Online Appendix: The Upside of Accents: Language, Inter-group Difference, and Attitudes toward Immigration

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Online Appendix A: Manipulation Checks

This appendix details the two manipulation checks for the first experiment. To be sure, there is no straightforward test of the skin tone manipulation. But as an indirect test, we asked 414 randomly chosen respondents about the immigrant's likely country of origin. In response to the open-ended question, 49% answered "Mexico," while an additional 7% named countries in Central America such as Guatemala or El Salvador. Drawing on some respondents' knowledge of the large indigenous populations in Guatemala and much of Central America, we can examine what share of respondents indicated that the immigrant was from that region. This test is a difficult one, as many respondents might not have pre-existing views of stereotypical skin tone differences among Latin American countries.

The left side of Figure 1 presents the results of an analysis using logistic regression to predict whether the respondent reports that the immigrant came from Central America. It employs the same five covariates as the analyses above: race, education, gender, partisan identification, and ideology. It, too, removes Hispanic respondents. For this manipulation check, we also remove respondents in the control group, as people who did not see the video cannot give answers about the immigrant it depicted. For each experimental group, the figure illustrates the estimated change from a respondent exposed to the light-skinned treatment. This figure uses thick vertical lines to present standard errors and thin vertical lines to depict 95% confidence intervals. The number under each treatment indicates the two-sided p-value testing whether this treatment's coefficient is different from the baseline group.

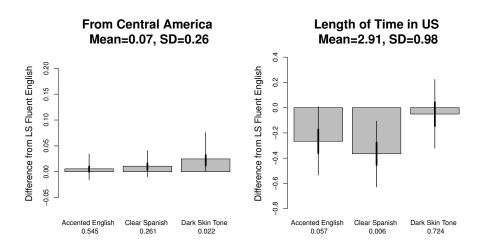
The language-based groups show no significant differences in their perception that the immigrant is from a Central American country such as Guatemala. But seeing the dark-skinned immigrant increases the share reporting that he comes from Central America by 2.5 percentage points. The 95% confidence interval on the change runs from 0.2 percentage points to 7.6 percentage points. According to the underlying logistic regression model, the corresponding two-sided p-value that dark skin tone has an impact is 0.02. It is clear that respondents in the dark-skinned treatment groups were more likely to name a Central American country. This is a difficult test, as it relies on stereotypes about people from specific Central American countries. It seems fair to conclude, then, that the skin tone differences were perceived by many respondents.

The other manipulation was the voice-over used for the undocumented immigrant. Respondents were able to perceive these differences, as shown on the right side of Figure 1, where again the light-skinned, fluent English treatment is the baseline. Those respondents who were exposed to the accented English speaker or the Spanish speaker were markedly less likely to indicate that the immigrant had been in the U.S. for a long time. For example, the 0.37 gap on the 1-5 scale between those who heard fluent English and those who heard fluent Spanish translates into an effect that is 38% of the dependent variable's standard

¹Seven percent of respondents did not know, and another 7% said South America.

²The 2005-6 Latino National Survey asked respondents to rate their skin tone. First-generation respondents with the darkest self-ratings were those from Panama (2.56), Ecuador (2.53), Mexico (2.50), Puerto Rico (2.50), and El Salvador (2.45).

Figure 1: August 2010 manipulations checks.



Note: The gray bars depict the mean change in response for each experimental group as compared to the group exposed to a light-skinned immigrant speaking fluent English. At left, the dependent variable is a binary indicator of believing the immigrant to be from Latin America. At right, it indicates respondents' guesses about how long the immigrant has lived in the U.S. The p-values reported below are naive, two-sided comparisons with the light-skinned, fluent English condition.

deviation.³ There is no significant difference between the Spanish speaker and the accented English speaker: both were perceived to have spent less time in the U.S. Nor do skin tone changes produce differences in perceptions of the immigrant's time in the U.S.

On the open-ended manipulation check about the immigrant's country of origin, we observe that respondents who heard fluent English were more likely to not hazard a guess about where the immigrant was from as compared to those who heard accented English (11.3% vs. 3.0%).⁴ Also, the fluent English voice-over produced a marked drop in respondents indicating that the immigrant was from Mexico, with the figure falling from 52.9% (Spanish treatment) or 54.5% (accented English) to 34.0% (fluent English).⁵ Overall, we can conclude that at least a sizable subset of respondents heard and saw the experimental manipulations and responded in sensible ways. The fluent English voice-over did not fit the typical image of a Mexican immigrant to the same extent as the other voice-overs, an important fact to keep in mind in making sense of that treatment's impacts. Still, respondents clearly believed that the fluent English speaker was nonetheless the immigrant rather than an interpreter, as they used his manner of speaking to guess that he had been in the

 $^{^{3}}$ The effect's 95% confidence interval spans from 0.10 to 0.63. From the linear regression model, the corresponding two-sided p-value is 0.001.

⁴The 95% confidence interval for the difference between the two treatments spans from 1.0 to 15.4 percentage points.

⁵Both of these differences are highly statistically significant. For example, the 95% confidence interval for the difference between the English treatment and the accented treatment runs from 7.8 to 34.3 percentage points.

country for longer.

Online Appendix B: Question Wording

- Do you support or oppose a national policy of allowing illegal immigrants already living in the United States for a number of years to stay in this country permanently and earn US citizenship? Strongly oppose, somewhat oppose, somewhat support, or strongly support?
- Now thinking about *legal* immigration, do you think the number of immigrants from foreign countries who are permitted to come to the United States to live should be decreased a lot, decreased a little, left the same, increased a little, or increased a lot?
- Please tell us if you agree or disagree with the following statements: "These days, I am afraid that the American way of life is threatened." Do you agree strongly, agree somewhat, disagree somewhat, or disagree strongly?
- Please tell us if you agree or disagree with the following statements: "The growing number of newcomers from other countries strengthens American society." Do you agree strongly, agree somewhat, disagree somewhat, or disagree strongly?
- How likely is it that the immigrants currently coming into the U.S. will take jobs away from people already here? Not at all likely, somewhat likely, very likely, or extremely likely?
- Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?

Online Appendix C: Additional Results

	August 2010 Experiment				January 2011 Experiment			
	Mean	SD	Min.	Max.	Mean	SD	Min.	Max.
Income	59.47	45.71	2.50	250.00	59.42	48.19	2.50	250.00
Years of Educ.	13.69	2.43	0.00	20.00	13.83	2.45	0.00	19.00
Online	0.72	0.45	0.00	1.00	0.77	0.42	0.00	1.00
Employed	0.56	0.50	0.00	1.00	0.55	0.50	0.00	1.00
Cons. Ideology	4.22	1.50	1.00	7.00	4.25	1.51	1.00	7.00
Republican ID	3.83	2.11	1.00	7.00	3.86	2.06	1.00	7.00
Black	0.11	0.31	0.00	1.00	0.10	0.30	0.00	1.00
Other	0.03	0.18	0.00	1.00	0.06	0.23	0.00	1.00
Age	48.14	16.09	18.00	91.00	48.95	16.13	18.00	94.00

Table 1: This table presents descriptive statistics for the non-Hispanic respondents in the two experiments conducted through Knowledge Networks, with sample sizes of 1,854 and 1,032, respectively. Income is reported in thousands of dollars. "Online" indicates that these respondents have access to the Internet not provided by KN. "Other" refers to respondents who reported their racial/ethnic background as "other."

	Pathway		Legal Immig.		Generio	Threat
	β	SE	β	SE	β	SE
Intercept	2.475	0.162	1.557	0.187	1.542	0.154
Accented	0.185	0.089	0.008	0.104	0.155	0.085
English	-0.000	0.089	0.025	0.104	0.077	0.085
Spanish	0.040	0.086	-0.020	0.100	0.082	0.082
Dark Skin	0.044	0.045	0.044	0.053	0.014	0.043
Education	0.058	0.009	0.080	0.010	0.095	0.009
Conservative Ideo.	-0.147	0.019	-0.083	0.022	-0.182	0.018
Republican ID	-0.070	0.014	0.014	0.016	-0.061	0.013
Black	0.039	0.076	-0.056	0.087	0.157	0.072
Male	-0.149	0.044	0.047	0.051	0.006	0.042
Degrees of Freedom	1825		1823		1824	

Table 2: This table presents linear regression models estimating the impact of the experimental manipulations on three immigration-related attitudes. The data set includes all non-Hispanic respondents to the August 2010 survey.

	Strengthen America		Social	Trust	Job Threat	
	β	SE	β	SE	β	SE
Intercept	1.622	0.150	-2.093	0.519	1.381	0.166
Accented	0.162	0.083	0.271	0.296	0.061	0.092
English	0.024	0.083	-0.180	0.302	-0.068	0.092
Spanish	0.011	0.080	-0.030	0.288	-0.005	0.089
Dark	0.014	0.042	0.263	0.149	-0.005	0.047
Education	0.085	0.008	0.130	0.029	0.115	0.009
Conservative Ideo.	-0.123	0.017	-0.087	0.061	-0.095	0.019
Republican ID	-0.028	0.013	-0.001	0.045	-0.037	0.014
Black	0.011	0.070	-0.998	0.294	-0.245	0.078
Male	0.053	0.041	0.208	0.144	0.044	0.045
Degrees of Freedom	1818		885		1818	

Table 3: This table presents regression results estimating the impact of the experimental manipulations on three immigration-related attitudes. The baseline is respondents who saw no video. Social trust is a binary outcome measured for half of the respondents, so the corresponding coefficients are from a logistic regression. The data set includes all non-Hispanic respondents to the August 2010 survey.

	Path	way	Pro-Immig. Index		
	β	SE	β	SE	
Intercept	1.8067	0.2803	-6.6648	1.1239	
Accented	0.0993	0.0784	0.4540	0.3152	
Spanish	0.0491	0.0803	0.3678	0.3230	
Education	0.0633	0.0135	0.5236	0.0540	
Conservative Ideo.	-0.1095	0.0275	-0.5374	0.1101	
Democratic ID	0.0762	0.0210	0.3951	0.0845	
Male	-0.1894	0.0648	-0.4253	0.2606	
Black	0.0503	0.1114	0.1847	0.4531	
Degrees of Freedom	813		803		

Table 4: This table presents the linear regression models used to the estimate the treatment effects in Figure 4. The baseline group is respondents who heard fluent English. The proimmigration index is a composite of six questions with a mean of zero and a standard deviation of 4.14.



Figure 2: January 2011: Image of Immigrant