The Upside of Accents: The Spanish Language and Attitudes toward Immigration

Daniel J. Hopkins
Assistant Professor
Georgetown University
Presentation at the University of Kentucky

March 10th, 2011

1The Russell Sage Foundation provided funding for this research.
Foreign-born population in U.S.: 12.5% in 2000
Foreign-born population in U.S.: 12.5% in 2000
Foreign-born population in Britain: 8.3% in 2001
Diversifying Democracies

- Foreign-born population in U.S.: 12.5% in 2000
- Foreign-born population in Britain: 8.3% in 2001
- Both numbers: twice as high as 1950
Diversifying Democracies

- Foreign-born population in U.S.: 12.5% in 2000
- Foreign-born population in Britain: 8.3% in 2001
- Both numbers: twice as high as 1950
- Initial research question: impact of ethnic and racial diversity on politics, public good provision
Diversifying Democracies

- Foreign-born population in U.S.: 12.5% in 2000
- Foreign-born population in Britain: 8.3% in 2001
- Both numbers: twice as high as 1950
- Initial research question: impact of ethnic and racial diversity on politics, public good provision
- Core claim of earlier work: local ethnic/racial divisions must be politicized; national rhetoric on immigration = one politicizing agent
38 million immigrants in U.S.; 24.9 million U.S. residents not English proficient
Language Threat

- 38 million immigrants in U.S.; 24.9 million U.S. residents not English proficient
- Focus group participant in L.A. complains of ordering a hamburger, receiving eight
38 million immigrants in U.S.; 24.9 million U.S. residents not English proficient

Focus group participant in L.A. complains of ordering a hamburger, receiving eight

“If a single source of conflict stands out, it involves the use of different languages” –1993 Ford Foundation Report
Language Threat

- 38 million immigrants in U.S.; 24.9 million U.S. residents not English proficient
- Focus group participant in L.A. complains of ordering _a_ hamburger, receiving _eight_
- “If a single source of conflict stands out, it involves the use of different languages” –1993 Ford Foundation Report
- Research goal: identify role of language in generating immigrant-native tension in the U.S.
Language Threat

- 38 million immigrants in U.S.; 24.9 million U.S. residents not English proficient
- Focus group participant in L.A. complains of ordering a hamburger, receiving eight
- “If a single source of conflict stands out, it involves the use of different languages” –1993 Ford Foundation Report
- Research goal: identify role of language in generating immigrant-native tension in the U.S.
- Broader goal: understand responses to immigrants in polities with pre-existing ethnic/racial cleavage
Introduction
The Upside of Accents

Daniel J. Hopkins

Introduction

Theory and Hypotheses

Proposition 227

Experiments

Results

Conclusion

Additional Material

Related Research

Outline

- Introduction
- Theoretical Discussion: Language as Source of Immigrant-Native Tension
Introduction

Theoretical Discussion: Language as Source of Immigrant-Native Tension

Initial Evidence: California’s Proposition 227
Introduction

Theoretical Discussion: Language as Source of Immigrant-Native Tension

Initial Evidence: California’s Proposition 227

Confirmatory Evidence: 2010, 2011 Survey Experiments
The Upside of Accents
Daniel J. Hopkins

Outline

- Introduction
- Theoretical Discussion: Language as Source of Immigrant-Native Tension
- Initial Evidence: California’s Proposition 227
- Confirmatory Evidence: 2010, 2011 Survey Experiments
- Conclusion and Next Steps
Outline

- Introduction
- Theoretical Discussion: Language as Source of Immigrant-Native Tension
- Initial Evidence: California’s Proposition 227
- Confirmatory Evidence: 2010, 2011 Survey Experiments
- Conclusion and Next Steps
- Spanish → cultural and political symbol
Introduction

Theoretical Discussion: Language as Source of Immigrant-Native Tension

Initial Evidence: California’s Proposition 227

Confirmatory Evidence: 2010, 2011 Survey Experiments

Conclusion and Next Steps

Spanish $\rightarrow$ cultural and political symbol
  - Not triggering reflexive out-group aversion
Introduction

Theoretical Discussion: Language as Source of Immigrant-Native Tension

Initial Evidence: California’s Proposition 227

Confirmatory Evidence: 2010, 2011 Survey Experiments

Conclusion and Next Steps

Spanish → cultural and political symbol
  - Not triggering reflexive out-group aversion
  - Instead, signal of desire to assimilate
Debates about role of economics vs. culture in shaping immigration attitudes
Theoretical Background

- Debates about role of economics vs. culture in shaping immigration attitudes
Debates about role of economics vs. culture in shaping immigration attitudes


But which cultural factors are influential? Is immigration simply an extension of racial cleavages?
Language differences:
  - Significant cleavage outside U.S. (e.g. Laitin 1992)
Theorizing Language Differences

Language differences:

- Significant cleavage outside U.S. (e.g. Laitin 1992)
- In U.S., contention over language appears in case studies (Hopkins et al. 2010)
Theorizing Language Differences

Language differences:

- Significant cleavage outside U.S. (e.g. Laitin 1992)
- In U.S., contention over language appears in case studies (Hopkins et al. 2010)
- Typically ignored in American politics (but see Schildkraut 2001, 2005)
Language differences:

- Significant cleavage outside U.S. (e.g. Laitin 1992)
- In U.S., contention over language appears in case studies (Hopkins et al. 2010)
- Typically ignored in American politics (but see Schildkraut 2001, 2005)
- Spanish as potent symbol of immigration’s cultural impacts (e.g. Schildkraut 2005, Huntington 2004)
Theorizing Language Differences

Language differences:

- Significant cleavage outside U.S. (e.g. Laitin 1992)
- In U.S., contention over language appears in case studies (Hopkins et al. 2010)
- Typically ignored in American politics (but see Schildkraut 2001, 2005)
- Spanish as potent symbol of immigration's cultural impacts (e.g. Schildkraut 2005, Huntington 2004)
- Survey experiments → Spanish threatens non-Hispanic subgroups (Bareto et al. 2008, Hopkins et al. 2010)
Theorizing Language Differences

Language differences:

- Significant cleavage outside U.S. (e.g. Laitin 1992)
- In U.S., contention over language appears in case studies (Hopkins et al. 2010)
- Typically ignored in American politics (but see Schildkraut 2001, 2005)
- Spanish as potent symbol of immigration’s cultural impacts (e.g. Schildkraut 2005, Huntington 2004)
- Survey experiments → Spanish threatens non-Hispanic subgroups (Bareto et al. 2008, Hopkins et al. 2010)
- Goal: probe generality, mechanisms of this finding
“There’s Armando’s Grocery Store... Signs used to be English, ‘Potatoes–79 cents a pound,’ and down below it would be in Spanish. Now the big sign is in Spanish and the little sign is in English... It’s frightening to see that it’s just kind of been dominated.” –Elgin, IL
Case Studies in Contention

- “There’s Armando’s Grocery Store... Signs used to be English, ‘Potatoes–79 cents a pound,’ and down below it would be in Spanish. Now the big sign is in Spanish and the little sign is in English... It’s frightening to see that it’s just kind of been dominated.” –Elgin, IL

- “I pick up the telephone and call the local garage. I can’t understand the person on the other side of the line... They’re all over the place, and they don’t speak English. Do we want more of this?”
Case Studies in Contention

- “There’s Armando’s Grocery Store... Signs used to be English, ‘Potatoes–79 cents a pound,’ and down below it would be in Spanish. Now the big sign is in Spanish and the little sign is in English... It’s frightening to see that it’s just kind of been dominated.” –Elgin, IL

- “I pick up the telephone and call the local garage. I can’t understand the person on the other side of the line... They’re all over the place, and they don’t speak English. Do we want more of this?”
Case Studies in Contention

- “There’s Armando’s Grocery Store... Signs used to be English, ‘Potatoes–79 cents a pound,’ and down below it would be in Spanish. Now the big sign is in Spanish and the little sign is in English... It’s frightening to see that it’s just kind of been dominated.” – Elgin, IL

- “I pick up the telephone and call the local garage. I can’t understand the person on the other side of the line... They’re all over the place, and they don’t speak English. Do we want more of this?” – U.S. Senator Robert Byrd

- “I think that when you are out in public and you want to be here in America, speak English and also work towards U.S. citizenship.” – Columbus, OH
Case Studies in Contention

- “There’s Armando’s Grocery Store... Signs used to be English, ‘Potatoes–79 cents a pound,’ and down below it would be in Spanish. Now the big sign is in Spanish and the little sign is in English... It’s frightening to see that it’s just kind of been dominated.” – Elgin, IL

- “I pick up the telephone and call the local garage. I can’t understand the person on the other side of the line... They’re all over the place, and they don’t speak English. Do we want more of this?” – U.S. Senator Robert Byrd

- “I think that when you are out in public and you want to be here in America, speak English and also work towards U.S. citizenship.” – Columbus, OH

- Research question: Is Spanish an independent influence on immigration attitudes? How does it operate? Who is influenced?
Spanish Words and English Speakers

How might Spanish influence attitudes?

1. By signaling *out-group membership* (e.g. Tajfel 1981, Sniderman et al. 2000)
How might Spanish influence attitudes?

1. By signaling *out-group membership* (e.g. Tajfel 1981, Sniderman et al. 2000)

2. By priming *partisanship* (e.g. Hopkins et al. 2010, Sniderman et al. 2004)
How might Spanish influence attitudes?

1. By signaling *out-group membership* (e.g. Tajfel 1981, Sniderman et al. 2000)

2. By priming *partisanship* (e.g. Hopkins et al. 2010, Sniderman et al. 2004)

3. By enabling *communication* (e.g. Gluszek and Dovidio 2010)
How might Spanish influence attitudes?

1. By signaling **out-group membership** (e.g. Tajfel 1981, Sniderman et al. 2000)

2. By priming **partisanship** (e.g. Hopkins et al. 2010, Sniderman et al. 2004)

3. By enabling **communication** (e.g. Gluszek and Dovidio 2010)

4. By signaling **desire to assimilate** (e.g. Gilens 1999, Citrin et al. 2001)
How might Spanish influence attitudes?

1. By signaling *out-group membership* (e.g. Tajfel 1981, Sniderman et al. 2000); expectation of negative attitudes toward speakers of accented English or Spanish.

2. By priming *partisanship* (e.g. Hopkins et al. 2010, Sniderman et al. 2004); expectation is differential impact by party.

3. By enabling *communication* (e.g. Gluszek and Dovidio 2010); negative attitudes toward Spanish speakers.

4. By signaling *desire to assimilate* (e.g. Gilens 1999, Citrin et al. 2001); expectation of positive attitudes toward speakers of accented English.
Study 2: California’s Proposition 227

- Question: does use of Spanish influence political behaviors?
Study 2: California’s Proposition 227

- **Question:** does use of Spanish influence political behaviors?
- **Challenge:** self-selection in exposure
Study 2: California’s Proposition 227

- **Question:** does use of Spanish influence political behaviors?
- **Challenge:** self-selection in exposure
- **Priming can occur through ballot, polling place** (e.g. Berger et al. 2008, Ho and Imai 2006)
Question: does use of Spanish influence political behaviors?

Challenge: self-selection in exposure

Priming can occur through ballot, polling place (e.g. Berger et al. 2008, Ho and Imai 2006)

Analyze impact of bilingual ballots in California’s 1998 Proposition 227
Study 2: California’s Proposition 227

- **Question**: does use of Spanish influence political behaviors?
- **Challenge**: self-selection in exposure
- **Priming** can occur through ballot, polling place (e.g. Berger et al. 2008, Ho and Imai 2006)
- **Analyze** impact of bilingual ballots in California’s 1998 Proposition 227
- **On ballot** in June primary; passes with 61% support
Study 2: California’s Proposition 227

- **Question:** does use of Spanish influence political behaviors?
- **Challenge:** self-selection in exposure
- **Priming can occur through ballot, polling place (e.g. Berger et al. 2008, Ho and Imai 2006)**
- **Analyze impact of bilingual ballots in California’s 1998 Proposition 227**
- **On ballot in June primary; passes with 61% support**
- **Prop. 227 restricted bilingual ed. → clear predictions of impact**
Study 2: California’s Proposition 227

- **Question:** does use of Spanish influence political behaviors?
- **Challenge:** self-selection in exposure
- **Priming can occur through ballot, polling place (e.g. Berger et al. 2008, Ho and Imai 2006)**
- **Analyze impact of bilingual ballots in California’s 1998 Proposition 227**
- **On ballot in June primary; passes with 61% support**
- **Prop. 227 restricted bilingual ed. → clear predictions of impact**
- **Arguments in support: link English to American Dream, success in U.S., assimilationist**
Study 2: California’s Proposition 227

- Question: does use of Spanish influence political behaviors?
- Challenge: self-selection in exposure
- Priming can occur through ballot, polling place (e.g. Berger et al. 2008, Ho and Imai 2006)
- Analyze impact of bilingual ballots in California’s 1998 Proposition 227
  - On ballot in June primary; passes with 61% support
  - Prop. 227 restricted bilingual ed. → clear predictions of impact
- Arguments in support: link English to American Dream, success in U.S., assimilationist
- Hard test: exposure to Spanish was minimal
Section 203 of Voting Rights Act mandates Spanish-language ballots, sample ballots, interpreters, and signs (Tucker and Espino 2007, GAO 2008)
Section 203: covers county if:
Section 203: covers county if:

1. > 5% of voting age citizens from language group don’t speak English
Section 203: covers county if:

1. > 5% of voting age citizens from language group don’t speak English
2. > 10,000 voting age citizens from language group don’t speak English
Section 203: covers county if:

1. > 5% of voting age citizens from language group don’t speak English
2. > 10,000 voting age citizens from language group don’t speak English

Allows for regression discontinuity design (Green et al. 2009, Imbens and Lemieux 2008, Hahn et al. 2001)
Impact on Non-Hispanic White Precincts: Vote

Figure: Multilevel model of Prop. 227 vote; 27,787 neighborhoods
Figure: Predicted share of support for Prop. 227 under the model.
Study 2: Results, Non-Hispanic White Precincts

- Some evidence of backlash overall → but not statistically significant (one-sided p-value=.11)
Study 2: Results, Non-Hispanic White Precincts

- Some evidence of backlash overall → but not statistically significant (one-sided p-value=.11)
- Strongest evidence in Republican precincts
Study 2: Results, Non-Hispanic White Precincts

- Some evidence of backlash overall → but not statistically significant (one-sided p-value=.11)
- Strongest evidence in Republican precincts
- Core results hold using matching (and different assumptions)
Study 2: Results, Non-Hispanic White Precincts

- Some evidence of backlash overall → but not statistically significant (one-sided p-value=.11)
- Strongest evidence in Republican precincts
- Core results hold using matching (and different assumptions)
  - Genetic matching (Diamond and Sekhon 2008)
Study 2: Results, Non-Hispanic White Precincts

- Some evidence of backlash overall → but not statistically significant (one-sided p-value=.11)
- Strongest evidence in Republican precincts
- Core results hold using matching (and different assumptions)
  - Genetic matching (Diamond and Sekhon 2008)
  - Coarsened exact matching (Iacus et al. 2009)
Study 2: Results, Non-Hispanic White Precincts

- Some evidence of backlash overall $\rightarrow$ but not statistically significant (one-sided p-value=.11)
- Strongest evidence in Republican precincts
- Core results hold using matching (and different assumptions)
  - Genetic matching (Diamond and Sekhon 2008)
  - Coarsened exact matching (Iacus et al. 2009)
- Spanish $\rightarrow$ political symbol
Study 2: Results, Non-Hispanic White Precincts

- Some evidence of backlash overall → but not statistically significant (one-sided p-value=.11)
- Strongest evidence in Republican precincts
- Core results hold using matching (and different assumptions)
  - Genetic matching (Diamond and Sekhon 2008)
  - Coarsened exact matching (Iacus et al. 2009)
- Spanish → political symbol
- Still, mechanisms, generality unclear
Experiment 1 Design

- Why does the use of Spanish influence political attitudes/behaviors?
Experiment 1 Design

- Why does the use of Spanish influence political attitudes/behaviors?
- Survey conducted via Knowledge Networks (August 6th-23rd, 2010)
Experiment 1 Design

- Why does the use of Spanish influence political attitudes/behaviors?
- Survey conducted via Knowledge Networks (August 6th-23rd, 2010)
- N=2,063 American adults
Experiment 1 Design

- Why does the use of Spanish influence political attitudes/behaviors?
- Survey conducted via Knowledge Networks (August 6th-23rd, 2010)
- N=2,063 American adults
- News clip; exploit practice of not revealing undocumented immigrants
Experiment 1 Design

- Why does the use of Spanish influence political attitudes/behaviors?
- Survey conducted via Knowledge Networks (August 6th-23rd, 2010)
- N=2,063 American adults
- News clip; exploit practice of not revealing undocumented immigrants
- Randomly vary immigrant’s language (accented English, fluent English, fluent Spanish)
Experiment 1 Design

- Why does the use of Spanish influence political attitudes/behaviors?
- Survey conducted via Knowledge Networks (August 6th-23rd, 2010)
- N=2,063 American adults
- News clip; exploit practice of not revealing undocumented immigrants
- Randomly vary immigrant’s language (accented English, fluent English, fluent Spanish)
- Randomly vary immigrant’s skin tone (darker or lighter)
Experiment 1 Design

- Why does the use of Spanish influence political attitudes/behaviors?
- Survey conducted via Knowledge Networks (August 6th-23rd, 2010)
- N=2,063 American adults
- News clip; exploit practice of not revealing undocumented immigrants
- Randomly vary immigrant’s language (accented English, fluent English, fluent Spanish)
- Randomly vary immigrant’s skin tone (darker or lighter)
- Then ask 8 questions about immigrants, immigration policy
Experiment 1 Design

- Why does the use of Spanish influence political attitudes/behaviors?
- Survey conducted via Knowledge Networks (August 6th-23rd, 2010)
- N=2,063 American adults
- News clip; exploit practice of not revealing undocumented immigrants
- Randomly vary immigrant’s language (accented English, fluent English, fluent Spanish)
- Randomly vary immigrant’s skin tone (darker or lighter)
- Then ask 8 questions about immigrants, immigration policy
- Two manipulation checks
Please watch the entire 30-second video before pressing the "Next" button to continue your survey.

Figure: Immigrant with light skin tone
Darker Immigrant

Figure: Immigrant with dark skin tone

Please watch the entire 30-second video before pressing the "Next" button to continue your survey.
From Central America

“If you had to guess, where does the immigrant featured in the news clip come from?”
From Central America?

Mean=0.1, SD=0.3

Figure:
Length of Residence

“If you had to guess, how long do you think the immigrant in the news clip has lived in the United States?”
Length of Residence

Length of Time in US
Mean=3, SD=1

Figure:
“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 U.S. citizenship?”
Pathway to Citizenship

Support Pathway to Citizenship
Mean=2.5, SD=1

Figure: Support for Creating Pathway to Citizenship
The Upside of Accents

Daniel J. Hopkins

Introduction

Theory and Hypotheses

Proposition 227

Experiments

Results

Conclusion

Additional Material

Related Research

Please tell us if you agree or disagree with the following statements: “the growing number of newcomers from other countries strengthens American society.”
Strengthen American Society
Mean=2.3, SD=0.9

Difference from Control

Accented English 0.024  
Clear English 0.489  
Clear Spanish 0.385  
Light Skin Tone 0.256  
Dark Skin Tone 0.171

Figure: Believe Immigrants Strengthen American Society
Increased Immigration

“Now thinking about legal immigration, do you think the number of immigrants 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?”
Support Increased Immigration
Mean = 2.4, SD = 1.1

Figure:
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.”
Threaten American Way of Life

Don’t Feel Threatened
Mean=2, SD=1

Figure:

<table>
<thead>
<tr>
<th></th>
<th>Difference from Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accented English</td>
<td>0.063</td>
</tr>
<tr>
<td>Clear English</td>
<td>0.279</td>
</tr>
<tr>
<td>Clear Spanish</td>
<td>0.18</td>
</tr>
<tr>
<td>Light Skin Tone</td>
<td>0.205</td>
</tr>
<tr>
<td>Dark Skin Tone</td>
<td>0.096</td>
</tr>
</tbody>
</table>
"How likely is it that the immigrants currently coming into the U.S. will take jobs away from people already here?"
Take Jobs

Don’t Take Jobs
Mean=2.5, SD=1

FIGURE:

<table>
<thead>
<tr>
<th>Accented English</th>
<th>Clear English</th>
<th>Clear Spanish</th>
<th>Light Skin Tone</th>
<th>Dark Skin Tone</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.238</td>
<td>0.282</td>
<td>0.429</td>
<td>0.454</td>
<td>0.476</td>
</tr>
</tbody>
</table>
Experimental Results

- Language: No impact on support for legal immigration, job threat
Experimental Results

- Language: No impact on support for legal immigration, job threat
- Skin tone: little impact on immigration attitudes
Experimental Results

- **Language**: No impact on support for **legal** immigration, job threat
- **Skin tone**: little impact on immigration attitudes
- **Accented English**: makes Americans more likely to support pathway to citizenship; say immigrants strengthen American society
Experimental Results

- Language: No impact on support for legal immigration, job threat
- Skin tone: little impact on immigration attitudes
- Accented English: makes Americans more likely to support pathway to citizenship; say immigrants strengthen American society
- Mechanism: not communication; fluent English speaker does not produce same effect
Experimental Results

- Language: No impact on support for legal immigration, job threat
- Skin tone: little impact on immigration attitudes
- Accented English: makes Americans more likely to support pathway to citizenship; say immigrants strengthen American society
- Mechanism: not communication; fluent English speaker does not produce same effect
- Suggests importance of perceived willingness to assimilate
January 2011, $N = 804$
Confirmatory Experiment

- January 2011, $N = 804$
- Remove Hispanics, those who do not watch video, those who do not complete survey within half hour
Confirmatory Experiment

- January 2011, $N = 804$
- Remove Hispanics, those who do not watch video, those who do not complete survey within half hour
- Expose respondents to new photo, same voice-overs, no skin tone manipulation
Confirmatory Experiment

- January 2011, $N = 804$
- Remove Hispanics, those who do not watch video, those who do not complete survey within half hour
- Expose respondents to new photo, same voice-overs, no skin tone manipulation
- “He came here ten years ago from Mexico.”
Confirmatory Experiment

- January 2011, $N = 804$
- Remove Hispanics, those who do not watch video, those who do not complete survey within half hour
- Expose respondents to new photo, same voice-overs, no skin tone manipulation
- “He came here ten years ago from Mexico.”
- 97.8% of those who heard accented English said speaker had accent
Confirmatory Experiment

- January 2011, $N = 804$
- Remove Hispanics, those who do not watch video, those who do not complete survey within half hour
- Expose respondents to new photo, same voice-overs, no skin tone manipulation
- “He came here ten years ago from Mexico.”
- 97.8% of those who heard accented English said speaker had accent
- 63.6% of those who heard clear English said speaker had accent
**Figure:** January 2011: Image of Immigrant
Support Pathway to Citizenship
Mean=2.5, SD=1

Figure: January 2011: Pathway to Citizenship
Returning to Hypotheses

How might Spanish influence attitudes?

1. By signaling out-group membership
2. By priming partisanship
3. By enabling communication
4. By signaling desire to assimilate
Use of language influences Americans’ attitudes toward immigration policy, bilingual education
Use of language influences Americans’ attitudes toward immigration policy, bilingual education

Not simply ethnocentrism/rejection of out-group
Conclusion

- Use of language influences Americans’ attitudes toward immigration policy, bilingual education
- Not simply ethnocentrism/rejection of out-group
  - Republican precincts with Spanish ballots $\rightarrow$ less support for Proposition 227
Use of language influences Americans’ attitudes toward immigration policy, bilingual education

- Not simply ethnocentrism/rejection of out-group
  - Republican precincts with Spanish ballots $\rightarrow$ less support for Proposition 227
  - Respondents who heard accented English $\rightarrow$ more supportive of pathway to citizenship
Use of language influences Americans’ attitudes toward immigration policy, bilingual education

Not simply ethnocentrism/rejection of out-group

- Republican precincts with Spanish ballots → less support for Proposition 227
- Respondents who heard accented English → more supportive of pathway to citizenship

Political context is central; use of language communicates politically relevant information; symbol of assimilation
Conclusion

- Use of language influences Americans’ attitudes toward immigration policy, bilingual education
- Not simply ethnocentrism/rejection of out-group
  - Republican precincts with Spanish ballots $\rightarrow$ less support for Proposition 227
  - Respondents who heard accented English $\rightarrow$ more supportive of pathway to citizenship
- Political context is central; use of language communicates politically relevant information; symbol of assimilation
- Policy implications: information, integration
Next Steps

- Additional survey experiments varying language, message, immigrant appearance
Next Steps

- Additional survey experiments varying language, message, immigrant appearance
- Content analysis of focus groups
Next Steps

- Additional survey experiments varying language, message, immigrant appearance
- Content analysis of focus groups
- Cross-national comparisons (e.g. Quebec; Urdu in northern England)
Next Steps

- Additional survey experiments varying language, message, immigrant appearance
- Content analysis of focus groups
- Cross-national comparisons (e.g. Quebec; Urdu in northern England)
- Your suggestions?
Design Effects and Effective Sample Size

- Design effect: function of intra-class correlation (ICC; share of variance explained at county level)
- ICC = 0.11
- Effective sample size: 4,872
- Rich set of covariates can improve efficiency
The neighborhood-level model for observation $i$ in county $j$ is:

$$y_{ij} = \beta_0j + \beta_1x_{ij} + \ldots + \epsilon_{ij}$$

where $y_{ij}$ is turnout and where $\epsilon_{ij}$ is mean zero with a normal distribution. At the level of counties, we model:

$$\beta_0j = \gamma_1w_j + \ldots + \delta_j$$

where $\delta_j$ is similarly mean zero and normally distributed.
Regression Discontinuity

- Compare those arbitrarily close to threshold
Regression Discontinuity

- Compare those arbitrarily close to threshold
- No reason counties with 4.99%, 5.01% should differ except for treatment
Regression Discontinuity

- Compare those arbitrarily close to threshold
- No reason counties with 4.99%, 5.01% should differ except for treatment
- In theory: significantly reduces omitted variable bias
Regression Discontinuity

- Compare those arbitrarily close to threshold
- No reason counties with 4.99%, 5.01% should differ except for treatment
- In theory: significantly reduces omitted variable bias
- In practice: not enough observations to estimate treatment effect without modeling
Challenges in analyzing these data:

1. Multiple forcing variables $\rightarrow$ condition on both (and higher order terms)
Challenges in analyzing these data:

1. Multiple forcing variables → condition on both (and higher order terms)
2. Treatment at county level → multi-level model (Schochet 2009); neighborhoods nested in counties
Study 2: Research Design

- Data: Statewide Database (University of California-Berkeley)
Study 2: Research Design

- Data: Statewide Database (University of California-Berkeley)
- Eliminate mountainous north, Southern California
Study 2: Research Design

- Data: Statewide Database (University of California-Berkeley)
- Eliminate mountainous north, Southern California
- 41 counties; 27,547 precincts where more than 90% of residents are non-Hispanic white
Study 2: Research Design

- Data: Statewide Database (University of California-Berkeley)
- Eliminate mountainous north, Southern California
- 41 counties; 27,547 precincts where more than 90% of residents are non-Hispanic white
- Multilevel model: 34 tract- or precinct-level variables; 7 county-level variables including forcing variables, treatment indicator
Counties Included in Study

Figure: Counties in study
Sniderman et al. (2004): distinguish between mobilizing cues (e.g. influence people already anti-immigration), galvanizing cues (e.g. previously pro-immigration)
A Partisanship Interaction?

- Sniderman et al. (2004): distinguish between mobilizing cues (e.g. influence people already anti-immigration), galvanizing cues (e.g. previously pro-immigration)
- Does Spanish as symbol operate differently for Republicans, Democrats?
Impact on Non-Hispanic White Precincts: Vote

Figure: Multilevel model of Prop. 227 vote; 27,787 neighborhoods
Impact on Non-Hispanic White Precincts: Vote

Figure: RDD analysis of Proposition 227
The Upside of Accents
Daniel J. Hopkins

Introduction
Theory and Hypotheses
Proposition 227
Experiments
Results
Conclusion
Additional Material
Related Research

Figure: RDD analysis of Proposition 227
Impact on Non-Hispanic White Precincts: Vote

Impact of Section 203
White Precincts

Figure: Predicted share of support for Prop. 227 under the model
Please watch the entire 30-second video before pressing the "Next" button to continue your survey.
Provisions

Please watch the entire 30-second video before pressing the "Next" button to continue your survey.
Figure:

Please watch the entire 30-second video before pressing the "Next" button to continue your survey.
Introduce Immigrant

Please watch the entire 30-second video before pressing the "Next" button to continue your survey.

Figure:
Please watch the entire 30-second video before pressing the "Next" button to continue your survey.

**Figure:**
**Impact: Seeing Spanish**

Figure: Each figure depicts interaction between hearing Spanish in day-to-day life, seeing the Spanish cue at the beginning of the survey.
Personal Experience?

- Personal experience not randomized; moderator might be anything correlated with personal experience
- Contact not correlated with Democratic party ID (-0.05), conservative ideology (-0.05)
- In control group, hearing Spanish not correlated with anti-immigration index (-0.02)
- Measures of personal experience—highly correlated with one another (> 0.59); moderately correlated with ZIP pct. Hispanic (0.26)
Second Experiment

- Conduct confirmatory experiment embedded in exit poll, November 2008
- 902 respondents at four polling sites in Everett, Somerville, MA
- Chosen based on partisan diversity, large immigrant communities, accessibility
- Every other exit poll contained Spanish line at top
- Imbalance: Race, education
- Dependent variable: generic threat, decrease immigration
The Upside of Accents

Daniel J. Hopkins

Introduction

Theory and Hypotheses

Proposition 227

Experiments

Results

Conclusion

Additional Material

Related Research

NOVEMBER 2008 POLL BY RESEARCHERS AT HARVARD AND MIT

Por favor, fiijense que uds. pueden contestar en español al otro lado

Exit Poll Survey
The Upside of Accents

Daniel J. Hopkins

Introduction

Theory and Hypotheses

Proposition 227

Experiments

Results

Conclusion

Additional Material

Related Research

Exit Poll Population

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>McCain Voter</td>
<td>0.17</td>
<td>0.00</td>
<td>0.00</td>
<td>1.00</td>
<td>149</td>
</tr>
<tr>
<td>Female</td>
<td>0.58</td>
<td>0.00</td>
<td>0.00</td>
<td>1.00</td>
<td>860</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>0.65</td>
<td>0.00</td>
<td>0.00</td>
<td>1.00</td>
<td>587</td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>0.12</td>
<td>0.00</td>
<td>0.00</td>
<td>1.00</td>
<td>108</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.08</td>
<td>0.00</td>
<td>0.00</td>
<td>1.00</td>
<td>76</td>
</tr>
<tr>
<td>Other Race/Ethnicity</td>
<td>0.15</td>
<td>0.00</td>
<td>0.00</td>
<td>1.00</td>
<td>131</td>
</tr>
<tr>
<td>Age</td>
<td>41.00</td>
<td>14.80</td>
<td>18.00</td>
<td>88.00</td>
<td>818</td>
</tr>
<tr>
<td>Education</td>
<td>14.81</td>
<td>2.80</td>
<td>5.00</td>
<td>19.00</td>
<td>873</td>
</tr>
<tr>
<td>Income</td>
<td>2.80</td>
<td>0.95</td>
<td>1.00</td>
<td>4.00</td>
<td>835</td>
</tr>
<tr>
<td>Talk with imm. (5=Everyday)</td>
<td>4.11</td>
<td>1.23</td>
<td>1.00</td>
<td>5.00</td>
<td>866</td>
</tr>
<tr>
<td>Hear Spanish (5=Everyday)</td>
<td>4.47</td>
<td>0.97</td>
<td>1.00</td>
<td>5.00</td>
<td>871</td>
</tr>
<tr>
<td>American life threatened</td>
<td>2.95</td>
<td>0.97</td>
<td>1.00</td>
<td>4.00</td>
<td>861</td>
</tr>
<tr>
<td>Decrease immig.</td>
<td>0.35</td>
<td>0.00</td>
<td>0.00</td>
<td>1.00</td>
<td>854</td>
</tr>
</tbody>
</table>

**Table:** Descriptive statistics for the exit poll.
Logit Model, Exit Poll

<table>
<thead>
<tr>
<th></th>
<th>All Respondents</th>
<th></th>
<th>Obama Voters</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \beta )</td>
<td>SE</td>
<td>( \beta )</td>
<td>SE</td>
</tr>
<tr>
<td>Intercept</td>
<td>1.51</td>
<td>0.47</td>
<td>1.19</td>
<td>0.56</td>
</tr>
<tr>
<td>Site 2</td>
<td>-1.57</td>
<td>0.20</td>
<td>-1.56</td>
<td>0.25</td>
</tr>
<tr>
<td>Site 3</td>
<td>-1.55</td>
<td>0.34</td>
<td>-1.18</td>
<td>0.39</td>
</tr>
<tr>
<td>Site 4</td>
<td>-0.42</td>
<td>0.21</td>
<td>-0.34</td>
<td>0.25</td>
</tr>
<tr>
<td>Black</td>
<td>-1.34</td>
<td>0.27</td>
<td>-1.12</td>
<td>0.30</td>
</tr>
<tr>
<td>Education</td>
<td>-0.08</td>
<td>0.03</td>
<td>-0.10</td>
<td>0.04</td>
</tr>
<tr>
<td>Saw Spanish</td>
<td>0.20</td>
<td>0.16</td>
<td>0.48</td>
<td>0.19</td>
</tr>
<tr>
<td>df</td>
<td>844</td>
<td></td>
<td>659</td>
<td></td>
</tr>
</tbody>
</table>

**Table:** Two logistic regressions predicting wanting to decrease immigration.
**Figure:** Interaction of Presidential vote choice and the effect of seeing Spanish on the 2008 exit poll.
Figure: This figure compares coverage of immigration in USA Today with county-level contextual effects.
Changing Contextual Effects

The Salience of Immigration

Contextual Effect on Supporting Decreased Immigration
Changing Contextual Effects

The Upside of Accents

Daniel J. Hopkins

Introduction

Theory and Hypotheses

Proposition 227

Experiments

Results

Conclusion

Additional Material

Related Research

Changing Contextual Effects

Contextual Effect
Low Salience

Prob. = 0.001

Change in Probability

Contextual Effect
High Salience

Prob. < 0.001

Change in Probability

Contextual Effect, Difference

Prob. = 0.03

Change in Probability

Mean = −0.11

Change in Probability
The September 11th Test

Agreeing Immigrants Too Demanding

[Graph showing data points and linear regression lines for various variables such as Age, Log, County Population Change, Logged Density, Metro, County Pct. Immigrant, Male, Logged County Income, County Pct. Black, Logged County Change Income, Hispanic, County Change Pct. Black, County Change Pct. Immigrant, County Change Pct. with BA, Logged Income, Economic Satisfaction, County Pct. with BA, Log, County Population, Black, Liberal Ideology, and Education, plotted against Change in Prob. of Strong Agreement.]
The September 11th Test

ZIP Code Contextual Effect

- March 2002
  - P=0.49
- Fall 2000
  - P=0.51
- October 2001
  - P<0.01

Density

Change in Probability
Core take-home point: living in a changing community matters more when immigration is a nationally salient issue.
Evidence from September 11th

- Core take-home point: living in a changing community matters more when immigration is a nationally salient issue.
- Effect disappears quickly when salience of immigration issue subsides.
Evidence from September 11th

- Core take-home point: living in a changing community matters more when immigration is a nationally salient issue.
- Effect disappears quickly when salience of immigration issue subsides.
- Additional test: local anti-immigrant ordinances.
Core take-home point: living in a changing community matters more when immigration is a nationally salient issue. Effect disappears quickly when salience of immigration issue subsides. Additional test: local anti-immigrant ordinances. Many examples: Fremont, NE; Hazleton, PA.
Local Ordinances
Britain, 2005 Election

Salience of Immigration

Number of Articles/Interviews

Date


0  50  100  150  200  250

News Stories
Pre-Election Interviews
Post-Election Interviews
Britain, 2005 Election

Predicting Immigration as Most Important Problem

Individual-Level Variables
- Income
- Unemployment Benefit
- Education
- Immig. Enrich Culture
- Personal Economic Situation
- General Economic Situation
- Age
- % Routine Workers
- % Well Educated
- % Immigrant
- % Unemployed
- % Immigrant Change
- % Lone Parents
- % Over 65
- % Unskilled
- Conservative
- Labour
- Male
- Pop Density
- % Well Educated
- % Routine Workers
- % Immigrant
- % Unemployed
- % Immigrant Change
- % Lone Parents
- % Over 65
- % Unskilled
- Conservative
- Labour
- Male
- Pop Density
- % Well Educated
- % Routine Workers
- % Immigrant
- % Unemployed
- % Immigrant Change
- % Lone Parents
- % Over 65
- % Unskilled
- Conservative
- Labour
- Male
- Pop Density

Contextual Variables
- Pre-Election
- Post-Election

Introduction
- Theory and Hypotheses
- Proposition
- Experiments
- Results
- Conclusion
- Additional Material
- Related Research
### An Unsupervised Example: LDA

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>don’t</td>
<td>know</td>
<td>they</td>
<td>illeg</td>
<td>law</td>
<td>they</td>
<td>about</td>
</tr>
<tr>
<td>2</td>
<td>you</td>
<td>you</td>
<td>english</td>
<td>here</td>
<td>the</td>
<td>here</td>
<td>church</td>
</tr>
<tr>
<td>3</td>
<td>peopl</td>
<td>differ</td>
<td>languag</td>
<td>fine</td>
<td>we’re</td>
<td>and</td>
<td>would</td>
</tr>
<tr>
<td>4</td>
<td>there</td>
<td>communiti</td>
<td>speak</td>
<td>pay</td>
<td>enforc</td>
<td>want</td>
<td>you</td>
</tr>
<tr>
<td>5</td>
<td>are</td>
<td>american</td>
<td>them</td>
<td>they’re</td>
<td>that</td>
<td>their</td>
<td>immigr</td>
</tr>
<tr>
<td>6</td>
<td>job</td>
<td>veri</td>
<td>they’re</td>
<td>legal</td>
<td>togeth</td>
<td>get</td>
<td>that</td>
</tr>
<tr>
<td>7</td>
<td>mani</td>
<td>like</td>
<td>their</td>
<td>tax</td>
<td>about</td>
<td>money</td>
<td>cathol</td>
</tr>
<tr>
<td>8</td>
<td>know</td>
<td>more</td>
<td>know</td>
<td>who</td>
<td>was</td>
<td>back</td>
<td>like</td>
</tr>
<tr>
<td>9</td>
<td>problem</td>
<td>your</td>
<td>learn</td>
<td>you</td>
<td>this</td>
<td>work</td>
<td>say</td>
</tr>
<tr>
<td>10</td>
<td>there</td>
<td>and</td>
<td>our</td>
<td>should</td>
<td>down</td>
<td>lot</td>
<td>i’m</td>
</tr>
<tr>
<td>Prop.</td>
<td>0.144</td>
<td>0.122</td>
<td>0.139</td>
<td>0.157</td>
<td>0.142</td>
<td>0.141</td>
<td>0.155</td>
</tr>
</tbody>
</table>

**Table:** Clustering 836 comments from focus groups on immigration using 165 word stems, LDA.