**SUPPLEMENTARY MATERIAL**

## A. Cantonese Stimuli

Table IX. Cantonese stimuli.

| No | Sentence | No | Sentence |
|---|---|---|---|
| 1 | 健仔後悔無去衝浪 | 24 | 出面有一隻靚馬 |
| 2 | 學大提琴好有魅力 | 25 | 佢並冇拜佛嘅習慣 |
| 3 | 唔好成日都咁厭世 | 26 | 山腳下面係個碼頭 |
| 4 | 伯公有十幾個老死 | 27 | 小慧唔見咗啲珍珠 |
| 5 | 公司冇資格去投標 | 28 | 冇人知道佢想離婚 |
| 6 | 嗰個男人唔係詩人 | 29 | 阿輝準備抵制疫苗 |
| 7 | 個鬼佬上過報紙 | 30 | 阿哥覺得人工好低 |
| 8 | 王婆婆唔習慣影相 | 31 | 阿婆每日買藥材 |
| 9 | 我同謙仔反對欺凌 | 32 | 阿妹想要去做推拿 |
| 10 | 阿勇要乾淨嘅藥棉 | 33 | 華仔費事睇指南 |
| 11 | 阿杰畫咗一座山 | 34 | 呢隻牛成日嚟呢度 |
| 12 | 阿金識得唱梵文 | 35 | 二樓有間香燭舖 |
| 13 | 採礦工作好鬼危險 | 36 | 嗰隻狗望實個包 |
| 14 | 佢哋見到條水蛇 | 37 | 強仔居然咁鬼敗家 |
| 15 | 呢個島好似隻煎蛋 | 38 | 一班人睇緊煙花 |
| 16 | 佢搵緊人生嘅意義 | 39 | 宜家唔興講電話 |
| 17 | 禮金都有南北差異 | 40 | 我以為呢個係甜嘅 |
| 18 | 潘生自己整藥酒 | 41 | 我唔想學整雪櫃 |
| 19 | 政府拒絕出口礦產 | 42 | 明仔嘅阿爸係逃犯 |
| 20 | 我老豆未試過買馬 | 43 | 佢好似唔想被打攪 |
| 21 | 司機攞咗兩個蘋果 | 44 | 祥仔冇時間做手術 |
| 22 | 呢隻香水竟然致癌 | 45 | 我姑丈被控偷渡 |
| 23 | 隻貓咬爛左塊樹葉 | | |

**B. A linear mixed effect model was run separately for the ratings in the post-experiment test on images:** Attractiveness/Friendliness/Approachability ratings~ ethnicity + (1|ID) + (1|Face)

TABLE X. Model results for 40 people's ratings on South Asian faces and White faces.

| | | Est. | SE | t value | *p* |
|---|---|---|---|---|---|
| **Attractiveness** | Intercept | 6.25 | 0.42 | 14.9 | <.001 |
| | **Ethnicity** (South Asian) | -1.0 | 0.53 | -1.89 | 0.067 |
| **Friendliness** | Intercept | 6.36 | 0.43 | 14.83 | <.001 |
| | **Ethnicity** (South Asian) | -0.11 | 0.46 | -0.23 | .81 |
| **Approachability** | Intercept | 6.07 | 0.42 | 14.56 | <.001 |
| | **Ethnicity** (South Asian) | -0.01 | 0.46 | -0.02 | .98 |

**C. The scree plot of the PCA results.**

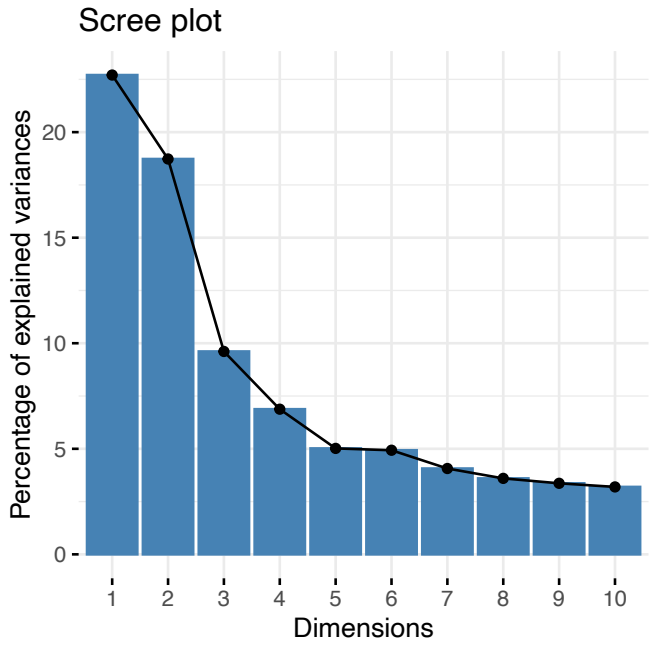


FIG. 4. The scree plot of the PCA results.

**D. The face effect: the results of generalised logistic mixed effect models for MAN and CAN.**

CAN/MAN/ENG base model: glmer(cbind(correct,incorrect) ~ Face + (1|group)+(1|image) + (1|trial), data= CAN/MAN/ENG, family = binomial(), control = glmerControl(optimizer = "bobyqa") )

Table XI. Results of logistic mixed effect models for the face.

| **Accent = CAN** | **Est.** | **SE** | **z-value** | ***p*** |
|---|---|---|---|---|
| (intercept) | 3.87 | 0.19 | 20 | **<.001** |
| **Face (South Asian vs Silhouette)** | 0.10 | 0.13 | 0.08 | 0.93 |
| **Face (White vs Silhouette)** | 0.03 | 0.13 | 0.26 | 0.79 |
| **Face (White vs South Asian)** | 0.02 | 0.11 | 0.21 | 0.84 |
| **Marginal/Conditional $R^2$** | 0.0001/0.73 | | | |
| | | | | |
| **Accent = MAN** | **Est.** | **SE** | **z-value** | ***p*** |
| (intercept) | 1.73 | 0.21 | 8.41 | **<.001** |
| **Face (South Asian vs Silhouette)** | 0.14 | 0.10 | 1.33 | 0.18 |
| **Face (White vs Silhouette)** | 0.17 | 0.10 | 1.61 | 0.11 |
| **Face (White vs South Asian)** | 0.03 | 0.07 | 0.40 | 0.69 |
| **Marginal/Conditional $R^2$** | 0.003/0.78 | | | |

**E. The item analysis of face images for South Asian and White faces**

To test whether there is an effect of the image, a generalised logistic mixed effect model was run separately for the white faces and the South Asian faces using the formulas below. The reference level of images changed to test all the comparisons. Only the significant comparisons were shown in the table.

glmer(cbind(correct,incorrect) ~ image + (1|Accent)+ (1|trial), data=White/SouthAsian, family = binomial(), control = glmerControl(optimizer = "bobyqa") )

Table XII. Results of the logistic mixed effect models for the image.

| **Face = white** | **Est.** | **SE** | **z-value** | ***p*** |
|---|---|---|---|---|
| (intercept) | 2.83 | 0.70 | 4.06 | <.001 |
| **Image (Face_W01 vs Face_W04)** | -1.03 | 0.52 | -1.98 | **0.048*** |
| **Face = South Asian** | **Est.** | **SE** | **z-value** | ***p*** |
| (intercept) | 2.99 | 0.69 | 4.35 | <.001 |
| **Image (Face_SA01 vs Face_SA04)** | -1.31 | 0.50 | -2.62 | **0.0087*** |

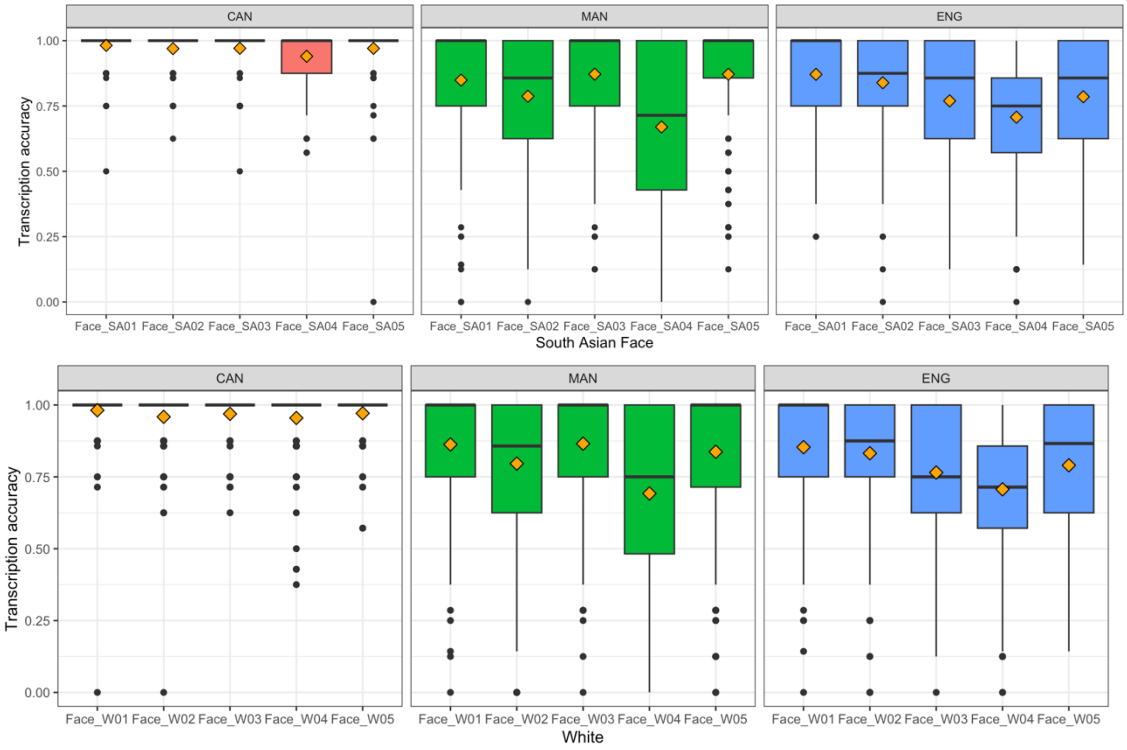


FIG. 5. Transcription accuracy by image across three accent conditions in boxplots with means (the diamond in the bar).

**F. Logistic mixed effect models for the interaction between attitude factors and face for each accent.**

Table XIII. The results of model comparisons between the base model and the model with an interaction between face and attitude factors.

| | CAN | | | MAN | | | ENG | | |
|---|---|---|---|---|---|---|---|---|---|
| | $\chi^2$ | df | p | $\chi^2$ | df | p | $\chi^2$ | df | p |
| Factor 1 | 40.74 | 3 | **<.001** | 35.41 | 3 | **<.001** | 13.4 | 3 | **0.004** |
| Factor 2 | 5.03 | 3 | 0.17 | 4.15 | 3 | 0.25 | 5.93 | 3 | 0.115 |
| Factor 3 | 10.27 | 3 | **0.016** | 46.42 | 3 | **<.001** | 5.93 | 3 | 0.115 |
| Factor 4 | 2.73 | 3 | 0.44 | 6.04 | 3 | 0.11 | 8.62 | 3 | **0.035** |

Table XIV. The summary of pair-wise comparisons for the interaction between face and attitude factors.

| | Comparisons | CAN | MAN | ENG |
|---|---|---|---|---|
| **Factor 1 (Status)** | **Silhouette vs South Asian** | **0.005** | ns | ns |
| | **Silhouette vs White** | ns | **<.001** | **0.046** |
| | **White vs South Asian** | **0.006** | **<.001** | **0.013** |
| **Factor 2 (Friendliness)** | **Silhouette vs South Asian** | **0.024** | ns | ns |
| | **Silhouette vs White** | ns | ns | **0.0501** |
| | **White vs South Asian** | ns | ns | ns |
| **Factor 3 (Competence)** | **Silhouette vs South Asian** | ns | **<.001** | ns |
| | **Silhouette vs White** | **0.02** | **<.001** | ns |
| | **White vs South Asian** | **0.026** | ns | ns |
| **Factor 4 (Energetics)** | **Silhouette vs South Asian** | ns | ns | ns |
| | **Silhouette vs White** | ns | ns | ns |
| | **White vs South Asian** | ns | ns | ns |

**G. Summary of *p* values in pair-wise comparisons for the interactions between face and attitude factors.**

Table XV. Summary of *p* values in pair-wise comparisons for the interactions between face and attitude factors. A significant *p*-value indicates a significant improvement in model fit by adding the interaction. "ns" represents no significance.

| | Comparisons | CAN | MAN | ENG |
|---|---|---|---|---|
| **Factor 1 (Status)** | **Silhouette vs South Asian** | **0.005** | ns | ns |
| | **Silhouette vs White** | ns | **<.001** | **0.046** |
| | **White vs South Asian** | **0.006** | **<.001** | **0.013** |
| **Factor 2 (Friendliness)** | **Silhouette vs South Asian** | **0.024** | ns | ns |
| | **Silhouette vs White** | ns | ns | **0.05** |
| | **White vs South Asian** | ns | ns | ns |
| **Factor 3 (Competence)** | **Silhouette vs South Asian** | ns | **<.001** | ns |
| | **Silhouette vs White** | **0.02** | **<.001** | ns |
| | **White vs South Asian** | **0.026** | ns | ns |
| **Factor 4 (Energetics)** | **Silhouette vs South Asian** | ns | ns | ns |
| | **Silhouette vs White** | ns | ns | ns |
| | **White vs South Asian** | ns | ns | ns |

**H. A list of model formulas for all the models used in this paper**

| Model | formula | marginal $R^2$/ conditional $R^2$ |
|---|---|---|
| Table IV. Accentedness | lm(accentedness~Face*Accent, data=All_data) | 0.71 |
| Table V. Face effect on Attitudes | Local Cantonese: lm(Factor 1 factor scores ~ Face) | 0.002 |
| | Local Cantonese: lm(Factor 2 factor scores ~ Face) | 0.0003 |
| | Local Cantonese: lm(Factor 3 factor scores ~ Face) | 0.002 |
| | Local Cantonese: lm(Factor 4 factor scores ~ Face) | 0.03 |
| | Mandarin accent: lm(Factor 1 factor scores ~ Face) | 0.098 |
| | Mandarin accent: lm(Factor 2 factor scores ~ Face) | 0.12 |
| | Mandarin accent: lm(Factor 3 factor scores ~ Face) | 0.006 |
| | Mandarin accent: lm(Factor 4 factor scores ~ Face) | 0.027 |
| | English accent: lm(Factor 1 factor scores ~ Face) | 0.071 |
| | English accent: lm(Factor 2 factor scores ~ Face) | 0.002 |
| | English accent: lm(Factor 3 factor scores ~ Face) | 0.026 |
| | English accent: lm(Factor 4 factor scores ~ Face) | 0.038 |
| Table VI. The full dataset | glmer(cbind(correct,incorrect) ~ Face*Accent + (1\|group)+(1\|image) + (Accent\|trial) | 0.36/0.85 |
| Table VII. The face effect | Local Cantonese accent: glmer(cbind(correct,incorrect) ~ Face + (1\|group)+(1\|image) + (1\|trial) | 0.0001/0.73 |
| | Mandarin-accented Cantonese: glmer(cbind(correct,incorrect) ~ Face + (1\|group)+(1\|image) + (1\|trial) | 0.003/0.78 |
| | English-accented Cantonese: glmer(cbind(correct,incorrect) ~ Face + (1\|group)+(1\|image) + (1\|trial) | 0.008/0.78 |
| Table VIII. Models used for comparison | Local Cantonese: glmer(cbind(correct,incorrect) ~ Face*Factor1_status + (1\|group)+(1\|image) + (1\|trial) | 0.04/0.74 |
| | Local Cantonese: glmer(cbind(correct,incorrect) ~ Face*Factor2_friendliness + (1\|group)+(1\|image) + (1\|trial) | 0.005/0.73 |
| | Local Cantonese: glmer(cbind(correct,incorrect) ~ Face*Factor3_competence+ (1\|group)+(1\|image) + (1\|trial) | 0.011/0.73 |
| | Local Cantonese: glmer(cbind(correct,incorrect) ~ Face*Factor4_energetics + (1\|group)+(1\|image) + (1\|trial) | 0.003/0.73 |
| | Mandarin accent: glmer(cbind(correct,incorrect) ~ Face*Factor1_status + (1\|group)+(1\|image) + (1\|trial) | 0.01/0.78 |
| | Mandarin accent: glmer(cbind(correct,incorrect) ~ Face*Factor2_friendliness + (1\|group)+(1\|image) + (1\|trial) | 0.004/0.78 |

| | | |
|---|---|---|
| | Mandarin accent: glmer(cbind(correct,incorrect) ~ Face*Factor3_competence+ (1\|group)+(1\|image) + (1\|trial) | 0.01/0.78 |
| | Mandarin accent: glmer(cbind(correct,incorrect) ~ Face*Factor4_energetics + (1\|group)+(1\|image) + (1\|trial) | 0.004/0.78 |
| | English accent: glmer(cbind(correct,incorrect) ~ Face*Factor1_status + (1\|group)+(1\|image) + (1\|trial) | 0.01/0.78 |
| | English accent: glmer(cbind(correct,incorrect) ~ Face*Factor2_friendliness + (1\|group)+(1\|image) + (1\|trial) | 0.009/0.78 |
| | English accent: glmer(cbind(correct,incorrect) ~ Face*Factor3_competence+ (1\|group)+(1\|image) + (1\|trial) | 0.009/0.78 |
| | English accent: glmer(cbind(correct,incorrect) ~ Face*Factor4_energetics + (1\|group)+(1\|image) + (1\|trial) | 0.008/0.78 |