LISTENERS' COGNITIVE AND AFFECTIVE REACTIONS TO ENGLISH SPEAKERS WITH STANDARD AMERICAN ENGLISH AND ASIAN ACCENTS'

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Summary.—Using a 2 (speaker accent: standard American, Asian) × 2 (speakers' sex: male, female) between-subjects design, the present study examined the effects of accent and sex on listeners' cognitive and affective reactions towards speakers with standard American English accents and Asian accents. 70 female and 27 male college students (M=21.8 yr., SD=4.7) listened to the audio recording of a monologue by one of the speakers in the early 20s who differed in accent and sex. Standard American English was operationalized as nonaccented English, typical of the western part of the USA, and Vietnamese-accented English was used as an exemplar of Asian-accented English. Results showed that relative to standard American-accented English speakers. Asian-accented English speakers were perceived as poorer communicators who were less potent, less threatening, and more concerned about others. These cognitive reactions to Asian-accented English speakers include (a) the general stereotype associated with an accent, status and solidarity, as well as (b) the stereotype unique to Asians as an ethnic group, being concerned for others and poorer communicators. Analysis also showed that speakers with an Asian accent evoked more negative affect and required more attention from listeners than did speakers with a standard American English accent. Implications of the study are discussed.

Research on social cognition has consistently shown that individuals often form impressions about others and evaluations of them based on such superficial attributes as age, racial or ethnic background, and physical appearance (Hamilton, 1981; Gill, 1994). In addition to these physical cues, research on language attitudes has demonstrated that language variations, that is, accents and dialects, play an important role in perceptions of and judgments about individuals (for reviews, see Ryan & Giles, 1982; Ryan, Hewstone, & Giles, 1984; Cargile, Giles, Ryan, & Bradac, 1994; Cargile & Bradac, 2001).

Recent reviews of research on language attitudes conducted in Australia, Britain, Canada, the USA, and elsewhere (e.g., Cargile, et al., 1994; Cargile & Bradac, 2001) have indicated that speakers' accents and regional dialects are associated with variations in listeners' evaluations of speakers on (a) status, including perceived intelligence, wealth, and competence, and (b) solidarity dimensions, including perceived friendliness or kindness. Overall, the

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research indicates that the accent or dialect of a dominant group in a society is evaluated more positively on the status dimension but less positively on the solidarity dimension than the accent or dialect of less dominant groups (e.g., Nesdale & Rooney, 1990; Cargile, *et al.*, 1994; Cargile & Bradac, 2001).

In addition to the considerable attention devoted to listeners' evaluative reactions to speakers with accents or dialects on the two above-noted dimensions, Ryan (1979) raised an important question concerning the separability and universality of such dimensions: "Do judges distinguish between standard and nonstandard speakers along separable dimensions, or does one overriding factor (e.g., social status) dominate to the exclusion of others?" (p. 153). Ryan suggests that language attitudes might include both basic universal aspects, i.e., social status and solidarity, as well as more specific situation-dependent aspects (e.g., stereotypes associated with a given ethnic group). In addition, several other researchers (e.g., Cargile & Bradac, 2001) agree that listeners' reactions to language reflect not only on the language stimulus but also on the perceived social attributes of a speaker, e.g., sex, ethnicity, or nationality. Indeed, Nesdale and Rooney (1990) indicated that accents elicit ethnic stereotypes.

Further, research on attitudes toward accents has been criticized because it has focused exclusively on listeners' cognitive reactions towards speakers with an accent or dialect, neglecting to examine affective reactions to them (Cargile & Giles, 1998). Finally, despite the fact that Asians are one of the fastest growing segments of the population in the USA, only three studies conducted in the USA (Podberesky, Deluty, & Feldstein, 1990; Gill, 1994; Cargile, 1997) have examined listeners' attitudes towards a variety of Asian-accented English speakers, i.e., Chinese, Japanese, Korean, Malaysian, and Vietnamese. However, the results of these studies are inconsistent, indicating a need for more empirical evidence on attitudes regarding these Asian groups.

Thus, using theory and research on the area of social cognition, the present study examined both listeners' cognitive and affective reactions to Asian-accented English speakers, in comparison to standard American English speakers. More specifically, in the present study, (a) standard American English was operationalized as the nonaccented English that is typical of the western part of the USA, i.e., northern California, and (b) Asian-accented English was operationalized using speakers with Vietnamese accents (who are seldom studied).

Theory and research on social cognition suggest that individuals often use one or more distinct or salient attributes of a stimulus person to assign him to a particular social category. Certain such attributes, including age, sex, and skin color, are "primitive" dimensions, and categorization based

upon these dimensions is a seemingly automatic and unconscious process (e.g., Brewer, 1988; Devine, 1989). Because a certain language or accent can often serve as a salient marker of a speaker's race or ethnicity (Ryan & Sebastian, 1980; Ryan, *et al.*, 1984), listeners are likely to categorize a speaker on the basis of the highly salient attribute of his accent, especially when it is distinctly foreign.

Categorization leads to a number of consequences (Hamilton, 1981). One is the activation of the stereotype associated with a given social category and the generation of expectations about the person (Brewer & Kramer, 1985; Hamilton, Sherman, & Ruvolo, 1990; Stone, Stone, & Dipboye, 1992). For example, when an individual is classified as being physically attractive, others use the stereotype associated with physical attractiveness to generate a set of beliefs about the person, including those that pertain to intelligence, social competence, and success (e.g., Hosoda, Stone-Romero, & Coats, 2003).

Cognitive Reactions to Speakers with Accent

When an individual speaks with a foreign accent, a listener is likely to categorize the speaker on the basis of his accent, and the stereotype associated with the accent will be activated and a set of beliefs about him will be generated that is based on the stereotype. Extensive research on listeners' cognitive reactions to speakers with foreign accents has consistently shown that relative to speakers with standard American English accents, foreign-accented English speakers are rated more negatively on such social status-related attributes as intelligence, wealth, and competence, even by listeners who speak with foreign accents. The devaluation of foreign-accented English speakers on social status often stems from listeners thinking that foreign-accented speakers are of low class (Ryan & Sebastian, 1980). Interestingly, however, when these speakers are evaluated on attributes related to such solidarity-related dimensions as kindness, friendliness, integrity, and social attractiveness, foreign-accented English speakers are often rated as favorably or more favorably than speakers with standard American English accents.

An exception to the rather consistent findings considered above is that speakers of a few varieties of foreign-accented English in the USA, i.e., those of the British and "Asian" varieties, have not been downgraded on attributes related to social status. Rather, they have been downgraded on attributes related to solidarity and attractiveness (Stewart, Ryan, & Giles, 1985; Podberesky, et al., 1990; Gill, 1994; Cargile, 1997).

For example, Stewart, et al. (1985) reported that Euro-American college students viewed British-accented English speakers as having greater social status (e.g., being more intelligent and successful) but of lower solidarity (e.g., less trustworthy and sincere) than standard American English speakers. Lal-

wani, Lwin, and Li (2005) also found that college students in Singapore rated British-accented speakers higher on the status dimension of professionalism, but lower on the solidarity dimension of affinity, than speakers with the local English accent of "Singlish." Likewise, Cargile (1997) found that Euro-American and Asian-American college students did not downgrade Chinese-accented English speakers on the status dimension but evaluated them more unfavorably on the solidarity dimension relative to speakers with standard American English accents. A probable explanation for the lack of devaluation of the above noted foreign-accented speakers on the social status dimension is that Americans perceive these groups to be of equal or greater status (Cargile, 1997). However, a study by Feurtes and Celso (2000), who examined Euro-American college students' perceptions of hypothetical counselors with different accents, found that speakers with standard American English accents and speakers with Hispanic accents were rated similarly on the dimensions of expertness, attractiveness, and trustworthiness.

Ryan (1979) indicated that cognitions about foreign-accented individuals might consist of both basic universal aspects (i.e., social status and solidarity) and more specific situation-dependent aspects (i.e., stereotypes associated with a particular ethnic group). This suggests that, when a listener perceives a speaker's foreign accent as that of an Asian and classifies the speaker as being an Asian, the universal stereotype associated with the accent itself, i.e., social status and solidarity, is activated. In addition, the stereotype associated with Asians as a group, which may not be part of the universal stereotype, i.e., concern for others, being motivated, poor communicators, is likely to be activated. Consistent with this assertion, several researchers maintain that listeners' responses to language depend not only on the language stimulus but also on the perceived social attributes of a speaker, e.g., nationality or ethnicity (Cargile & Bradac, 2001).

However, research has examined listeners' cognitive reactions to speakers with accents or dialects only on the dimensions of social status and solidarity and has not examined whether the stereotype associated with the perceived race or nationality of a speaker is also activated. Although Gallois and Callan (1981) reported that "accents do not necessarily call up a particular national group stereotype" (p. 357), a more recent study (Nesdale & Rooney, 1990) showed that accents did elicit national stereotypes of the groups to which speakers were perceived to belong. These findings suggest that cognitive evaluations of speakers might reflect both the stereotype associated with an accent and the stereotype associated with the racial or ethnic group to which speakers are perceived to belong.

Eagly, Ashmore, Makhijani, and Longo (1991) asserted that individuals' evaluative beliefs about others are made with respect to at least six major evaluative dimensions: (a) Social Competence, including interpersonal skills

and traits (sociable, fun loving) and the successful outcomes of such skills (popularity, likeability); (b) Intellectual Competence, including intellectual ability (intelligent) and rational mental style (logical); (c) Concern for Others, including social sensitivity (sensitive), nurturance (generous), and lack of egotism (modest, not egotistic); (d) Integrity, including honesty (honest, trustworthy); (e) Adjustment, including normal psychological functioning and indicators of positive adjustment such as good mental health (well adjusted) and high self-esteem (positive self-regard); and (f) Potency, including power (strong, self-assertive, leader) and dominance (dominant, acting as leader), implying dominance over others.

Research on racial stereotypes shows that Asians are often stereotyped as being intelligent, hard-working, ambitious, being concerned for others, honest, law-abiding, but socially introverted (i.e., reserved or quiet), being poor communicators, and lacking in confidence, assertiveness, and leadership qualities (Maykovich, 1976; Eagly & Kite, 1987; Karlins, Coffman, & Walters, 1988; Woo, 2000). Given the possibility that cognitive reactions to foreign-accented English speakers include the universal stereotype associated with the accent itself and the specific stereotype associated with Asians, the following hypotheses were tested.

Hypotheses 1a-1b: Compared to standard American English-accented speakers, listeners will evaluate Asian-accented English speakers more favorably on attributes related to social status (H1a) but less favorably on attributes related to solidarity (H1b).

Hypotheses 2a-2f: Asian-accented English speakers also will be evaluated on the basis of the Asian racial stereotype. More specifically, compared to standard American English-accented speakers, Asian-accented English speakers will be evaluated more favorably on attributes related to motivation (H2a), concern for others (H2b), integrity (H2c), and threat (H2d) but less favorably on attributes related to communication (H2e) and adjustment (H2f).

Affective Reactions to Speakers with Accents

Another consequence of categorization is the activation of affect. According to Fiske (1982), affect is stored within a cognitive schema (stereotype) and is available immediately upon the categorization of a stimulus. The available evidence suggests that the nature of the affect that is integral to contexts involving intergroup contact is often negative in tone (Stephan & Stephan, 1985; Dijker, 1987; Bodenhausen, 1993; Vanman & Miller, 1993) and includes such affective reactions as anxiety, uneasiness, and discomfort (e.g., Stephan & Stephan, 1985; Vanman & Miller, 1993).

Although attitudes include both affective and cognitive reactions to an attitude object (McGuire, 1985), research on attitudes towards speakers with accents is thought to represent an affective vacuum (Giles, Williams, Mackie,

& Rosselli, 1995). That is, researchers have focused their attention exclusively on listeners' cognitive reactions to accented speakers, neglecting their affective reactions. The lack of attention to listeners' affective reactions towards speakers with foreign accents is noteworthy because affect is a crucial component in intergroup relations (e.g., Hamilton, 1981). Although empirical evidence on affective reactions towards foreign-accented speakers is extremely limited, it suggests that listeners experience more negative affect towards foreign-accented English speakers than towards standard Americanaccented English speakers. This is true for British-accented English speakers (Stewart, et al., 1985), German-accented English speakers (Ryan & Bulik, 1982), Japanese-accented English speakers (Cargile & Giles, 1997), and Spanish-accented English speakers (Sebastian, Ryan, Keogh, & Schmidt, 1980). An exception to this general pattern of results was obtained by Giles, et al. (1995) who reported that among Euro-American listeners, Hispanic-accented English speakers did not induce a more negative mood than did standard American-accented English speakers.

Although no studies have examined the effects of foreign accents on the amount of attention that listeners devote to speakers with and without foreign accents, it can be reasonably expected that, given differences in speech, foreign-accented English speakers will require more cognitive resources, i.e., attention, from listeners than standard American-accented English speakers.

In view of these findings, the present study tested the following hypotheses: Hypothesis 3a-3c: Listeners will experience less positive affect (H3a) and more negative affect (H3b) towards Asian-accented English speakers than towards standard American-accented English speakers. Furthermore, listeners will be more attentive (H3c) to Asian-accented English speakers than to standard American-accented English speakers.

Finally, because the majority of the studies have focused on male speakers as targets, Ryan and Bulik (1982) have called for more studies that examine listeners' reactions towards female speakers. Thus, the present study included both male and female speakers for each type of accent to examine whether the cognitive and affective reactions of listeners would differ between male and female speakers.

Hypothesis 4: The cognitive and affective reactions of listeners will differ between male and female speakers.

METHOD

Participants

A total of 97 college students participated in the present study as part of an assignment for additional credit that could be applied to their final course grades. The sample was diverse in terms of its ethnic composition: 39% Asian (n=38), 23% Euro-American (n=22), 18% Hispanic American

(n = 17), 4% African American (n = 4), and 15% of mixed-ethnicity (n = 15). Seventy-two percent (n = 70) of participants were women. Participants' ages ranged from 18 years to 48 years (M = 21.8 yr., SD = 4.7).

The majority of participants in the study (79%, n=77) had friends who spoke English with an accent, and 60% of these participants interacted with these friends on a regular basis, meaning more than twice a week. Fifty-two percent (n=50) of the participants spoke only English at home, 39% (n=38) spoke English and other language(s), and 8% (n=8) of the participants spoke only a language other than English at home. Finally, 37% of the participants (n=36) indicated that their parents spoke only English at home, and 61% (n=59) reported that their parents either spoke both English and other languages or only a language other than English at home.

Procedure

Each experimental session involved a small group of participants, ranging in size from 3 to 8. At the beginning of each session, an experimenter explained that interest lay in examining their opinions about a person whose voice would be heard on a tape recorder. Participants were informed that the person would briefly describe self for 60 sec. The recording included information about the speaker's favorite things to do, a recent movie that he saw, and an experience related to a first job. No information that could identify the ethnicity of speakers, e.g., name, was included in the recording. Participants were told they would be asked to complete several questionnaires after listening to the recording.

After this brief explanation, participants were asked to complete a consent form and were then provided with a packet containing the question-naires. Attached to the packet was an instruction sheet. It informed participants to listen to a tape recording of a person briefly describing self and then to fill out questionnaires designed to assess their reactions to the person. They were then instructed to complete questions on demographic information. After the questionnaires were completed, participants were provided with a written debriefing statement.

Manipulations

Both speakers' accent (standard American, Asian) and speakers' sex (male, female) were experimentally manipulated through the "verbal guise" technique. This technique utilizes different speakers for each accent condition, all of whom speak with their usual accents. A male and a female Euro-American were the native speakers of standard American-accented English, and a male and a female Vietnamese were the native speakers of Vietnamese-accented English. The latter two individuals were exemplars of Asian-accented English speakers. All of the speakers were college students in their early 20s.

Note that the "verbal guise" technique used in the present study contrasts with the "matched guise" technique, which uses one bilingual or bicultural speaker who takes on the accents of his two cultures. Although the "verbal guise" technique has been criticized for a potential lack of control over the variations in paralinguistic features, e.g., pitch, tone, and voice quality, across different accented speakers, it has the important advantage of employing natural rather than feigned accents which might only represent the speaker's stereotypes (e.g., Gallois & Callan, 1981; Edwards, 1982; Nesdale & Rooney, 1990; Podberesky, et al., 1990). Thus, an effort was made to ensure that paralinguistic features, e.g., pitch and tone, were constant across all the experimental conditions by monitoring the recording of the stimulus audiotapes. Participants were randomly assigned to one of the four experimental conditions, each a unique combination of speakers' sex and speakers' accent.

Measures

Cognitive reactions.—A 59-item, 7-point bipolar adjective scale was developed to measure participants' cognitive reactions towards the speakers. Using Eagly, et al.'s classification of personality attribute dimensions (1991) mentioned above, the bipolar adjectives were categorized into nine dimensions; (a) Intellectual Competence (8 items; $\alpha = .83$; e.g., unintelligent-intelligent, uneducated-educated); (b) Potency (13 items; α = .85; e.g., unsuccessful-successful, follower-leader); (c) Social Competence (13 items; $\alpha = .84$; e.g., unlikeable–likeable, unsociable–sociable); (d) Motivation (6 items; α = .70; e.g., not ambitious-ambitious, lazy-hard working); (e) Concern for Others (5 items; $\alpha = .70$; e.g., unhelpful-helpful, inconsiderate-considerate); (f) Integrity (6 items; $\alpha = .77$; e.g., unreliable—reliable, untrustworthy—trustworthy); (g) Nonthreatening (2 items; r = .57, dangerous-safe, threatening-nonthreatening); (h) Communication (1 item, does not communicate well-communicates well); and (i) Adjustment (5 items; $\alpha = .68$; e.g., unconfident-confident, insecure-self-assured). Item scores were summed and averaged for each dimension. The higher the score on a dimension, the more positively the speaker was perceived.

It should be noted that intellectual competence and potency could be considered attributes that pertain to social status. Social competence could be viewed as an aspect of solidarity. Other attributes, i.e., motivation, concern for others, integrity, nonthreatening, communication, adjustment, are considered stereotypical of Asians.

Affective reactions and attention.—A 24-item scale was developed to measure affective reactions evoked by the speaker and attention paid to the speaker. The scale included a variety of positive and negative feelings that often have been associated with intergroup contact, e.g., anxious, at ease,

comfortable, and irritated (Dijker, 1987). It also included items designed to assess attention devoted to the speaker, e.g., attentive or alert. Participants were asked to indicate their responses to each item using a 5-point Likert-type scale, with anchors of 1: very slightly or not at all and 5: extremely.

The affect-oriented items were subjected to an exploratory factor analysis, yielding four factors which explained 66% of the total variance. On the basis of the same analysis, the items were grouped into four dimensions, and an internal consistency estimate of reliability was computed for each: (a) Positive Affect (7 items; α =.89; e.g., happy, at ease, comfortable); (b) Negative Affect (8 items; α =.86; e.g., annoyed, impatient, confused); (c) Attentiveness (3 items; α =.80; e.g., attentive, alert); and (d) Self-consciousness (6 items; α =.75; e.g., self-conscious, vulnerable, guilty). Item scores were summed and averaged for each dimension.

Manipulation Checks

Speaker's accent.—Four items (α =.94) were used to assess the effectiveness of the accent manipulation. Participants were asked to indicate (a) the heaviness of the speaker's accent, (b) how noticeable was the speaker's accent, (c) the ease of understanding the speaker, and (d) how easy it would be to converse with the speaker. They did so using items in a 7-point semantic differential scale. Scores on the four items were summed and averaged. The higher the score, the heavier the accent was perceived to be and the harder it was to understand the speaker.

Speaker ethnicity.—Participants were asked to write down the perceived ethnicity of the speaker to whom they listened.

RESULTS

Manipulation Checks

An analysis of variance supported the effectiveness of the accent manipulation ($F_{1,92}$ =415.62, p<.001). As intended, Asian-accented English speakers were perceived as having a stronger accent (M=5.6, SD=.9) than were standard American-accented English speakers (M=1.8, SD=1.0). Furthermore, 80% of the participants (n=40) in the standard American-accented English condition correctly identified the speakers as Euro-American, and 89% of the participants (n=42) in the Asian-accented English condition correctly identified the speakers as either Asian (n=30) or of an Asian nationality (n=12; 6 as Vietnamese, 2 as Chinese, 1 as Japanese, 1 as Asian Indian). A multivariate analysis of variance showed that there were no differences in ratings on the measured variables between those who correctly identified the ethnicity of the speakers and those who did not in the standard American English condition ($F_{13.33}$ =1.02, p=.46, Λ =.71). Likewise, there were no differences in ratings on the measured variables between those who

identified the ethnicity of the speakers as Asian and those who used specific Asian nationality in the Asian-accented English condition ($F_{15,24}=1.15$, p=.38, $\Lambda=.62$). As expected, there was no effect of speaker's accent on participants' perceptions of the pitch of the speaker's voice ($F_{1.93}=1.03$, p>.05) and the tempo of speech ($F_{1.93}=1.13$, p>.05). Therefore, all of the data were used for testing the study's hypotheses.

Tests of Hypotheses

Table 1 presents zero-order correlations for the manipulated and measured variables. Before testing the hypotheses, whether the ethnicity of participants, the type of language these participants spoke at home, or both interacted with speaker's accent to influence the measured variables were examined. A 2 (speaker's accent: standard American, Asian) × 2 (listener's ethnicity; Asian American, non-Asian American) multivariate analysis of variance and a 2 (speaker's accent: standard American, Asian) × 2 (language spoken at home: English only, English/other language or other language only) multivariate analysis of variance were conducted. The dependent variables in each of the multivariate analyses of variance were intellectual competence, potency, social competence, motivation, concern for others, integrity, nonthreatening, communication, adjustment, positive affect, negative affect, attention, and self-consciousness. Both multivariate analyses of variance indicated that neither listener ethnicity ($F_{13,73} = 1.70$, p = .80, $\Lambda = .77$) nor language spoken at home ($F_{33.73} = 1.43$, p = .17, $\Lambda = .80$) interacted with speaker's accent to influence the measured variables.

Furthermore, a 2 (speaker accent: standard American, Asian) \times 2 (speaker's sex: male, female) multivariate analysis of variance was conducted to test Hypothesis 4, which predicted that the cognitive and affective reactions of listeners would differ for male and female speakers. The multivariate analysis of variance suggested a main effect for accent ($F_{13.74}$ =4.70, p=.000, Λ =.55) but no main effect for speaker's sex ($F_{13.74}$ =1.74, p=.07), and no interaction effect between speaker's sex and speaker's accent ($F_{13.74}$ =1.76, p=.07), so data were collapsed on speaker's sex, and all the study's hypotheses were tested using a one-way multivariate analysis of variance with speaker's accent as an independent variable. This analysis was followed by an analysis of variance.

As can be seen in Table 1, the variables concerned with cognitive reactions were not highly correlated with those dealing with affective reactions. Therefore, to hold the Type I error rate at or below .05 for the study, the hypotheses pertaining to cognitive reactions were tested using a Type I error rate of .006, and the hypotheses pertaining to affective reactions were tested using a Type I error rate of .01. Table 2 shows descriptive statistics for the cognitive and affective outcomes as a function of speaker's accent.

TABLE 1
PEARSON CORRELATIONS AMONG MANIPULATED AND MEASURED VARIABLES

PEARSON CORRELATIONS AMONG MANIPULATED AND MEASURED VARIABLES															
	1.	2	3	4	5	6	7	8	9	10	11	12	13	[4	15
1. Speakers' accent															
2. Speakers' sex	03														
3. Intellectual competence	I.5	.13	.83												
4. Potency	36\$.06	.64‡	.85											
Social competence	.14	08	.55‡	.21*	.84										
6. Motivation	.07	.10	.67‡	.50\$.52‡	.70									
7. Concern for others	.30字	.13	.33\$] .4	.60\$.33\$.70								
8. Integrity	.25*	.13	.543	.01	.53‡	.55\$.63‡	.77							
9. Nombreatening	.26†	.14	.17	314	.47\$.09	.57%	.50\$							
10. Communication	39‡	.09	.46‡	.59‡	.44\$.25*	.08	10	.01						
 Adjustment 	20	.16	.70#	.60\$.62‡	.58‡	.25*	.43#	.23*	.52\$.68				
12. Positive affect	23°	.05	.46‡	.25°	.44‡	.21*	.11	.26†	.22*	.47%	.38\$.89			
Negative affect	.4()‡	.()4	39‡	39‡	301	11	.16	10.	.07	45#	39\$	27 [†]	.86		
14. Attention	.35‡	10	.15	.00	.36‡	.25**	.25*	.31%	.22*	.10	.11	.311	.16	.80	
15. Self-consciousness	.01	.08	10	10	()3	04	.18	.09	.09	.03	1.1	.311	.36‡	.25*	.75

Note.—Numbers in boldface are Cronbach alpha reliability estimates. ns ranged from 93 to 97. *p < .05. †p < .01. ‡p < .001.

TABLE 2

Mean Cognitive and Affective Reactions to Speakers as a Function of Speakers' Accent

Measure	Anglo-accer	sted (n=47)a	Asian-accented $(n = 43)^b$		
	M	SD	M	SD	
Intellectual competence	5.1	.7	5.0	.8	
Potency	4.2	.7	3.7	.8	
Social competence	5.1	.8	5.2	.7	
Motivation	5.0	0.1	5.1	.8	
Concern for others	4.8	.9	5.3	.8	
Integrity	5.1	-8	5.5	.8	
Nonthreatening	5.6	1.0	6.2	1.0	
Communication	5.1	2.0	3.6	1.9	
Adjustment	5.2	.9	4.9	.9	
Positive affect	2.9	1.1	2.5	1.0	
Negative affect	1.3	.4	1.8	.7	
Attention	2.4	1.0	3.2	1.0	
Self-consciousness	1.4	.5	1.5	.6	

*The original number of participants was 50. b The original number of participants was 47.

Cognitive reactions to the speaker.—Hypotheses 1a and 1b predicted that, compared with standard American-accented English speakers, listeners would evaluate Asian-accented English speakers more favorably on the status dimension (H1a) but less favorably on the solidarity dimension (H1b). As noted above, intellectual competence and potency are reflections of the social status dimension, whereas social competence is indicative of the solidarity dimension. Hypotheses 1a and 1b were not supported. As far as the social status dimension was concerned, relative to standard American-accented English speakers, Asian-accented English speakers were not rated as being more intellectually competent ($F_{1.88}$ =1.03, p=.31) but were rated as being less potent ($F_{1.88}$ =12.06, p=.001). When the solidarity dimension was considered, Asian-accented English speakers were not rated as being less socially competent ($F_{1.88}$ =1.09, p=.30) than standard American-accented English speakers.

Hypotheses 2a-2f predicted that Asian-accented speakers would be evaluated more favorably on attributes related to motivation (H2a), concern for others (H2b), integrity (H2c), and being nonthreatening (H2d) but less favorably on attributes related to communication (H2e) and adjustment (H2f). This hypothesis was partially supported. The analysis of variance indicated effects of accent on concern for others ($F_{1,88} = 7.58$, p = .006), being nonthreatening ($F_{1,88} = 7.95$, p = .006), and communication ($F_{1,88} = 13.39$, p = .001). Consistent with the hypotheses, Asian-accented English speakers were viewed as being more concerned for others (M = 5.3, SD = .8 vs M = 4.8, SD = .9), less threatening (M = 6.2, SD = 1.0 vs M = 5.6, SD = 1.0), and less able to communicate well (M = 3.6, SD = 1.9 vs M = 5.1, SD = 2.0) than standard American-accented English speakers.

In summary, compared to the standard American-accented English speakers, the Asian-accented English speakers were rated more negatively on potency and communication but more positively on concern for others and being nonthreatening.

Affective reactions to the speaker.—Hypothesis 3a-3c predicted that listeners would experience less positive affect (H3a) and more negative affect (H3b) towards Asian-accented English speakers than towards standard American-accented English speakers. It was also predicted that listeners would be more attentive to Asian-accented English speakers than standard American-accented English speakers (H3c). In support of Hypothesis 3b, analyses of variance showed that participants reported that they experienced more negative affect when they listened to Asian-accented English speakers (M=1.8, SD=.7) than when they listened to standard American-accented English speakers (M=1.3, SD=.4; $F_{1.88}=16.01$, p=.001). They were also more attentive when they listened to the Asian-accented English speakers (M=3.2, SD=1.0) than when they listened to the standard American-accented English speakers (M=2.4, SD=1.0; $F_{1.88}=13.38$, p=.001). However, positive affect did not differ as a function of speaker's accent ($F_{1.88}=2.78$, p=.10).

Discussion

Given the influx of immigrants to the United States during the last several decades, it is increasingly likely that standard American-accented English speakers will interact with individuals who speak English with a foreign accent regularly and across a wide variety of contexts, including workplaces, classrooms, and communities. Although research has consistently shown that compared to standard American-accented English speakers, foreign-accented English speakers are perceived less positively on attributes related to social status and more positively on attributes related to solidarity and social attractiveness, Ryan (1979) suggested that cognitive evaluations of speakers with an accent include both the universal stereotype associated with the accent and the specific stereotype associated with an ethnic group to which the speaker is perceived to belong. Thus, the present study considered this issue.

Effects of Foreign Accents

Overall, the present study's analyses suggest that the way individuals speak and how listeners interpret their speech has important consequences: listeners had different affective and cognitive reactions to Asian-accented English speakers than to standard American-accented English speakers. More specifically, the present study indicated that cognitive evaluations of Asian-accented English speakers include both (a) the basic universal aspects, i.e., social status and solidarity, and (b) the more situation-specific aspects, i.e., the stereotype associated with Asians.

In terms of the social status dimension, Asian-accented English speakers

were not upgraded on intellectual competence, but they were downgraded on potency. These results contrast with the findings of research on other Asian groups, i.e., Chinese and Japanese, in which selected Asian groups were not necessarily downgraded on the social status dimension (e.g., Gill, 1994; Cargile, 1997). In the present study, potency was measured by items referring to success, leadership, and power. The devaluation of Asian-accented speakers on potency might reflect the stereotype associated with Asians. As mentioned above, Asians are often stereotyped as lacking in terms of leadership qualities, assertiveness, and dominance. With regard to the solidarity dimension, Asian-accented English speakers were not necessarily downgraded relative to standard American-accented English speakers. The relatively favorable ratings of Asian-accented English speakers on the social status dimension and unfavorable ratings on the solidarity dimension might be limited to a few select Asian ethnic groups, not to all Asians.

In addition to the universal stereotype associated with an Asian accent, this accent also activated the stereotype associated with this racial group. Therefore, Asian-accented English speakers were also perceived as more being concerned for others and less threatening but poorer communicators. Consistent with Nesdale and Rooney (1990), the present study indicated that listening to Asian-accented English seems to elicit the stereotype associated with Asians.

Rival Explanations for Findings

Setting of study and nature of participants.—One explanation for the lack of devaluation of Asian-accented speakers on certain dimensions might be sociological and demographic factors (Podberesky, et al., 1990). The present study was conducted in northern California, which has large Hispanic and Asian populations, including many immigrants who speak English with an accent. Thus, it is possible that many of the participants had been exposed to speakers with accented English on a regular basis or that they themselves were the offspring of speakers with various accents. Likewise, the university in which the study was conducted has a large proportion of students and teachers who speak with accents or were born in other countries. Thus, the participants might have had a large amount of positive and close interaction with instructors, professors, or other students with accents, which may have contributed to the minimization of negative stereotyping (Podberesky, et al., 1990).

Indeed, the majority of the participants (79%) had friends who spoke accented English, and more than half of them reported that they interacted with these friends on a regular basis. Likewise, about 48% of the participants were either bilingual or spoke a language other than English at home. Furthermore, 61% of the participants indicated that their parents were either bi-

lingual or spoke a language other than English. Thus, it may be that, given participants' high familiarity with speakers with an Asian accent and the positive stereotype associated with Asians, the present study yielded no evidence of a consistent devaluation of Asian-accented speakers on attributes related to the solidarity dimension.

Difficulty in comprehension.—Consistent with earlier studies (e.g., Sebastian, et al., 1980; Ryan & Bulik, 1982; Cargile & Giles, 1997), the present study showed that Asian-accented English speech elicited more negative affect than standard American-accented English speech. Given the relative lack of research attention paid to the examination of affective reactions toward foreign-accented English speech, this finding suggests that the examination of affective reactions to accented speech is important and that studies of attitudes toward accents should consider both cognitive and affective reactions to speakers with foreign accents. One explanation concerns difficulty in comprehension (r = .52 with negative affect, p < .001) and the subsequent difficulty experienced in verbal interactions (r = .52 with negative affect, p < .001).

Attention demands.—It deserves mention that the present study also indicated that foreign-accented speech required more attention from listeners than standard American-accented English speech, probably because foreign-accented speech is more difficult to comprehend. This finding has a very important implication: when individuals have limited attention, e.g., they are working on a complex task or working on more than one task, information from individuals with a foreign-accent may not be processed properly. This could lead to misunderstanding or miscommunication between foreign-accented speakers and nonforeign-accented listeners, generating some strain in workplace relationships and lowered productivity, and influencing how such speakers may be viewed and evaluated.

It is noteworthy that sex of the speaker did not interact with accent to influence listeners' affective and cognitive reactions to speakers with different type of accents. Because most studies have focused on male speakers, Ryan and Bulik (1982) noted more studies be done to examine listeners' reactions towards female speakers. However, the present study's results suggest that listeners' affective and cognitive reactions towards accented-English speakers are not affected by the speaker's sex.

Limitations and Research

There are several potential limitations of the present study's findings. First, the limited number of speakers, i.e., one speaker per experimental condition, is not truly a representative sample of either an accent or sex, as the specific aspects of the speaker could also influence listeners' judgments. This limits internal validity; it is not known whether differences in listeners' cog-

nitive and affective reactions were related to a speaker's accent or a speaker's idiosyncrasies. Thus, researchers should use either the "matched guise" technique, i.e., bilingual or bicultural speakers, or the "verbal guise" technique, including more than one speaker per accent condition. The 'matched guise' technique ensures that listeners are reacting to differences in accent, not differences among speakers because the same speaker is used across the conditions. The 'verbal guise' technique is likely to increase one's confidence in drawing conclusions about the accent and not about the speakers in the study because several speakers were used to represent a given accent, thereby decreasing the possibility that a study's results are an artifact of speakers' idiosyncrasies.

Second, because the present study used only one type of Asian accent, it is not known if the findings apply to speakers of other types of Asian accents. Although 65% of the participants who listened to the Vietnamese-accented English identified the speakers as Asians, these participants probably responded cognitively and affectively to the Asian accent, rather than to the Vietnamese accent. Indeed, several researchers have pointed out that listeners find it difficult to identify correctly the ethnicity of an accented speaker of a particular race (Kalin, Rayko, & Love, 1980; Gallois & Callan, 1981; Podberesky, et al., 1990). For example, Podberesky, et al. (1990) noted that college students could not distinguish the different varieties of either (a) Spanish-accented speech, i.e., Cuban, Costa Rican, Argentinean, and Puerto Rican, or (b) Asian-accented speech, i.e., Japanese, Chinese, Korean, and Vietnamese. Thus, research must be designed to evaluate listeners' reactions to the speakers of different nationalities within a given racial group, i.e., Chinese, Korean, or Japanese. However, it seems likely that once listeners identify the race of speakers, they might respond to the general stereotype associated with the racial group, regardless of the different ethnicities of the speakers. The results of the present study are somewhat inconsistent with those examining other Asian groups, i.e., Chinese and Japanese. Thus, researchers should examine potential differences in cognitive and affective reactions to speakers with different types of Asian accented English speech.

Third, the present study compared only standard American-accented English speech with speech that had a relatively heavy foreign accent. It did not consider slight or moderately heavy foreign accents. Thus, it is not known whether similar results would be obtained had other severities of foreign accent been studied, so researchers should examine this issue.

Fourth, the present study did not directly examine stereotypes associated with Asians. Instead, participants were implicitly assumed to use cultural stereotypes to make judgments of Asian-accented English speakers. Thus, researchers should measure stereotypes as well as cognitive and affective reactions to Asian-accented English speakers.

Fifth, although the present study examined the effects of the ethnicity of listeners (Asian, non-Asians) and accent, little attention has been given potential effects of listeners' ethnicity on reactions to foreign-accented individuals. For example, Latino or Latina listeners might react differently to Asian-accented English speakers than Euro-American listeners. Likewise, Asian/Asian American listeners might react differently to Mexican-accented English speakers than Euro-American listeners, so such potential effects require study.

Sixth, the present study recorded no effects of a speaker's sex on listeners' cognitive and affective reactions to the speakers. However, it would be interesting to study the effects of listeners' sex as well. To explore whether male and female listeners react differently to male and female speakers, a 2 (speaker accent: standard American, Asian) × (2 (speakers' sex: male, female) × 2 (listeners' sex: male, female) multivariate analysis of variance was conducted on the measured variables. In the present study, results showed that male and female listeners reacted similarly to both male and female speakers. However, given the relatively small number of male listeners and consequently the small number in each condition, results should be interpreted with caution and further study undertaken.

Seventh, one might argue that topics of the idiosyncratic scripts followed by the speakers in the present study influenced listeners' judgments. Regrettably, there is no way of knowing if this occurred. Present speech samples were developed to deal with topics felt to be relevant to most college students, i.e., favorite things to do or first job experience; however, accented speech could be applied to different scripts.

Eighth, the effects of context, i.e., type of speech, on listeners' evaluations have been somewhat inconsistent; some studies show that the context in which a speech is embedded does not influence listeners' reactions to speakers (e.g., Lay, 1989; Gill & Badzinski, 1992; Bresnahan, Ohashi, Nebashi, Liu, & Shearman, 2002), whereas other studies show that speakers' accent and content of a passage are associated with ratings on status and solidarity dimensions (e.g., Callan, Gallois, & Forbes, 1983; Cargile, 1997), so clarification should be sought.

Finally, the present study focused only on cognitive and affective reactions towards foreign-accented speakers in a nonspecific context. As Kalin (1982) has pointed out, researchers should examine the consequences of both cognitive and affective reactions, especially in contexts wherein accurate communication is important, e.g., occupational, legal, and medical situations. For example, Gill (1994) showed that participants recalled more information from teachers who spoke standard American-accented English than from teachers who spoke nonstandard American-accented English in a hypothetical classroom setting. Likewise, foreign-accented English speakers have often

been shown to be less successful in the job market than standard Americanaccented English speakers, especially in high status jobs, e.g., as managers (e.g., Giles, Wilson, & Conway, 1981; Kalin, 1982).

In sum, the present study makes clear that in a multiethnic society such as ours, in which one dominant language is spoken, foreign-accented speech is a readily recognizable cue for racial group membership and may be associated with perceptions of and judgments about a speaker. More importantly, perceptions of foreign-accented individuals include both the basic universal aspects—the stereotype associated with an accent (social status and solidarity), and more situation-specific aspects—a stereotype associated with the perceived racial identity of individuals with foreign-accents. Further, speakers with an Asian accent evoked more negative affect and required greater attention from listeners than did the standard American English speakers.

Ryan, et al. (1984) argued that "... the dominant group promotes its patterns of language use as the model required for social advancement, and use of a lower prestige dialect or accent by minority group members reduces their opportunities for success in the society as a whole" (p. 1). Consistent with this, the present study affirms that speakers with foreign-accented English might experience reduced opportunities for social advancement as they are viewed as less potent and as less able to communicate well. Several questions are raised which may motivate additional research on listeners' cognitive and affective reactions to accented English speech.

REFERENCES

- Bodenhausen, G. V. (1993) Emotions, arousal, and stereotypic judgements: a heuristic model of affect and stereotyping. In D. M. Mackie & D. L. Hamilton (Eds.), Affect, cognition, and stereotyping: interactive processes in group perception. San Diego, CA: Academic Press. Pp. 13-37.
- Bresnahan, M. J., Ohashi, R., Nebashi, R., Liu, W. Y., & Shearman, S. M. (2002) Attitudinal and affective response toward accented English. Language & Communication, 22, 371-185.
- Brewer, M. B. (1988) A dual process model of impression formation. In T. K. Srull & R. S. Wyer (Eds.), A dual process model of impression formation: advances in social cognition. (Vol. 1). Hillsdale, NJ: Erlbaum. Pp. 1-36.
- Brewer, M. B., & Kramer, R. M. (1985) The psychology of intergroup attitudes and behavior. Annual Review of Psychology, 36, 219-243.
- CALLAN, V., GALLOIS, C., & FORBES, P. (1983) Evaluative reactions to accented English: ethnicity, sex roles, and context. Journal of Cross-Cultural Psychology, 14, 407-426.
- CARGILE, A. C. (1997) Attitudes toward Chinese-accented speech: an investigation on two contexts. Journal of Language and Social Psychology, 16, 434-443.
- CARGLE, A. C., & BRADAC, J. J. (2001) Attitudes toward language: a review of speaker-evaluation research and a general process model. In W. B. Gudykunst (Ed.), Communication yearbook 25. Mahwah, NJ: Erlbaum. Pp. 347-382.
- CARGLE, A. C., & GILES, H. (1997) Understanding language attitudes: exploring listener affect and identity. Language & Communication, 17, 195-217.
- CARGILE, A. C., & GILES, H. (1998) Language attitudes toward varieties of English: an American Japanese context. Journal of Applied Communication Research. 26, 338-356.
- 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, 211-236.
- Devine, P. Cr. (1989) Stereotypes and prejudice: their automatic and controlled components. Journal of Personality and Social Psychology, 61, 5-18.
- DIJKER, A. (1987) Emotional teactions to ethnic minorities. European Journal of Social Psychology, 17, 305-325.
- EAGLY, A. H., ASHMORE, R., MAKHIJANI, M., & LONGO, L. (1991) What is beautiful is good, but . . .: a meta-analytic review of research on the physical attractiveness stereotype. Psychological Bulletin, 110, 109-128.
- EAGLY, A. H., & KITE, M. E. (1987) Are stereotypes of nationalities applied to both women and men? *Journal of Personal and Social Psychology*, 53, 451-462.
- EDWARDS, J. (1982) Language attitudes and their implications among English speakers. In E. Ryan & H. Giles (Eds.), Attitudes towards language variation: social and applied contexts. London: Edward Arnold. Pp. 20-33.
- FEURTES, J. N., & CELSO, C. J. (2000) Hispanic counselors' race and accent and Euro Americans' universal-diverse orientation: a study of initial perceptions. *Cultural Diversity & Ethnic Minority Psychology*, 6, 211-219.
- FISKE, S. T. (1982) Schema-triggered affect: applications to social perception. In M. S. Clark & S. T. Fiske (Eds.), Affect and cognition. Hillsdale, NJ: Erlbaum. Pp. 55-78.
- GALLOIS, C., & CALLAN, V. (1981) Personality and impressions elicited by accented English speech. Journal of Cross-Cultural Psychology, 12, 347-359.
- GILES, H., WILLIAMS, A., MACKIE, D., & ROSSBILLI, F. (1995) Reactions to Anglo- and Hispanic-American-accented speakers: affect, identity, persuasion, and the English-only controversy. Language & Communication, 15, 107-120.
- GILES, H., WILSON, P., & CONWAY, A. (1981) Accent and lexical diversity as determinants of impression formation and perceived employment suitability. Language Sciences, 3, 91-103.
- GILI, M. (1994) Accent and stereotypes: their effect on perceptions of teachers and lecture comprehension. Journal of Applied Communication Research, 22, 348-361.
- GILL, M. M., & BADZINSKI, D. M. (1992) The impact of accent and status on information recall and perception formation. Communication Report, 5, 99-106.
- Намилов, D. (1981) Stereotyping and intergroup behavior: some thoughts on the cognitive approach. In D. Hamilton (Ed.), Cognitive processes in stereotyping and intergroup behavior. Hillsdale, NJ: Erlbaum. Pp. 333-353.
- HAMILTON, D. L., SHERMAN, S. J., & RUVOLO, C. M. (1990) Stereotype-based expectancies: effects on information processing and social behavior. Journal of Social Issues, 46, 35-60.
- Ноѕора, М., Stone-Romero, E. E., & Coats, G. (2003) The effects of physical attractiveness on job-related outcomes: a meta-analysis of experimental studies. *Personnel Psychology*, 56, 431-462.
- KALIN, R. (1982) The social significance of speech in medical, legal and occupational settings. In E. Ryan & H. Giles (Eds.), Attitudes towards language variation: social and applied contexts. London: Edward Arnold. Pp. 148-163.
- KALIN, R., RAYRO, D. S., & LOVE, N. (1980) The perception and evaluation of job candidates with four different ethnic accents. In H. Giles, W. P. Robinson, & P. M. Smith (Eds.), Language: social psychological perspectives. Oxford: Pergamon. Pp. 197-202.
- KARLINS, M., COFFMAN, T., & WALTERS, G. (1988) On the fading social stereotypes: studies in three generations of college students. In W. Bergmann (Ed.), Error without trial: psychological research on anti-semitism. Berlin: Walter de Gruyter. Pp. 302-330.
- Laiwani, A. K., Lwin, M., & Li, K. L. (2005) Consumer responses to English accent variations in advertising. *Journal of Global Marketing*, 18, 143-165.
- Lax, C. H. (1989) Responses to French-Canadian-accented English speech: the role of context. Journal of Language and Social Psychology, 8, 321-325.
- Мачкоvich, М. К. (1976) Stereotypes and racial images—Whites, Black and Yellow. Human Relations, 25, 101-120.
- McGurre, W. (1985) Attitudes and attitude change. In G. Lindzey & E. Aronson (Eds.), Handbook of social psychology. Vol. 2. (3rd ed.) New York: Random House. Pp. 233-346.
- NESDALE, A., & ROONEY, R. (1990) Effect of children's ethnic accents on adult's evaluations and stereotyping, Australian Journal of Psychology, 42, 309-319.

- PODBERESKY, R., DELUTY, R., & FELDSTEIN, S. (1990) Evaluations of Spanish- and Oriental-accented English speakers. Social Behavior & Personality, 18, 53-63.
- RYAN, E. (1979) Why do low-prestige language varieties persist? In H. Giles & R. N. StClair (Eds.), Language and social psychology. Oxford: Blackwell. Pp. 145-157.
- RYAN, E., & BULIK, C. (1982) Evaluations of middle class speakers of standard American and German accented English. Journal of Language and Social Psychology, 1, 51-62.
- Ryan, E., & Gues, H. (1982) Attitudes toward language variation. London: Edward Arnold.
- RYAN, E., HEWSTONE, M., & GLES, H. (1984) Language and intergroup attitudes. In J. Eiser (Ed.), Attitudinal judgment, New York: Springer, Pp. 135-150.
- RYAN, E., & SEBASTIAN, R. (1980) The effects of speech style and social class background on social judgments of speakers, British Journal of Social and Clinical Psychology, 19, 229-233.
- Sebastian, R., Ryan, E., Keogh, T., & Schmidt, A. (1980) The effects of negative affect arousal on reactions to speakers. In H. Giles, W. Robinson, & P. M. Smith (Eds.), Language: social psychological perspectives. Oxford: Pergamon. Pp. 203-208.
- Stephan, W. G., & Stephan, C. W. (1985) Intergroup anxiety. Journal of Social Issues, 41, 157-175.
- STEWART, M., RYAN, E., & GILES, H. (1985) Accent and social class effects on status and solidarity evaluations. Personality and Social Psychology Bulletin, 11, 98-105.
- STONE, E. F., STONE, D. L., & DIPBOYE, R. L. (1992) Stigmas in organizations: race, handicaps, and physical unattractiveness, In K. Kelly (Ed.), Issues, theory, and research in industrial/organizational psychology. Amsterdam: North Holland. Pp. 384-444.
- VANMAN, E. J., & MILLER, N. (1993) Applications of emotion theory and research to stereotyping and intergroup relations. In D. M. Mackie & D. L. Hamilton (Eds.), Affect, cognition, and stereotyping: interactive processes in group perception. San Diego, CA: Academic Press, Pp. 213-238.
- Woo, D. (2000) Glass ceiling and Asian Americans: the new faces of workplace barriers. Walnut Creek, CA: Alta Mira Press.

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