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Lexical tone in word activation

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Appendix A

Table A1. Stimuli used in Experiment 1 & 2 in Chapter 2.

	Target	Segmental Competitor	Cohort Competitor	Rhyme Competitor	Tonal Competitor
1	<i>chuang2</i>	<i>chuang1</i>	<i>cha2</i>	<i>huang2</i>	<i>ya2</i>
	bed	window	tea	yellow	tooth
2	<i>li2</i>	<i>li4</i>	<i>lun2</i>	<i>qi2</i>	<i>men2</i>
	pear	chestnut	tire	flag	door
3	<i>hu3</i>	<i>hu2</i>	<i>hai3</i>	<i>tu3</i>	<i>er3</i>
	tiger	pot	ocean	dirt	ear
4	<i>jing4</i>	<i>jing1</i>	<i>ju4</i>	<i>xing4</i>	<i>xiang4</i>
	mirror	whale	saw	apricot	elephant
5	<i>shu3</i>	<i>shu1</i>	<i>shou3</i>	<i>gu3</i>	<i>wan3</i>
	mouse	book	hand	drum	bowl
6	<i>shan4</i>	<i>shan1</i>	<i>shu4</i>	<i>dan4</i>	<i>tu4</i>
	fan	mountain	tree	egg	rabbit
7	<i>tang2</i>	<i>tang1</i>	<i>tou2</i>	<i>fang2</i>	<i>sheng2</i>
	sugar	soup	head	house	rope
8	<i>bing1</i>	<i>bing3</i>	<i>bei1</i>	<i>xing1</i>	<i>yan1</i>
	ice	pie	cup	star	cigarette
9	<i>bao4</i>	<i>bao1</i>	<i>bu4</i>	<i>pao4</i>	<i>xin4</i>
	leopard	bag	cloth	cannon	envelope
10	<i>bi3</i>	<i>bi2</i>	<i>ban3</i>	<i>yi3</i>	<i>san3</i>
	pen	nose	board	chair	umbrella
11	<i>hua1</i>	<i>hua4</i>	<i>hei1</i>	<i>gua1</i>	<i>che1</i>
	flower	painting	black	melon	car
12	<i>mao4</i>	<i>mao1</i>	<i>mo4</i>	<i>yao4</i>	<i>suan4</i>
	hat	cat	ink	medicine	garlic

Table A2. Stimuli used in Experiment 3 in Chapter 2.

	Tonal Pair			
	Early POD		Late POD	
1	埋	卖	丑	仇
	<i>mai2</i>	<i>mai4</i>	<i>chou3</i>	<i>chou2</i>
	bury	sell	ugly	hatred
2	萌	梦	读	赌
	<i>meng2</i>	<i>meng4</i>	<i>du2</i>	<i>du3</i>
	cute	dream	read	bet
3	鸭	哑	哭	酷
	<i>ya1</i>	<i>ya3</i>	<i>ku1</i>	<i>Ku4</i>
	duck	dumb	cry	cool
4	影	鹰	龟	贵
	<i>ying3</i>	<i>ying1</i>	<i>gui1</i>	<i>gui4</i>
	ink	wipe	turtle	expensive
5	脑	闹	金	近
	<i>nao3</i>	<i>nao4</i>	<i>jin1</i>	<i>jin4</i>
	brain	noisy	gold	closer
6	圆	院	抢	墙
	<i>yuan2</i>	<i>yuan4</i>	<i>qiang3</i>	<i>qiang2</i>
	round	yard	rob	wall
7	网	旺	证	蒸
	<i>wang3</i>	<i>wang4</i>	<i>zheng4</i>	<i>zheng1</i>
	nest	thriving	certificate	steam
8	玉	鱼	摆	白
	<i>yu4</i>	<i>yu2</i>	<i>bai3</i>	<i>bai2</i>
	cigarette	eye	arrange	white
9	盐	艳	烦	反
	<i>yan2</i>	<i>yan4</i>	<i>fan2</i>	<i>fan3</i>
	sault	bright	upset	opposite
10	舞	雾	猪	住
	<i>wu3</i>	<i>wu4</i>	<i>zhu1</i>	<i>zhu4</i>
	dance	fog	pig	live
11	夜	野	摔	帅
	<i>ye4</i>	<i>ye3</i>	<i>shuai1</i>	<i>shuai4</i>
	night	wild	fall	handsome
12	秒	妙	猜	菜
	<i>miao3</i>	<i>miao4</i>	<i>cai1</i>	<i>cai4</i>
	second	nice	guess	vegetable

	Segment Pair			
	Early POD		Late POD	
13	爬	瓶	雪	选
	<i>pa2</i>	<i>ping2</i>	<i>xue3</i>	<i>xuan3</i>
	climb	bottle	snow	choose
14	塔	腿	铁	舔
	<i>ta3</i>	<i>tui3</i>	<i>tie3</i>	<i>tian3</i>
	tower	leg	iron	lick
15	纸	找	亲	轻
	<i>zhi3</i>	<i>zhao3</i>	<i>qin1</i>	<i>qing1</i>
	paper	look for	kiss	light
16	电	豆	琴	晴
	<i>dian4</i>	<i>dou4</i>	<i>qin2</i>	<i>qing2</i>
	electricity	bean	piano	sunny
17	方	风	睡	顺
	<i>fang1</i>	<i>feng1</i>	<i>shui4</i>	<i>shun4</i>
	square	wind	sleep	smooth
18	热	弱	宽	筐
	<i>re4</i>	<i>ruo4</i>	<i>kuan1</i>	<i>kuang1</i>
	hot	weak	wide	basket
19	呆	东	喘	闯
	<i>dai1</i>	<i>dong1</i>	<i>chuan3</i>	<i>chuang3</i>
	stupid	east	breath	rush
20	僧	酸	球	穷
	<i>seng1</i>	<i>suan1</i>	<i>qiu2</i>	<i>qiong2</i>
	monk	soar	ball	poor
21	丢	灯	坏	换
	<i>diu1</i>	<i>deng1</i>	<i>huai4</i>	<i>huan4</i>
	lost	light	broke	replace
22	慌	喝	家	姜
	<i>huang1</i>	<i>he1</i>	<i>jia1</i>	<i>jiang1</i>
	old	cold	home	ginger
23	烤	苦	乖	光
	<i>kao3</i>	<i>ku3</i>	<i>guai1</i>	<i>guang1</i>
	grill	pain	behave	light
24	雷	楼	追	钟
	<i>lei2</i>	<i>lou2</i>	<i>zhui1</i>	<i>zhong1</i>
	lightening	building	chase	clock

Appendix B

Table B1. Stimuli used in the Standard Chinese task in Chapter 3.

	<i>Homophone Condition</i>		<i>Translation Condition</i>		<i>Segment Condition</i>	
	<i>Target</i>	<i>Competitor</i>	<i>Target</i>	<i>Competitor</i>	<i>Target</i>	<i>Competitor</i>
1	棍	滚	挂	瓜	火	活
	<i>gun4</i>	<i>gun3</i>	<i>gua4</i>	<i>gua1</i>	<i>huo3</i>	<i>huo2</i>
	stick	roll	hang	melon	fire	alive
2	害	海	怪	乖	洗	席
	<i>hai4</i>	<i>hai3</i>	<i>guai4</i>	<i>guai1</i>	<i>xi3</i>	<i>xi2</i>
	harm	sea	weird	good	wash	mat
3	汗	喊	醋	粗	挤	急
	<i>han4</i>	<i>han3</i>	<i>cu4</i>	<i>cu1</i>	<i>ji3</i>	<i>ji2</i>
	sweat	yell	vinegar	thick	squeeze	urgent
4	见	剪	兔	秃	举	桔
	<i>jian4</i>	<i>jian3</i>	<i>tu4</i>	<i>tu1</i>	<i>ju3</i>	<i>ju2</i>
	see	cut	rabbit	bold	lift	orange
5	旧	酒	送	松	踩	才
	<i>jiu4</i>	<i>jiu3</i>	<i>song4</i>	<i>song1</i>	<i>cai3</i>	<i>cai2</i>
	old	wine	send	loose	tread	talent
6	笑	小	蒜	酸	纸	直
	<i>xiao4</i>	<i>xiao3</i>	<i>suan4</i>	<i>suan1</i>	<i>zhi3</i>	<i>zhi2</i>
	laugh	small	garlic	sour	paper	straight
7	醉	嘴	赚	砖	怕	爬
	<i>zui4</i>	<i>zui3</i>	<i>zhuan4</i>	<i>zhuan1</i>	<i>pa4</i>	<i>pa2</i>
	drunk	mouth	earn	brick	afraid	climb
8	豆	抖	撞	装	厚	猴
	<i>dou4</i>	<i>dou3</i>	<i>zhuang4</i>	<i>zhuang1</i>	<i>hou4</i>	<i>hou2</i>
	bean	shake	hit	pack	thick	monkey
9	造	枣	变	编	县	咸
	<i>zao4</i>	<i>zao3</i>	<i>bian4</i>	<i>bian1</i>	<i>xian4</i>	<i>xian2</i>
	make	date	change	edit	county	salty
10	瘦	手	记	鸡	踢	提
	<i>shou4</i>	<i>shou3</i>	<i>ji4</i>	<i>ji1</i>	<i>ti1</i>	<i>ti2</i>
	slim	hand	note	chicken	kick	carry
11	盖	改	告	高	饭	烦
	<i>gai4</i>	<i>gai3</i>	<i>gao4</i>	<i>gao1</i>	<i>fan4</i>	<i>fan2</i>
	build	change	tell	high	meal	bother
12	看	砍	证	争	翘	桥
	<i>kan4</i>	<i>kan3</i>	<i>zheng4</i>	<i>zheng1</i>	<i>qiao4</i>	<i>qiao2</i>
	look	chop	certificate	compete	raise	bridge

Table B2. Stimuli used in the Xi'an Mandarin task in Chapter 3.

	<i>Homophone Condition</i>		<i>Translation Condition</i>		<i>Segment Condition</i>	
	<i>Target</i>	<i>Competitor</i>	<i>Target</i>	<i>Competitor</i>	<i>Target</i>	<i>Competitor</i>
1	菜	猜	课	渴	唱	尝
	<i>cai4</i>	<i>cai1</i>	<i>ke4</i>	<i>ke3</i>	<i>chang4</i>	<i>chang2</i>
	dish	guess	class	thirsty	sing	taste
2	夏	虾	贵	鬼	亮	凉
	<i>xia4</i>	<i>xia1</i>	<i>gui4</i>	<i>gui3</i>	<i>liang4</i>	<i>liang2</i>
	summer	shrimp	expensive	ghost	bright	cold
3	画	花	肚	堵	臭	愁
	<i>hua4</i>	<i>hua1</i>	<i>du4</i>	<i>du3</i>	<i>chou4</i>	<i>chou2</i>
	paint	flower	belly	block	smelly	worry
4	替	踢	练	脸	剩	绳
	<i>ti4</i>	<i>ti1</i>	<i>lian4</i>	<i>lian3</i>	<i>sheng4</i>	<i>sheng2</i>
	replace	kick	practice	face	surplus	rope
5	地	低	气	起	笔	鼻
	<i>di4</i>	<i>di1</i>	<i>qi4</i>	<i>qi3</i>	<i>bi3</i>	<i>bi2</i>
	earth	low	gas	up	pen	nose
6	肺	飞	报	宝	粉	坟
	<i>fei4</i>	<i>fei1</i>	<i>bao4</i>	<i>bao3</i>	<i>fen3</i>	<i>fen2</i>
	lung	fly	report	baby	pink	grave
7	戏	西	冻	懂	汤	糖
	<i>xi4</i>	<i>xi1</i>	<i>dong4</i>	<i>dong3</i>	<i>tang1</i>	<i>tang2</i>
	drama	west	freeze	understand	soup	sugar
8	裤	哭	到	岛	天	甜
	<i>ku4</i>	<i>ku1</i>	<i>dao4</i>	<i>dao3</i>	<i>tian1</i>	<i>tian2</i>
	pants	cry	arrive	island	sky	sweet
9	棒	帮	瞪	等	签	钱
	<i>bang4</i>	<i>bang1</i>	<i>deng4</i>	<i>deng3</i>	<i>qian1</i>	<i>qian2</i>
	stick	help	stare	wait	sign	money
10	病	冰	电	点	灰	回
	<i>bing4</i>	<i>bing1</i>	<i>dian4</i>	<i>dian3</i>	<i>hui1</i>	<i>hui2</i>
	ill	ice	electricity	dot	grey	back
11	锈	修	断	短	枪	墙
	<i>xiu4</i>	<i>xiu1</i>	<i>duan4</i>	<i>duan3</i>	<i>qiang1</i>	<i>qiang2</i>
	rust	repair	break	short	gun	wall
12	动	东	烫	躺	秋	球
	<i>dong4</i>	<i>dong1</i>	<i>tang4</i>	<i>tang3</i>	<i>qiu1</i>	<i>qiu2</i>
	move	east	hot	lie	autumn	ball

Appendix C

Table C1. Stimuli used in Chapter 3.

	Target	Distractors		
		Tone-sharing	No-tone-sharing	Unrelated
1	新娘	心脏	信封	头盔
	<i>xin1niang2</i>	<i>xin1zang4</i>	<i>xin4feng1</i>	<i>tou2kui1</i>
	bride	heart	envelope	helmet
2	医生	衣柜	椅子	汽车
	<i>yilsheng1</i>	<i>yilgui4</i>	<i>yizi0</i>	<i>qi4che1</i>
	doctor	wardrobe	chair	car
3	孔雀	恐惧	空气	希望
	<i>kong3que4</i>	<i>kong3ju4</i>	<i>kong1qi4</i>	<i>xi1wang4</i>
	peacock	fear	air	hope
4	企鹅	乞丐	气球	地图
	<i>qi3e2</i>	<i>qi3gai4</i>	<i>qi4qiu2</i>	<i>di4tu2</i>
	penguin	beggar	balloon	map
5	蜥蜴	膝盖	喜剧	城市
	<i>xi1yi4</i>	<i>xi1gai4</i>	<i>xi3ju4</i>	<i>cheng2shi4</i>
	lizard	knee	comedy	city
6	鲸鱼	经理	警察	香水
	<i>jing1yu2</i>	<i>jing1li3</i>	<i>jing3cha2</i>	<i>xiang1shui3</i>
	whale	manager	policeman	perfume
7	屋顶	乌龟	舞蹈	钢琴
	<i>wu1ding3</i>	<i>wu1gui1</i>	<i>wu3dao3</i>	<i>gang1qin2</i>
	roof	turtle	dance	piano
8	羽毛	雨衣	玉米	眼泪
	<i>yu3mao2</i>	<i>yu3yi1</i>	<i>yu4mi3</i>	<i>yan3lei4</i>
	feather	raincoat	corn	tear
9	士兵	世界	时间	经验
	<i>shi4bing1</i>	<i>shi4jie4</i>	<i>shi2jian1</i>	<i>jing1yan4</i>
	soldier	world	time	experience

	Target	Distractors		
		Tone-sharing	No-tone-sharing	Unrelated
10	眼镜	演员	烟花	沙漠
	<i>yan3jing4</i>	<i>yan3yuan2</i>	<i>yan1hua1</i>	<i>sha1mo4</i>
	glasses	actor	firework	desert
11	鸡蛋	机器	季节	比赛
	<i>ji1dan4</i>	<i>ji1qi4</i>	<i>ji4jie2</i>	<i>bi3sai4</i>
	egg	machine	season	match
12	橡皮	相机	香蕉	钱包
	<i>xiang4pi2</i>	<i>xiang4ji1</i>	<i>xiang1jiao1</i>	<i>qian2bao1</i>
	eraser	camera	banana	wallet
13	蜡烛	辣椒	垃圾	词典
	<i>la4zhu2</i>	<i>la4jiao1</i>	<i>la1ji1</i>	<i>ci2dian3</i>
	candle	chili	trash	dictionary
14	鼠标	薯条	数字	雕塑
	<i>shu3biao1</i>	<i>shu3tiao2</i>	<i>shu4zi4</i>	<i>diao1su4</i>
	mouse	fries	number	sculpture
15	礼物	理论	力量	诗歌
	<i>li3wu4</i>	<i>li3lun4</i>	<i>li4liang4</i>	<i>shi1ge1</i>
	present	theory	strength	poem
16	洋葱	阳光	氧气	故事
	<i>yang2cong1</i>	<i>yang2guang1</i>	<i>yang3qi4</i>	<i>gu4shi4</i>
	onion	sunshine	oxygen	story
17	鹦鹉	英雄	影子	邮件
	<i>ying1wu3</i>	<i>ying1xiong2</i>	<i>ying3zi0</i>	<i>you2jian4</i>
	parrot	hero	shadow	mail
18	贝壳	背心	悲剧	窗户
	<i>bei4ke2</i>	<i>bei4xin1</i>	<i>bei1ju4</i>	<i>chuang1hu0</i>
	shell	vest	tragedy	window
19	蜘蛛	芝麻	纸巾	花瓶
	<i>zhi1zhu1</i>	<i>zhi1ma0</i>	<i>zhi3jin1</i>	<i>hua1ping2</i>
	spider	sesame	tissue	vase

	Target	Distractors		
		Tone-sharing	No-tone-sharing	Unrelated
20	珊瑚	山坡	闪电	石头
	<i>shan1hu2</i>	<i>shan1po1</i>	<i>shan3dian4</i>	<i>shi2tou0</i>
	coral	hillside	lightening	rock
21	肩膀	坚果	剪刀	螃蟹
	<i>jian1bang3</i>	<i>jian1guo3</i>	<i>jian3dao1</i>	<i>pang2xie4</i>
	shoulder	nuts	scissor	crab
22	钥匙	药店	摇篮	收据
	<i>yao4shi0</i>	<i>yao4dian4</i>	<i>yao2lan2</i>	<i>shou1ju4</i>
	key	pharmacy	cradle	receipt
23	斑马	扳手	板栗	恐龙
	<i>ban1ma3</i>	<i>ban1shou3</i>	<i>ban3li4</i>	<i>kong3long2</i>
	zebra	wrench	chestnut	dinosaur
24	葡萄	仆人	瀑布	银行
	<i>pu2tao0</i>	<i>pu2ren2</i>	<i>pu4bu4</i>	<i>yin2hang2</i>
	grape	servant	waterfall	bank

Appendix D

Table D1. Stimuli used in Chapter 4.

	English Target	Standard Chinese Distractor			
		Cross-language Homophone		Unrelated	
		<i>Rising</i>	<i>Falling</i>	<i>Rising</i>	<i>Falling</i>
1	ball	<i>bao2</i>	<i>bao4</i>	<i>yang2</i>	<i>yang4</i>
		thin	erupt	sheep	pattern
2	bar	<i>ba2</i>	<i>ba4</i>	<i>ji2</i>	<i>ji4</i>
		pull	dad	urgent	note
3	bee	<i>bi2</i>	<i>bi4</i>	<i>chu2</i>	<i>chu4</i>
		nose	avoid	kitchen	dread
4	fan	<i>fan2</i>	<i>fan4</i>	<i>qing2</i>	<i>qing4</i>
		bother	meal	feeling	celebrate
5	hen	<i>hen2</i>	<i>hen4</i>	<i>xing2</i>	<i>xing4</i>
		mark	hate	ok	apricot
6	jar	<i>jia1</i>	<i>jia4</i>	<i>li2</i>	<i>li4</i>
		cheek	marry	pear	chestnut
7	knee	<i>ni2</i>	<i>ni4</i>	<i>qiang2</i>	<i>qiang4</i>
		mud	greasy	wall	choke
8	lake	<i>lei2</i>	<i>lei4</i>	<i>ti2</i>	<i>ti4</i>
		thunder	tired	lift	shave
9	line	<i>lan2</i>	<i>lan4</i>	<i>du2</i>	<i>du4</i>
		blue	rot	poison	ferry
10	lung	<i>lang2</i>	<i>lang4</i>	<i>you2</i>	<i>you4</i>
		wolf	wave	oil	right
11	mat	<i>mai2</i>	<i>mai4</i>	<i>pa2</i>	<i>pa4</i>
		bury	sell	climb	fear
12	meat	<i>mi2</i>	<i>mi4</i>	<i>fu2</i>	<i>fu4</i>
		maze	honey	bliss	rich
13	bat	<i>bai2</i>	<i>bai4</i>	<i>yan2</i>	<i>yan4</i>
		white	salute	salt	swallow

	English Target	Standard Chinese Distractor			
		Cross-language Homophone		Unrelated	
		<i>Rising</i>	<i>Falling</i>	<i>Rising</i>	<i>Falling</i>
14	pea	<i>pi2</i>	<i>pi4</i>	<i>tuo2</i>	<i>tuo4</i>
		skin	fart	camel	spit
15	pie	<i>pai2</i>	<i>pai4</i>	<i>di2</i>	<i>di4</i>
		row	assign	enemy	brother
16	pin	<i>pin2</i>	<i>pin4</i>	<i>hu2</i>	<i>hu4</i>
		poor	employ	lake	protect
17	tea	<i>ti2</i>	<i>ti4</i>	<i>lu2</i>	<i>lu4</i>
		question	replace	stove	deer
18	tie	<i>tai2</i>	<i>tai4</i>	<i>she2</i>	<i>she4</i>
		table	over	snake	shoot
19	tool	<i>tu2</i>	<i>tu4</i>	<i>wen2</i>	<i>wen4</i>
		picture	rabbit	text	ask
20	tongue	<i>tang2</i>	<i>tang4</i>	<i>qian2</i>	<i>qian4</i>
		candy	trip	money	owe
21	wine	<i>wan2</i>	<i>wan4</i>	<i>ren2</i>	<i>ren4</i>
		play	all	people	blade
22	wood	<i>wu2</i>	<i>wu4</i>	<i>huo2</i>	<i>huo4</i>
		nothing	fog	live	disaster
23	whale	<i>wei2</i>	<i>wei4</i>	<i>rao2</i>	<i>rao4</i>
		surround	flavour	forgive	circle
24	shoe	<i>shu2</i>	<i>shu4</i>	<i>nuo2</i>	<i>nuo4</i>
		redeem	tree	move	promise