

QUALIFYING PAPER

**Linguistic and Cultural Orientation in Indiana**

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## LINGUISTIC AND CULTURAL ORIENTATION IN INDIANA

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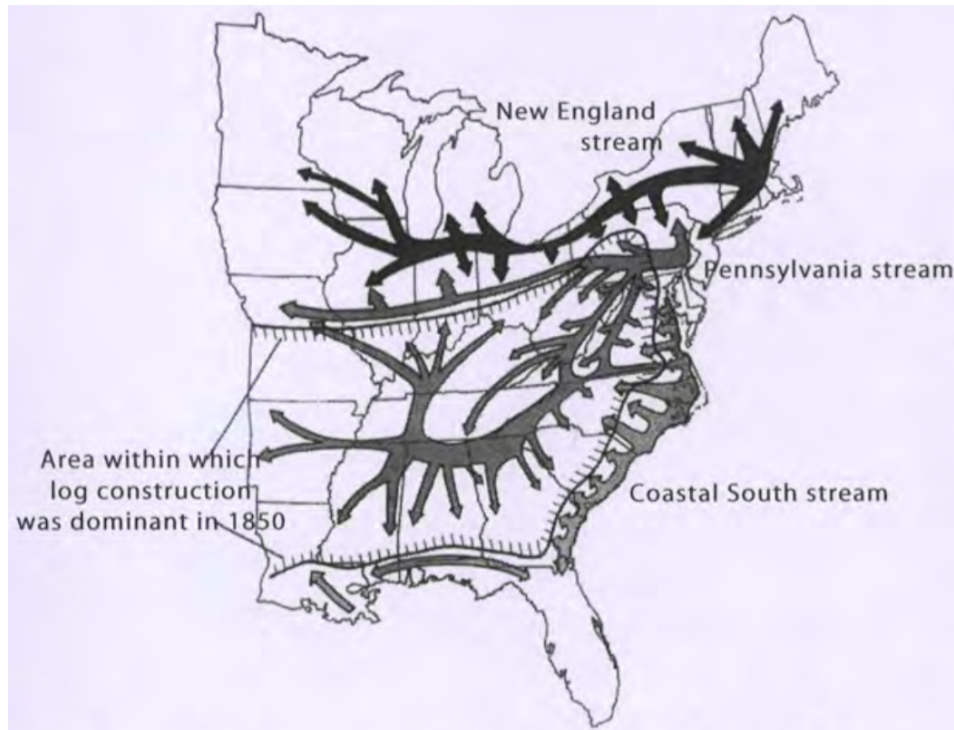
**1. INTRODUCTION.** Variation in the production and perception of speech in individuals is strongly linked to linguistic experience, but it has also been shown to be influenced by attitudes and beliefs about regional and social patterns of linguistic variation. Our current understanding of the relationship between a) perceptual adaptation and sociophonetic perception, b) production variation, c) speaker's cultural and sociophonetic identification, and d) cultural evaluation is not clear. This paper seeks to lay out some basic facts about the latter two areas in the state of Indiana, with an eye toward developing a larger study of the former areas.

In the remainder of this introduction, I will describe why Indiana is an ideal region to study in order to gain insights into relationships just mentioned, present the goals and scope of this paper, and briefly introduce some constructs of theoretical interest. The paper will then describe the constructs in more detail, document the development of a survey used to assess regional, cultural, and linguistic orientation, and present the results of a distribution of the survey. Finally, a summary of the findings and plans for further work will be given.

**1.1. INDIANA AS AN IDEAL LABORATORY.** Indiana is an ideal laboratory for the study of sociophonetic variation and cultural orientation and evaluation. On the one hand, the people who inhabit the state of Indiana have a shared regional identity. The political boundaries of Indiana, along with typical symbols of politically-based communities such as the state flag and other emblems representing the state, sports teams, and the widely recognized moniker, 'Hoosier', serves to unify inhabitants into a single community. Despite this unified identity, the geographic territory of the state spans several broad culture and language regions in the United States. Labov (2012) provides examples of several factors that divide Indiana into distinct regions. It is important to note that these regions in Indiana are part of broader cultural and linguistic trends that span multiple states.

Using the geographic distribution of construction materials and building practices to demonstrate settlement patterns in the westward expansion of the United States (Kniffen & Glassie, 1966), Figure 1 shows that Indiana was settled via three routes. In the north, the New England stream brought settlers across the southern edge of the Great Lakes. The Pennsylvania stream brought settlers from two directions, a direct route that brought settlers across western Pennsylvania and Ohio into central Indiana, and an indirect route that took settlers into the southern states, including Tennessee and Kentucky before eventual settlement north of the Ohio river into southern Indiana.

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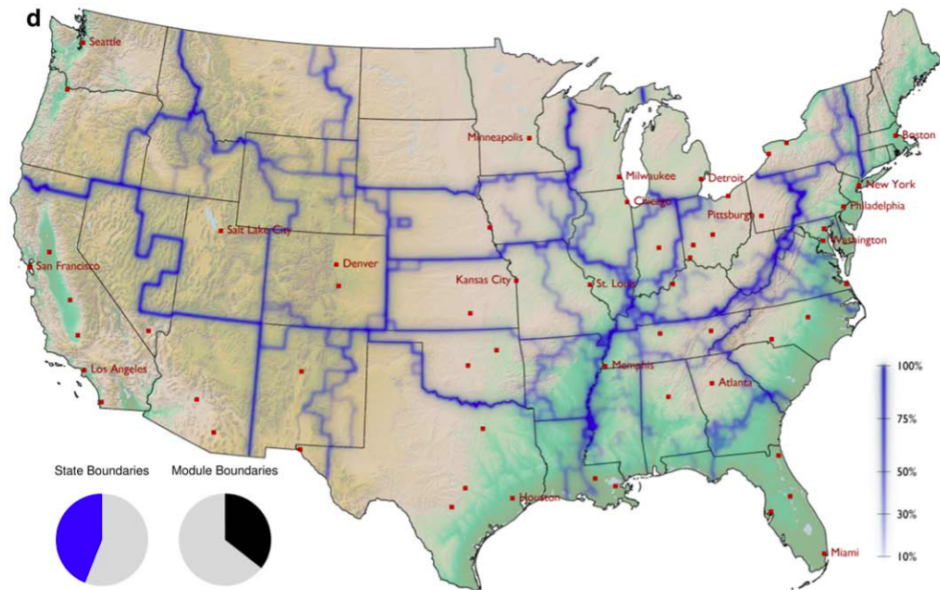


**Figure 1:** Westward settlement streams as shown by building material (Kniffen and Glassie (1966) in Labov (2012, 285)).

Using another technique for identifying divisions within the United States, Thiemann, Theis, Grady, Brune, and Brockmann (2010) used data on banknote circulation to detect borders of population movement. Figure 2 depicts borders as blue lines. The darker the shade of blue, the less likely a given bill is to have crossed that line. In many instances, the dark blue borders coincide with state borders. Focusing on Indiana and surrounding regions, it is clear that Indiana is split into at least three regions. There is a central region which encompasses most of the state, a northwestern region near Chicago and a southern region. The northern region is divided between the area closest to Chicago and another area around the city of South Bend. The southern region is further subdivided into an Evansville region in the southwest, a Louisville region in the central south, and an Ohio region near the cities of Cincinnati and Dayton.

A final map that suggests the division of Indiana into distinct regions comes from a study of the political values of people in North America. Labov

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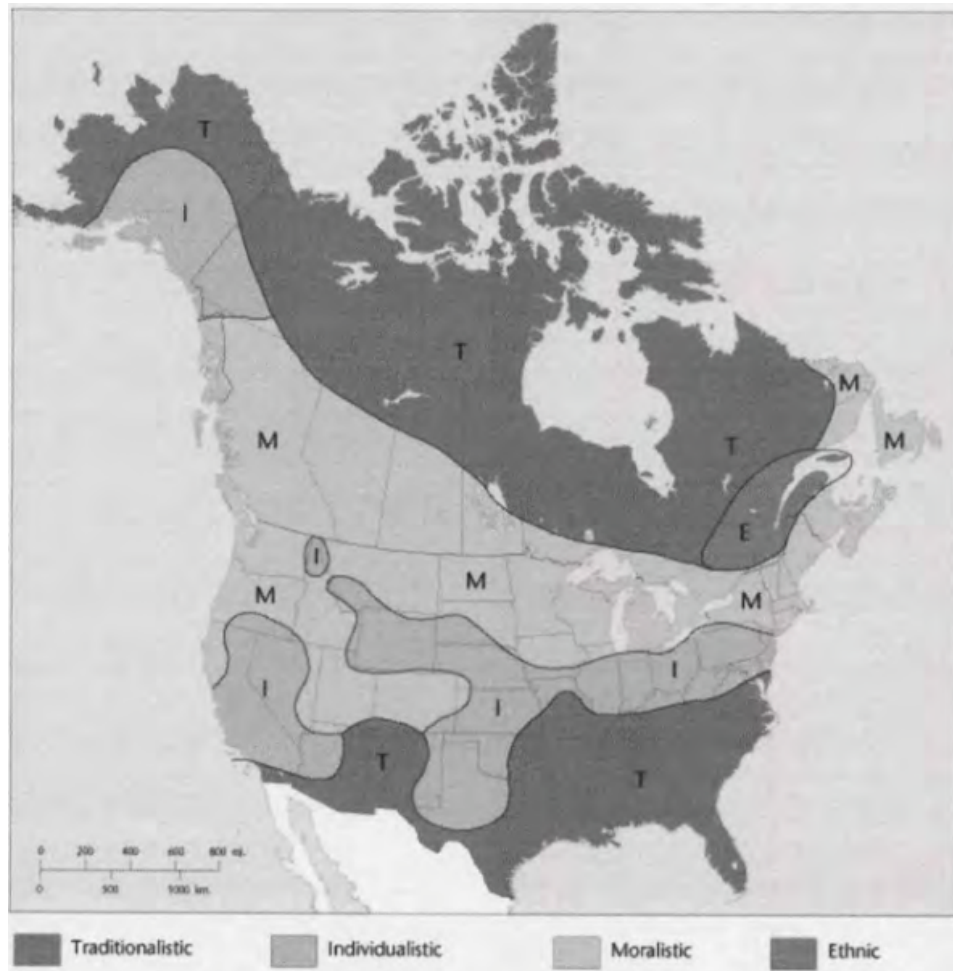


**Figure 2:** Borders based on circulation of US banknotes as recorded by the online bill-tracking game wheresgeorge.com (Thiemann et al., 2010, Figure 2d).

(2012) describes the work of Daniel Elazar, who characterized the political values of people in various regions as being Traditionalist, Individualistic, Moralistic, and Ethnic. Figure 3 shows that Indiana is situated within the Individualistic region—where people generally believe that the government should have minimal interference on the lives of individuals—and flanked by the Moralistic region to the north—where people believe the government should help people achieve good lives—and the Traditionalistic region to the south—where people believe in a hierarchical structure of society in which the elites govern. We need not be concerned that these two flanking regions do not actually overlap with the borders of Indiana as Figure 2 indicates that there is contact across these borders within Indiana. The important interpretation of these political value regions is that there are broader influences within the cultures of North America that can unify a large community of people that stretches well beyond and across state borders.

Finally, Indiana provides an interesting laboratory for the study of dialect contact due to the four major dialect regions that cross the state, which roughly correspond with the regional divisions seen in Figures 1, 2, and 3. Dialectologists (Labov, Ash, & Boberg, 2005) have presented evidence for

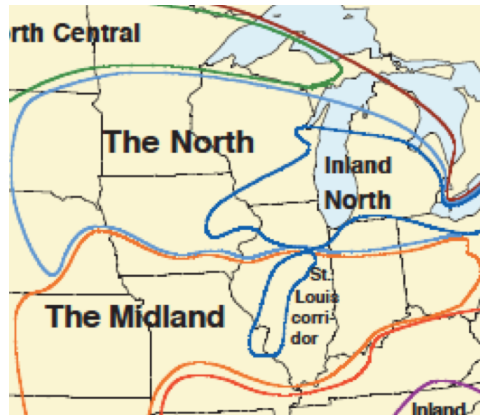
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**Figure 3:** Distribution of political cultures in North America (Elazar (1972) in Labov (2012, 288)).

Northern, Inland North, Midlands, and Southern dialects in Indiana, with speakers in each dialect region sharing relevant linguistic features with other talkers in the broader dialect regions as seen in Figure 4. These four dialect regions are also generally known to be associated with a range of language attitudes. The Southern dialect is usually considered stigmatized and is associated with negative attitudes, although it is also typically considered to sound friendly. The Midlands dialect is believed by many to represent the “standard” dialect of American English. Finally, the Northern dialect, despite being fairly recognizable and frequently parodied in the media, is

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**Figure 4:** The state of Indiana situated among the dialect regions of North America based on data collected for the Atlas of North American English (ANAE) (Labov et al., 2005).

not normally considered to be stigmatized (Niedzielski & Preston, 2003; Preston, 1996, 1999a).

Research in southern Michigan, a region where speakers tend to participate in the Northern Cities Chain Shift, an important factor in defining the Northern dialect region, found that participants believed they spoke in a way similar to people in Indiana (Preston, 1996). This sentiment was not reflected by Hoosiers who identified Michigan as having speech that was different than their own. This finding is significant because it shows a mismatch in the mutual perception of two groups. One group, the Michiganders believe that they form part of a homogeneous group with Hoosiers, but Hoosiers identify Michiganders as sounding different. This and other related questions must be explored in order to facilitate future studies of dialect perception in Indiana, or anywhere one would want to understand the social psychological and cognitive factors that influence speech perception and the subsequent effects on language change.

Thus far I have argued that, while inhabitants of Indiana have a unified identity in some respects as Hoosiers, they are also members of other communities whose borders cross over state lines and correspond with broader cultural regions in North America. Because of this situation in which broader cultural trends support the existence of multiple dialects within an otherwise politically unified state, people in Indiana are confronted with a complex linguistic environment that is intertwined with an equally complex cultural environment.



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**1.2. GOALS.** This paper presents the development and results of a distribution of a survey designed to assess regional, cultural, and linguistic orientations of people in Indiana. Following in the spirit of Nagy, Chociej, and Hoffman (2014), this study seeks to identify which aspects of speakers' beliefs, perceptions, and cultural/regional affiliations contribute to the construction of linguistic, regional, and cultural orientation. How language users orient themselves in relation to a particular society and how that orientation influences expression of sociolinguistic variables has been shown to be relevant in describing variation in a speech community (Labov, 1963). Subsequent work has confirmed the importance of language users' social identity on language use (Eckert, 1988, 1989).

Although previous research on dialect perception in Indiana has assumed and even presented evidence for respondents' variable attitudes toward dialect variation in the state (e.g., Preston, 1996) a suitable method for identifying participants' linguistic identity has not yet been developed. This tool is being developed in order to facilitate future studies of the role of people's regional and linguistic orientations in dialect and sociophonetic perception. In addition to the development of this tool, the results of the study can be analyzed to better understand how people across Indiana construct their regional, cultural, and linguistic identities.

**1.3. OUTLINE OF CONSTRUCTS.** In survey research CONSTRUCTS refer to unobserved psychological traits. Surveys attempt to determine the state of these traits among individuals or groups of individuals. Surveys may use multiple items, or questions, to assess a single construct. For example, if the trait happiness is being assessed, the survey may ask directly "Are you happy," in a negative form "Are you sad," and indirectly "Are you smiling?". While none of these items may individually reveal the underlying feeling of the person, we get some sense of the individual's sentiment by examining all of the responses. Thus, someone who reports being happy and not being sad but who is not smiling may still be considered happy. Indeed, upon further examination of the items among many participants, it may be determined that the original construct was flawed and should be revised or assessed with different items.

This section presents a brief description of the ten constructs related to regional, cultural, and linguistic orientation assessed by the present survey. While the constructs will be discussed in greater detail in the following section, they are presented here to provide a convenient overview.

The ten constructs with brief descriptions are given below:

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### Regional Orientation

**Hometown Pride** A measure of orientation toward the respondent's home region. Does the respondent like his/her home region?

**Homebody** A measure of desire to leave home region (quasi-opposite of 'Hometown Pride').

**Cardinality** Measurement of where the respondents believe they reside geographically (likely to be biased by cultural beliefs).

**Beadth of Region** A measure of the size of the respondent's *imagined community*.

### Cultural Orientation

**Sports** A measure of involvement with sports teams.

**Cultural Ties** A measure of involvement with local activities such as clubs and social organizations.

### Linguistic Orientation

**Personal Accentedness** A measure of the respondent's beliefs about his/her own accentedness without explicit reference to the identity of the accent.

**Home Region Accentedness** A measure of the respondent's beliefs about the accentedness of their region without explicit reference to the identity of the accent.

**Regional Accent Label** A measure of which regional accent the respondents believe they participate in.

**Linguistic Security** A measure of how much the respondents believe their accent varies in different social situations.

**2. REGIONAL, CULTURAL, AND LINGUISTIC ORIENTATION CONSTRUCTS.** In this section the ten constructs to be assessed will be described in detail along with a brief history of research that suggests why these constructs may be of interest to the study of dialectal variation. The ten constructs listed below are intended to help gain an understanding of how language users situate themselves culturally and linguistically. Descriptions abbreviate 'respondents' with the letter 'R'.

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**2.1. REGIONAL ORIENTATION.** Regional orientation is assessed on the basis of Hometown Pride, Homebodiness (desire to stay or leave hometown), and two measures of regional membership—Cardinality and Breadth of Region. The first two measures reflect attitudes toward the home region, and the latter two measures reflect beliefs about where one is geographically situated and the breadth of that region on a local to global continuum.

**HOMETOWN PRIDE.** A measure of orientation toward R's home region. Does R like his/her home region in a global sense?

Inspired by Labov's (1963, 1972) study of Martha's Vineyard, this construct deals with how much Rs like their home region. Labov used his own subjective assessment of talkers' orientation to the Vineyard and found that those who had a positive orientation to the island participated in phonological patterns associated with the island.

An important part of the Vineyard study is that an increase in tourism brought long-time island inhabitants into frequent contact with mainlanders and their ways of talking. For those on the Vineyard who wanted to distinguish themselves from the non-locals, they needed to develop outward indicators of their local identity. One way of doing this was to exploit linguistic variation by using phonological patterns that were associated with people who exemplified long-time habitation on the island, the fishermen. Thus, merely liking one's home region is not enough to drive participation in distinct regional patterns, rather, one must have a reason to increase usage of regionally- or socially-marked patterns. If such a reason is present to drive the shift, then it is expected that those who have more regional pride would participate more fully in phonological shifts/innovations.

**HOMEBOODY.** A measure of desire to leave home region (quasi-opposite of 'pride').

The term HOMEBOODY comes from Clopper and Pisoni (2004) where it referred to people who had only lived in the state of Indiana, in contrast to people who had lived in three or more places, called Army Brats. Rather than determining where Rs have lived, this construct seeks to assess Rs desire to explore new places. Clopper and Pisoni (2004) were explicitly interested in the role of linguistic experience on dialect categorization. I am already assuming that people in Indiana have experience with the range of speech in Indiana, so I want to know how a Hoosier's openness to other regions in and beyond Indiana influences their ability to categorize and distinguish regional variation. I would assume that people who are more

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open (less of a homebody) would have broader phonological categories and be less sensitive to regional variation because their concept of the OTHER or NOT-LIKE-ME is smaller or less sensitive than someone who is more closed or a homebody.

CARDINALITY. Measurement of where R's believe they reside geographically (likely to be biased by cultural beliefs).

People in Indiana have a complex relationship with culture and geographical identity. Hoosiers' mental maps of linguistic variation in Indiana match dialectologists' maps about as well as could be expected.<sup>1</sup> They distinguish broadly between northern and southern speech. They divide the northern region into east and west regions, and they divide the southern region into two degrees of southernness with a horizontal boundary. They also tend to leave a region open in the middle of the state that is "normal", corresponding to the ostensible standard American dialect. Thus, only marked varieties are overtly indicated while the unmarked variety is implicitly indicated by being ignored.

Although Hoosiers are aware of linguistic variation in Indiana, they may not label the dialect regions, especially their own, in the same way as dialectologists due to cultural biases. Indiana began to develop its identity in the years preceding and following the American Civil War (1861-1865). The terms "North" and "South" may have particularly charged associations for certain people and communities in Indiana. While Indiana may have objectively Southern cultural and linguistic regions, the state sided with the Union, or the North, during the war. Geographically, Indiana is bisected by the latitude line that divides the geographic north from south (39° 50') (U.S. Department of the Interior Geological Survey, 1964).

The northern part of the state may not identify as northern, either, because Rs might consider the North to be even further north, such as Michigan. Studies of beliefs about language reveal that people in Michigan believe they speak like people in Indiana, yet Hoosiers deny that they speak like Michiganders, themselves (Preston, 1989). This is an interesting asymmetry that suggests that Hoosiers may reject a Northern label for language and possibly culture.

The conflict between cultural, political, and geographic identity could cause Rs to conceive of their cardinal orientation quite differently depending

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<sup>1</sup>These comments about Hoosiers' mental maps are based on maps I have collected over the last several years. As no formal analysis of the data has been done, these comments reflect my general impressions of the data.

on how they have internalized the social meaning of cardinality.

**BREADTH OF REGION.** A measure of the size of R's 'imagined community'.

Benedict Anderson (2006) popularized the term **IMAGINED COMMUNITY** referring to the communities that extend beyond the range of traditional face-to-face communities. The breadth of human development, especially in industrialized countries, has led to a situation in which humans are part of very large groups that identify as a single group, yet no single member in the group knows every member in the group. Anderson discusses imagined communities in the context of nation formation, but imagined communities can exist anywhere there is a common cause that unites a group of people. Sports teams and religions lend a sense of unity to those who identify with them. Members of these groups have a shared set of traditions that unite them and allow them to believe they have had similar experiences. Since they cannot use facial recognition to indicate group membership, they must use alternative symbols, such as clothing, jewelry, or bodypaint (though this is less common nowadays). As mentioned earlier about Labov's Martha's Vineyard study, ways of speaking can also be used to indicate group identity.

The purpose of asking about breadth of region is to try to understand how far a person believes his or her geographical community extends. Many people are expected to identify with the national level, feeling that they are Americans first and Hoosiers only second. However, it is not inconceivable that some people strongly identify with the regional level, such as Northern or Southern. Still others may feel a strong loyalty to the entire state of Indiana. However someone identifies might indicate what community they are seeking to be a part of when they speak. Certainly, even if a good measure of breadth of region could be developed, the community someone is trying to index linguistically is likely to change, as much sociolinguistic research has discovered (e.g. Eckert, 2000).

Even more important than the fact that someone might use different phonological forms depending on which identity they would like to index, people who earnestly identify with a particular group (such as Northern, or working class, or Polish-American) may use phonology to index their identity differently than another person who also earnestly identifies with the same group. In other words, there could be multiple ways of signaling group membership even among members of the same group.

Alternatively, someone could have such a broad region which she considers "like me" or "part of my region" that even wildly divergent phonological

patterns are considered part of her native dialect (in perception, if not also in production). For example, Niedzielski (1997) demonstrated that people from Michigan shift their perceptual boundaries for vowels when the same talker is purportedly from Michigan relative to when they are told the speaker is from Canada. We can speculate that someone who believes Canadians speak like Michiganders would perform differently on this same task than someone who believes Michigan and Canadian accents are different.

**2.2. CULTURAL ORIENTATION.** The Cultural Orientation construct is intended to be a measure of secondary indexical associations with the region. In the Regional and Linguistic Orientation portions, Rs are asked to explicitly indicate their orientation toward regional and linguistic identities, associations, and beliefs. The intention of the Cultural Orientation portion is to attempt to gain additional information about the person's embeddedness in their region. For example, if someone has a lot of regional pride, as indicated in their responses to the Regional Pride questions, we would expect that person to participate in regional activities. In contrast, someone who does not follow regional sports teams, hates the weather, and does not participate in local clubs is unlikely to have a great deal of regional pride.

It may well be that sports and cultural ties are not the methods to get at implicit affiliations. An early version of this survey included regional culinary items, but it was not very informative (Weirich, 2015). I did, nonetheless, discover that people in Indiana overwhelmingly embrace corn on the cob and Southern food. Other measures of cultural orientation may prove more fruitful, and these should be explored further.

It may be found that people in various regions use different sets of cultural practices to construct their regional identities. Food and sports may be more region-specific and not appropriate for assessing all Rs affiliations equally. For example, Northerners may follow more regional sports because there are more teams in the north than the south, whereas people seem to generally be more appreciative of Southern cuisine compared to dishes with Northern origins. Whatever may be the case, uncovering how people construct their regional identities through cultural practices and participation will ultimately be helpful to understanding the interaction of identity and language use.

**SPORTS.** A measure of involvement with sports teams.

Watching sports is a popular cultural activity. Knowing which teams and/or sports someone follows can be very informative. Including questions about sports affiliations is exploratory, but not unmotivated. Researchers in

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New Zealand (Drager, Hay, & Walker, 2010) found significant differences in phonetic realizations between sports-fans and non-sports-fans after exposure to facts about Australia due to a friendly rivalry between the two states which is heightened among sports-fans.

The sports affiliation construct in the present survey is intended to function similarly as in New Zealand with the important difference being that the New Zealand study was using “fan-ness” as a proxy of aversion to another group, while the Indiana survey would use fan-ness as a proxy for preference for their own group.

**CULTURAL TIES.** A measure of involvement with local culture.

In addition to sports affiliations, other cultural ties are likely to be predictive of embeddedness in the local culture. For the purpose of this survey, cultural embeddedness is approximated by tallying the number of relevant cultural activities each person participates in, both implicitly and explicitly. Implicit embeddedness is measured by how long each side of the family has been in Indiana. Explicit embeddedness is measured by the numbers of clubs and local organizations the person is part of.

The explicit embeddedness measure can be further informed by the person’s desire to leave the community. Eckert (1989) describes how high-schoolers who were involved in many school activities such as athletic teams, after school clubs, and student government tended to be upwardly mobile, desiring to leave the town they grew up in in order to seek post-secondary education and high paying jobs. On the other hand, students who had few aspirations to leave the town preferred to find employment locally and tended to participate in school-based activities much less frequently. This analysis goes against the intuitive hypothesis that people who are involved in local activities are more embedded in the community.

Eckert’s study focused on adolescents, and it is likely that adults would follow different patterns. Nonetheless, community involvement is likely to suggest a greater, rather than lesser, degree of openness to other cultures and people. It remains to be seen just how measures of cultural ties will play out in Indiana.

**2.3. LINGUISTIC ORIENTATION.** The Linguistic Orientation construct is the most interesting at the same time that it is probably the least informative. People are notoriously bad (i.e. inaccurate) at reporting their own patterns of language use. However, I am not interested in asking people to report what they do; I only want to know what they think. As Hamlet points out about the relativity of beliefs and how they affect our behavior, “there is nothing

either good or bad, but thinking makes it so" (Shakespeare, 1603, 2.2). In this sense, what people believe about their language is very interesting because of how individual beliefs might differ or align within a region. More importantly, what someone believes about their language use can help to define their dialect.

In my interviews with people from several dialectal backgrounds, very few people disagree that they talk basically "like other people around here." When I ask if they have an "accent", no one ever responds, "Oh, yes, I have a very strong accent." Rather, what is more likely is that they tell me that that have no accent or a slight accent, but they quickly follow up with, "But you should talk to my [insert kinship term], she/he has a really thick accent!"<sup>2</sup>

**PERSONAL ACCENTEDNESS.** A measure of R's beliefs about their own accentedness (without explicit reference to the identity of the accent).

This construct is fairly straight-forward, but it has two parts. The first part asks if the person personally believes he/she has a distinct accent and the second part asks if the person has been told they have an accent. Both responses are likely to be informative. While most people do not personally believe they have an accent (because they have no trouble communicating with people in their community), certain people may have been told that they have an accent. Someone who does not report being told they have an accent is likely to have a fairly high degree of linguistic security, though this correlation should be tested.

**REGIONAL ACCENTEDNESS.** A measure of R's beliefs about the accentedness of their region (without explicit reference to the identity of the accent).

Regional accentedness has to do with a person's personal belief about the existence of a distinct accent in their region. This construct, in conjunction with the Personal Accentedness construct will help to paint a picture of the perceived dialect situation in a given region and for a given individual. If someone reports not personally having an accent and also reports that their region has no accent, then they are simply conforming to the local norms. However, if someone without a personal accent reports living in a region with a distinct accent, then this person is a rebel. Either of these situations could have cognitive consequences, particularly in perception, but also in production.

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<sup>2</sup>One of these days, I'm going to track down these illustrious family members and interview them. It would be an interesting comparative study.



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**REGIONAL ACCENT LABEL.** A measure of which regional accent Rs believe they participate in.

While the previous two constructs deal with the existence of an accent or changes in accent, this construct deals with the label for those accents. What do people call their way of talking?

**LINGUISTIC SECURITY.** A measure of how much Rs believe their accent varies in different social situations. LINGUISTIC SECURITY, as originally conceived of by Labov (1966) (see also Preston (2013)), asks people to consider alternative pronunciations of a word, tell what is the norm and what they say. A discrepancy is considered a sign of linguistic insecurity, that the person is aware of a “correct” form and yet uses an alternate form.

For the purpose of the present survey, I would like to know if people globally believe that they speak differently depending on the social context. I cannot directly ask about distinct dialects because people may deny that they use a particular dialect. Instead, I want to let the R decide, broadly, if they change the way they speak.

**3. METHODS.** This section describes the structure of the survey and survey distribution methods.

**3.1. SURVEY STRUCTURE.** The survey used for this study consists of 33 items assessing 10 constructs as well as demographic and personal history questions. The ultimate purpose of the construction of this survey is to provide a quick way to assess people’s regional, cultural, and linguistic orientations as part of a sociolinguistic interview or at the end of a laboratory study of speech production or perception. With this goal in mind, the survey includes items presented in a way that participants can quickly respond to. The survey can be completed within 15 minutes. All questions have a discrete number of possible responses. Some items have the option for an open-ended response. All of the items are one of four types: binary response, Likert-type scale, multiple-response allowing one response, and multiple-response allowing many responses.

The survey was adapted to the online survey platform offered by Qualtrics (2016). A paper-version of the survey is included as an appendix.

**3.2. SURVEY DISTRIBUTION.** The survey was distributed at two sites in Indiana, the campuses of Indiana University in Bloomington and South Bend. South Bend, contrary to what its name suggests, is in far northern Indiana. Bloomington is in southern Indiana.

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The survey was distributed to students enrolled in a public oral communication course. The course is required for all students, so enrolled students can be expected to come from a range of majors in the physical and social sciences as well as the humanities. Students were asked to complete the survey voluntarily; no course credit, financial reward, or other incentive was offered by the researcher or course instructors. The survey was distributed to approximately 1344 students in Bloomington and 100 students in South Bend. 239 people began the survey, but 55 surveys were excluded because respondents abandoned the survey before completion. Of the remaining 184 surveys, according to the self-reported school enrollment, 126 are from Bloomington ( $126/1344 = 9.4\%$  response rate) and 36 are from South Bend ( $36/100 = 36.0\%$  response rate). The remaining 22 respondents reported being enrolled at another university in Indiana.<sup>3</sup> The overall response rate for completed surveys was  $184/1444 = 12.7\%$ .

In order to control for the age of respondents, only data from those 25 years old and under will be considered in this analysis. Thus, data from 163 surveys representing respondents on two college campuses ranging in age from 18–25 years old are presented. The distribution of respondents by university is: IU Bloomington - 123, IU South Bend - 27, Other universities in Indiana - 13.

Figure 5 shows a map of respondents' hometowns based on where they reported living the longest before the age of 18. This map and all subsequent maps were produced using ggmap (Kahle & Wickham, 2013).

**4. RESULTS: SUMMARY OF ITEMS AND CONSTRUCTS.** This section presents a descriptive summary of the responses to each item divided by the constructs they were intended to assess. For each construct, a very brief reminder of the usefulness of the construct is presented, followed by a description of responses to each item that comprise the construct. Each construct section concludes with an assessment of the items and suggestions for future analyses and uses of the data.

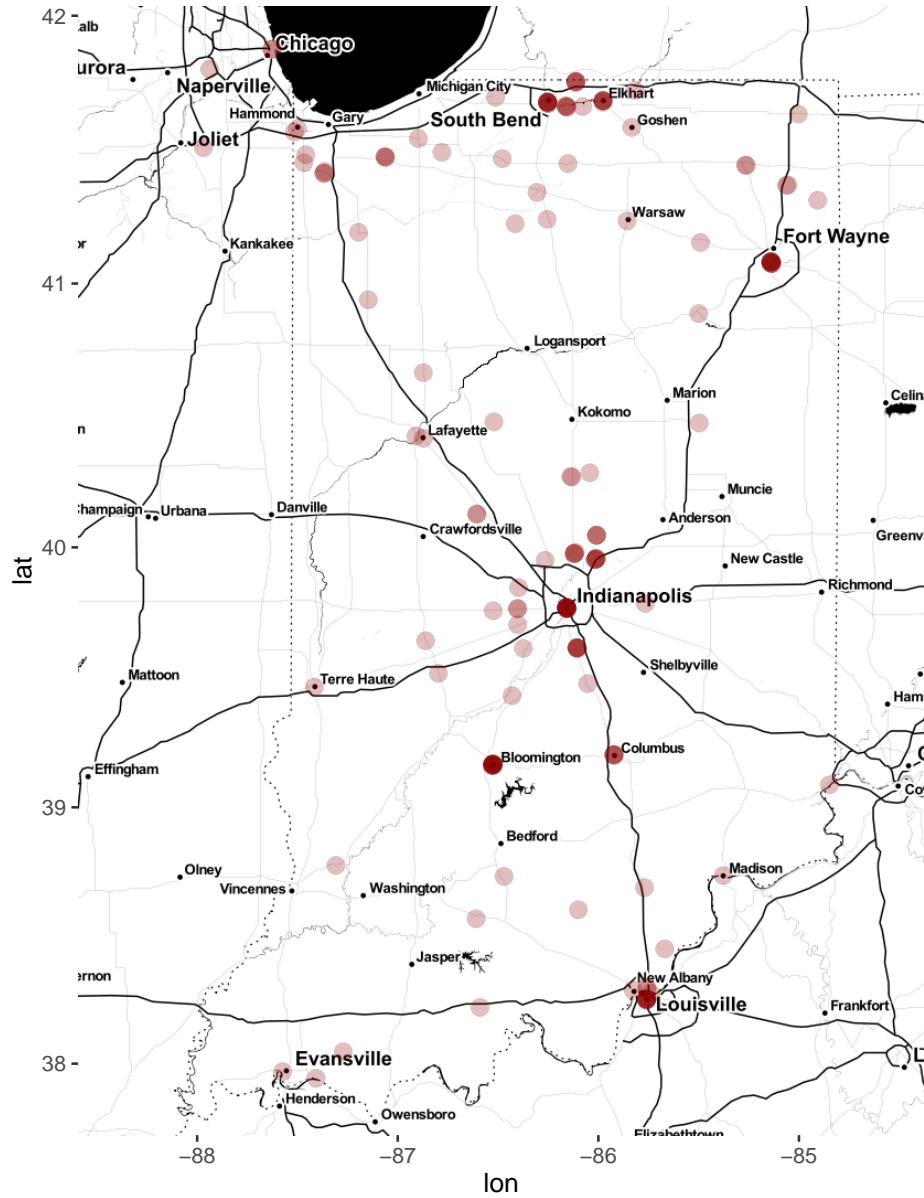
**4.1. HOMETOWN PRIDE.** The Hometown Pride construct is about respondents' feelings toward their hometown. People who have a positive orientation may be more likely to participate in region-specific linguistic patterns than those with negative orientations.

**Item:** How much do you like living in your hometown?

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<sup>3</sup>Some students enrolled in the IU Bloomington course have primary enrollment at another branch campus of the IU system but may enroll in courses on the Bloomington campus.

## LINGUISTIC AND CULTURAL ORIENTATION IN INDIANA



**Figure 5:** Plot of respondents' self-reported locations where they lived the longest before they were 18, assumed to be their "hometown". Points have been jittered to reveal multiple overlapping points. More opaque colors indicate a greater concentration of respondents.

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	Not at all		Neutral		A lot
	⊙	⊙	⊙	⊙	⊙
%	5.6	7.5	6.9	46.9	33.1

**Table 1:** Percent of total responses to “How much do (did) you like living in your hometown?”

With a mean response of 3.9, respondents overwhelmingly like living in their home town. As seen in Table 1, only about 13% of respondents provided negative responses.

**Item:** Satisfaction with aspects of hometown.

The Satisfaction with Hometown items asked people to rate their satisfaction with nine aspects of their hometown. The “social” category consisted of family, friends, and social life. The “prestige” category consisted of economy, job prospects, and education. The “incidental” category consisted of weather, food, and safety.

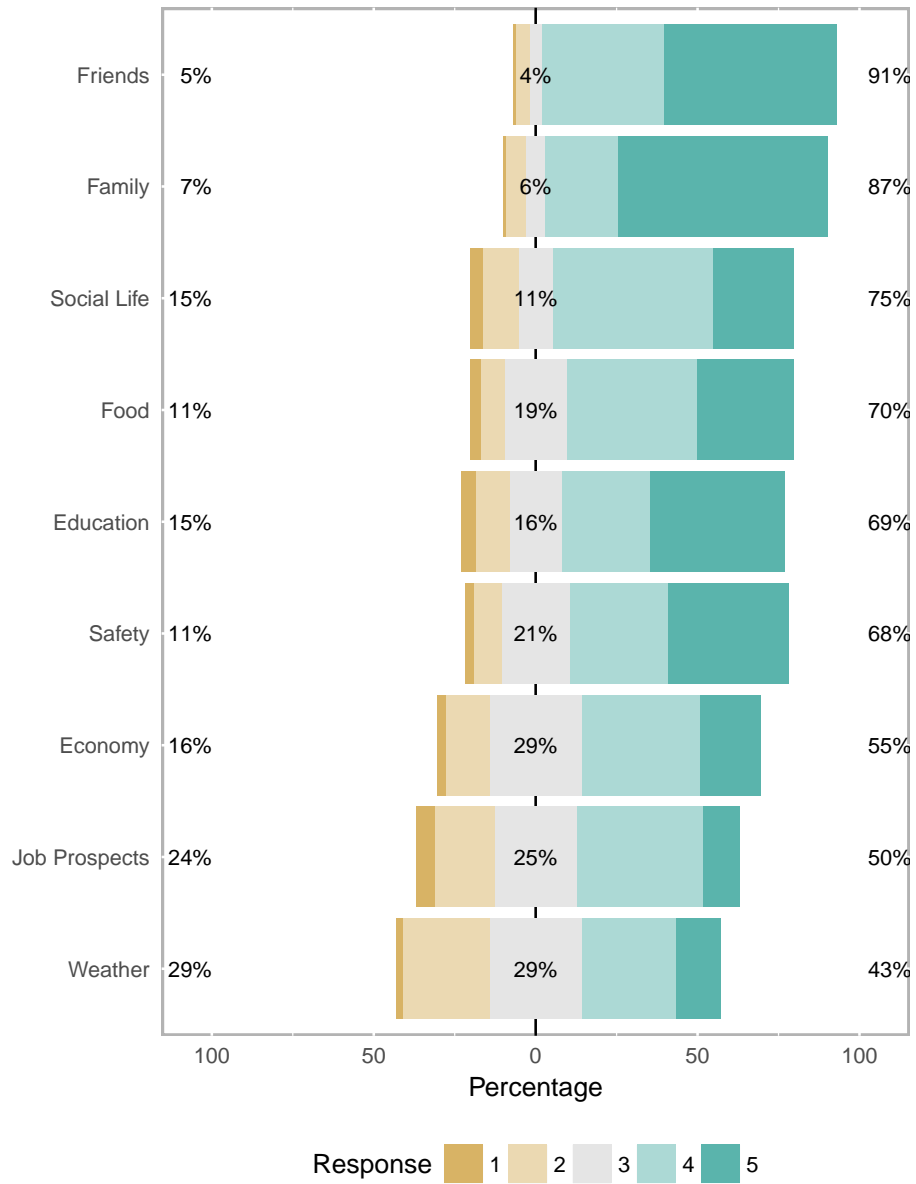
Overall responses to these items are summarized in Figure 6. Negative responses are on the left in gold, while positive responses are on the right in green. Responses are generally positive. People are most satisfied with aspects in the social category: family, friends, and social life. Weather and job prospects are the only aspects that received 50% or more negative and neutral responses.

Figure 7 presents a density plot of Hometown Satisfaction responses by people in each region. The contours are nearly identical for each region within each item with the exception of “Food” in the South. The regularity of responses across regions is somewhat remarkable. It might be expected, for example, that there would be a regional difference in attitudes about the weather since Indiana latitudes span several climate zones. However, the diversity of modal values and contour shapes suggest that responses are being generated by genuinely similar opinions about each aspect rather than by a default response pattern to the item, in which we would expect to see similar modal values and contour shapes for each aspect.

**Item:** Do you like living in your hometown?

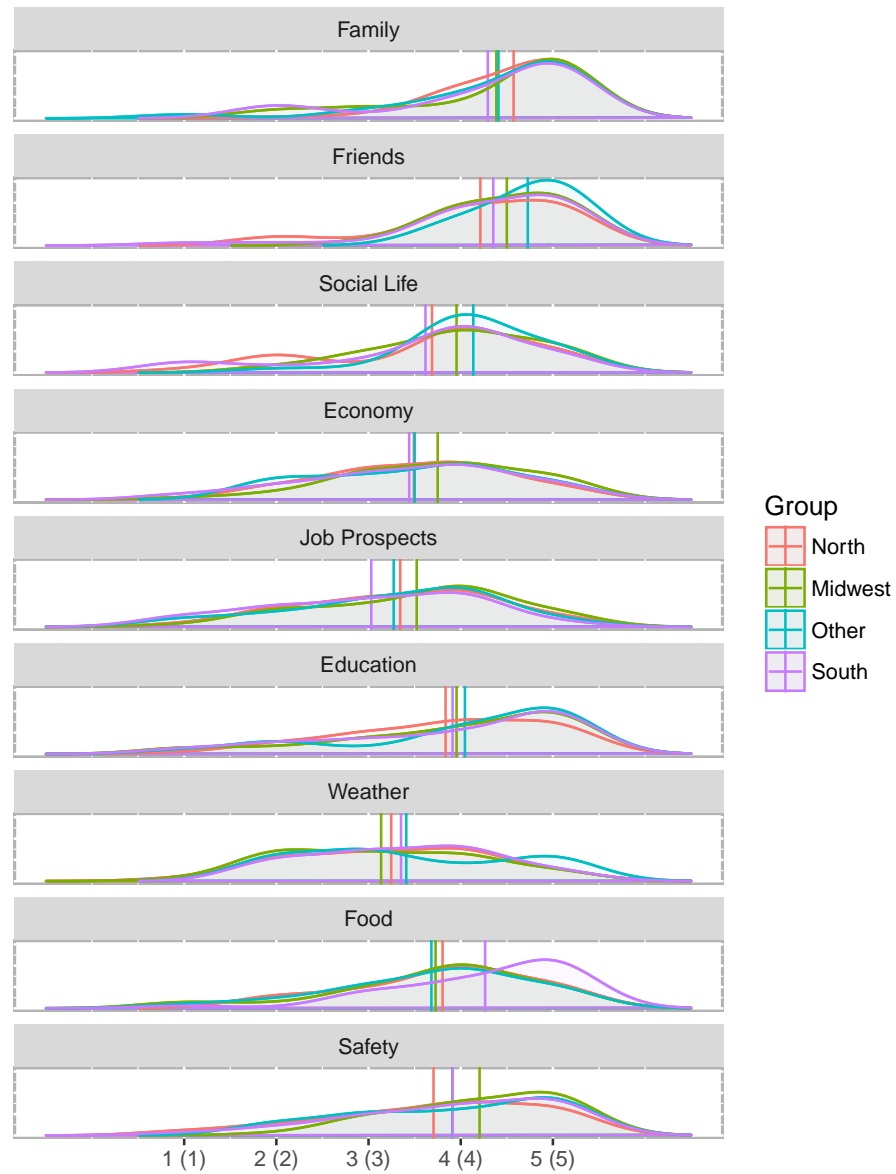
139 people (85%) reported that they like living in their hometown, while only 24 (15%) do not. It is not surprising that people tend to like their hometowns based on responses to the Hometown Satisfaction item, which

## LINGUISTIC AND CULTURAL ORIENTATION IN INDIANA



**Figure 6:** Summary of responses to satisfaction with various aspects of hometown. 1 = Not at all satisfied, 5 = Extremely Satisfied.

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**Figure 7:** Density plot of responses to satisfaction with various aspects of hometown divided by self-reported provenance. 1 = Not at all satisfied, 5 = Extremely Satisfied.

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	Not at all				A lot	No Response
	⊙	⊙	⊙	⊙	⊙	
No	9	10	2	3	0	0
Yes	0	2	9	72	53	3

**Table 2:** Number of total responses to “Do (did) you like living in your hometown?” and “How much do (did) you like living in your hometown?”

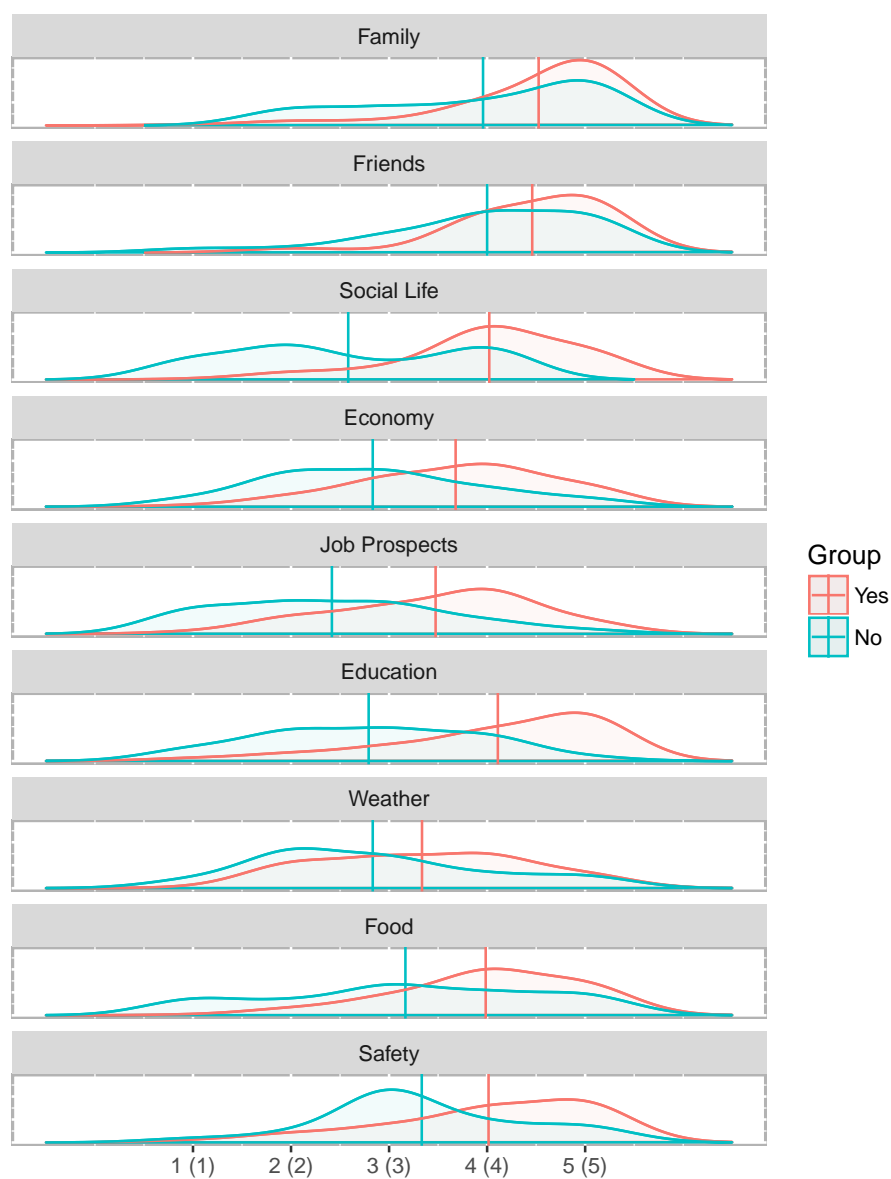
were largely positive. Table 2 shows a cross-tabulation of responses to “Do (did) you like living in your hometown?” and “How much do (did) you like living in your hometown?”. It confirms that the people who gave a low rating to living in their hometown also overtly say that they do not like living there. Interestingly, the scalar cutoff for the binary responses extends beyond the neutral response for both “yes” and “no” responses.

Unsurprisingly, people who report not liking hometown life tend to provide lower ratings on the various aspects of life surveyed, as seen in Figure 8. While the mean of every aspect of hometown life was lower for those who do not like hometown life compared with those who do, many aspects show similar contours for the two groups. Safety and Social Life are two aspects that show up as drastically different between the two groups. The peak for Safety around the neutral region suggests ambivalence about Safety among those who do not like hometown life. However, the bimodal distribution for the same group on Social Life, split by the neutral region, suggests this aspect is worth further exploration. Job Prospects is the only aspect that received a majority (54.2%) of negative responses for those who do not like hometown life.

**ASSESSMENT OF CONSTRUCT.** Overall, this construct and the items used to probe it appear to be useful. Simply asking for a binary response to “Do you like living in your hometown” seems sufficient to assess people’s hometown pride.

The nine aspects of hometown life provide rich data that deserves further exploration. In particular, the Social Life and Job Prospects are of key interest.

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**Figure 8:** Density plot of responses to satisfaction with various aspects of hometown divided by response to "Do (did) you like living in your hometown". 1 = Not at all satisfied, 5 = Extremely Satisfied.



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	Hometown	Indiana	USA
Mean	4.2	3.6	1.9

**Table 3:** Mean responses of likelihood of moving outside of these areas. 1 corresponds to low likelihood and 5 corresponds to high likelihood.

**4.2. HOMEBODY.** The Homebody construct has to do with people's desire to leave their hometown. The items assess two levels of desire to leave: a higher level—moving to other regions, and a lower level—visiting another region. People who are inclined to leave their hometown may be less likely to participate in local linguistic patterns and more likely to participate in broader regional linguistic patterns.

**Item:** How likely are you to move outside of the following regions in the next five years?

As seen in Table 3, respondents said they are highly likely to move out of their hometowns, somewhat likely to move out of Indiana, and unlikely to move outside of the United States. Dividing responses by respondents' regional provenance does not suggest differences by region, but rather suggests the trend applies across the population. Furthermore, the lack of a clear bimodal distribution in the responses does not suggest that this item is likely to be a useful for identifying people who are more likely to have variable performance in later work on variable production and perception.

**Item:** Please indicate the regions you would like to visit or live.

Table 4 shows the percent of respondents who want to visit or live in various places. Interestingly, respondents are more likely to consider living or visiting another state than remaining in Indiana. In fact, respondents are more than twice as likely to want to move to another state than to remain in Indiana but move to a different place within the state. This suggests that while these respondents tend to be willing to live somewhere else, they would rather stay in their hometown if they had to remain in Indiana.

**Item:** Do you have a passport?

99 people reported having passports while 64 people did not have passports. Table 5 reports the correspondence between people's likelihood of moving outside of Indiana—and are, thus, likely to interact with speakers of other dialects of American English—and if they have a passport. Although people who have a passport are slightly more likely to desire living outside of Indiana, this particular item is unlikely to assess the Homebody construct in a useful way.

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	Another Indiana Place	Another State	Another Country
<b>Visit %</b>	24.5	85.3	88.3
<b>Live %</b>	38.0	88.3	56.4

**Table 4:** Percent responses of desire to visit and live in various regions.

	Not at all likely ⊙	⊙	⊙	⊙	Extremely likely ⊙
<b>No</b>	5	7	11	26	15
<b>Yes</b>	9	12	17	30	30

**Table 5:** Number of total responses to “Do you have a passport?” and “How likely are you to move outside of Indiana?”

ASSESSMENT OF CONSTRUCT. The responses to items for this construct suggest that assessing someone’s desire to leave their home region is not as simple as asking if they would like to leave. While most people would consider moving to another state, fewer were interested in relocating within Indiana. Knowing if the person has a passport does not help us to know if they would like to move somewhere else. Of course, it is helpful to know who would like to stay in Indiana. However this construct should be explored in future work, it is likely an aggregate score of several propensities will be a more helpful analytical construct than responses to any one item.

Further explorations of this data may consider a broader construct that incorporates responses to the Homebody construct, Hometown Pride, and Cultural orientation items. Perhaps constructing a scale of local–global orientation would be helpful. For example, someone with prototypically local orientation likes their hometown, gives high positive ratings on aspects of their hometown, is involved with local organizations, and does not want to live in another state.

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Region	n	%
North	61	37.4
Midwest	45	27.6
Central	9	5.5
South	35	21.5
Total	150	92

**Table 6:** Number of responses to “Which region in Indiana are you from?” (% based on total survey response count of 163; “Other” responses not show).

**4.3. CARDINALITY.** This construct is fairly straightforward. It assumes that people associate themselves with a geographic region on a North–South continuum. The one item used to assess this construct simply asks people to label the geographic region they associate with.

**Item:** Indicate which region in Indiana you are from.

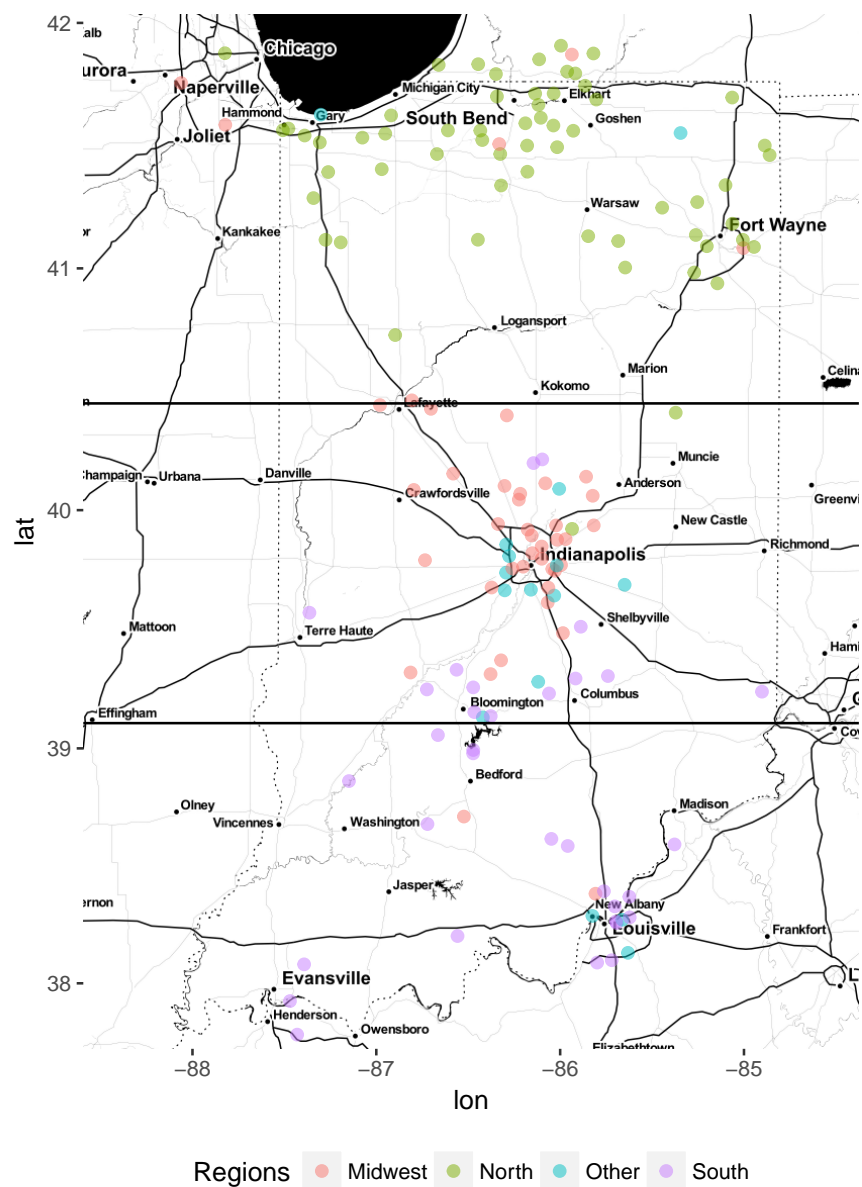
Which region of Indiana people say they are from is of interest as a control for which accent they say they speak. More generally, where people say they are from can be used to explore the mental geographic boundaries that Hoosiers have. Table 6 gives the count of responses to each region of Indiana. Although “Central” was not provided on the survey, it was a popular “other” response. Future versions of the survey should include a “Central” option.

Looking at the plot of respondents’ self-reported region of provenance in the map in Figure 9, it is clear that there is little ambiguity as to which regions exist in the state. In fact, the self-reported regions divide the state nearly perfectly into thirds. The dark horizontal lines added to the map indicate the lines of latitude that divide the state into thirds.

If we were to adjust these latitude lines to better indicate the self-reported geographic regions, both lines should be shifted up slightly—the Midwest/South boundary should be raised above Bloomington, and the Midwest/North Boundary should be raised above Lafayette.

It is interesting to note the responses that diverge from the regional tendencies. The “Midwest” response is found around Louisville in the south, and South Bend and Ft. Wayne in the north. This is likely due to the fact that “Midwest” is a more general term in Indiana that could refer to the entire state. The “Central” responses, which are not explicitly shown on the map but are among the “Other” responses, are clustered around Indianapolis. There are two “South” responses above Indianapolis, above

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**Figure 9:** Plot of respondents self-reported region of provenance with latitude lines dividing the state into thirds. Points have been jittered to reveal multiple overlapping points. More opaque colors indicate a greater concentration of respondents.

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even a binary North/South division line. My only speculation about these responses (which would be easier to ignore if there were only one) is that there are enclaves of Southern cultural regions in Indiana as the result of settlement history.

**ASSESSMENT OF CONSTRUCT.** This construct worked out surprisingly well. As seen in Figure 9, people not only have a fairly accurate mental map of regions in Indiana, they are also able to use the item as worded on the survey to report their own provenance. Seeing such clean responses to an item with a clear correlate in physical reality lends credibility to people's responses to more abstract questions about regional associations. It is unclear how the most common write-in response, "Central", should be incorporated in a revised version of the survey. Having both "Midwest" and "Central" on the survey could be confusing. Perhaps the best solution is to include one option or the other, and then continue to allow write-ins.

**4.4. BREADTH OF REGION.** When asking questions about someone's home region, we would like to know the size of that person's region. While there may be many ways to assess the breadth of someone's region, the item selected to assess this construct directly asks people to give the extent of what they consider to be their region.

**Item:** What size of place do you most associate yourself with?

Table 7 shows the size of place that people associate themselves with. The basic idea of this item is to assess if the respondent is more locally oriented, or more globally oriented. Most people (98) reported associating with their hometowns. The next most popular response, state, lagged far behind with 24 responses. Country and region followed with 17 and 15 responses, respectively. Unsurprisingly, few people chose the extreme responses.

There are two useful clusters in these responses, the Hometown/County group and the State and larger group. A further analysis of interest would be to compare the rate of these responses to the distance between the hometown and urban centers such as Indianapolis, Chicago, Louisville, and Evansville. Of the four people who responded "Neighborhood", three were from Southern regions and one was from Indianapolis. I would have expected these responses to come from people in more densely populated areas, but this was not the trend.

**ASSESSMENT OF CONSTRUCT.** Responses to the single item that assessed this construct yielded a bimodal distribution for the breadth of people's region, centered on hometown and state. Seeing such responses suggests

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Place Size	n	%
Neighborhood	4	2.5
Hometown	98	60.1
County	17	10.4
State	24	14.7
Region	15	9.2
USA	5	3.1
Total	163	100

**Table 7:** Number of responses to “What size of place do you most associate yourself with?” (% based on total survey response count of 163).

that, indeed, people do have varied regional orientations, and the size of that region is varied as well. The format of this item is very important since it presents a range of increasingly larger options. Seeing the range of available options, people must choose how large their own region is.

Further explorations of this data should examine if responses to this item are reliably correlated with other measures that may be assessing a similar construct, such as responses to items in the Homebody construct and which regional sports teams people follow.

**4.5. PERSONAL ACCENTEDNESS.** This construct asks if respondents believe they have an accent. Something likely to contribute to someone’s belief about their own accentedness is if someone has told them they have an accent. People who believe they have an accent may be more likely to shift their language use in particular situations. They may also be more likely to have pride in their way of speaking, compared to someone who does not believe they have an accent, and therefore does not have an accent to associate pride with.

**Item:** Do you think you have a distinct regional accent?

Table 8 shows the distribution of responses to the question “Do you think you have a distinct regional accent?” While most of the respondents did not believe they had a distinct regional accent (122), 28 believed that they did have a distinct accent.

**Item:** Have you been told you have a distinct accent?

When asked if they have been told they have a distinct accent, 51 respondents said yes, while 109 said no. Table 8 presents a cross-tabulation of

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people’s ratings of their own accentedness and if they reported being told they have a distinct accent.

	No, not distinct						Yes, very distinct	Total
	○	○	○	○	○	○	○	
No	46	41	11	6	5	0	0	109
Yes	7	12	5	5	16	6	1	51
Total	53	53	16	11	21	6	1	160

**Table 8:** Number of responses to “Do you think you have a distinct regional accent?” and “Have you been told you have a distinct accent?”

People’s beliefs about their own accentedness and being told they have an accent are moderately correlated,  $r(159) = 0.52, p < .001$ . It is perhaps not surprising that the correlation is not greater since only 28 people reported having a distinct accent while 51 people have been told they have an accent. As mentioned earlier, people tend to believe they do not have an accent, although it is quite easy for someone to be told they have an accent. Further analysis should explore which people were told they have an accent. Is it the people who were less extreme in reporting their own accentedness, people from extreme latitudes in Indiana, or some other predictor?

Dividing the self-reported own-accentedness by told-accentedness reveals that the bimodal distribution in own-accentedness ratings is explained by the “Yes” told-accentedness responses. While the bimodal distribution remains even among the “Yes” responders, the “No” responses have a unimodal distribution.

**ASSESSMENT OF CONSTRUCT.** While most people did not report having a regional accent, there is a fairly close correspondence between having an accent and being told they have an accent. Further explorations should consider the geographic location of people who report having and not having accents, including the geographic distribution of people who have been told they have an accent and either agree or disagree in their assessment of their own accentedness. A description of the correspondence between these results and items in the Hometown Pride and Linguistic Security

constructs would further help to understand the relationship between beliefs about one's own accent and the attitudes associated with those beliefs.

**4.6. HOME REGION ACCENTEDNESS.** This construct is about beliefs about the accentedness of the respondents' home regions. The method and labels for attitude scales item are borrowed from Preston (1999b). Items ask for a description of the accent as well as an indication of the standardness of the accent.

**Item:** Indicate on the following scales how people speak in your region.

Figure 10 presents a summary of all of responses to various characteristics of the home region accent. The labels on the left side of the figure show the two polar ends of a continuum on which respondents were asked to rate the speech of their home region. The figure has been oriented such that characteristics which are typically considered positive are on the left while typically negative characteristics are on the right.

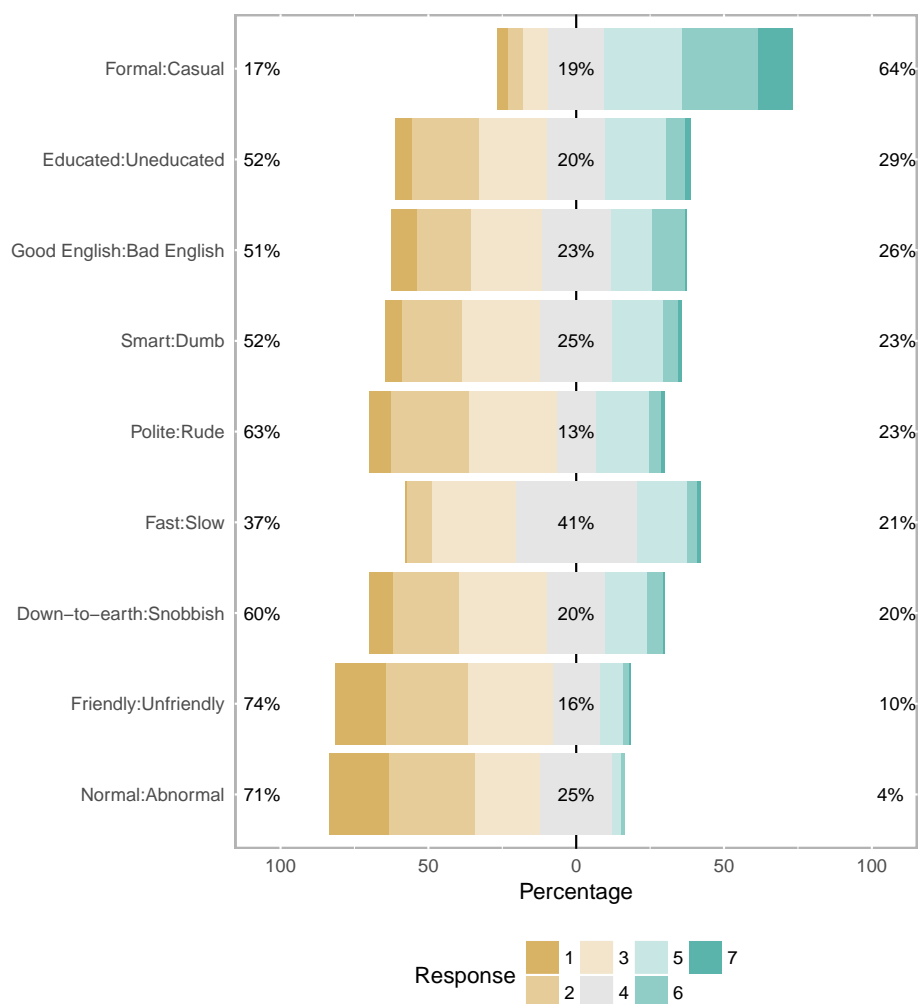
The figure shows that people tend to have positive beliefs about the way people speak in their region. The one characteristic which received a majority of "negative" responses was formality. In fact, if "casual" is considered the positive end of the continuum and the polar ends are flipped, this particular distribution looks nearly identical to the "friendliness" continuum.

If there are different beliefs about regional accents in different regions, we would expect to see them in Figure 11. Rather than clear differences popping out, the general trend is for people to respond similarly to each item rather than to vary consistently by region. One recurring trend for nearly every characteristic is that people who identified as being from the Midwest had response means closer to the positive end than any other region. Southerners report their speech as more down-to-earth and casual than do people from other regions. By and large, however, people tend to respond to these items similarly, regardless of their region.

Although the previous figure did not reveal any clear or interesting differences between regions, Figure 12 shows that people's attitudes toward their hometown is associated with consistently different responses. In this figure we see that while some of the contours nearly overlap, all of the response means for those who do not like their hometowns are closer to the negative end of each continuum. The contours of nearly all responses from people who like their hometowns look identical, a peak around a moderately positive response and a long tail toward the negative pole. Exceptions to this trend are the speaking rate responses and the formality responses, although it appears that respondents were treating the "casual" label as the positive



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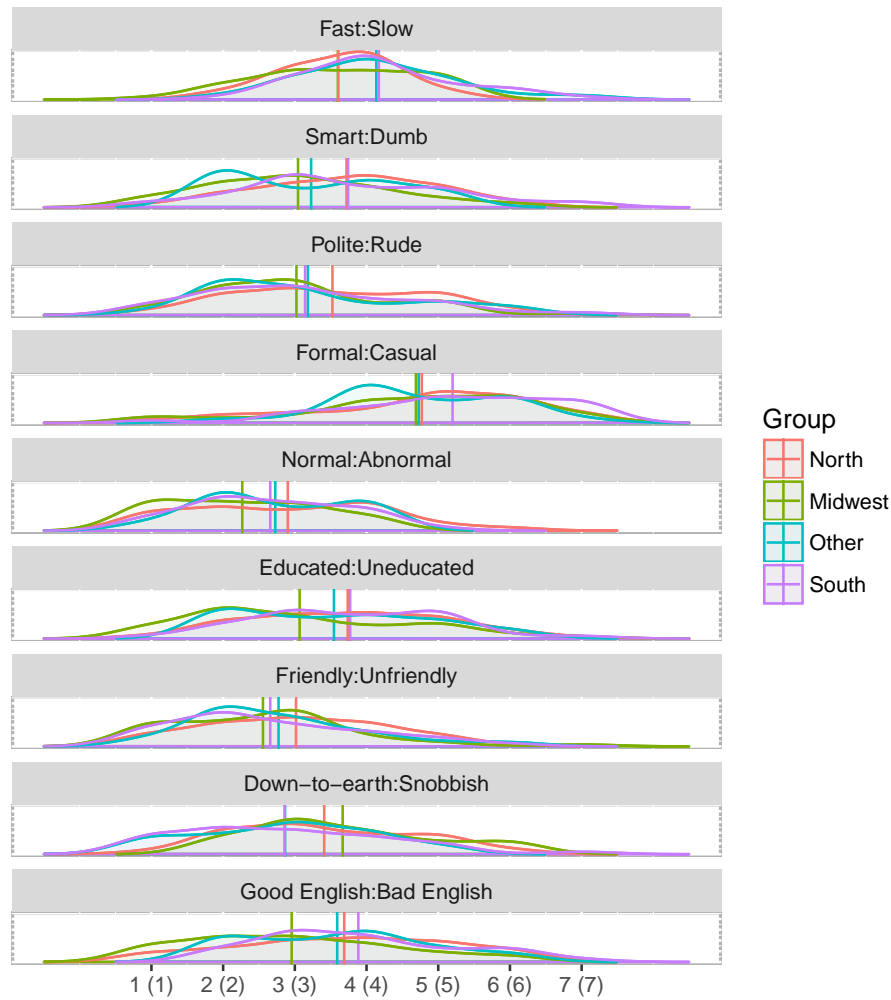


**Figure 10:** Summary of responses to characteristics of home region accent. 1 = closer to left description in label, 7 = closer to right description in label.

end of the continuum.

Those who do not like their hometowns show notable divergences from those who do on items that can be classified as “competence” items: Smart:Dumb, Educated:Uneducated, and Good:Bad English. Notably, the mean and modal responses for these two groups on these three items are on opposites sides of the neutral mark. On the other hand, “social” items such as Polite:Rude, Friendliness, and Down-to-earth:Snobbish are not the items

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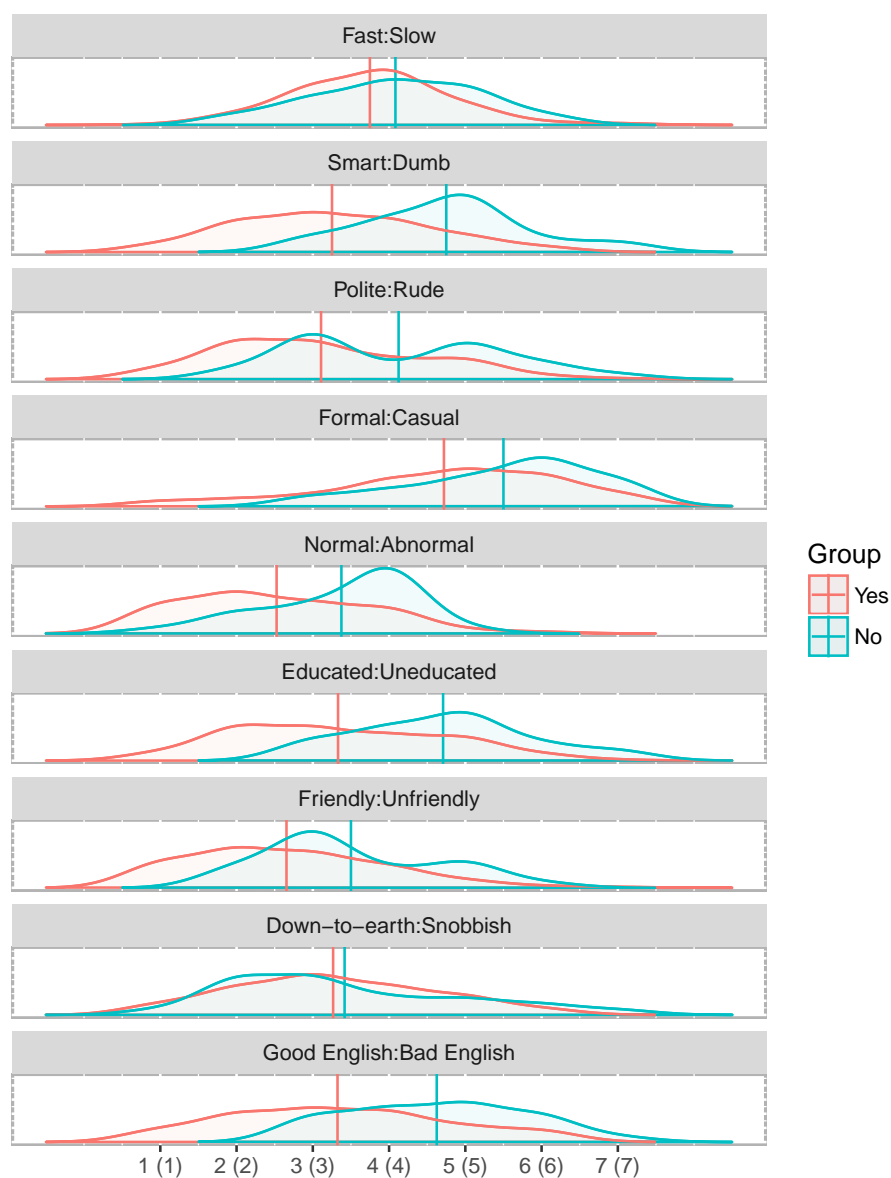
**Figure 11:** Summary of responses to characteristics of home region accent divided by respondents' self-reported home region. 1 = closer to left description in label, 7 = closer to right description in label.

on which those who do not like their hometowns diverge from those who do.

**Item:** Would your region be a good place to learn a neutral American accent?

In response to this item, most people, 135, said yes, but 25 people said no. Referring to the map of the geographic distribution of these responses in

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**Figure 12:** Summary of responses to characteristics of home region accent divided by response to “Do (did) you like living in your hometown?”. 1 = closer to left description in label, 7 = closer to right description in label.

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	North	Midwest	Central	South	Other
No	7	2	0	13	3
Yes	52	43	9	21	10

**Table 9:** Number of responses to regional provenance and “Would your region be a good place to learn a neutral American accent?”

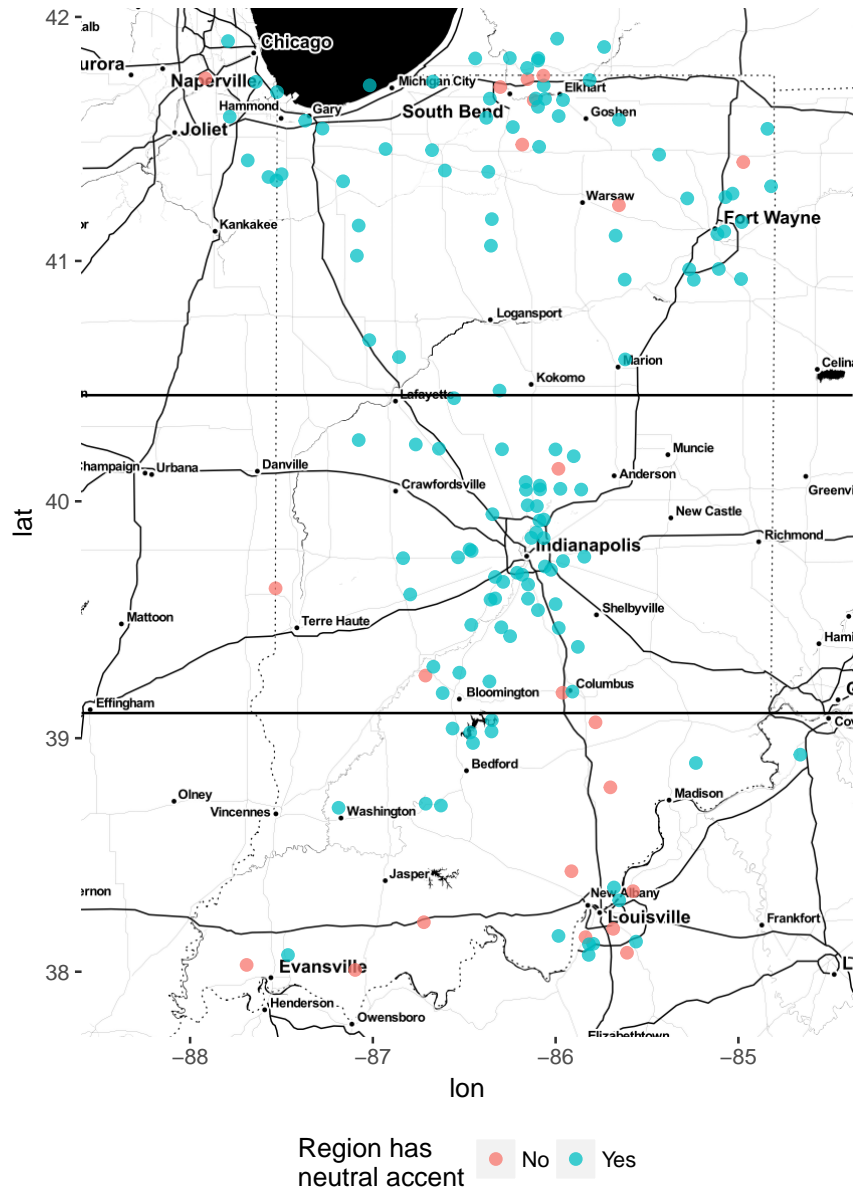
Figure 13, while people across Indiana believe their region is a good place to learn a neutral accent, there are almost no negative response in the central region of the state.

Table 9 shows people’s beliefs about if their home region is a good place to learn a neutral accent divided by their self-reported provenance. Again, while the overwhelming trend is that most people believe their region is a good place to learn a neutral accent, those in the South are far more likely to report that their region does not have neutral accent. This tendency is intensified when the respondents from the university town of Bloomington are removed. The Bloomington respondents gave their regional provenance as South, yet 8 of the 9 respondents from this town who also said they are from the South said that yes, their region has a neutral accent. Those in the North are fairly confident about the neutrality of their accent. However, people who self-report being from the Midwest or Central regions of Indiana are nearly categorically certain that their region has a neutral accent.

**ASSESSMENT OF CONSTRUCT.** While attitudes toward the home region accent are similar across the state, differences can be found among people who do not like living in their hometown. People who do not like hometown life do not find fault in local speech on features related to social interaction, such as politeness and friendliness, but they do find fault in features related to competence, such as intelligence, education, and command of idealized grammar.

Although people tend to rate the speech of their home region fairly positively, people nonetheless believe that certain regions of the state have more neutral accents. Being from a Central or Midwestern region is associated with being good language role models, while being further south is not. The Northern region lies somewhere in between, but somewhat close to the

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**Figure 13:** Plot of respondents' answers of if they believe their region is a good place to learn a neutral American accent. Points have been jittered to reveal multiple overlapping points. More opaque colors indicate a greater concentration of respondents.

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'good role model' end of the spectrum. The university town of Bloomington is an exception to the poor role model trend in the South since responses from this town follow more closely with the Central/Midwest pattern.

The comparison of items in the Personal Accentedness construct with items from the Hometown Pride construct reveal interesting patterns in the survey data. It confirms that comparison of results across constructs is not only helpful, but necessary for understanding the relationship between regional and linguistic orientation.

**4.7. REGIONAL ACCENT LABEL.** Similar to the Cardinality construct, this construct assumes that people are aware of dialectal variation, that they have labels for those dialects, and that they can describe their own dialect using one of those labels.

**Item:** Indicate which accent you usually speak.

As seen in Table 10, most respondents said they usually speak with a neutral or Midwestern accent (130). Referring to a map of respondents' hometowns, Figure 14, most of those who say they speak with a Southern accent are grouped around Louisville. Those who speak with a Northern accent are much further north in the state than those who reported being from the northern geographic region. Of particular note is the city of Ft. Wayne in the northwest in which respondents reported being from the northern geographic region but who report speaking with a Midwestern or neutral accent. It is clear from comparing these two maps in Figures 9 and 14 that being from a particular geographic region in Indiana does not necessarily mean speaking with an accent that bears a similar label.

Table 11 presents the proportion of people's responses to their self-reported provenance by the accent they usually speak. People who reported being from the Midwest only reported speaking with a Midwestern or Neutral accent, never a Northern or Southern accent. As might be expected, no one from the South reported speaking with a Northern accent and vice versa. Overall, "neutral" was the most popular accent. Northerners were as likely to select the neutral option as Southerners when response rate is controlled.

**ASSESSMENT OF CONSTRUCT.** The Regional Accent Label construct is simple to assess and seems to produce fairly clear and consistent results. Further explorations should consider the characteristics of people who provide clear regional accent labels. Do these people have high scores for Linguistic Security, do they have a great deal of Hometown Pride, do they admit to having a Regional Accent, do they have strong cultural ties? In

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Accent	n	%
<b>Northern</b>	20	12.3
<b>Midwestern</b>	49	30.1
<b>Neutral</b>	81	49.7
<b>Sorthern</b>	12	7.4
<b>Total</b>	162	99.5

**Table 10:** Number and percent of responses to “Which accent do you usually speak?” (% based on total survey response count of 163).

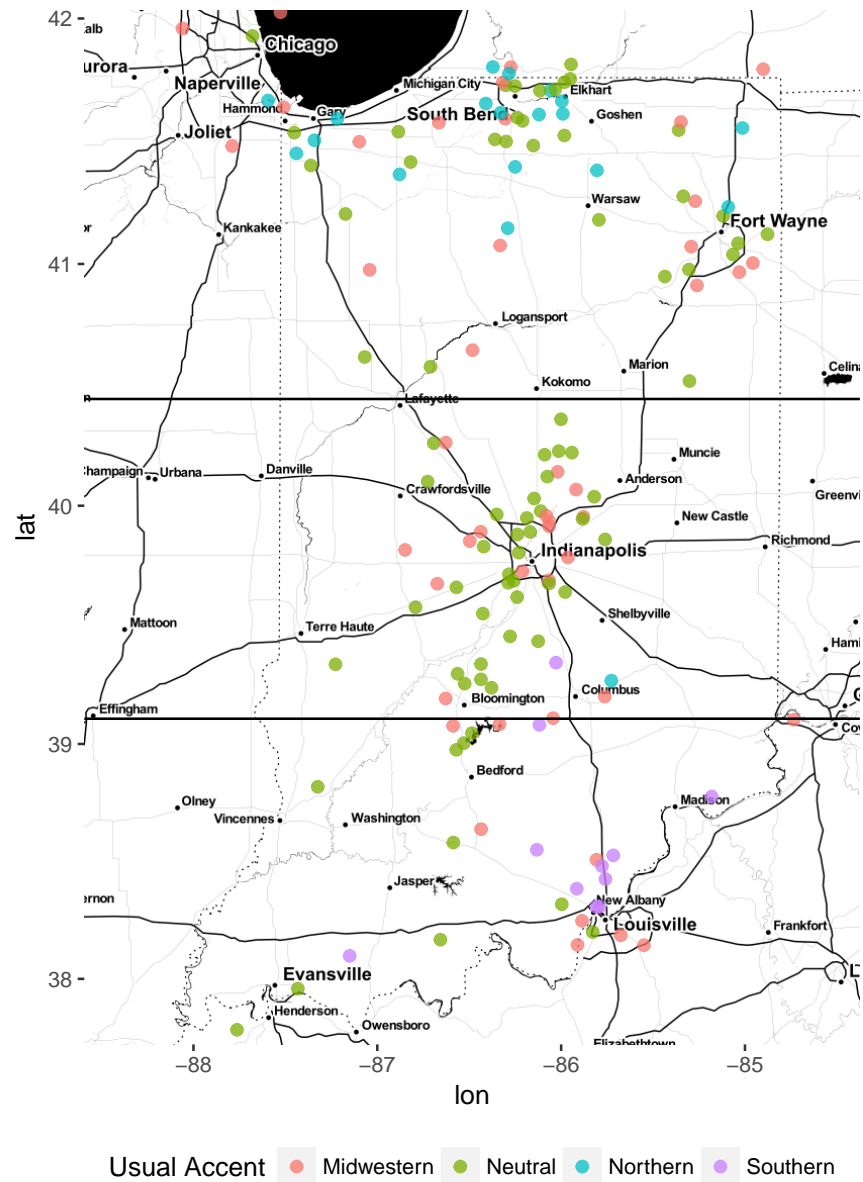
Usual Accent					
Provenance	Northern	Midwestern	Neutral	Southern	Total by Provenance
<b>North</b>	19	14	27	0	60
<b>Midwest</b>	0	17	28	0	45
<b>Other</b>	1	11	8	2	22
<b>South</b>	0	7	18	10	35
<b>Total by Usual Accent</b>	20	49	81	12	162

**Table 11:** Number of responses to regional provenance and “Which accent do you usually speak?”

sum, what is it that allows someone to label their accent despite the potential associated stigma?

**4.8. LINGUISTIC SECURITY.** This construct assumes that people will shift their accent in certain situations. They may shift in situations where they believe they need to adopt a formal speech style or in order to sound like they are speaking “correctly”. People’s linguistic security may be affected by others’ comments about their way of speaking, such as by “making fun” of their speech.

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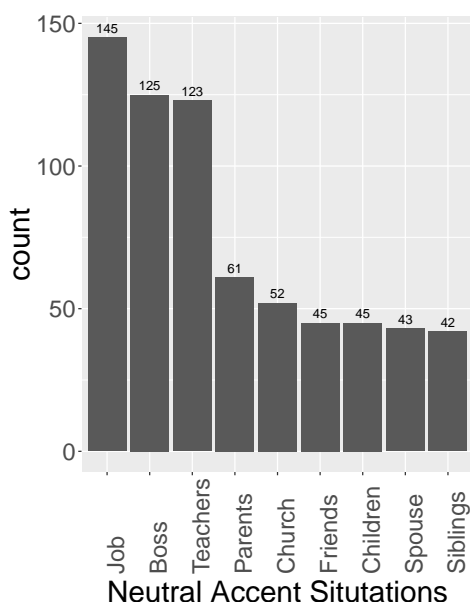
**Figure 14:** Plot of respondents' answers of which accent they usually speak. Points have been jittered to reveal multiple overlapping points. More opaque colors indicate a greater concentration of respondents.



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**Item:** Indicate the situations in which you might try to use a ‘neutral’ accent.

Of the 163 responses to this item, most people reported trying to use a ‘neutral’ accent in places where there is a corporate hierarchy: at their job, with their boss, and with teachers at school, as seen in Figure 15. Less than half reported trying to use a neutral accent in with family, friends, and children.



**Figure 15:** Frequency of responses to situations in which respondents report trying to use a “neutral” accent.

**Item:** Has anyone ever made fun of the way you talk?

Most people (103) have not been made fun of for how they talk while a substantial minority (60) have been made fun of. Table 12 shows that people from every region in Indiana report that someone has made fun of their speech. In every region, though, fewer people had been made fun of than not.

Corresponding roughly to the results to the item that asked “Would your region be a good place to learn a neutral accent,” the ratio of yes and no responses suggest that people from the Midwest are less likely to be told they have an accent than those from the North or the South. On the basis of these results, people from the Midwest can be assumed to have greater linguistic security since they have not been presented with a reason to doubt

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the standardness of their speech.

	North	Midwest	South	Other
<b>No</b>	37	29	20	17
<b>Yes</b>	24	16	15	5
<b>Ratio</b>	0.65	0.55	0.75	0.29

**Table 12:** Number of responses to regional provenance and “Has anyone ever made fun of how you talk?”

**Item:** Do you use a different accent in certain situations?

Table 13 shows that people tend to not shift their accents when speaking to strangers, but many people do shift their accents in formal situations. These two items are positively correlated ( $\rho = 0.663$ , 95% CI: 0.567 – 0.741).

**ASSESSMENT OF CONSTRUCT.** The items presented in this construct continue to suggest that people orient themselves with reference to a social-professional continuum. “Neutral” accents are used in situations where there is a corporate hierarchy (work and school). People are more likely to shift their accents in formal situations than in social situations with people they have not met. Geography also plays a role in linguistic security, where the speech of people further from the center of the state is more likely to be the subject of stigmatized commentary.

Further analysis is needed to uncover common characteristics of people who shift even in social situations.

		Formal		Total by Strangers
		No	Yes	
<b>Strangers</b>	<b>No</b>	103	25	128
	<b>Yes</b>	1	34	35
<b>Total by</b>	<b>Formal</b>	104	59	163

**Table 13:** Number of responses to “Do you use a different accent when you speak to strangers compared to family and friends?” and “Do you use a different accent in formal situations compared to informal situations?”

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**4.9. SPORTS AND CULTURAL TIES.** Cultural ties are assessed in this survey based on three criteria: religious participation, participation in local social organizations, and interest in sports teams. Many other measures of cultural ties may be appropriate, but these three have been selected for this survey.

**Item:** How often do you participate in religious activities?

Table 14 shows a fairly even divide between people who attend religious activities less than yearly and either yearly or never.

Daily	Weekly	Monthly	Yearly	Never
5	32	20	42	64

**Table 14:** Number of respondents who attend religious services at the indicated frequencies.

**Item:** How many club club or social activities do you attend each month?

Due to a coding oversight, responses to this item were input inconsistently. The data is salvageable, but a method for recoding the data should be developed.

**Item:** Which of the following sports teams did you intentionally watch at least once in the last 12 months?

Only about half of the respondents regularly watch any sporting event. Table 15 shows the number and percent of people who watch sporting events in the given categories. “Fan Type” is an aggregation of responses from people who watched any sporting event within the listed category. The “Football” category counts all people who watched any of the football teams listed on the survey. The “Chicago” category counts all people who watched any athletic team based in Chicago. The “Sports” category is slightly different. It counts the number of people who watched at least three teams, regardless of sport or region.

In order to examine the correspondence between religious participation and sports watching habits, Table 16 gives the frequency of responses to these two items.

Many people who regularly attend religious activities also tend to watch multiple sports. While only about two-thirds of religious attendees also watch a number of sports, the opposite is true of people who never attend religious activities. These results suggest that sports and religious participation may be helpful in estimating people’s cultural ties. That is, people who watch sports and attend religious events are likely to also have other cultural

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Fan Type	n	%
<b>"Sports Fan"</b>	86	52.7
<b>Football</b>	91	55.8
<b>Hockey</b>	33	20.2
<b>Baseball</b>	52	31.9
<b>Basketball</b>	56	34.4
<b>NCAA</b>	112	68.7
<b>St. Louis</b>	11	6.8
<b>Ohio</b>	30	18.4
<b>Chicago</b>	62	38.0
<b>Indianapolis</b>	80	49.1
<b>Detroit</b>	13	8.0

**Table 15:** Number of respondents who are fans of at least one team in each category. "Sports" fans are fans of at least 3 teams, regardless of sport or region.

	Daily	Weekly	Monthly	Yearly	Never
<b>Non-Fan</b>	2	13	11	16	35
<b>Sports Fan</b>	3	19	9	26	26
<b>Ratio</b>	1.5	1.46	0.82	1.62	0.74

**Table 16:** Cross-tabulation of people's frequency of religious participation and their sports-watching habits. "Sports" fans have deliberately watched at least three different sports teams within the previous year.

ties in the community that may be associated with particular patterns of social and linguistic behavior.

ASSESSMENT OF CONSTRUCT. Responses for this construct are promising. We can see that sports and religious participation coincide. Remaining questions include the association between cultural ties and the other constructs. For example, do people with greater linguistic security or hometown pride also have more cultural ties? Do people who watch the Chicago Bears also admit to having a Northern accent? Do people who watch only Indiana

teams also have a narrow breadth of region and stronger homebody scores?

5. CONCLUSION. This paper has presented the development and results of a distribution of a survey designed to assess regional, cultural, and linguistic orientations of people in Indiana. It has also sought to support the argument that Indiana is an ideal laboratory for the study of sociophonetic variation and cultural orientation and evaluation. It began by showing that Indiana is in some ways a unified geographic and cultural region, and in other ways it is split between two or three broader regional and cultural trends that span large areas of the United States. It is a politically and macro-culturally unified geographic region on the basis of widely recognized political borders, a recognized state shape, and a unique and positive moniker for people from Indiana, "Hoosier". At the same time, the state is divided into several regions due to settlement patterns, patterns of population movement, and broad cultural patterns. Patterns of language use do not ignore these regional divisions, yet the nature of these overlapping regional divisions mean that people have choices to make when they use language, both in production and perception, which is mediated by the social evaluation of linguistic forms associated with particular regions and cultures.

Next, in order to better understand the connection between people's regional and cultural orientations and linguistic orientation within Indiana, several theoretical constructs were proposed and described. The constructs were proposed based on studies in sociolinguistics, dialectology, language attitudes, and social psychology of language that show various factors that may influence people's language use. A survey was constructed in order to assess these constructs among people from Indiana.

The remainder of the paper has given a description of the results from an initial distribution of the survey. The description is necessarily and deliberately broad. Further exploration of the data is necessary in order to further assess the usefulness of the items as well as identify co-occurring response trends as well as statistical verification of qualitative observations.

A major theme that emerges from the initial exploration of responses to the survey of regional, cultural, and linguistic orientation in Indiana is that both attitudes and geography play important roles in the responses.

Attitudes toward the hometown explain responses to many items. Respondents who do not like living in their hometowns diverge from those who do like living in their hometowns on items that have to do with what can be considered "prestige" or "competence" (e.g. intelligence, education, and job prospects). The two groups, however, do not diverge on items that

can be grouped as “social” aspects of life (e.g. family, friends, politeness, friendliness). Aspects of local life and language that do not fit into these two categories can be considered “incidental” (e.g. speaking rate and the weather) and do not necessarily show agreement between the two groups, but rather show indifference (i.e. neutral responses) that cannot be explained by region or attitudes toward the hometown.

A geographic theme that emerged in the survey results is the divide between people in the Northern, Central, and Southern parts of Indiana. Figures 9, 13, and 14 and Table 11 reveal the complicated relationship between place and language in the state. Although people are happy (and able) to indicate their regional provenance by dividing the state into equal thirds, they are reluctant to group their language use similarly. Instead of responding to questions of regional provenance and regional accent similarly, the neutral/Midwest accent region covers a much larger territory than the Central provenance region. People in extreme latitudes of Indiana admit to having different accents than those speakers from more central latitudes. For future work on linguistic production variation and sociophonetic perception, these people in transition zones who call themselves Northern and Southern but label their speech as neutral or Midwestern may provide the most interesting range of variation.

Moving forward, with an eye on developing a brief questionnaire of 10-12 easy to answer questions for inclusion at the end of a sociolinguistic interview or sociophonetic perception experiment, analyses should focus on which items are most useful. Already in this brief summary of the results, it is clear that people’s binary response to “Do you like living in your hometown” is enough to distinguish groups of people.

Subsequent work will focus on more sophisticated quantitative analysis of these data in order to develop a better understanding of how people in Indiana deal with the unified and divided regions and cultures of Indiana.

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# Indiana Culture Survey

Thank you for agreeing to participate in this research. This survey will ask you about your thoughts of life and language in your region. Please answer the questions as best as you can. Your participation in this study is voluntary and greatly appreciated. By providing your responses, you are helping us learn about life and language in Indiana. Your responses are anonymous, and all of the questions are about your thoughts about your region, so there are no substantial risks to completing this survey.

If you have any questions, you are welcome to contact Phillip Weirich at pweirich@indiana.edu

Thank you again for agreeing to participate!

IRB Protocol # 1606364154

**Instructions:** Please respond to the following questions as best as you can. For questions that ask about your 'hometown' or 'region,' respond based on where you consider to be 'home' or where you spent most of your time growing up before going to college.

## Life in Indiana and Beyond

### Your town

**1. How much do (did) you like living in your hometown?**

Not at all	Slightly	Neutral	Very much	A lot
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**2. Please rate how satisfied you are about the following aspects of your hometown.**

	Not at all satisfied	Slightly satisfied	Neutral	Very satisfied	Extremely satisfied
Family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social Life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Economy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job Prospects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**3. Do (did) you like living in your hometown?**

☐ Yes    ☐ No

### Travel

**4. How likely are you to move outside of the following regions within the next five years?**

	Not at all likely	Slightly likely	Somewhat likely	Very likely	Extremely likely
Hometown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Indiana	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
United States	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**5. Please indicate the regions you would like to visit on a vacation** (check all that apply)

- ☐ Another place in Indiana  
☐ Another state in the USA  
☐ Another country

**6. Please indicate the regions you would like to live for at least one year** (check all that apply)

- ☐ Another place in Indiana  
☐ Another state in the USA  
☐ Another country

**7. Do you have a passport?** ☐ Yes ☐ No

**Your neck of the woods**

**8. Indicate which region in Indiana you are from (select only one)**

- ☐ North  
☐ South  
☐ Midwest  
☐ Other \_\_\_\_\_

**9. What size of place do you most associate yourself with** (select only one)

*For example, when you think about where you are from, do you first think “I’m a Hoosier,” “I’m from Lincoln county,” etc.*

- ☐ Neighborhood  
☐ Hometown  
☐ County  
☐ State (Indiana)  
☐ Region (north/south/midwest/etc.)  
☐ USA

## Ways of Talking

This section asks you to rate your opinion on topics that have two extreme responses. Your job is to mark a box along this continuum that corresponds with your opinion about the topic.

For example, if the question is “What is the weather like today?” the scale would look like this:

Cold ☐—☐—☐—☐—☐—☐—☐ Hot

If it is really cold, you might check the first box. If it is somewhat warm, you might check the fifth box.

**10. Do you think you have a distinct regional accent?**

No, not distinct ☐—☐—☐—☐—☐—☐ Yes, very distinct

**11. Have you ever been told that you have a distinct accent?** ☐ Yes ☐ No

**12. Does everyone in Indiana have basically the same accent?**

No, there are ☐—☐—☐—☐—☐—☐ Yes, people speak  
different accents basically the same

13. Indicate on the following scales how you would rate the way people speak in your region.

fast ☐—☐—☐—☐—☐—☐—☐—☐ slow  
 polite ☐—☐—☐—☐—☐—☐—☐—☐ rude  
 down-to-earth ☐—☐—☐—☐—☐—☐—☐—☐ snobbish  
 educated ☐—☐—☐—☐—☐—☐—☐—☐ uneducated  
 normal ☐—☐—☐—☐—☐—☐—☐—☐ abnormal  
 smart ☐—☐—☐—☐—☐—☐—☐—☐ dumb  
 formal ☐—☐—☐—☐—☐—☐—☐—☐ casual  
 good English ☐—☐—☐—☐—☐—☐—☐—☐ bad English  
 friendly ☐—☐—☐—☐—☐—☐—☐—☐ unfriendly

14. Would your region be a good place to learn a neutral American accent? ☐ Yes ☐ No

15. Indicate which accent you usually speak

- ☐ Northern
- ☐ Southern
- ☐ Midwestern
- ☐ Neutral

16. Indicate the situations in which you might try to use a ‘neutral’ accent (Check as many as appropriate)

- ☐ Parents
- ☐ Teachers/Professors
- ☐ Boss
- ☐ Church
- ☐ Job interview
- ☐ Siblings
- ☐ Spouse/Partner
- ☐ Friends
- ☐ Children

17. Has anyone ever made fun of the way you talk? ☐ Yes ☐ No

18. Do you use a different accent when you speak to strangers compared to family and friends?  
☐ Yes ☐ No

19. Do you use a different accent in formal situations compared to informal situations?  
☐ Yes ☐ No

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## About you

20. Age: \_\_\_\_\_

21. Gender    ☐ M    ☐ F    ☐ Other: \_\_\_\_\_

22a. Which university do you currently attend?

- ☐ IU South Bend    ☐ IUFW    ☐ IU Kokomo  
☐ IU Southeast    ☐ IU Bloomington    ☐ University of Southern Indiana

22b. Year in school    ☐ Freshman    ☐ Sophomore    ☐ Junior    ☐ Senior    ☐ Other: \_\_\_\_\_

22c. In what category is your major?

- ☐ Business  
☐ Engineering  
☐ Humanities (ex: literature, languages, philosophy)  
☐ Physical Science (ex: physics, chemistry biology)  
☐ Social Science (ex: psychology, sociology, anthropology)  
☐ Other: \_\_\_\_\_

23. How would you describe your ethnicity?

- ☐ Hispanic  
☐ Non-Hispanic

24. How would you describe your ancestry?  
(check all that apply)

- ☐ European  
☐ African  
☐ American Indian  
☐ Eastern Asian  
☐ Middle Eastern  
☐ Other: \_\_\_\_\_

## Residence History

25. Where were you born? (town/city, state) \_\_\_\_\_

26. Name the location where you lived the longest from birth to 18 years old (town/city, state)  
\_\_\_\_\_

27. Has your primary residence been located outside of Indiana for more than six months at any point in time?    ☐ Yes    ☐ No

28. Have you ever lived outside of The United States for more than three months?  
☐ Yes    ☐ No

## Cultural Activities

29a. How often do you participate in religious activities? ☐ Yes ☐ No

29b. With what religious tradition do you primarily identify?

- ☐ Protestant (specify denomination: \_\_\_\_\_)
- ☐ Catholic
- ☐ Mormon
- ☐ Orthodox Christian
- ☐ Other Christian (specify denomination: \_\_\_\_\_)
- ☐ Jewish
- ☐ Muslim
- ☐ Hindu
- ☐ Buddhist
- ☐ Nothing in particular
- ☐ Atheist/Agnostic
- ☐ Other: \_\_\_\_\_

30a. Are you active in any clubs or social organizations? ☐ Yes ☐ No

30b. How many club or social organization meetings do you attend each month? \_\_\_\_\_

31. Which of the following sports teams did you intentionally watch (on TV or in-person) at least once in the last 12 months? (check all that apply)

### Professional

#### **Basketball**

- ☐ Chicago Bulls ☐ Cleveland Cavaliers ☐ Indianapolis Pacers

#### **Baseball**

- ☐ Chicago Cubs ☐ Cincinnati Reds ☐ Cleveland Indians  
☐ Detroit Tigers ☐ St. Louis Cardinals

#### **Hockey**

- ☐ Chicago Blackhawks ☐ Detroit Red Wings ☐ St. Louis Blues

#### **Football**

- ☐ Chicago Bears ☐ Cincinnati Bengals ☐ Cleveland Browns  
☐ Detroit Lions ☐ Indianapolis Colts ☐ St. Louis Rams

### NCAA (any sport)

- ☐ Butler Bulldogs ☐ DePaul Blue Demons ☐ Purdue Boilermakers  
☐ Indiana Hoosiers ☐ Northwestern Wildcats ☐ Notre Dame Fighting Irish  
☐ U. Kentucky Wildcats ☐ U. Louisville Cardinals

## Family History

**Mother's Side** (or first primary caretaker)

32a. What state did your **mother** grow up in? \_\_\_\_\_

32b. What state did your **mother's mother** grow up in? \_\_\_\_\_

32c. What state did your **mother's father** grow up in? \_\_\_\_\_

**Father's Side** (or second primary caretaker)

33a. What state did your **father** grow up in? \_\_\_\_\_

33b. What state did your **father's mother** grow up in? \_\_\_\_\_

33c. What state did your **father's father** grow up in? \_\_\_\_\_

## Thank you

You have now completed the survey. Thank you very much for your participation!