
The Effect of Priming on Accent Attitudes

An Examination of Their Affective and Cognitive Bases

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Presentation Outline

1. Approaches to attitudes in social psychology
2. Approaches to attitudes in sociolinguistics
3. Methodology: linking social psychology and sociolinguistics
4. Results & discussion
5. Conclusions & future work

The Tripartite Model of Attitudes

- Three distinct attitudinal components have been found.
 - ✓ Attitudinal responses load on distinct factors.

Affect

The emotional or feeling-based evaluation of an attitude object.
E.g. This song is *very pleasant* (positive affect).

Cognition

The thought- or fact-based evaluation of an attitude object.
E.g. This song is *too fast* (negative cognition).

Behaviour

The past and intended physical manifestations toward an object.
E.g. I *will buy* this song (positive intended behaviour).

Attitudinal Affect vs. Cognition

- Attitudes towards some objects have been found to rely more on affect than cognition and vv.

Affect-based

- Marijuana and alcohol (experienced users)
- Snakes, literature, and maths

Cognition-based

- Capital punishment
- Presidential candidates
- Church

Both components

- Capital punishment
- Presidential candidates

Priming Method – Affect vs. Cognition

- Priming involves the presentation of a stimulus to activate an idea, category, or feeling (Step 1) and measure the effects of the prime on some other task (Steps 2/3).
 - ✓ Step 1 – prime stimuli: positive/negative & affective/cognitive persuasive cues (e.g. messages and pictures).
 - ✓ Step 2 – target stimuli: attitude objects, like maths and literature, Chinese ideographs (neutral valence), and lemphurs (fictitious animals).
 - ✓ Step 3 – evaluation: e.g. scales and open-ended lists.
 - Affective scalar examples: pleasant-unpleasant, and exciting-boring.
 - Cognitive scalar examples: useful-useless, and safe-unsafe.

Priming Stimuli Examples

- Affective priming pictures (target stimulus: Chinese characters)
 - ✓ Five different female faces in 10 photographs: 5 positively-valenced (happy) and 5 negatively-valenced (sad) expressions.
- Cognitive priming messages (target stimulus: Chinese characters)
 - ✓ Positive valence: the Chinese ideograph's strokes were described as well-balanced strokes and properly proportioned.
 - ✓ Negative valence: the Chinese ideograph's strokes were as thin and brittle.

Priming Results – Affect vs. Cognition

- Persuasive appeals are more effective when their basis (affective / cognitive) matches the basis of the attitude (affective / cognitive).
 - ✓ Affective appeals significantly and consistently influence affectively-based attitudes.
 - ✓ Cognitive appeals may influence cognitively-based attitudes non-significantly.

Attitudinal Methods in Sociolinguistic Studies

Direct approach: the phonetic varieties are directly evaluated.

- ✓ Attitude objects: conceptual accent labels, or vocal samples. E.g. the label 'a Mancunian accent'; or Mancunian accent recording(s).
- ✓ Evaluative technique: accent-specific questions. E.g. *Is this accent pleasant? How would you rate this accent's pleasantness?*

Indirect approach: the phonetic varieties are indirectly evaluated.

- ✓ Attitude objects: vocal samples. E.g. London accent recording(s).
- ✓ Evaluative technique: no accent specific questions. E.g. *Does the speaker sound pleasant? How would you rate the pleasantness of what you heard?*

Tripartite Model in Accent Attitude Studies

- No primary study has examined affect and cognition in relation to accent-attitude formation.
- No distinction among affect, cognition, and global attitudes.
 - ✓ Global attitudinal traits (e.g. good-bad and favourable-unfavourable) have been applied to both components.
- Affect induction only via negative stimuli accompanying the accents.
 - ✓ Equating of affect with negative valence (e.g. white noise, aggressive speech, and disfluency).

Tripartite Model in Accent Attitude Studies

- Affect has been examined only as participant moods.
 - ✓ Evaluation scales with participant moods (e.g. happy) but without affectively-based traits of the phonetic varieties (e.g. pleasant).
- One theoretical account of language attitudes connects them to the tripartite model.
 - ✓ Affect-cognition (and behaviour) distinction.
 - ✓ Language attitudes may be largely, or even entirely, affective in nature.
 - ✓ Affect is still treated as participant moods.

Methodology

- Affective priming of explicit/conscious and indirect attitudes towards non-novel/fictitious attitude objects (British accents) using thematically irrelevant prime stimuli.
 - ✓ Examination of how constantly-changing contextual stimuli modify sociolinguistic perception/attitudinal formation.
- Ten-minute online survey.
- 68 university students, aged 18-25, UK-born/raised.

Methodology: Prime Stimuli

- Affective pictures aimed at maximum affective priming impact via reduced processual demand.
 - ✓ Visual/pictorial → pictures are processed faster than words.
 - Positive prime (PosP; beach)
 - Negative prime (NegP; man vomiting)
 - Neutral prime (NeuP; rolling pin)
 - ✓ Shown supraliminally and separately from the target stimuli → no audio-visual processing.
 - ✓ Thematically irrelevant → text-less pictures cannot showcase accents.

Methodology: Target Stimuli

- Recordings of the same weather forecast performed in three phonetic varieties: Received Pronunciation (RP), standard Edinburgh, and Birmingham.
 - ✓ Content valence: neutral, with 'bad' and 'good' weather information.
 - ✓ Speaker: male professional phonetician (matched-guise technique).
- Six neutral pictorial target stimuli (NeuT): e.g. zipper and lamp.
 - ✓ Presented among the recordings to distract the participants and represent neutrally-valenced target stimuli, unlike the accents.

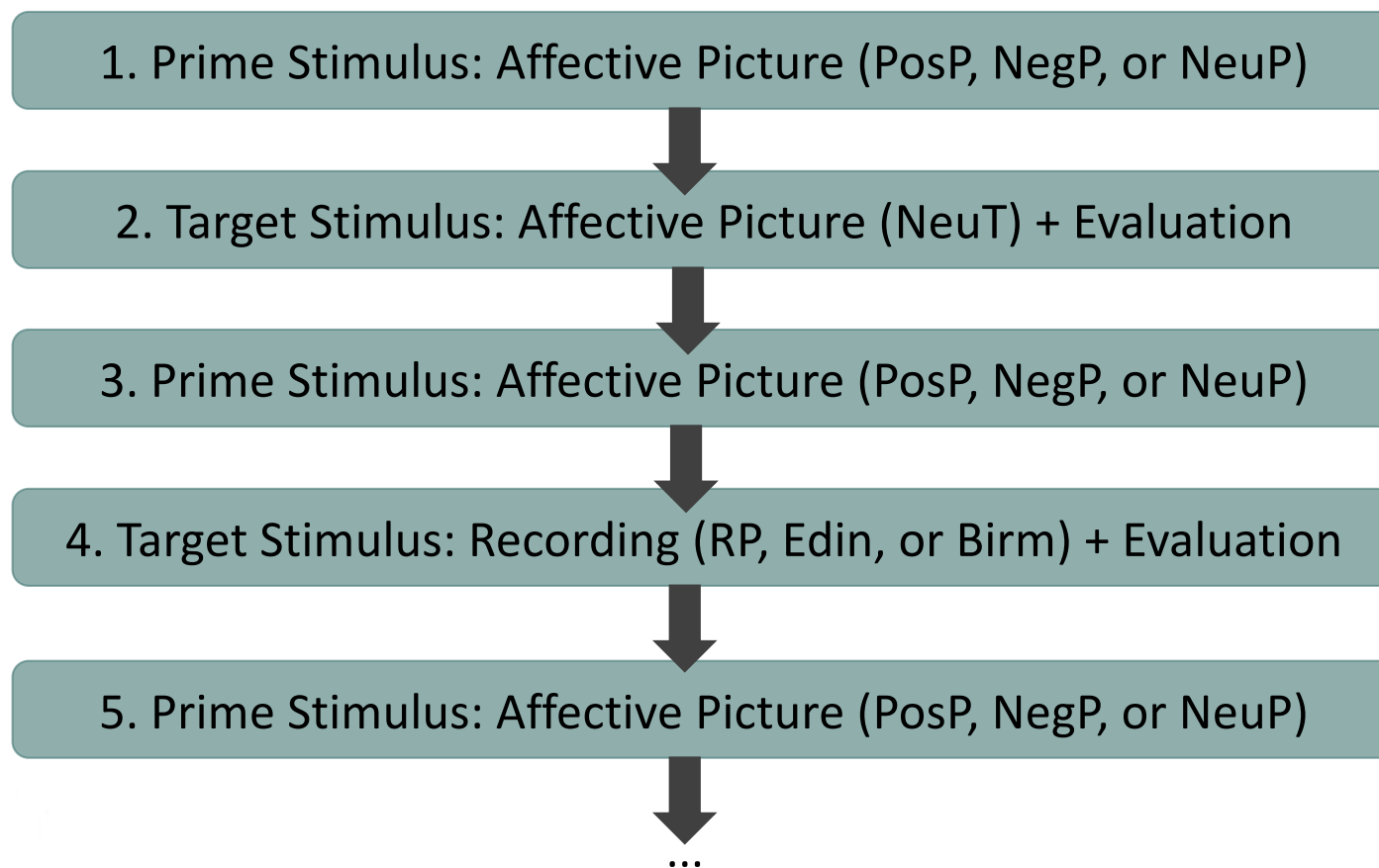
Methodology: Evaluations

- Evaluation of speaker/weather forecaster:
 - ✓ Eight six-point semantic differential scales with personality traits (binary ends accompanied by adverb 'extremely').
 - ✓ Two trait dimensions: solidarity and status.
 - Solidarity traits: pleasant–unpleasant, sincere–insincere, friendly–unfriendly, and reliable–unreliable
 - Status traits: articulate–inarticulate, certain–uncertain, knowledgeable–ignorant, and refined–unrefined.
 - ✓ Trait and dimension choices based on: (a) previous accent-attitude studies; (b) the speaker's profession; and (c) the *Evaluative Lexicon* (EL).

Methodology: Evaluations

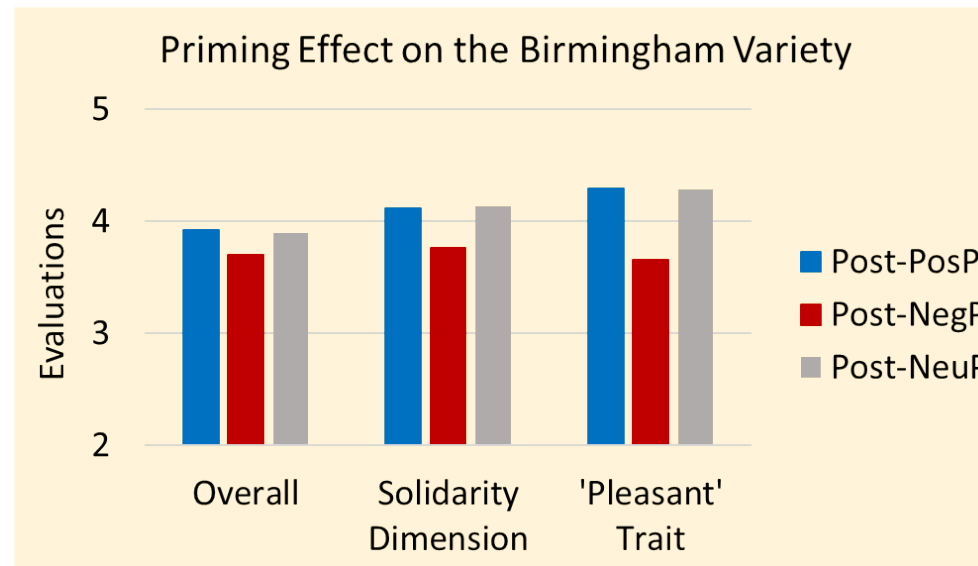
- The EL contains the emotionality scores (0-9) of over 1.500 English words from millions of attitudinal discourses by native-English speakers.
 - ✓ Matching of solidarity traits to higher emotionality scores (affective) and status traits to lower emotionality scores (cognitive).
 - ✓ E.g. pleasant/unpleasant = 5.73/5.21 vs. knowledgeable/ignorant = 2.5/4.
- Evaluation of NeuT: Directly evaluated on six-point 'extremely negative' to 'extremely positive' scales (global attitude traits).

Study Flow Recap



Results: Intra-Varietal Priming

- Birmingham: overall, the solidarity dimension, and the trait 'pleasant' were rated significantly higher post-PosP than post-NegP.



Results: Intra–Varietal Priming

- RP/Edinburgh: the status traits ‘sincere’ and ‘certain’ were rated significantly higher post-PosP than post-NegP.
- No other significant priming influences.
- Only attitudes towards the Birmingham variety showed extensive affective priming: overall, solidarity, and trait levels.
- A general, (non)significant post-PosP > post-NegP rating tendency was observed within each variety.

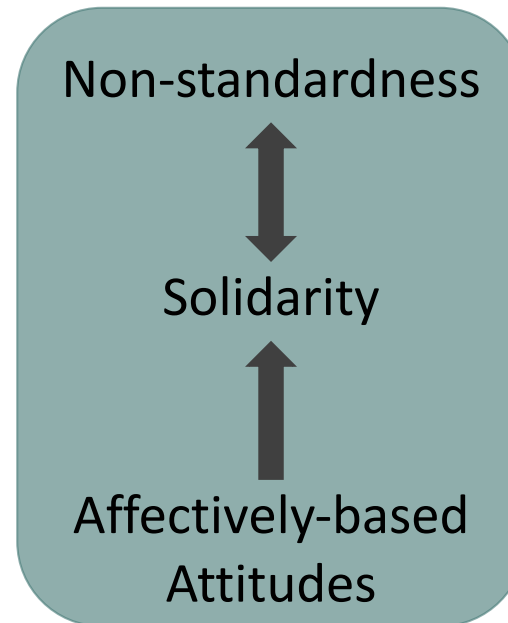
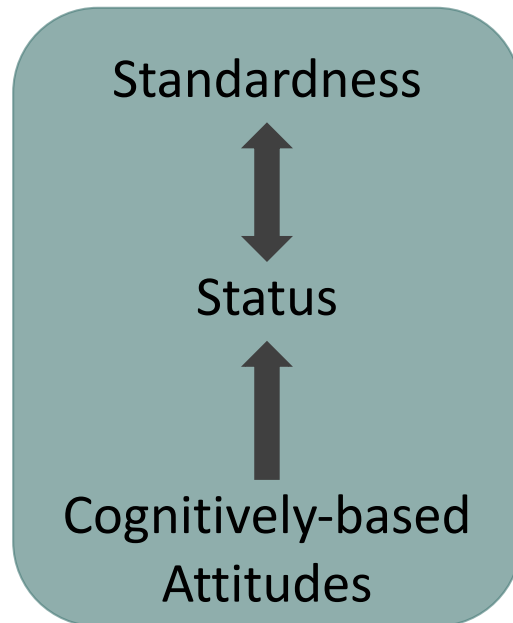
Discussion

- The participants' primed emotions contributed to their accent evaluations, whether significantly or not.
- The solidarity evaluations were significantly primed for Birmingham, the non-standard variety.
- Unlike solidarity, attitudes towards the status dimension were non-significantly primed.
- The rigidity of the attitudes toward the status dimension contrasts the primeability of the attitudes toward the solidarity dimension.

Discussion

- Significant affective priming of attitudes toward Birmingham overall and towards the solidarity dimension.
 - ✓ Link between non-standardness and solidarity (affective priming).
- Non-significant affective priming of attitudes toward RP/Edinburgh overall and toward the status dimension.
 - ✓ Link between standardness and status (no affective priming).
- The EL matched solidarity traits to higher emotionality evaluations (affectively) than status traits (cognitive).
 - ✓ By extension, the ‘non-standardness/solidarity & standardness/status’ binary set can develop to include affective and cognitive attitude bases.

Discussion



Conclusions & Future Work

- Accent attitudes can be affectively primed.
- (Non)standardness could function as an independent variable in the affective/cognitive formation of accent attitudes.
- The effect of cognitive priming will be operationalised and contrasted to that of affective priming.
- Thematically relevant but indirect primes (i.e. written messages) will be employed.
- More phonetic varieties will be included.

Selected Bibliography

- Albarracin, D., & Shavitt, S. (2018). Attitudes and Attitude Change. *Annual Review of Psychology*, 69, 299–327.
- BBC. (2017). *BBC Weather* [Online]. Available at: <http://www.bbc.co.uk/weather>.
- Breckler, S. J. (1984). Empirical Validation of Affect, Behavior, and Cognition As Distinct Components of Attitude. *Journal of Personality and Social Psychology*, 47(6), 1191–1205.
- Cameron, C. D., Brown-Iannuzzi, J. L., & Payne, B. K. (2012). Sequential Priming Measures of Implicit Social Cognition: A Meta-Analysis of Associations With Behavior and Explicit Attitudes. *Personality and Social Psychology Review*, 16(4), 330–350. <https://doi.org/10.1177/1088868312440047>
- Cargile, A. C., Giles, H., Ryan, E. B., & Bradac, J. J. (1994). Language attitudes as a social process: A conceptual model and new directions. *Language & Communication*, 14(3), 211–236. [https://doi.org/10.1016/0271-5309\(94\)90001-9](https://doi.org/10.1016/0271-5309(94)90001-9)
- Coupland, N., & Bishop, H. (2007). Ideologised values for British accents. *Journal of Sociolinguistics*, 11(1), 74–93. <https://doi.org/10.1111/j.1467-9841.2007.00311.x>
- Crites, S. L., Fabrigar, L. R., & Petty, R. E. (1994). Measuring the Affective and Cognitive Properties of Attitudes: Conceptual and Methodological Issues. *Personality and Social Psychology Bulletin*, 20(6), 619–634. <https://doi.org/10.1177/0146167294206001>
- Dragojevic, M., & Giles, H. (2016). I Don't Like You Because You're Hard to Understand: The Role of Processing Fluency in the Language Attitudes Process. *Human Communication Research*, 42(3), 396–420. <https://doi.org/10.1111/hcre.12079>
- Edwards, K. (1990). The Interplay of Affect and Cognition in Attitude Formation and Change. *Journal of Personality and Social Psychology*, 59(2), 202–216. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2000-07085-000&site=ehost-live>

Selected Bibliography

- Garrett, P., Coupland, N., & Williams, A. (2003). *Investigating Language Attitudes: Social Meanings of Dialect, Ethnicity and Performance* (pp. 82–110).
- Giles, H. (1970). Evaluative Reactions To Accents. *Educational Review*, 22(3), 211–227.
<https://doi.org/10.1080/0013191700220301>
- Giles, H., Baker, S., & Fielding, G. (1975). Communication length as a behavioral index of accent prejudice. *International Journal of the Sociology of Language*, 73–82. <https://doi.org/10.1515/ling.1975.13.166.73>
- Giles, H., Williams, A., Mackie, D. M., & Rosselli, F. (1995). Reactions to Anglo- and Hispanic-American-accented speakers: Affect, identity, persuasion, and the English-only controversy. *Language and Communication*, 15(2), 107–120.
[https://doi.org/10.1016/0271-5309\(94\)00019-9](https://doi.org/10.1016/0271-5309(94)00019-9)
- Glaser, W. R. (1992). Picture Naming. *Cognition*, 42, 61–105.
- Lang, P.J., Bradley, M.M., & Cuthbert, B. N. (2008). *International affective picture system (IAPS): Affective ratings of pictures and instruction manual. Technical Report A-8*. <https://doi.org/10.1016/j.epr.2006.03.016>
- Rocklage, M. D., Rucker, D. D., & Nordgren, L. F. (2018). The Evaluative Lexicon 2.0: The measurement of emotionality, extremity, and valence in language. *Behavior Research Methods*, 50(4), 1327–1344. <https://doi.org/10.3758/s13428-017-0975-6>
- Sebastian, R. J., Ryan, E. B., Keogh, T. F., & Schmidt, A. C. (1980). The Effects of Negative Affect Arousal on Reactions to Speakers. In *Language: Social Psychological Perspectives* (pp. 203–208). <https://doi.org/10.1016/B978-0-08-024696-3.50035-1>
- Simons, J., & Carey, K. B. (1998). Attitudes toward Alcohol and Marijuana Use. *Personality and Social Psychology Bulletin*, 24(7), 727–735.