The relationship between label-based and speechbased perceptual evaluations: The case of Enshi Mandarin regional varieties

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The current study explored the relationship between participants' label-based evaluations of six regional varieties in Enshi Prefecture, China, and their speech-based evaluations of talkers from these varieties using a label ranking task and a speaker evaluation task. The results revealed that under correct identification of talker dialect, participants' evaluations of real talkers based on speech samples were different from their evaluations of 'imagined' county-based dialects, suggesting that speech-based talker evaluations are not solely governed by ideological values associated with dialects. Focusing on a small, understudied community in China, this study contributes to our understanding of the local language attitudes, and language use and maintenance in Enshi Prefecture. An integrated approach is needed to build a model of talker evaluation, which must include a complex set of linguistic, social cognitive, and situational objects. The current results suggest that the object(s) that primarily drives talker evaluations is not the talker's dialect itself.

1. INTRODUCTION

An understanding of the relationship between nonlinguists' evaluations of 'imagined' regional varieties and their evaluative responses to real voices is essential for a complete theory of sociolinguistic processing. In perceptual dialectology, nonlinguists' overt ideological values about regional varieties are elicited by handdrawn map and subjective rating tasks (Benson, 2003; Evans, 2011; Hartley, 1999, 2005; Preston, 1986, 1989). This line of research aims to understand nonlinguists' mental representations of dialect varieties that are constructed over time and stored in long-term memory. In speaker evaluation experiments, nonlinguists are exposed to utterances of unfamiliar talkers and are asked to rate the talkers on social qualities such as friendliness, intelligence, and socioeconomic status (Gao, Su & Zhou, 2000; Giles, 1970; Hoare, 2001; Lambert, Hodgson, Gardner & Fillenbaum, 1960; Zhou, 1999, 2000). The current study draws on work in perceptual dialectology and speaker evaluation to investigate the perceptual evaluation of regional varieties in Enshi Prefecture, China, with the primary goal of exploring the relationship between overt values associated with regional varieties and participants' evaluations of real talkers from these varieties.

Enshi Prefecture, a small region which is underrepresented in sociolinguistic research, was chosen as the field site for the current study because of its linguistic and socioeconomic characteristics. Anecdotal evidence indicates that Enshi natives consider dialects spoken in different counties within the prefecture to be mutually intelligible (but to different degrees) and that some dialects have higher social status than others. Previous production studies have documented dialect differences between counties in the prefecture (Chao, Ding, Yang, Wu & Dong, 1948; Yang, 2011; Yuan, 2001), and a recent perceptual study showed that Enshi participants were able to classify talkers based on their dialects (Yan, 2015). In terms of socioeconomic characteristics, considerable differences in socioeconomic development are found between counties as well as between urban and rural areas in the prefecture (Enshi Statistics Bureau, 2013).

Given the linguistic and socioeconomic characteristics of Enshi Prefecture, asking participants to rate county-based dialects in a label ranking task and to socially evaluate talkers from different counties in a speaker evaluation task is close to their daily experience with dialects, and will also reveal how their social evaluations are shaped by local linguistic and socioeconomic situation. The results of the two tasks will show, for example, whether dialects that are linguistically similar based on dialect production data (e.g., belong to the same dialect region; Chao et al., 1948; Guo, 2009) are also rated similarly on social dimensions, whether dialects spoken in socioeconomically more developed counties are rated to be more favorable than those used in less developed counties, and whether talkers from more developed counties are also perceived more favorably than those from less developed counties under correct identification of talker dialect. Thus, the use of these two tasks allows me to examine the way in which participants' evaluations of regional

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dialects and talkers are influenced by linguistic and social factors. In particular, the finding regarding the role of social factors in dialect evaluations has implications for our understanding of language use and maintenance in Enshi Prefecture. If a dialect is rated favorably by participants across the prefecture, given that positive evaluations of the target language can facilitate the learning of that language (Garrett, 2010), it is likely that Enshi prefecture participants are more willing to learn this dialect than a dialect that receives less positive evaluations. On the other hand, if participants exhibit positive evaluations of their own local dialect, even if their dialect is viewed less favorably by non-local participants, the local dialect is expected to persist and be used by local speakers; no significant language shift should happen given their loyalty to their mother tongue dialect. Moreover, a comparison of participants' evaluations of regional dialects and their speech-based evaluations of talkers of these dialects will shed light on the contribution of dialect evaluations to talker evaluations: whether dialect evaluations contribute in a significant way such that talker evaluations largely match participants' perceptions of the dialect used by the talker, or the contribution is limited such that talker evaluations do not solely reflect dialect evaluations.

1.1 Perceptual Dialectology

The field of perceptual dialectology emphasizes the importance of nonlinguists' perceptions and beliefs regarding dialect variation (Benson, 2003; Preston, 1989, 1999). For example, Preston (1989) asked respondents to make judgments about the correctness and pleasantness of the English spoken in individual states in the United States. The attributes 'correctness' and 'pleasantness' correspond to the social dimensions nonlinguists typically associate with dialect images (Inoue, 1999), and they also match the attributes 'competence' and 'warmth' as two major dimensions of perceiving people generally (Fiske, Cuddy & Glick, 2007). Studies employing the subjective rating task have consistently shown that respondents from different areas perform differently when asked to rate the same set of varieties (Bucholtz et al., 1999; Evans, 2011; Preston, 1989, 1993a, 1993b).

Nonlinguists' evaluations of regional varieties based on dialect labels are influenced by the geographical, economic, social, and cultural environment of the local region. Preston (1993b) suggested that the Ohio River, as a traditional dividing line between Indiana and the American South, played a role in the correctness ratings provided by southern Indiana respondents. In Turkey, the more economically developed regions, and the regions associated more with European culture than Asian culture are perceived to be more correct and pleasant than other regions (Demirci & Kleiner, 1999). More recently, Hartley (2005) found that the commonly held stereotypes of Bostonians as either educated elites or working-class descendants of immigrants had an effect on the evaluations of the Boston variety. Bostonian raters gave high correctness ratings of their home area which can be attributed to the positive image of educated elites, but not the highest correctness ratings because of the negative stereotype of working-class descendants. Similarly, Bostonians rated their home region high, but not highest, on pleasantness possibly due to the conflicting stereotypes associated with Boston. The current study used a label ranking task to explore nonlinguists' evaluations of regional varieties in a small, understudied area in China, and examined how the differing socioeconomic development of counties influenced nonlinguists' evaluations of dialect in each county.

1.2 Speaker Evaluation

Perceptual dialectology research reveals nonlinguists' beliefs about dialect varieties without addressing how listeners judge individual talkers on various social characteristics. To answer this question, speaker evaluation experiments have been used to explore listeners' evaluations of talkers' social attributes on the basis of their speech characteristics. In this type of experiment, listeners are presented with speech samples, and are asked to rate the talkers on a range of social dimensions including intelligence, competence, friendliness, likeability, and socioeconomic status, among others. Studies using speaker evaluation experiments have shown that listeners use variation in the speech signal to make explicit judgments about unfamiliar talkers, and their evaluative judgments conform to stereotypes associated with the talkers' home regions (Edwards, 1977; Gallois, Callan & Johnstone, 1984; Lambert et al., 1960; Luhman, 1990; Ryan & Carranza, 1975). Studies comparing evaluations of standard and nonstandard speech have found that talkers who speak standard varieties are generally rated higher than those who speak nonstandard varieties on intelligence, competence and socioeconomic status, and lower than talkers of nonstandard varieties on friendliness and likeability (Edwards, 1999; Giles, 1970). This general trend reflects listeners' values associated with linguistic varieties: standardness is linked with status, while nonstandardness is often associated with solidarity, especially when the listener shares the same variety with the talker who represents that variety. Despite the commonly observed connection between nonstandardness and solidarity, some stigmatized dialects associated with large urban centers or with 'foreignness' (e.g., dialects spoken in New York City, and Birmingham, England) are perceived as both low status and unpleasant (Giles, 1970;

Preston, 1993a). Thus, nonstandard dialects are not necessarily always rated high on solidarity.

Language attitudes studies conducted with various Chinese-speaking communities reveal that nonlinguists' attitudes towards Chinese dialect varieties vary considerably depending on participants' home region, their social and cultural stances (e.g., ethnic Korean-Chinese vs. Tibetans), their particular social identities (e.g., Hong Kongers 'being Chinese' and 'being Hong Kongers'), and the variety being evaluated (Putonghua¹ as a 'high' language vs. Cantonese as a 'low' language), among others (Blum, 2004; Gao et al., 2000; Kalmar, Yong & Hong, 1987; Zhou, 1999, 2000). These studies also demonstrate that language attitudes towards Putonghua are overall consistent, but attitudes towards regional varieties vary across communities. For example, students in Guangzhou rate Putonghua speakers to be more competent but less empathetic than speakers of Cantonese-accented Putonghua (Kalmar et al., 1987). In Yunnan Province, college students perceive Putonghua speakers and speakers from the provincial capital as standard, but not always pleasant (Blum, 2004). Qinghai residents view their own dialect favorably on solidarity, but acknowledge that local dialect is restricted to use with family and Putonghua is used in various situations outside of the home (Dede, 2004).

In China, Zhou (2000) used a rating test and a matched-guise test to elicit overt and covert language attitudes held by Korean-Chinese and Tibetan college students towards Putonghua and Putonghua talkers. The Koreans' overt and covert attitudes were consistent, while the Tibetans' were not. The Tibetans rated the stereotyped Putonghua speakers (the Beijingese) high on status and solidarity dimensions, demonstrating their positive overt attitudes towards Putonghua. But the Tibetans showed negative covert attitudes towards Putonghua talkers by rating the Putonghua talkers lower than talkers of their native language on various personality traits, including leadership, intelligence, looks, humor, friendliness, and sociability. The differences between the two ethnic groups can be partly attributed to their cultural and political backgrounds. Adopting a typical minority-group reaction, the Tibetans did not value Putonghua as the national linguistic norm as much as the Koreans did.

Kristiansen (2009, 2010) explicitly explored the disconnect between overt and covert language attitudes. In his 2009 study, Danish adolescents first evaluated a set of talkers on personality traits based on recordings from talkers who spoke three different accents: Local (locally-accented speech), Conservative (*rigsdansk*), and Modern (*københavnsk*). Their talker evaluations were covert in the sense that they were not aware of the purpose of the task. Then participants were

told the real purpose of the experiment. They listened to the recordings again and judged the standardness of the talkers' speech and identified talkers' geographical affiliation. Their responses were overt attitudes. In the subsequent label ranking task, participants were given dialect names and ranked the dialects from most favorable to least favorable, offering overt attitudes. The results show that the adolescents' covert attitudes are different from their overt attitudes: locally-accented speech was covertly downgraded relative to the Conservative and Modern accents on all personality traits, while the adolescents expressed a high degree of solidarity with the local accent and meanwhile admitted the high standardness of the Conservative accent when attitudes were offered overtly.

Zhou (2000) and Kristiansen (2009, 2010) have demonstrated the disconnect between two types of evaluations: evaluations made with dialect labels but without real speech samples (overt attitudes), and evaluations made with real speech samples but without dialect labels (covert attitudes). In the current study, these two types of evaluations are distinguished by using the terms 'label-based evaluations' and 'speechbased evaluations,' respectively. The former highlights the fact that label-based evaluations are made based on dialect labels, which reflect participants' values associated with 'imagined' speech varieties, and the latter involves participants' evaluative judgments of real speech.

In Zhou's (2000) study, participants were asked to assess linguistic varieties that were used over a large geographical region. One question that remains unanswered is whether a disconnect between label-based evaluations and speech-based evaluations can also be observed when participants are asked to evaluate regional varieties that are spoken in a much smaller geographical region, such as within a single prefecture. Moreover, Zhou (2000) and Kristiansen (2009) used college students and adolescents as participants, respectively, without strictly manipulating other social factors of the participants and talkers except their region of origin and, in the case of Zhou (2000), ethnic identity. Thus, it is not clear from these studies how participant's education level affects perceptual evaluations of dialects and talkers.

The current study explored the relationship between nonlinguists' label-based evaluations of regional varieties and their speech-based evaluations of real talkers who came from these varieties: whether they are the same or different under correct identification of talker dialect. If a correspondence between these two sets of evaluations is consistently found, it is reasonable to conclude that, among many possible sources for talker evaluations, the contribution of overt evaluations associated with varieties is significant. It should be noted that this study did not aim to examine the contributions of other sources, for example, linguistic features, performance characteristics, or talkers' social attributes, in relation to talker evaluations, given the design of the experimental tasks. The central question addressed here is whether, when talker dialect is correctly identified, participants' evaluations of real talkers based on speech samples match their evaluations of 'imagined' dialects given based on dialect labels.

Participants in this study came from different social backgrounds, differing in their gender, age (20-82 years old), education level, and county affiliation in Enshi Prefecture, China. Talkers differed in their county origin and urban/rural origin. Thus, this study was able to examine the effect of social factors including participant's home county and education level on the labelbased evaluations of regional varieties, and the effect of participant's home county, education level, talker's county origin, and urban/rural origin on the speechbased evaluations of talkers. The role of the local social situation in shaping nonlinguists' evaluations of regional varieties and talkers was considered by examining which varieties and talkers were perceived more favorably. Participants' evaluations of 'imagined' county-based regional varieties were elicited in a label ranking task. Their speech-based evaluations of talkers were revealed in a speaker evaluation task.

2. ABOUT ENSHI (恩施)

2.1 Social Situation in Enshi

Enshi Tujia and Miao Autonomous Prefecture (Enshi Prefecture) is in the southwest region of Hubei Province, China (Map 1). Enshi county, which shares the same name as the larger political unit Enshi Prefecture, is the capital county of the prefecture. The present study covers six counties including Enshi, Jianshi, Badong, Hefeng, Xuanen, and Laifeng. Lichuan and Xianfeng were not covered due to time limitations in the field.

While Enshi Prefecture is a geographically small region, there are considerable differences among counties in terms of economic and social development. Based on population, gross domestic product, and urbanization percentage (Enshi Statistics Bureau, 2013), Enshi county is the most developed county; Badong and Jianshi rank second and third respectively. Xuanen and Laifeng are less developed, and Hefeng is the least developed county. As the economic, political, and cultural center of Enshi Prefecture, Enshi county is home to many local universities, research institutions and corporations (e.g., food, energy, and retail), and thus has a relatively diverse economy. Enshi county has attracted people from other counties and also from outside the prefecture to live and work, so the county proper has expanded and the population has increased more rapidly than other counties. Badong and Jianshi have been making a great deal of advancement in socioeconomic development in recent decades. Since the construction of the "eco-cultural tourism circle" in 2008, the tourist economy has developed in Badong and Jianshi, making use of their unique natural and cultural landscape. Ecological and cultural tourism attracts millions of visitors every year and strongly promotes local economic development (Chen, Wu & Zhang, 2010). In contrast, the economic foundation of Xuanen, Laifeng, and Hefeng is much weaker and agriculture is still the major source of local economy. The high mountains have served as geographical barriers against physical mobility, limiting outside contact. Railways are not operated in these three counties; many young people choose to leave their hometown to find better



Map 1. (from right to left) The location of Hubei Province in China, the location of Enshi Prefecture in Hubei Province, and the location of eight counties in Enshi Prefecture.

jobs in coastal areas. As suggested by previous perceptual dialectology work on Turkish (Demirci & Kleiner, 1999), the varieties of the socioeconomically more developed counties (Enshi, Badong, and Jianshi) were predicted to be evaluated more favorably than the varieties of the socioeconomically less developed counties (Xuanen, Laifeng, and Hefeng).

Besides the differences in socioeconomic development between counties, a strong urban-rural distinction is observed throughout Enshi Prefecture. The per capita income of urban residents (RMB16639) is three times higher than that of rural residents (RMB5235), and 17% of urban residents have received college and higher education, whereas only 3% of rural residents have received such education (Enshi Statistics Bureau, 2013). The urban-rural income and education opportunity gap may have an impact on how nonlinguists evaluate urban and rural talkers. Urban talkers were predicted to be perceived more favorably than rural talkers, particularly along the status dimension.

2.2 Linguistic Situation in Enshi

The dialects spoken in Enshi Prefecture belong to Southwestern Mandarin. Traditional Chinese dialectology divides Enshi Prefecture into three subareas (Guo, 2009). Enshi, Jianshi, and Badong counties belong to *Danyi pian* 'Danjiangkou and Yichang subarea' (丹宜 片); Xuanen and Laifeng counties are classified into *Yunzhu pian* 'Yunxi and Zhushan subarea' (鄧竹片); and Hefeng county is grouped into *Changhe pian* 'Changde and Hefeng subarea' (常鹤片). The linguistic division partially aligns with the socioeconomic development of the six counties in that the three counties in *Danyi pian* subarea are more developed than the three counties in *Yunzhu pian* and *Changhe pian* subareas.

Dialects of Enshi Prefecture and Putonghua differ in phonology, lexicon, and grammar, as reported by a small number of fieldwork projects that collected production data of Enshi prefecture dialects (e.g., Chao et al., 1948; Yang, 2011). For example, the merger of /n/and /l/ into [n] and the merger of /x/ and /f/ distinguish Enshi dialects from Putonghua; Putonghua /x/ is typically realized as [o] in Enshi dialects. Differences also exist between various dialects spoken within Enshi Prefecture. For example, /x/ and /f/ merge into [x]regardless of the following vowel in the Badong and Enshi county dialects, whereas in the Laifeng dialect /x/ and /f/ merge into [x] only before $/o_{1}/$, and into [f] before other rhymes (Yuan, 2001). The retroflexes /ts, ts^h, s/ are realized differently in the Laifeng dialect depending on the following environment: they become palatals $[tc, tc^h, c]$ before /u/, and become alveolars $[ts, tc^h, c]$ ts^h, s] elsewhere. In contrast, these retroflexes are realized as alveolars [ts, tsh, s] in the urban Enshi

county and Badong dialects regardless of the following environment. In addition to consonant variation, vowel variation is also abundant across dialects in the prefecture. Putonghua /uo/ is realized as [ue] in the Jianshi dialect but [0] in the Enshi county dialect. /uei/ is realized as [ei] following alveolars in the Laifeng and Xuanen dialects, and /ue/ becomes [io] following palatals in the Enshi county and Jianshi dialects. Lastly, /uan/ becomes [an] following alveolars in the Laifeng dialect.

Tone differences are found between dialects of Enshi Prefecture and Putonghua, and between different dialects within the prefecture. Although most Enshi dialects share the same four tonal categories with Putonghua, the exact tonal contours are different. The tonal contours can be described as yīnpíng 55, yángpíng 13, shăng 53, and qù 214 in most Enshi dialects, and yīnpíng 55, yángpíng 35, shăng 214, and qù 51 in Putonghua. Within the prefecture, the tone system of the Hefeng dialect differs from that of the other dialects. The urban Hefeng variety has four tones: yīnpíng 45, yángpíng11, shăng 51, and qù 214, and a rural Hefeng variety has five tones: yīnpíng 55, yángpíng 24, shăng 51, qù 44, and rù 35 (Yang, 2011).

In a recent dialect perception study, participants from Enshi Prefecture completed a hand-drawn map task, a dialect difference rating task, and a dialect classification task (Yan, 2015). The first two tasks elicited participants' perceptions of dialect differences based on dialect labels, and the third task elicited their categorization of real talkers based on speech samples. The results showed that the talkers who were most frequently confused for one another in dialect classification were those who came from counties that were perceived to have similar dialects. Moreover, in classifying talkers, participants showed a positive response bias for the Enshi county dialect, which corresponds to their perception that the Enshi county dialect was least different as revealed in the dialect difference rating task. The overall results suggest that participants' talker categorization was largely consistent with their labelbased perceptions of dialect differences. Yan's (2015) study adds to the previous work on classification of Enshi prefecture dialect. Yet, no language attitudes studies of Enshi dialects have been published. The current study complements the prior perceptual categorization study on Enshi Prefecture by exploring nonlinguists' perceptual evaluations of Enshi prefecture dialects. This study contributes to our understanding of the sociolinguistic situation in Enshi Prefecture by examining how local residents evaluate their own dialect and dialects spoken in other counties on standardness and pleasantness, and how they evaluate talkers from different counties based on short speech samples.

3. METHODOLOGY

3.1 Participants

A total of 120 participants were recruited, balanced for gender (2 levels: male, female), education level (2 levels: high school or lower education, college and higher education), and county affiliation (6 levels: Enshi, Jianshi, Badong, Hefeng, Laifeng, Xuanen counties). There were five participants in each gender, education level, and county affiliation cell of the design for a total of 120 participants.

All participants spent all or nearly all of their lives in Enshi Prefecture. They were monolingual native speakers of Mandarin Chinese. Speaking Putonghua was not required to participate in this study. Information about whether the participants were able to speak Putonghua was not collected in this study, thus it is unknown how many of them spoke Putonghua. In China, people who completed junior high and higher education are generally able to speak Putonghua (though with quite different degrees of fluency). None of the participants were native speakers of Putonghua since it is only acquired at school through formal education.

Participants' ethnic background was not collected, thus the percentage of Tujia and Miao participants in this study is not clear. Nowadays in Enshi Prefecture, Tujia and Miao people predominantly use local regional dialect, as opposed to their ethnic language. Moreover, participants were asked to evaluate regional varieties, not ethnic varieties, spoken in the prefecture. Thus, I do not speculate how participants' ethnic background might have influenced their evaluations, but this question is an interesting topic to be explored in future research where data on participants' ethnicity is collected.

All tasks were conducted in Enshi county dialect, the author's native dialect² (the author's hometown is Enshi county). Participants were simply informed that this study was a dialect study; no further information was given. Participants were offered incentives of RMB36 (\$5) for their time.

3.2 Procedures

In a label ranking task, participants were given the names of the six target counties in Enshi Prefecture, and were asked to rate the standardness and pleasantness of the dialect in each county on a five-point scale (standardness: 1= almost the opposite of standardness, very strong accent; 2= not standard, strong accent; 3= somewhat standard, still with some accent; 4= close to being standard, weak accent; and 5= very standard, no accent. Pleasantness: 1= very unpleasant; 2= a little unpleasant; 3= neutral; 4= a little pleasant; and 5= very pleasant. See Appendix A for the questionnaire).

A speaker evaluation task followed the label ranking task. The stimuli in this task comprised excerpts from narrations of The Emperor's New Clothes recorded by twelve non-mobile, older (above 35 years old) male talkers. One urban talker and one rural talker from each of six counties were recorded telling the story. The ages of the twelve talkers at the time of recording were as follows: urban Enshi county talker was 51 years old, rural Enshi county talker was 40 years old, urban Jianshi talker was 48 years old, rural Jianshi talker was 50 years old, urban Badong talker was 46 years old, rural Badong talker was 45 years old, urban Hefeng talker was 36 years old, rural Hefeng talker was 43 years old, urban Laifeng talker was 47 years old, rural Laifeng talker was 45 years old, urban Xuanen talker was 52 years old, and rural Xuanen talker was 46 years old. These talkers were selected to represent the authentic local variants (Chambers & Trudgill, 1998:29; Orton & Dieth, 1962:15; Preston, 1989:128), and participants' accurate identification of talker's county origin confirms that the selected talker voices were highly reliable and authentic (Yan, 2015).

The story *The Emperor's New Clothes* is familiar to Chinese adults so the talkers did not read a script. 30-second clips of each recording were selected as the speech samples. Since the excerpts were not read, they are different in wording, fluency, speaking rate, and voice quality, but relatively coherent in content. Participants listened to the samples one at a time, and different presentation orders were used for different participants. They were then asked to rate each talker on social characteristics including education, friendliness, accentedness, and urbanness on a scale from 1 to 5 (for each of the rating scales: 1 = the lowest level, and 5 = the highest level. See Appendix B for the questionnaire).

The results of the two tasks allow me to compare participants' label-based evaluations of regional varieties to their speech-based evaluations of real talkers. Two sets of five-point scales were used in the two tasks to prevent participants from comparing their responses to each task and guessing the real purpose of the study. The particular word pairs chosen for the tasks either convey contrastive meanings ('standardness' and 'accentedness') or similar meanings ('pleasant' and 'friendly') in Mandarin, which facilitate comparisons across tasks. I assume that there is a relationship between the standardness ratings in the label ranking task and the accentedness ratings in the speaker evaluation task in that the concept 'standard, accent' was emphasized in both tasks. The terms 'standard, accent' (标准, 口音) are those local people use to talk about speech.

In addition to the label ranking task and speaker evaluation task, participants also completed a hand-drawn map task, a dialect difference rating task, and a dialect classification task, in this order (Yan, 2015). The label ranking task followed the hand-drawn map task and preceded the dialect classification task, conducted at the same time with the dialect difference rating task. The dialect classification task and speaker evaluation task were conducted at the same time, during which participants identified the talker's county of origin and also evaluated the talkers on four social dimensions. The results of the hand-drawn map task, the dialect difference rating task, and the dialect classification task are described in a separate paper (Yan, 2015).

4. RESULTS AND DISCUSSION

4.1 Label Ranking Task Results

The standardness ratings reflect how standard a particular variety is perceived to be by participants from varying parts of Enshi Prefecture. The mean standardness scores for the six counties are shown in Table 1. An ANOVA was conducted to examine whether the standardness ratings are different for the six target counties (the rightmost column of Table 1). Participants provided their ratings on a five-point scale, with each participant making only one response to each item, and the rating data are normally distributed, therefore ANOVA is appropriate for the current data set. The result showed a significant effect of rated county (F(5, 714) = 13.20,p < 0.001). Post hoc paired-sample *t* tests revealed that the standardness ratings for Enshi county were significantly higher than those for the five other counties (all p < 0.001). Jianshi and Badong were rated significantly higher than Xuanen, Laifeng, and Hefeng (all p < 0.05). None of the other pairwise differences were significant. Thus, overall Enshi county, Jianshi, and Badong received higher standardness ratings than Hefeng, Laifeng, and Xuanen. The three northern counties (Enshi, Badong, and Jianshi) are the counties where population and wealth concentrate

while the three southern counties (Hefeng, Laifeng, and Xuanen) are relatively undeveloped and impoverished. The standardness ratings parallel the varying socioeconomic development of the different counties since the dialects in northern (more developed) counties are regarded as more standard than the speech in the southern (less developed) counties.

A series of ANOVAs and post-hoc Tukey tests was carried out to test the effect of social factors including participant's home county and education level on the standardness ratings for each county. As shown in Table 2, there was a main effect of home county for Badong and Hefeng. Enshi county and Jianshi participants rated Badong significantly lower than local Badong participants; Hefeng was perceived to be significantly less standard by non-local participants than by local participants.

There was a significant effect of education level on the standardness ratings for Enshi county, Jianshi, and Badong. Highly-educated participants rated these three counties significantly lower on standardness (means = 2.88, 2.45, 2.51, sd = 0.78, 0.72, 0.77 for Enshi county, Jianshi, and Badong, respectively) than less-educated participants (mean = 3.23, 2.83, 2.80, sd = 0.76, 0.56, 0.78 for Enshi county, Jianshi, and Badong, respectively). Thus, highly-educated participants gave lower status ratings to the three northern counties which received higher status ratings overall. The effect of education level was not observed for the southern counties which received lower status ratings overall than the northern counties.

The pleasantness ratings capture how pleasant a particular variety is perceived to be by participants from different parts of Enshi Prefecture. The mean pleasantness scores for the six counties are shown in Table 3. An ANOVA conducted to examine whether the six counties were rated differently on pleasantness revealed a significant effect of rated county (F(5, 714) = 12.85, p < 0.001; the rightmost column of Table 3). Post hoc paired-sample t tests showed that Enshi

Table 1. Mean scores of the standardness ratings for six counties. The columns represent the home county of the participants and rows represent the county being rated. The highest mean score for each county is in bold, and the lowest mean score for each county is in italics. Overall rating for each county collapsed across participants of different counties is shown in the rightmost column.

County		Rater home county							
	Enshi	Jianshi	Badong	Hefeng	Laifeng	Xuanen	Total		
Enshi	3.25	3.00	3.30	3.30	2.65	2.85	3.06		
Jianshi	2.60	2.80	2.70	2.65	2.65	2.45	2.64		
Badong	2.25	2.50	3.20	2.75	2.65	2.60	2.66		
Hefeng	2.05	2.25	2.10	3.15	2.35	2.40	2.38		
Laifeng	2.45	2.20	2.10	2.30	2.75	2.55	2.39		
Xuanen	2.35	2.25	2.20	2.60	2.50	2.80	2.45		

Main effects	Pairwise Tukey test
Education $F(1,118) = 6.53, p < 0.05$	High education < Low education
Education $F(1,118) = 10.41, p < 0.01$	High education < Low education
Education $F(1,118) = 4.48, p < 0.05$	High education < Low education
Home county <i>F</i> (5,114) = 3.71, <i>p</i> < 0.01	Enshi, Jianshi < Badong
Home county $F(5,114) = 5.86, p < 0.001$	Enshi, Badong, Jianshi, Laifeng, Xuanen < Hefeng
None	
None	
	Main effects Education $F(1,118) = 6.53$, $p < 0.05$ Education $F(1,118) = 10.41$, $p < 0.01$ Education $F(1,118) = 4.48$, $p < 0.05$ Home county $F(5,114) = 3.71$, $p < 0.01$ Home county $F(5,114) = 5.86$, $p < 0.001$ None None

Table 2. Results of ANOVAs and pairwise Tukey tests on the standardness ratings.

Table 3. Mean scores of the pleasantness ratings for six counties. The columns represent the home county of the participants and rows represent the county being rated. The highest mean score for each county is in bold, and the lowest mean score for each county is in italics. Overall rating for each county collapsed across participants of different counties is shown in the rightmost column.

	Rater home county							
County	Enshi	Jianshi	Badong	Hefeng	Laifeng	Xuanen	Total	
Enshi	3.75	3.95	3.70	3.85	3.30	3.70	3.70	
Jianshi	3.55	4.05	3.55	3.40	3.10	3.15	3.47	
Badong	3.50	3.45	3.95	3.40	3.05	3.15	3.42	
Hefeng	2.25	3.10	2.90	4.25	2.90	2.90	3.05	
Laifeng	2.40	2.70	2.95	2.80	3.60	3.00	2.91	
Xuanen	2.95	2.95	3.20	3.05	3.25	3.65	3.18	

Table 4. Results of ANOVAs and pairwise Tukey tests on the pleasantness ratings.

Rated county	Main effects	Pairwise Tukey test
Enshi	None	
Jianshi	Education $F(1,118) = 7.36, p < 0.01$	High education < Low education
	Home county <i>F</i> (5,114) = 4.33, <i>p</i> < 0.01	Laifeng, Xuanen < Jianshi
Badong	Home county $F(5,114) = 3.00, p < 0.05$	Laifeng, Xuanen < Badong
Hefeng	Home county $F(5,114) = 10.47$, $p < 0.001$	Enshi, Badong, Jianshi, Laifeng,
-		Xuanen < Hefeng; Enshi < Jianshi
Laifeng	Home county $F(5,114) = 3.79$, $p < 0.01$	Enshi, Jianshi < Laifeng
Xuanen	None	

county was rated to be significantly more pleasant than the five other counties (all p < 0.05). Jianshi and Badong were rated significantly higher than Xuanen, Laifeng, and Hefeng (all p < 0.05). Xuanen was rated significantly more pleasant than Laifeng (p < 0.05). None of the other pairwise differences were significant. The overall pattern of the pleasantness ratings paralleled that of the standardness ratings: Enshi county was rated highest on pleasantness; Jianshi and Badong were also perceived to be highly pleasant. Thus, the northern counties were rated favorably and the pleasantness ratings decreased toward the south. A series of ANOVAs and post-hoc Tukey tests tested the effect of participant's home county and education level on the pleasantness ratings. As shown in Table 4, participant's home county was a significant predictor for Jianshi, Badong, Hefeng, and Laifeng. Laifeng and Xuanen participants rated Jianshi and Badong significantly lower than local Jianshi and Badong participants, respectively. Hefeng participants rated their own speech as 4.25, the highest score in the pleasantness ratings, while non-local participants ranked Hefeng rather low, typically giving scores below 3.00. The ratings given by Enshi county participants were particularly low, significantly lower than those given by Jianshi participants. Enshi county and Jianshi participants also perceived Laifeng as less pleasant than local Laifeng participants did.

The effect of education level was found to be significant only for Jianshi. Highly-educated participants rated Jianshi significantly lower (mean = 3.28, sd = 0.86) than less-educated participants (mean = 3.65, sd = 0.71). Although the education effect was not found for all counties, the direction of this effect on pleasantness ratings was similar to that on standardness ratings in that highly-educated participants gave lower pleasantness ratings than less-educated participants.

4.2 Label Ranking Task Discussion

The label ranking task uncovered nonlinguists' labelbased evaluations of 'imagined' regional varieties in Enshi Prefecture. Across participants from different counties and with different education levels, the three northern counties were rated higher on both standardness and pleasantness than the three southern counties. Participants agreed on the high status of the Enshi county variety by ranking it most standard and pleasant. Badong and Jianshi were perceived as highly standard and pleasant, while Laifeng, Xuanen, and Hefeng were viewed as less standard and less pleasant. This pattern parallels the socioeconomic development of the six counties, suggesting that participants' labelbased evaluations reflect the socioeconomic realities that may be salient to them. The more developed northern counties have a higher social prestige than the less developed southern counties, and the higher prestige leads to the belief that the dialects in the north are more standard and pleasant than those in the south. Enshi county as the economically and politically most powerful county is perceived as having the most standard and pleasant speech. A similar correspondence between socioeconomic advancement and favorable linguistic evaluations was reported by Demirci and Kleiner for Turkish dialects (1999). Thus, the power and prestige associated with a place are reflected in nonlinguists' social evaluations of the dialect spoken in that place.

Linguistic realities also play a role such that participants' label-based evaluations reflect major dialect boundaries. Different standardness and pleasantness ratings for the three northern counties and the three southern counties suggest that one salient linguistic divide within the prefecture is between the *Danyi pian* subarea and two other subareas (*Yunzhu pian* and *Changhe pian*). Thus, participants' contrastive evaluations of the dialects in different counties correspond with some of the real linguistic differences between counties.

Participants' label-based evaluations are also affected by participant's home county and education level. The effects of these two social factors on standardness and pleasantness ratings were observed for some but not all counties. When differences were observed, local participants rated the local dialect more standard and pleasant than non-local participants and highly-educated participants gave lower standardness and pleasantness ratings than less-educated participants. The results of the label ranking task highlight the effect of power: both the perceived power associated with a place, and the power individuals believe themselves to have. Participants' label-based evaluations may be partly derived from their implicit appreciation of the unequal power among counties such that the dialects spoken in larger, richer, and more prestigious counties are perceived as more standard and pleasant than those used in smaller, poorer, and less prestigious counties. Further, compared with the less powerful, less educated individuals, the economically and socially more powerful, more educated individuals tended to evaluate others' and their own speech as less favorable. This interpretation does not imply that participants are consciously aware of the association between linguistic evaluations and social facts. In fact, they often reject the cause and effect relationship between language facts and social groups (Preston, 1996). As for the effect of individual power, high status participants with more education perceived some dialects as less standard than those who have lower social status. Thus, a dialect can acquire special status due to its connection with a place and the perceived power of that place; highly-educated individuals who have higher social status and more power tended to downgrade the speech used by others arguably because of the language training and education they have received relative to less-educated individuals. A similar relationship among education, power, place, and linguistic evaluations of 'good' and 'bad' dialects was reported by Bucholtz et al. (2008), who showed that label-based evaluations are essentially linked to place, which in turn is associated with people who live there, as well as the perceived power of these people which can be evaluated based on their access to education.

4.3 Speaker Evaluation Task Results

In the speaker evaluation task, participants were presented with speech samples from twelve talkers (one rural and one urban talker from each of the six counties). They were asked to rate each talker on education, friendliness, accentedness, and urbanness, and to identify each talker's county origin at the same time (Yan, 2015). An analysis of participants' identification performance showed that the talkers' county origin was correctly identified with 56% accuracy. This overall success rate was significantly higher than statistical chance (chance performance being 17% given 6 counties; t(119)=2.07, p < 0.05. See Yan, 2015 for more details). Given the high identification rate, it is meaningful to analyze the subset of talker evaluations under correct talker dialect identification to explore whether and how speech-based talker evaluations were consistent with label-based evaluations when the talkers' dialects were correctly identified.

A series of repeated measures ANOVAs with talker's county origin and urban/rural origin as withinsubject variables and participant's home county and education level as between-subject variables was conducted for each rating scale. The detailed results are presented in Table 5. There was a significant effect of talker's county origin on all four types of ratings. A main effect of talker's urban/rural origin and a main effect of participant's education level were observed for the education, accentedness, and urbanness ratings, but not the friendliness ratings. There was a significant effect of participant's home county on the friendliness and urbanness ratings. Significant interactions between these factors were also found for each rating scale, as shown in the rightmost column of Table 5.

The mean ratings for the twelve talkers are presented in Figure 1 to demonstrate the main effect of talker's county origin on all four types of ratings, the main effect of talker's urban/rural origin on the education,

Table 5. Results of ANOVAs and pairwise Tukey tests on the education, friendliness, accentedness, and urbanness ratings under correct talker dialect identification in the speaker evaluation task.

Ratings	Main effects	Pairwise Tukey test	Interactions
Education	talker's county origin (F(5,821) = 6.79, p < 0.001) talker's urban/rural origin (F(1,825) = 8.13, p < 0.01) participant's education level (F(1,825) = 35.47, p < 0.001)	Jianshi, Xuanen, Enshi < Laifeng (talker) Jianshi, Xuanen < Hefeng (talker) Jianshi < Badong (talker) rural < urban low education < high education	participant's home county x education level (F(5,821) = 8.55, p < 0.01) participant's home county x talker's county origin (F(25,801) = 3.39, p < 0.05) participant's home county x talker's county origin x urban/ rural origin ($F(20,806) = 3.37, p < 0.05$) participant's home county x education level x urban/rural origin ($F(5,821) = 6.49, p < 0.05$) education level x talker's county origin x urban/rural origin (F(5,821) = 2.77, p < 0.05)
Friendliness	talker's county origin ($F(5,821) = 2.99, p < 0.05$) participant's home county ($F(5,821) = 4.85, p < 0.05$)	Xuanen, Enshi < Jianshi (talker) Xuanen < Hefeng, Laifeng, Badong (talker) Enshi, Badong, Xuanen, Laifeng, Hefeng < Jianshi (participant) Xuanen < Enshi (participant)	(F(25,801) = 2.84, p < 0.001) participant's home county x talker's county origin $(F(25,801) = 2.84, p < 0.001)$ participant's home county x talker's county origin x urban/ rural origin (F(20,806) = 3.26, p < 0.05) education level x urban/rural origin (F(1,825) = 4.45, p < 0.05) participant's home county x urban/rural origin (F $(5,821) = 2.54, p < 0.05)$ participant's home county x education level x talker's county origin x urban/rural origin (F(21,805) = 1.68, p < 0.05)
Accentedness	talker's county origin (F(5,821) = 10.82, p < 0.001) talker's urban/rural origin (F(1,825) = 14.63, p < 0.001) participant's education level $(F(1,825) = 7.30, p < 0.05)$	Enshi, Badong, Hefeng, Laifeng, Xuanen < Jianshi (talker) Xuanen < Laifeng, Badong, Hefeng (talker) Enshi < Hefeng (talker) urban < rural low education < bigh education	talker's county origin x urban/rural origin ($F(5,821) = 8.13$, p < 0.001) participant's home county x talker's county origin ($F(25,801) = 2.18$, $p < 0.01$) participant's home county x talker's county origin x urban/ rural origin ($F(25,801) = 1.70$, $p < 0.05$)
Urbanness	$ \begin{array}{l} (F(5,821) = 5.81, \ p < 0.001) \\ \text{talker's urban/rural origin} \\ (F(1,825) = 42.48, \ p < 0.001) \\ \text{participant's home county} \\ (F(5,821) = 4.65, \ p < 0.05) \\ \text{participant's education} \\ \text{level} \\ (F(1,825) = 8.15, \ p < 0.05) \end{array} $	Enshi, Jianshi, Xuanen < Badong, Laifeng (talker) Enshi, Jianshi < Hefeng (talker) rural < urban Jianshi, Hefeng < Laifeng (participant) Jianshi < Enshi (participant) low education < high education	talker's county origin x urban/rural origin ($F(5,821) = 9.66$, $p < 0.001$) participant's home county x education level ($F(5,821) = 8.52$, $p < 0.01$) participant's home county x education level x urban/rural origin ($F(5,821) = 7.16$, $p < 0.01$)



Figure 1. The mean education, friendliness, accentedness, and urbanness ratings for rural and urban talkers from each county in the speaker evaluation task. Error bars are standard error.

accentedness, and urbanness ratings, and the talker's county origin x urban/rural origin interaction for the accentedness and urbanness ratings. As shown in the top left panel in Figure 1 and Table 5, collapsed across urban and rural talkers, the Laifeng talkers received the highest education ratings, followed by the Hefeng and Badong talkers. The Enshi county, Jianshi, and Xuanen talkers were rated to be significantly less educated than the Laifeng talkers (p < 0.05, p < 0.001, and p < 0.001, respectively). The Jianshi and Xuanen talkers were rated to be significantly less educated than the Hefeng talkers (p < 0.01 and p < 0.01, respectively). The Jianshi and Xuanen talkers were rated significantly lower on education than the Badong talkers (p < 0.05). A main effect of talker's

urban/rural origin was found, with urban talkers receiving higher education ratings than their rural counterparts (p < 0.05).

The top right panel in Figure 1 and Table 5 show a main effect of talker's county origin on the friendliness ratings. Collapsed across urban and rural talkers, the Xuanen and Enshi county talkers received the lowest friendliness ratings, perceived to be significantly less friendly than the Jianshi talkers (p < 0.01 and p < 0.05, respectively). The Xuanen talkers received significantly lower friendliness ratings than the Hefeng, Laifeng, and Badong talkers (p < 0.01, p < 0.05, and p < 0.05, respectively). The friendliness ratings were not affected by talker's urban/rural origin.

As shown in the bottom left panel in Figure 1 and Table 5, collapsed across urban and rural talkers, the Jianshi talkers were perceived to be more accented than talkers from other counties (p < 0.001 for Xuanen, p < 0.001 for Enshi county, p < 0.01 for Badong, p < 0.01 for Laifeng, and p < 0.05 for Hefeng). The Xuanen talkers received the lowest accentedness ratings, rated less accented than the Hefeng, Laifeng and Badong talkers (p < 0.001, p < 0.01, and p < 0.05, respectively). The Enshi county talkers were perceived as less accented than the Hefeng talkers (p < 0.05). A main effect of talker's urban/rural origin reveals that the rural talkers overall received higher accentedness ratings than their urban counterparts (p < 0.05).

The bottom right panel in Figure 1 and Table 5 show that, collapsed across urban and rural talkers, the Enshi county, Jianshi, and Xuanen talkers were rated lower on urbanness than the Badong and Laifeng talkers (p < 0.01, p < 0.01, and p < 0.05, respectively, for the comparisons with Badong talkers; p < 0.01, p < 0.01, and p < 0.05, respectively, for the comparisons with Laifeng talkers). The Enshi county and Jianshi talkers were perceived to be less urban than the Hefeng talkers (p < 0.05 and p < 0.05, respectively). There was also a significant effect of talker's urban/rural origin. The urban talkers were rated to be more urban than the rural talkers (p < 0.001).

An interaction between talker's county origin and urban/rural origin was found for the accentedness and urbanness ratings (see Figure 1). The rural talkers from Enshi county and Jianshi were rated significantly higher on accentedness than their urban counterparts (p < 0.001 and p < 0.01, respectively). The rural Xuanen talker, however, was perceived to be less accented than his urban counterpart (p < 0.001). For the urbanness ratings, significant differences due to urban/rural origin were found for the Enshi county and Jianshi talkers (p < 0.001 and p < 0.001, respectively) but not for other talkers, with urban talkers receiving higher urbanness ratings than their rural counterparts.

A comparison of the effect of talker's county origin on speech-based evaluations with the effect of rated county on label-based evaluations reveals that the two sets of evaluations based on different 'stimuli' were not consistent even when the talkers' dialects were correctly identified. In the label ranking task, Enshi county and Jianshi were perceived as highly standard and pleasant, and Hefeng and Laifeng were viewed much less favorably. In the speaker evaluation task, in contrast, the Hefeng and Laifeng talkers were rated as highly educated, friendly, and urban, while the Enshi county and Jianshi talkers were perceived as less educated and urban. Moreover, the Enshi county talkers were rated low on friendliness and the Jianshi talkers were perceived as most accented among all talkers. Thus, under correct identification of talker dialect, the talkers from positively rated counties (Enshi and Jianshi) were not perceived more favorably than the talkers from counties which received less favorable label-based evaluations (Hefeng and Laifeng). This finding suggests a discrepancy between evaluations based on dialect labels and evaluations based on real speech samples.

In terms of participant effects, a main effect of participant's home county was found for the friendliness and urbanness ratings. Specifically, Jianshi participants gave higher friendliness ratings than participants from the five other counties (p < 0.001 for Xuanen, p < 0.001 for Laifeng, p < 0.01 for Hefeng, p < 0.01 for Badong, and p < 0.05 for Enshi county, respectively), and Enshi county participants offered higher friendliness ratings than Xuanen participants (p < 0.05). Laifeng participants provided higher urbanness ratings than Jianshi and Hefeng participants (p < 0.01 and p < 0.05, respectively), and Enshi county participants offered higher urbanness ratings than Jianshi and Hefeng participants (p < 0.01 and p < 0.05, respectively), and Enshi county participants offered higher urbanness ratings than Jianshi county participants (p < 0.01 and p < 0.05, respectively), and Enshi county participants offered higher urbanness ratings than Jianshi county participants (p < 0.05).

The effect of participant's education level was significant for the education, accentedness, and urbanness ratings. Highly-educated participants overall gave higher education, accentedness and urbanness ratings than less-educated participants (p < 0.001, p < 0.001, and p < 0.05, respectively). Highly-educated participants tended to perceive the talkers' speech as more accented, arguably because they have more formal training in Putonghua and more language education in general, thus they are likely to have a higher standard for 'standard' speech than less-educated participants. The significant participant's home county x education level interaction for the education and urbanness ratings suggests that the effect of participant's education level on these ratings was observed for participants from some but not all counties. Post hoc paired-sample t tests revealed that highly-educated Enshi county, Badong, and Xuanen participants provided significantly higher education ratings than less-educated participants from these counties (p < 0.05, p < 0.001, and p < 0.01, respectively). Enshi county and Badong participants with higher education gave significantly higher urbanness ratings than those with less education (p < 0.05 and p < 0.001, respectively), while highly-educated Hefeng participants offered lower urbanness ratings than lesseducated Hefeng participants (p < 0.01). Thus, highlyeducated participants from the more developed and urbanized Enshi and Badong counties rated talkers more favorably on urbanness than their less-educated counterparts, while highly-educated participants from the least developed and urbanized county Hefeng provided lower urbanness ratings than their less-educated counterparts.

Participant's home county further interacted with talker's county origin and urban/rural origin for the

education, friendliness, and accentedness ratings, suggesting that evaluations of urban and rural talkers of different county origins differ depending on where the participants came from. As shown in Table 6, participants from some counties positively rated the talkers of their own dialect on certain social dimensions. For example, Badong participants rated the rural and urban Badong talkers high on education and friendliness. Jianshi participants also regarded the local Jianshi talkers to be highly friendly. But the positive ratings of talkers of one's own dialect were observed only for a limited number of participants and talkers, and only on two dimensions. Participants did not always rate the talkers from their own dialect more favorably than nonlocal participants did, nor did the talkers always receive the most favorable evaluations from local participants. For example, the rural and urban Enshi county talkers, rural Jianshi talker, and rural Hefeng talker received the highest education ratings from non-local participants. The urban Laifeng and urban Xuanen talker were rated highest on friendliness by non-local participants. Additionally, the urban Xuanen talker was perceived to

Table 6. Results of paired-sample t tests for the talker's county origin x talker's urban/rural origin x participant's home county interaction for the education, friendliness and accentedness ratings under correct talker dialect identification in the speaker evaluation task.

Ratings	Talker's county origin	Talker's urban/ rural origin	Participant's home county
Education	Enshi	Rural	Hefeng < Laifeng
		Urban	
	Jianshi	Rural	Badong < Laifeng
		Urban	None
	Badong	Rural	Jianshi < Badong
		Urban	Jianshi < Enshi, Badong, Xuanen, Laifeng, Hefeng
	Hefeng	Rural	Laifeng < Enshi, Badong
		Urban	None
	Laifeng	Rural	None
		Urban	Hefeng < Jianshi, Laifeng, Xuanen
	Xuanen	Rural	None
		Urban	None
Friendliness	Enshi	Rural	None
		Urban	Badong < Enshi, Jianshi, Hefeng, Laifeng
	Jianshi	Rural	Enshi < Jianshi
		Urban	Enshi, Xuanen, Hefeng < Jianshi
			Badong < Enshi, Jianshi, Laifeng
	Badong	Rural	Enshi, Jianshi, Laifeng, Xuanen, Hefeng < Badong; Laifeng < Enshi, Hefeng
		Urban	Hefeng < Badong
	Hefeng	Rural	None
		Urban	None
	Laifeng	Rural	Xuanen < Badong, Jianshi, Laifeng
	-	Urban	Xuanen < Jianshi
	Xuanen	Rural	None
		Urban	Xuanen < Hefeng
Accentedness	Enshi	Rural	None
		Urban	None
	Jianshi	Rural	Hefeng < Enshi; Badong, Hefeng < Jianshi
		Urban	None
	Badong	Rural	Jianshi, Xuanen < Badong; Jianshi < Enshi, Hefeng
		Urban	None
	Hefeng	Rural	None
	U	Urban	None
	Laifeng	Rural	None
	5	Urban	Enshi, Badong, Laifeng, Xuanen, Hefeng < Jianshi
	Xuanen	Rural	None
		Urban	Badong, Jianshi, Laifeng, Xuanen < Hefeng

be least friendly by local Xuanen participants. The rural Jianshi and rural Badong talkers received the highest accentedness ratings from the local Jianshi and Badong participants, respectively. These less favorable perceptions of local talkers cannot be predicted from participants' label-based positive evaluations related to their own dialects. Thus, although participants overtly evaluated their own county-based dialects as highly standard and pleasant in the label ranking task, these positive label-based evaluations of real talkers of their own dialects even under correct identification of the talkers' county origin.

4.4 Speaker Evaluation Task Discussion

In the speaker evaluation task, the talker effects were overall more robust than the participant effects. The effects of talker's county origin, talker's urban/rural origin, and their interaction indicate that the speechbased evaluations varied more systematically by talker than by participants' home county or education level. Talkers of different county origins were rated differently on social dimensions; urban talkers were rated differently from rural talkers, typically receiving higher education, higher urbanness, and lower accentedness ratings than their rural counterparts. These evaluative differences suggest that the speech-based evaluations reflect some social attributes of the talkers (e.g., socioeconomic status and education level) perceived by participants from different social backgrounds.

As for the participant effects, the effect of participant's home county was limited to the friendliness and urbanness ratings (compared to the effect of talker's county origin on all four types of ratings), and participant's education level was significant for three types of ratings. Importantly, the participant effects often interacted with talker's county origin and urban/rural origin, suggesting that the participant effects were observed for some but not all talkers.

When evaluating talkers on the basis of speech samples and under correct identification of talker dialect, participants did not necessarily rate the urban or rural talkers from their own dialect higher on social dimensions than non-local participants did, nor were the talkers from counties that received favorable labelbased evaluations judged more positively than the talkers from counties that were overtly rated as less favorable. The tendency to rate the talkers of one's own dialect positively was only observed for some participants' ratings of a few talkers on two social dimensions. Thus, the contribution of talker identity to talker evaluations appears to be quite limited. The current results show that the speech-based evaluations of talkers were not primarily triggered or governed by participants' label-based evaluations of 'imagined' county-based dialects, even when the talkers' county origin was correctly identified. Rather than being based on ideologies associated with various 'imagined' dialects, speech-based talker evaluations likely reflect participants' overall social perceptions of the talkers based on a complex set of socially meaningful markers present in the speech signals.

4.5 Comparing Across Tasks

A comparison of participants' label-based evaluations with their speech-based evaluations reveals two interesting patterns. First, when participants evaluated 'imagined' county-based dialects based on dialect labels, the effect of participant's home county was found for both standardness and pleasantness ratings and its direction was consistent: local participants rated the local dialect more favorably than non-local participants. When participants evaluated talkers based on real speech, local participants did not necessarily evaluate the local talkers more favorably than non-local participants.

Participants' education level also affected their labelbased and speech-based evaluations, but the direction of this effect differed across the two sets of evaluations. Highly-educated participants gave less favorable overt evaluations than less-educated participants in the label ranking task, while when evaluating talkers based on speech samples, highly-educated participants were willing to provide high social status evaluations, giving higher education and urbanness ratings than lesseducated participants.

Second, participants' label-based evaluations revealed that there was a consensus that Enshi county was most standard and pleasant. Jianshi was also viewed as standard and pleasant, whereas Hefeng and Laifeng were perceived as least favorable. Participants' speech-based evaluations under correct talker dialect identification showed that the Enshi county and Jianshi talkers were rated low on education and urbanness. The Enshi county talkers were perceived as not very friendly, and the Jianshi talkers were rated as most accented. Participants rated the Hefeng and Laifeng talkers, not the Enshi county or Jianshi talkers, highest on education and urbanness, and high on friendliness, a pattern which is almost the opposite of their label-based evaluations. Thus, the driving forces in the speech-based evaluations cannot be the values related to 'imagined' dialects that were stored in long-term memory; instead, speaker evaluations based on real speech samples are rooted in values that are associated with the linguistically encoded information.

The mismatch between nonlinguists' label-based evaluations and speech-based evaluations echoes

previous studies (Kristiansen, 2009, 2010; Zhou, 2000). There are differences between the present study and previous work though. Zhou (2000) found that the Tibetans in his study showed positive label-based evaluations of Putonghua, but positive speech-based evaluations of the Tibetan talkers. Kristiansen (2009) showed that participants upgraded the local dialect label in terms of solidarity (i.e., showing preference in terms of 'liking best'), but the local talker was rated lowest on all personality traits. In this study, participants rated their own local dialect as both most standard and pleasant based on dialect labels (except Enshi county participants). They did not often rate the local talkers most positively or most negatively of all the talkers. Thus, participants in these three studies differ in which variety they exhibit positive overt evaluations of, and in their evaluations of the talkers from their own variety.

Speech-based evaluations of talkers have multiple sources, including the speech (lexical items, tones, intonation, speech rate, fluency), attention (more attention paid to certain types of information in the speech signals than others), affective stance (whether a speech feature is something of which participants approve or disapprove; see Kristiansen, Garrett & Coupland, 2005), general social stereotypes (e.g., a talker who speaks fluently and clearly is highly educated; urban talkers are less accented), and more specific ideologies or stereotypes associated with place and dialect, among others. Different weightings may hold between these sources for different individuals and for different contexts. The current design of the speaker evaluation task (e.g., not a matched-guise test; with one urban and one rural talker per county) does not allow me to determine the exact roles played by various sources in speaker evaluations. This weakness nonetheless does not undermine the validity of this study because the current results, namely the mismatch between participants' ratings of dialect labels and their evaluations of real talkers under correct talker dialect identification, provide clear evidence that overt values/ideologies associated with places and 'imagined' dialects, as one possible source, cannot be the only or the principal source that determines evaluative judgments of real talkers. The discrepancy between participants' label-based evaluations of dialects and their responses to talkers from these dialects highlights the complexity and multidimensionality of sociolinguistic attitudinal evaluations.

5. DISCUSSION AND CONCLUSIONS

The current study used a hybrid approach to investigate the perceptual evaluation of regional varieties in Enshi Prefecture, China. It combined methodologies of perceptual dialectology and speaker evaluation studies to explore the relationship between nonlinguists' label-based evaluations of regional varieties and their speech-based evaluations of real talkers who are native speakers of these varieties: whether these two sets of evaluations are the same or different. Unlike previous studies which examined participants' evaluations of talkers who spoke varieties used over a large geographical region (e.g., Putonghua), this study used talkers who represented different regional varieties spoken in a small geographical region. The present study asked participants to evaluate the 'imagined' varieties they did not speak themselves (in addition to their own), allowing me to probe the extent to which socioeconomic factors contribute to participants' overt evaluations of varieties outside of their own linguistic repertoire. Moreover, the current study extended traditional perceptual dialectology and speaker evaluation studies by exploring the effects of various social factors on label-based and speech-based evaluations. Specifically, this study explored how label-based evaluations of regional varieties were affected by the participant's home county and education level, and the way in which speech-based evaluations of talkers were influenced by the participant's home county and education level, and the talker's county origin and urban/rural origin.

The comparison of participants' label-based evaluations and speech-based evaluations reveals discrepancies between the two sets of social evaluations elicited using different 'stimuli': one set was based on the beliefs about 'imagined' dialects without any linguistic input, and the other reflects participants' responses to real speech samples. Under correct identification of talker dialect, when the impact of overt dialect-related ideologies on talker evaluations is likely to be maximal, participants' speech-based evaluations of talkers do not match their values related to 'imagined' county-based dialects. This finding is consistent with results of earlier work which has shown that nonlinguists' overt values of regional varieties and their evaluations of talkers of these varieties can be quite different (Kristiansen, 2009, 2010; Zhou, 2000).

Previous sociophonetic studies have demonstrated that social information about talkers influences speech perception, including vowel identification, consonant categorization, and identification of consonant clusters (e.g., Hay, Warren & Drager, 2006; Staum Casasanto, 2008; Strand, 1999). In a classic study, Niedzielski (1999) showed how listeners' beliefs about talker identity impacted their performance on vowel identification. Listeners' beliefs about the talker's national/regional identity were altered by invoking different nation/ region labels, thus differences in listeners' vowel perceptions can be partly attributed to their beliefs and stereotypes associated with particular dialects or social groups. In the current study, participants identified the talker's county origin and socially evaluated the talker at the same time. When the talker's county origin was

correctly identified and participants may have consciously or subconsciously reflected on talker identity, evaluative differences across talkers do not correspond to, and therefore cannot merely be explained by, participants' different beliefs about talkers' dialects. Assessing talkers on social dimensions is not merely a linguistic task; rather, it is a cognitive process that integrates evaluations of linguistic and nonlinguistic information from multiple sources and dimensions. During this process, ideologies associated with particular places and dialects can be overridden by other sources such that talker dialect does not determine talker evaluations.

Compared with the prior sociophonetic work which has shown the influence of talker identity (e.g., gender, national/regional identity, race) on central linguistic processes, this study shows that the contribution of talker identity to talker evaluations is limited. This finding has implications for the model of talker evaluations. This model requires us to take an integrated, socially informed approach and to include a complex set of linguistic objects (including talker dialect), social cognitive objects (e.g., representations of individual's group affiliation and personality attributes, attention), and situational factors (e.g., location and topic of the conversation) which interact and 'compete' to influence social assessments of talkers. This study adds to the discussion regarding the 'base' of talker evaluations (Schoel et al., 2012) by showing that the base or main 'target' of talker evaluations is not the talker's dialect itself, even when the dialect information is accessible to the listeners.

The present study provides new evidence for how nonlinguists' evaluations of regional dialects and real talkers are socially constructed. Their evaluations reflected two aspects of social realities in Enshi Prefecture: county and urban-rural differences in socioeconomic development. Their knowledge of county differences surfaced in their label-based evaluations, where the dialect varieties spoken in the more developed counties were perceived to be more standard and pleasant than those spoken in the less developed counties.3 In particular, the standardness ranking for the six counties was almost identical to the population, gross domestic product, and urbanization ranking. The salience of the urban-rural distinction was demonstrated in the speech-based evaluations, where rural talkers were generally perceived less favorably than urban talkers. These results suggest that participants seem to have some social knowledge about the local socioeconomic environment, and consciously or subconsciously use this knowledge when evaluating regional dialects and real talkers. However, I did not explicitly ask participants about their knowledge, nor did I ask them whether they consciously use this

knowledge when making evaluations. The current results raise questions about the role of participants' explicit or implicit social knowledge about their home region in social evaluations, and more research is needed to address it.

Previous research on nonlinguists' perceptions of English varieties has found that rural accents (e.g., Yorkshire, Alabama) tend to be perceived more favorably than non-standard urban accents (e.g., Birmingham, New York City. Edwards, 2011:70; Hiraga, 2005; Smith & Workman, 2008). This study has shown that in Enshi Prefecture, rural talkers received overall less favorable evaluations than urban talkers. The disparity between previous studies and the current study can be partly attributed to the different socioeconomic status of urban and rural areas and their distinct sociocultural images in different countries. In Britain and the US, dialects spoken in industrial urban areas are associated with working-class speakers, whereas rural dialects are generally viewed positively with 'romantic nostalgia' (Hiraga, 2005:301; see Campbell-Kibler, 2012 for stigmatized rural varieties in the US). Working-class urban varieties are therefore less favored than rural varieties. Across China, in contrast, large urban areas are highly developed, symbolizing education, wealth and opportunity; rural areas are far less developed, associated with lack of education and poverty. Thus, the positive sociocultural images attached to urban areas evoke favorable evaluations of urban varieties in the current study. It should be noted that there was only one urban talker and one rural talker from each county in this study. Since an individual voice may bias social evaluations, and another talker of a different age or social class may be evaluated differently, inferences about the effect of the talker's urban/rural origin on social evaluations should be interpreted with caution and strictly in the context of Enshi Prefecture. Despite this weakness, the current results suggest that nonlinguists' attitudes toward urban and rural accents need to be assessed in specific sociocultural settings.

The Chinese government has been promoting Putonghua nationally since 1956 (Zhou, 2001). While Putonghua is upheld as the national standard language, regional dialects are not targets of prohibition or elimination (Guo, 2004:50). The national language policies recognize the value of dialects (China, 1999:9–10), stating that dialects are carriers of regional culture and that traditional arts based on dialects should be protected (China, 2001:47–48). In Enshi Prefecture, as in other parts of China, the presence of Putonghua is additive, coexisting with local dialects without replacing the latter (Blum, 2004). Unlike the Teochew families in Singapore in which younger generations use their ethnic language less and adopt the national languages (i.e., Mandarin and English) even in the family domain (Wei, Saravanan & Hoon, 1997), residents in Enshi Prefecture use their mother tongue dialect in the family and most social situations. Participants in this study rated their own dialect high on standardness and pleasantness, ⁴ exhibiting a strong loyalty to the local dialect. Since language attitudes are related to language learning and use (see a fuller discussion by Garrett, 2010:21–22), favorable attitudes can promote everyday use of local dialect and dialect transmission to children both as an effective communicative tool and a symbol of social solidarity. While Putonghua lexicon has gained slightly over generations in Enshi Prefecture, the Putonghua influence is minimal for other aspects of the local dialects. There is no sign of dialect loss across generations, nor significant shift from local dialects to Putonghua in most occasions (Yang, 2011). Thus, Enshi prefecture dialects are expected to persist as distinct varieties, although likely under some influence of Putonghua (see Norman, 1988:252 and Zhou, 2001 for language maintenance and shift in Shanghai, Guangzhou, and China in general).

The local Enshi language ideology can be better understood in light of state language ideology in China. The overall language ideology in China is that the social status and power associated with Putonghua is widely appreciated, and regional varieties are perceived differently (e.g., Dede, 2004; Kalmar et al., 1987). Some nonlinguists retain their affection to dialects, while others do not; some evaluate their own dialect positively only on solidarity, while others upgrade their own dialect on both status and solidarity. In this study, participants from each county exhibited positive overt attitudes toward their local variety on status and solidarity. Participants were not asked to evaluate Putonghua, though, and thus it is unknown whether the local language ideology regarding Putonghua is the same as the state language ideology. Based on previous work and given that Putonghua is the accepted national standard variety, Enshi Prefecture participants may evaluate Putonghua positively on status.

This study presents a new step towards better understanding dialect evaluations in Enshi Prefecture where few sociolinguistic studies have been conducted. It also points to some directions for future studies. First, across participants from different counties, the Enshi county variety elicited all-around positive evaluations by receiving the most favorable standardness and pleasantness ratings. These positive evaluations on both status and solidarity reflect the prestige Enshi county possesses across the prefecture. At the same time, the Enshi county variety, spoken in Enshi county only, is regional in nature compared to Putonghua which is the national standard. Due to the prestige and its regional nature, the Enshi county variety gains the status as the regional standard (Edwards, 2011:72; Edwards & Jacobsen, 1987). More research is needed to reveal the regional standard variety in other prefectures or provinces in China, and to investigate how the regional standard is evaluated relative to Putonghua and other non-standard regional varieties on status and solidarity dimensions. Second, language attitudes have been argued to have a tripartite structure, consisting of cognitive, affective, and behavioral components (Baker, 1992:13; Garrett, Coupland & Williams, 2003:3). The present study mainly explored the affective component, leaving open questions about cognitive and behavioral components. Future work can use interviews to probe these two components. For example, participants may be asked about their thoughts about differences between regional dialects in the prefecture, and whether they are willing to learn other dialects, revealing the cognitive and behavioral components of their attitudes.

Acknowledgments

I am grateful to Cynthia Clopper and Kathryn Campbell-Kibler for their support and feedback on the earlier drafts of this article. This research was funded by The Ohio State Linguistics Department.

Notes

- ¹ Putonghua, also known as Standard Mandarin, is the official national language of China as a tool for education, administration, and communication across regions. The Chinese language is "a vast dialect complex containing hundreds of mutually unintelligible local varieties" (Norman, 2003:72). These mutually unintelligible varieties are regarded as 'dialects' rather than 'languages' for political and cultural reasons rather than linguistic reasons. Most parts of China today have belonged to the same political entity and shared the same culture throughout most of Chinese history, thus different regional varieties are referred to as 'dialects' due to the notion of a unified nation and culture.
- ² Although participants were not told where the author came from or what her native dialect was, it is possible that some participants may have (correctly or incorrectly) guessed the author' home county or native dialect. Their impression of the author and their evaluations of her dialect may therefore have influenced their performance in the label ranking task. Future research is needed to systematically explore how the experimenter's use of different dialects affects participants' dialect evaluations.
- ³ It is reasonable to speculate that dialect varieties spoken in the more developed counties were perceived to be more standard and pleasant than those spoken in the less developed counties because these varieties are linguistically closer to Putonghua than the other varieties. If this were the case, the elicited evaluations might only reflect the participants' linguistic knowledge. Unfortunately, it is difficult (or more precisely, there is currently not enough production data on Enshi prefecture dialects that allows me) to accurately quantify the

linguistic distance between each regional variety and Putonghua, thus I am not able to determine whether, for example, the Enshi county variety is linguistically closer to Putonghua compared with the other varieties. For this reason, it is unclear whether the highest standardness ratings the Enshi county dialect received should be largely attributed to the linguistic knowledge people actually have (or their belief that the Enshi county dialect is linguistically more similar to Putonghua than other dialects), or to their overall positive impression of Enshi county as a place, given its status as the economic, political, and cultural center of the prefecture.

⁴ I used the term 'standardness' 标准 biaozhun (meaning 'norm, standard') in the current study in order to elicit participants' evaluations along the broad social dimension 'correctness'. The term 'correctness' was not used because the literal translation of 'correctness' in Chinese is '正确', which carries a quite different meaning than 'correctness' as used in sociolinguistic studies. As shown in Section 3.2 Procedures, participants were asked to rate the standardness of the dialect in each county on a five-point scale: 1 = almost the opposite of standardness, very strong accent; 2 = not standard, strong accent; 3 = somewhat standard, still with some accent; 4 = close to being standard, weak accent; and 5 = very standard, no accent. The terms 'standard' 标准 and 'accent' 口音 are those local people use to talk about speech.

References

- Baker, Colin. 1992. *Attitudes and language*. Clevedon: Multilingual Matters.
- Benson, Erica J. 2003. Folk linguistic perceptions and the mapping of dialect boundaries. *American Speech* 78(3). 307-330.
- Blum, Susan D. 2004. Good to hear: Using the trope of standard to find one's way in a sea of linguistic diversity. In Minglang Zhou (ed.), Language policy in the People's Republic of China: Theory and practice since 1949. 123-141. Boston: Kluwer Academic Press.
- Bucholtz, Mary, Nancy Bermudez, Victor Fung, Rosalva Vargas & Lisa Edwards. 2008. The normative North and the stigmatized South: Ideology and methodology in the perceptual dialectology of California. *Journal of English Linguistics* 36. 62-87.
- Campbell-Kibler, Kathryn. 2012. Contestation and enregisterment in Ohio's imagined dialects. *Journal of English Linguistics* 40(3). 281-305.
- Chambers, J.K. & Peter Trudgill. 1998. *Dialectology, 2nd edn.* Cambridge: Cambridge University Press.
- Chao, Yuanren, Shengshu Ding, Shifeng Yang, Zongji Wu & Tongsu Dong. 1948. *Hubei fangyan diaocha baogao* [A report on Hubei dialects]. Shanghai: Shangwuyingshuguan.
- Chen, Jiangmei, Zunhua Wu & Lili Zhang. 2010. Research on development strategy of tourism supporting for poverty alleviation in West Hubei. *Journal of Landscape Research* 2. 60-65.
- China (ed.). 1999. *Tuiguang Putonghua xuanchuan shouce,* [Handbook of Putonghua promotion]. Beijing: Yuwen Press.
- **China** (ed.). 2001. *Zhonghua renmin gongheguo guojia tongyong yuyan wenzi fa xuexi duben* [The law of the national

commonly used language and script of the PRC - a reader]. Beijing: Yuwen Press.

- Dede, Keith. 2004. Language attitudes in Xining, Qinghai. *Language and Linguistics* 5. 543-557.
- Demirci, Mahide & Brian Kleiner. 1999. The perception of Turkish dialects. In Dennis R. Preston (ed.), *Handbook of* perceptual dialectology, 263-281. Amsterdam: John Benjamins.
- Edwards, J. R. 1977. Students' reactions to Irish regional accents. *Language and Speech* 20. 280-286.
- Edwards, John. 1999. Refining our understanding of language attitudes. Journal of Language and Social Psychology 18. 101-110.
- Edwards, John. 2011. *Challenges in the social life of language*. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.
- Edwards, John & Maryanne Jacobsen. 1987. Standard and regional standardspeech: Distinctions and similarities. *Language in Society* 16. 369-379.
- Enshi Statistics Bureau (ed.). 2013. Enshi tongji nianjian 2013 [Enshi Statistical Yearbook, 2013].
- Evans, Betsy. 2011. "Seattletonian" to "Faux hick": Perceptions of English in Washington state. *American Speech* 86(4). 383-414.
- Fiske, Susan T., Amy J.C. Cuddy & Peter Glick. 2007. Universal dimensions of social cognition: Warmth and competence. *Trends in Cognitive Sciences* 11(2). 77-83.
- Gallois, Cynthia, Victor J. Callan & Michael Johnstone. 1984. Personality judgments of Australian aborigine and white speakers: Ethnicity, sex and context. *Journal of Language and Social Psychology* 3. 39-57.
- Gao, Yihong, Xinchun Su & Lei Zhou. 2000. Pre-handover language attitudes in Hong Kong, Beijing, and Guangzhou. *Journal of Asian Pacific Communication* 10(1). 135-153.
- Garrett, Peter. 2010. Attitudes to language. Cambridge, UK: Cambridge University Press.
- Garrett, Peter, Nikolas Coupland & Angie Williams. 2003. Investigating language attitudes: Social meanings of dialect, ethnicity and performance. Cardiff: University of Wales Press.
- Giles, Howard. 1970. Evaluative reactions to accents. *Educational Review* 22. 211-227.
- Guo, Li. 2009. *Hubei xinan guanhua yinyun yanjiu*, [Studies on phonology of Hubei Southwestern Mandarin]. Shanghai: Fudan University dissertation.
- Guo, Longsheng. 2004. The relationship between Putonghua and Chinese dialects. In Minglang Zhou (ed.), Language policy in the People's Republic of China: Theory and practice since 1949, 45-54. Boston: Kluwer Academic Press.
- Hartley, Laura C. 1999. A view from the west: Perceptions of U.S. dialects by Oregon residents. In Dennis R. Preston (ed.), *Handbook of perceptual dialectology*, 315-332. Amsterdam: John Benjamins.
- Hartley, Laura C. 2005. The consequences of conflicting stereotypes: Bostonian perceptions of U.S. dialects. *American Speech* 80(4). 388-405.
- Hay, Jennifer, Paul Warren & Katie Drager. 2006. Factors influencing speech perception in the context of a merger-inprogress. *Journal of Phonetics* 34. 458-484.
- Hiraga, Yuko. 2005. British attitudes towards six varieties of English in the USA and Britain. *World Englishes* 24. 289-308.
- Hoare, Rachel. 2001. An integrative approach to language attitudes and identity in Brittany. *Journal of Sociolinguistics* 5(1). 73-84.

Inoue, Fumio. 1999. Classification of dialects by image: English and Japanese. In Dennis R. Preston (ed.), Handbook of perceptual dialectology, 147-159. Amsterdam: John Benjamins.

Kalmar, Ivan, Zhong Yong & Xiao Hong. 1987. Language attitudes in Guangzhou, China. Language in Society 16. 499-508.

Kristiansen, Tore. 2009. The macro-level social meanings of late-modern Danish accents. *Acta Linguistica Hafniensia* 41. 167-192.

Kristiansen, Tore. 2010. Conscious and subconscious attitudes towards English influence in the Nordic countries: Evidence for two levels of language ideology. *International Journal of the Sociology of Language* 204. 59-95.

Kristiansen, Tore, Peter Garrett & Nikolas Coupland. 2005. Introducing subjectivities in language variation and change. *Acta Linguistica Hafniensia* 37. 9-35.

Lambert, W. E., R. C. Hodgson, R. C. Gardner & S. Fillenbaum. 1960. Evaluational reactions to spoken languages. *Journal of Abnormal and Social Psychology* 60. 44-51.

Luhman, Reid. 1990. Appalachian English stereotypes: Language attitudes in Kentucky. *Language in Society* 19. 331-348.

Niedzielski, Nancy. 1999. The effect of social information on the perception of sociolinguistic variables. *Journal of Language and Social Psychology* 18(1). 62-85.

Norman, Jerry. 1988. *Chinese*. Cambridge [Cambridgeshire]: Cambridge University Press.

Norman, Jerry. 2003. The Chinese dialects: Phonology. In Graham Thurgood & Randy J. LaPolla (eds.), *The Sino-Tibetan languages*, 72-83. London: Routledge.

Orton, Harold & Eugen Dieth. 1962. *Survey of English dialects*. Leeds: E.J. Arnold and Son Ltd, for University of Leeds.

Preston, Dennis R. 1986. Five visions of America. Language in Society 15. 221-240.

Preston, Dennis R. 1989. *Perceptual dialectology: Nonlinguists'* views of areal linguistics. Dordrecht, Netherlands: Foris.

Preston, Dennis R. 1993a. Folk dialectology. In Dennis R. Preston (ed.), American dialect research, 333-377. Philadelphia: John Benjamins.

Preston, Dennis R. 1993b. The uses of folk linguistics. International Journal of Applied Linguistics 3. 181-259.

Preston, Dennis R. 1996. Whaddayaknow? The modes of folk linguistic awareness. *Language awareness* 5(1). 40-74.

Preston, Dennis R. 1999. A language attitude approach to the perception of regional variety. In Dennis R. Preston (ed.),

Handbook of perceptual dialectology, 359-373. Amsterdam: John Benjamins.

Ryan, Ellen Bouchard & Miguel A. Carranza. 1975. Evaluative reactions of adolescents toward speakers of standard English and Mexican American accented English. *Journal of Personality and Social Psychology* 31(5). 855-863.

Schoel, Christiane, Janin Roessel, Jennifer Eck, Jana Janssen, Branislava Petrovic, Astrid Rothe, Selma Carolin Rudert & Dagmar Stahlberg. 2012. "Attitudes Towards Languages" (AToL) Scale: A global instrument. *Journal of Language and Social Psychology* 32(1). 21-45.

Smith, Hayley-Jane & Lance Workman. 2008. The effect of accent on perceived intelligence and attractiveness. Paper presented at the Annual Conference of the British Psychological Society, Dublin.

Staum Casasanto, Laura. 2008. Does social information influence sentence processing? *30th annual meeting of the Cognitive Science Society*. Washington, DC.

Strand, Elizabeth A. 1999. Uncovering the roles of gender stereotypes in speech perception. *Journal of Language and Social Psychology* 18(1). 86-99.

Wei, Li, Vanithamani Saravanan & Julia Ng Lee Hoon. 1997. Language shift in the Teochew community in Singapore: A family domain analysis. *Journal of Multilingual and Multicultural Development* 18(5). 364-384.

Yan, Qingyang. 2015. The perceptual categorization of Enshi Mandarin regional varieties. *Journal of Linguistic Geography* 3. 1-19.

Yang, Xuemei. 2011. *Hubei Hefeng fangyan yuyin yanjiu* [A phonological study on Hefeng dialect]. Changsha, Hunan: Hunan University M.A. thesis.

Yuan, Jiahua. 2001. *Hanyu fangyan gaiyao* [A compendium of Chinese dialects]. Beijing: Language and Culture Press.

Zhou, Minglang. 1999. The official national language and language attitudes of three ethnic minority groups in China. *Language Problems and Language Planning* 23(2). 157-174.

Zhou, Minglang. 2000. Language attitudes of two contrasting ethnic minority nationalities in China: The "model" Koreans and the "rebellious" Tibetans. *International Journal of the Sociology of Language* 146. 1-20.

Zhou, Minglang. 2001. The spread of Putonghua and language attitude changes in Shanghai and Guangzhou, China. *Journal* of Asian Pacific Communication 11. 231-253.

Appendix A

Please rate the standardness and pleasantness of the dialect in each county from 1 to 5. For standardness, 1 =almost the opposite of standardness, very strong accent; 2 = not standard, strong accent; 3 = somewhat standard, still with some accent; 4 = close to being standard, weak accent; and 5 = very standard, no accent. For pleasantness, 1 = very unpleasant; 2 = a little unpleasant; 3 = neutral; 4 = a little pleasant; and 5 = very pleasant.

Appendix B

Please rate each talker on education, friendliness, accentedness, and urbanness from 1 to 5. For education, 1 =lowest education level, and 5 = highest education level. For friendliness, 1 = lowest friendliness level, and 5 = highest friendliness level. For accentedness, 1 = lowest accentedness level, and 5 = highest accentedness level, and 5 = highest urbanness, 1 = lowest urbanness level, and 5 = highest urbanness level.

	Ctore do a da core	Diagona ta ang		Education	Friendliness	Accentedness	Urbanness
	Standardness	Pleasantness	Talker 1				
Enshi			Talker 2				
Jianshi			Talker 3				
Xuanen			Talker 4				
Laifeng			Talker 5				
Badong			Talker 6				
Hefeng			Talker 7				
			Talker 8				
			Talker 9				
			Talker 10	1			
			Talker 11				
			Talker 12				