**Supplemental Material S6.** Means and standard deviations (in parentheses) of the RT (ms) of the native Mandarin listeners.

	Visual stimuli		Diff.
	Present	Absent	
Auditory stimuli absent			
H+A-V+ vs. H+A-V-	942	962	20
	(144)	(161)	
H–A–V+ vs. H–A–V–	899	895	-4
	(156)	(167)	
Auditory stimuli present	, ,	, ,	
H+A+V+ vs. H+A+V-	822	822	0
	(173)	(145)	
H-A+V+vs. $H-A+V-$	802	769	-33
	(171)	(144)	

Note. Diff. = difference between the absence and presence of the visual stimuli; H+= high variability; H-= low variability; A= auditory; V= visual; A-V-= no stimuli; A-V+= visual only; A+V-= auditory only; A+V+= both auditory and visual.

**Results of the Repeated-measures ANOVA with RT.** The results of the repeated-measures ANOVA with RT as the dependent variable revealed significant main effects of the auditory stimuli (F(1, 29) = 97.175, p < .001,  $\eta_p^2 = .770$ ) and speech variability (F(1, 29) = 25.216, p < .001,  $\eta_p^2 = .465$ ) but no significant main effect of the visual stimuli (F(1, 29) = 0.337, p = .566). Regarding the three-way interaction, we did not detect a significant Visual × Auditory × Variability interaction (F(1, 29) = 0.107, p = .746).