

Supplemental Material S1. Detailed geographic backgrounds of the six talkers and 40 listeners.

Talkers	Gender	Age	Place of birth	Language background
1	F	21.6	Guangdong	Mandarin, Cantonese, Arabic, English
2	F	21.6	Guangdong	Mandarin, Cantonese, Arabic, English
3	F	21.9	Guangdong	Mandarin, Cantonese, Arabic, English
4	F	20.8	Anhui	Jianghuai Mandarin, Mandarin, Arabic, English
5	F	20.9	Guangdong	Mandarin, Cantonese, Arabic, English
6	F	22.1	Guangdong	Mandarin, Cantonese, Arabic, English
Amusics				
1	M	24.0	Shanxi	Jin Chinese, Mandarin, English
2	M	24.4	Henan	Zhongyuan Mandarin, Mandarin, English
3	F	24.9	Shandong	Shandong dialect, Mandarin, English
4	F	32.1	Hebei	Jilu Mandarin, Mandarin, English
5	M	23.4	Hebei	Jilu Mandarin, Mandarin, English
6	F	25.8	Shandong	Shandong dialect, Mandarin, English
7	M	26.4	Heilongjiang	Northeastern Mandarin, Mandarin, English
8	M	26.4	Anhui	Jianghuai Mandarin, Mandarin, English
9	M	22.7	Liaoning	Northeastern Mandarin, Mandarin, English
10	F	19.2	Shanxi	Jin Chinese, Mandarin, English
11	F	27.5	Shandong	Shandong dialect, Mandarin, English
12	F	21.2	Hebei	Jilu Mandarin, Mandarin, English
13	M	18.9	Henan	Zhongyuan Mandarin, Mandarin, English
14	F	21.0	Heilongjiang	Northeastern Mandarin, Mandarin, English
15	M	24.5	Shanxi	Jin Chinese Mandarin, English
16	F	22.9	Hebei	Jilu Mandarin Mandarin, English
17	M	24.8	Hebei	Jilu Mandarin Mandarin, English
18	M	21.4	Henan	Zhongyuan Mandarin, Mandarin, English
19	F	21.1	Shaanxi	Guanzhong dialect, Mandarin, English
20	F	23.6	Shanxi	Jin Chinese, Mandarin, English
Controls				
1	F	23.1	Jilin	Northeastern Mandarin, Mandarin, English
2	F	21.7	Liaoning	Northeastern Mandarin, Mandarin, English
3	F	23.6	Anhui	Jianghuai Mandarin, Mandarin, English
4	F	19.0	Shaanxi	Guanzhong dialect, Mandarin, English
5	M	23.6	Shandong	Shandong dialect, Mandarin, English
6	M	21.7	Shandong	Shandong dialect, Mandarin, English
7	F	20.8	Shandong	Shandong dialect, Mandarin, English
8	F	21.4	Heilongjiang	Northeastern Mandarin, Mandarin, English
9	M	24.4	Henan	Zhongyuan Mandarin, Mandarin, English
10	M	31.2	Tianjin	Tianjin dialect, Mandarin, English
11	M	19.4	Heilongjiang	Northeastern Mandarin, Mandarin, English
12	M	19.5	Liaoning	Northeastern Mandarin, Mandarin, English
13	F	24.1	Jiangsu	Xuzhou dialect, Mandarin, English
14	M	20.2	Shandong	Shandong dialect, Mandarin, English

15	F	27.2	Heilongjiang	Northeastern Mandarin, Mandarin, English
16	M	24.2	Henan	Zhongyuan Mandarin, Mandarin, English
17	M	24.0	Shanxi	Jin Chinese, Mandarin, English
18	F	29.6	Shandong	Shandong dialect, Mandarin, English
19	M	26.4	Hebei	Jilu Mandarin, Mandarin, English
20	F	22.7	Liaoning	Northeastern Mandarin, Mandarin, English

Note. F = female; M = male. Except for Cantonese and Jin Chinese, all the Chinese dialects listed in the table are considered as varieties of Mandarin.