1	5	4.19	7	8
apology	disculpa	control-vowel	4.20	0	7	5.10	7	8
argue	discutir	control-vowel	4.30	3	5	4.55	2	8
arise	surgir	control-vowel	3.47	3	5	3.37	1	6
ashes	cenizas	control-vowel	3.99	6	5	4.09	1	7
assignment	tarea	control-vowel	4.25	1	10	4.62	5	5
award	premio	control-vowel	4.11	3	5	4.60	4	6
earn	ganar	control-vowel	4.19	11	4	5.07	7	5
easily	fácilmente	control-vowel	4.35	0	6	4.33	0	10
edge	borde	control-vowel	4.37	5	4	4.23	4	5

Running head: SPEECH PERCEPTION IN BILINGUALS

egg	huevo	control-vowel	4.42	2	3	4.28	6	5
elbow	codo	control-vowel	3.79	1	5	3.73	16	4
elevator	ascensor	control-vowel	4.39	1	8	4.30	1	8
elope	fugarse	control-vowel	3.12	2	5	2.92	0	7
ember	brasa	control-vowel	2.34	2	5	2.90	4	5
embrace	abrazo	control-vowel	3.88	2	7	4.31	4	6
enroll	inscribir	control-vowel	2.82	0	6	2.89	0	9
ensure	asegurar	control-vowel	3.70	3	6	4.22	4	8
erase	borrar	control-vowel	3.79	4	5	3.96	2	6
exit	salida	control-vowel	4.19	4	4	4.87	8	6
icebreaker	rompehielos	control-vowel	2.61	10	10	0.00	0	11
imprison	encarcelar	control-vowel	2.59	0	8	2.97	0	10
improve	mejorar	control-vowel	3.91	2	7	4.35	4	7
injure	herir	control-vowel	3.00	3	6	3.89	1	5
intrude	meterse	control-vowel	3.40	1	7	4.12	3	7
issue	asunto	control-vowel	4.53	3	5	5.14	3	6
itch	picazón	control-vowel	3.62	9	4	3.29	0	7
old	viejo	control-vowel	5.78	12	3	5.53	3	5
oncoming	venidero	control-vowel	2.63	8	8	2.38	0	8
onward	adelante	control-vowel	3.19	2	6	5.43	5	8
open	abierto	control-vowel	5.51	5	4	4.66	3	7
outfit	traje	control-vowel	4.40	2	6	5.11	5	5
outline	contorno	control-vowel	3.31	3	7	2.76	0	8
overcome	vencer	control-vowel	3.79	8	8	4.20	7	7
owe	deber	control-vowel	4.87	12	3	4.46	6	5
own	dueño	control-vowel	5.66	8	3	4.63	4	5
umbrella	paraguas	control-vowel	3.87	1	8	3.55	0	8
unable	incapaz	control-vowel	4.01	2	6	3.93	0	7
unlock	abrir	control-vowel	3.74	0	6	4.81	4	5
unpack	deshacer	control-vowel	3.51	0	6	3.67	2	8
untangle	desenredar	control-vowel	2.46	1	8	2.34	0	10
update	actualización	control-vowel	3.69	2	6	3.35	0	13
upper	superior	control-vowel	4.08	3	5	4.48	0	8
understand	comprender	control-vowel	5.68	1	10	4.20	4	10

Nonword	Condition	Length	TotalND
spap	S+C_nw		4
spuv	S+C_nw		4
spash	S+C_nw		5

Running head: SPEECH PERCEPTION IN BILINGUALS

spess	S+C_nw	5	1
spet	S+C_nw	4	9
spold	S+C_nw	5	2
spinge	S+C_nw	6	2
spelg	S+C_nw	5	1
spont	S+C_nw	5	4
sporl	S+C_nw	5	3
spown	S+C_nw	5	4
spuck	S+C_nw	5	6
stalve	S+C_nw	6	3
stish	S+C_nw	5	3
stoil	S+C_nw	5	5
stees	S+C_nw	5	8
sterk	S+C_nw	5	4
staifs	S+C_nw	6	3
stigs	S+C_nw	5	2
stav	S+C_nw	4	5
stoz	S+C_nw	4	2
stolt	S+C_nw	5	2
stind	S+C_nw	5	4
sturf	S+C_nw	5	3
barsh	control-cons-nw	5	5
breleh	control-cons-nw	6	2
brolf	control-cons-nw	5	0
blout	control-cons-nw	5	5
brud	control-cons-nw	4	4
chool	control-cons-nw	5	2
charks	control-cons-nw	6	3
clant	control-cons-nw	5	8
ferched	control-cons-nw	7	2
flades	control-cons-nw	6	6
flafe	control-cons-nw	5	3
fraik	control-cons-nw	5	2
gault	control-cons-nw	5	4
gisque	control-cons-nw	6	1
gerf	control-cons-nw	4	2
jorst	control-cons-nw	5	3
koid	control-cons-nw	4	3
kimps	control-cons-nw	5	2
narned	control-cons-nw	6	3

Running head: SPEECH PERCEPTION IN BILINGUALS

nulse	control-cons-nw	5	2
prifed	control-cons-nw	6	3
thoob	control-cons-nw	5	1
vob	control-cons-nw	3	10
zeen	control-cons-nw	4	7
anch	control-vowel-nw	4	2
aived	control-vowel-nw	5	6
arp	control-vowel-nw	3	10
alfs	control-vowel-nw	4	4
alked	control-vowel-nw	5	3
arged	control-vowel-nw	5	5
arns	control-vowel-nw	4	5
arped	control-vowel-nw	5	2
asped	control-vowel-nw	5	3
atch	control-vowel-nw	4	10
almed	control-vowel-nw	5	3
awned	control-vowel-nw	5	3
eague	control-vowel-nw	5	1
ect	control-vowel-nw	3	3
eamed	control-vowel-nw	5	6
eants	control-vowel-nw	5	4
eash	control-vowel-nw	4	17
ense	control-vowel-nw	4	3
elt	control-vowel-nw	3	10
eeth	control-vowel-nw	4	4
enting	control-vowel-nw	6	4
eened	control-vowel-nw	5	0
erves	control-vowel-nw	5	3
ict	control-vowel-nw	3	4
imes	control-vowel-nw	4	3
iln	control-vowel-nw	3	5
imed	control-vowel-nw	4	4
ines	control-vowel-nw	4	9
ints	control-vowel-nw	4	7
ipes	control-vowel-nw	4	3
ilch	control-vowel-nw	4	3
isked	control-vowel-nw	5	2
oalls	control-vowel-nw	5	6
oamed	control-vowel-nw	5	4
obs	control-vowel-nw	3	7

Running head: SPEECH PERCEPTION IN BILINGUALS

ogged	control-vowel-nw	5	4
onch	control-vowel-nw	4	4
oones	control-vowel-nw	5	7
oped	control-vowel-nw	4	8
onth	control-vowel-nw	4	1
orvs	control-vowel-nw	4	2
udds	control-vowel-nw	4	2
udge	control-vowel-nw	4	6
uff	control-vowel-nw	3	10
unks	control-vowel-nw	4	3
urbed	control-vowel-nw	5	2
urped	control-vowel-nw	5	2
utch	control-vowel-nw	4	5