Perceptual dialectology: The view from Amazonian Brazil

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1. Introduction

It is not surprising that in a nation the size of Brazil, with a population of nearly 200 million and a geographic area greater than that of the contiguous forty-eight states of the US, numerous regional dialects are spoken. Some of the dialects of Brazilian Portuguese (BP) are particularly well documented. This is true for instance of Paulista BP and Carioca BP, the dialects of São Paulo and Rio de Janeiro, respectively. Perhaps this is to be expected given that Brazil's population is particularly concentrated in these states, and given that they represent the financial and media epicenters of the country. The features of other BP dialects are generally less well documented, however, and in some cases few-to-no relevant studies have been published. The primary goal of the present paper is to offer an analysis of Brazilian perceptions of the speech of one region, in order to better understand the dialect (as well as the way in which it is construed) of that region. The paper also includes a preliminary analysis of some potential vowel differences evident when the speech of the region in question is contrasted with Paulista BP, for which extensive quality acoustic data have previously been published.

Brazil is divided into five geopolitical regions, as evident in Figure 1. One of the regions, the Norte, consists almost entirely of Brazilian Amazonia. With approximately fifteen million residents, the Norte represents less than 8% of Brazil's population. It is comprised of an enormous land mass however, consisting of about 45% of Brazil's area. The region is approximately 3.8 million square kilometers in size. The speech of this region is sometimes referred to as *dialeto Nortista*. This dialect represents a greater geographic area than the vast majority of (and potentially all) dialects of any extant language. For this reason alone it merits attention.

As a linguistic area, Amazonia is of great interest to many researchers, and a number of the languages of this region have been studied in some depth. I have been conducting research in Amazonia for some time (see e.g. Everett 2010, 2011, Everett & Madora in press), but this research is focused on languages spoken among Amazonian tribal populations. During a recent research trip, I began to discuss dialeto Nortista with some non-indigenous friends in the region, and this discussion served as the impetus for the present preliminary study on the dialect. My curiosity was raised by the metalinguistic assessments offered by some of these friends vis-à-vis their own dialect and other BP dialects, assessments I will return to below.



Figure. 1. The five major regions of Brazil.

In addition to BP dialects associated with large regions (such as dialeto Nortista or dialeto Sulista), there are numerous regional dialects associated with smaller geographic areas, for instance Cearense, Caipira, and Mineiro. This study does not attempt to describe perceptions of most of these regional varieties, and includes data on the other regions only to the extent that they help elucidate Brazilians' perceptions of dialeto Nortista. To that end, below we separately consider the perceptions of various BP dialects, associated with the regions in Figure 1 as well as some salient and well-known dialects of smaller regions such as Rio de Janeiro and São Paulo. The dialects of these regions are considered separately since, via popular media, residents of the região Norte are quite familiar with each of them. (See Reis 1998 and Pace 2009 for discussions of the pervasiveness of such media in the Norte.)



Figure. 2. Location of Porto Velho, where this research was conducted.

This research was conducted in the city of Porto Velho, capital of the state of Rondônia. The location of the city in southwest Amazonia is depicted in Figure 2. The study was conducted in a community outside the center of town, located along the banks of the Rio Madeira, a primary tributary of the Amazon. Locals refer to such riverside communities as *ribeirinho* communities. During informal discussions with speakers who

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have lived in or near the community their entire lives, I was provided with several metalinguistic assessments of the aspects of dialeto Nortista that distinguish it from the standard varieties of BP evident in the media. (It remains an open question just how accurate these assessments are.) These speakers suggested that dialeto Nortista is characterized by fewer instances of full $2^{\rm nd}$ singular pronoun usage. In other words, $voc\hat{e}$ is typically reduced to $c\hat{e}$. This is actually a pattern that is observed throughout Brazil, but some from this region claim to reduce the pronoun at a more prodigious rate. The Nortista speakers surveyed also note that there are numerous lexical items that characterize their dialect, when contrasted with the dialects they are exposed to through the media. Interestingly, two speakers also claimed that there are differences in the vowels of dialeto Nortista, when contrasted with those of other regions.

The suggestion that Nortista vowels are in some way distinct is interesting but quite vague, and the two speakers in question were unable to provide any specificity regarding e.g. which vowels might be characterized by regional variants. In order to establish whether there was any evidence for such claims, I conducted a preliminary analysis of some Nortista vowels. This analysis is discussed in section 2. In sections 3 and 4 I discuss the perceptual dialectology study recently conducted, before offering some conclusions in section 5.

2. Analysis of vowel placement in BP Nortista

Ten Nortista speakers were recorded producing a list of 12 clauses. The stressed vowel of the clause-final word was excised and analyzed via Praat. Preceding place of articulation was controlled for, so that bilabial, alveolar, and velar consonantal placements occurred in an equal number of tokens, for each vowel type. Five oral vowels, evident in Figure 3, were analyzed. All vowels were peripheral, oral monophthongs. A total of 360 vowel tokens were analyzed (12 clauses x 10 speakers x 3 repetitions).

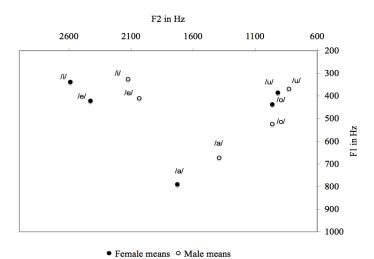


Figure. 3. Non-normalized vowel means for ten speakers (five male) of Nortista BP.

In order to better assess whether the Nortista vowels recorded differed from those in more standard BP dialects, the F1-F2 means for all female speakers' vowels were averaged together and plotted. The same was done for the F1-F2 means for all male speakers' vowels. In Figure 4 the female means for the five vowels in question are contrasted with those obtained from an extensive study of Paulista BP vowels (Escudero et al. 2009). In the same figure, the males' means for the five vowels in question are superimposed over the vowel loci for BP-speaking Paulista males (also taken from Escudero et al. 2009).

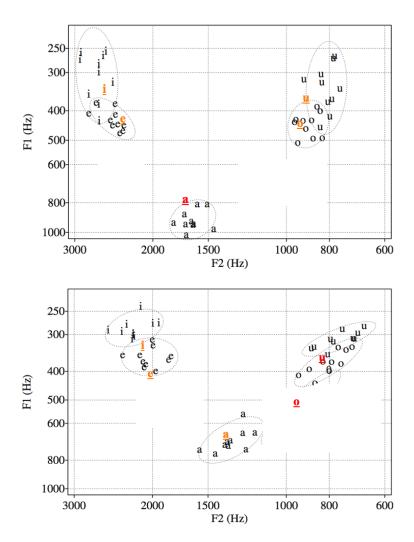


Figure. 4. Mean vowel loci for five female (above) and five male speakers of dialeto Nortista, superimposed over mean vowel loci of ten female Paulistas, and ten male Paulistas, respectively (Escudero et al. 2009). Underlined, colored letters represent vowel locations in current study. Red letters indicates vowel means that occurred outside an ellipse circumscribing all the means for that same vowel type in Escudero et al. (2009).

While the vowel findings depicted in Figures 3-4 are preliminary given that only ten Nortista speakers are considered and given that the formants of this study (and of Escudero et al. 2009) are not normalized, they nevertheless suggest that there may be some vowel differences between Nortista productions of the five vowels in question, when contrasted to the productions of the same vowels by speakers in São Paulo. In Figure 4 we see that the /a/ vowel of female Nortista speakers recorded tends to be produced slightly higher in the vowel space than that of their Paulista counterparts. We also observe that the /o/ and /u/ vowels of the male Nortista speakers recorded tend to be produced in a lower portion of the vowel space, when contrasted with the same vowel types of their Paulista counterparts. Higher /a/ vowels and lower /o/ and /u/ vowels suggest that the vowel spaces of the Nortista BP speakers recorded may be more contracted or slightly less peripheralized than the vowel spaces of Paulista BP speakers.

In short, these results are at least consistent with the metalinguistic assessments vis-à-vis Nortista vowels. Nevertheless, it is important to stress that these findings are based on ten speakers in one city only, and also that there may be some lurking methodological variable that explains the differences in Nortista and Paulista vowels obtained here. For now the data in Figure 4 are suggestive only, and await systematic replication.

3. Perceptual dialectology survey: Methods

In order to develop a better understanding of the dialect of the Norte, I conducted a study in perceptual dialectology. The primary purpose of the study was to test the perceptions of Nortista speakers regarding their own dialect, which is apparently characterized by, among other factors, the differences discussed in section 2. An ancillary goal was to test the perceptions of BP speakers from other regions of Brazil, vis-à-vis the Nortista dialect. I should note that some previous work on the perceptions of Brazilian dialects has been carried out in other regions of Brazil, for instance Rio Grande do Sul (see Faggion 1982 and Preston 1989).

A questionnaire was designed in order to assess speakers' perceptions of dialects according to three parameters, which can be loosely translated as 'correctness/education level', 'pleasantness/friendliness', and 'coolness.' The first two parameters are common to research on perceptual dialectology (see e.g. Preston 1989). The questionnaire is reproduced in Figure 5. A total of 55 speakers completed the questionnaire. Thirty-three of these were long-term residents of the Norte, while the others represented all of the four remaining regions of Brazil. While they were living in Rondônia at the time of the survey, they were raised elsewhere and had only been living in the state for a limited time.

Por favor dê um valor ao dialeto Brasileiro do lugar em questão.	
1. Indíce de educação evidente na fala (1 a 10)	
2. Portugues amigável/simpático (1 a 10)	
3. Portugues que voçê acha legal (1 a 10)	
Região Norte	
Região Nordeste	
Região Centro-Oeste	
Região Sul	
Distrito Federal/Brasília	
Estado de Rondônia	
Estado de Minas Gerais	
Estado de São Paulo	
Estado do Rio de Janeiro	

Figure. 5. Questionnaire utilized in survey.

As we see in Figure 5, participants were asked to evaluate the dialects of four major regions, including the Norte. They were also asked to separately evaluate the federal district, where the nation's capital is located, in addition to evaluating four states individually. One of these, Rondônia, was selected since the data were collected in that state. The other three, Minas Gerais, São Paulo, and Rio de Janeiro, were selected since the dialects of these regions are known to be quite distinct. The latter two states also represent the financial and cultural capitals of Brazil, and their dialects are the best represented in the media to which Nortista speakers are continually exposed.

Respondents were asked to rate each dialect on a scale of 1-10, for each variable. Lower numbers denoted less of a particular variable, i.e. a dialect that was perceived as being less pleasant or correct or cool. Responses were tabulated and analyzed for significant disparities. The results are presented in the following section.

4. Perceptual dialectology survey: Results and discussion

In Figure 6-8 the survey's results are depicted graphically. Figure 6 contains the mean responses for the first variable, perceived level of correctness/education. Figure 7 contains the mean responses for perceived level of pleasantness. Finally, Figure 8 contains the mean responses for perceived level of coolness.

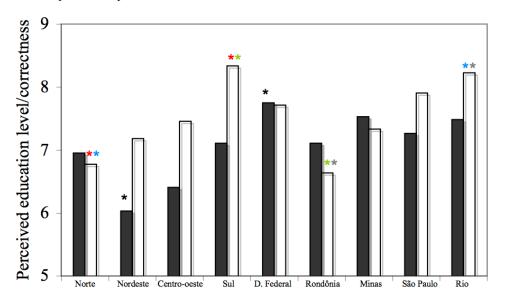


Figure. 6. Perceptions of dialects in terms of 'correctness'. Solid bars represent mean responses of speakers from the Norte, clear bars represent speakers from all other regions. Same-colored asterisks represent significant differences between two bars, according to a two-tailed paired t-test. (p<0.05)

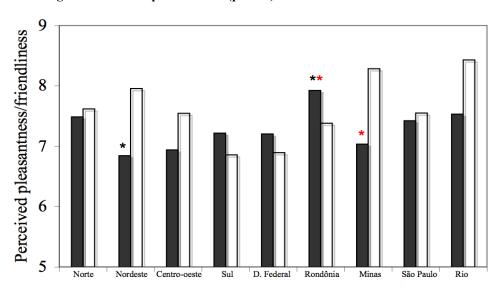


Figure. 7. Perceptions of dialects in terms of 'pleasantness'.

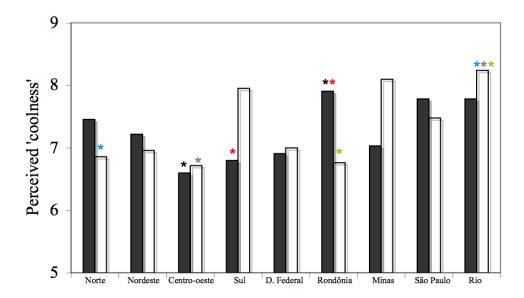


Figure. 8. Perceptions of dialects in terms of 'coolness'.

The results presented in Figure 6-8 allow us to make several observations. Let me first offer some remarks on the perceptions of speakers from the Norte region. The speech of both Rondônia and the Norte were given high evaluations for 'pleasantness' and 'coolness', when contrasted to other regions. There was a significant disparity between the perceived 'pleasantness' of speech in Rondônia when contrasted to the Nordeste region and the state of Minas Gerais. With respect to 'coolness', the speech of Rondônia received significantly higher evaluations when contrasted with the speech of the Centro-Oeste and of the Sul. The dialects of Rio and São Paulo also faired well with respect to this variable. With respect to 'correctness' of the regions' speech, Rondônia and the Norte received middle of the range scores, while the highest evaluations were for the speech of Brazil's capital.

Some observations can also be made with respect to speakers from the remainder of Brazil. The most readily-apparent observation, and the most relevant for our purposes, is that the speech of the Norte and Rondônia was consistently ranked relatively low in terms of two variables, 'correctness' and 'coolness'. With respect to correctness/education, the speech of Rio and the Sul were ranked highest, at significantly greater rates than the speech of both Rondônia and the Norte. With respect to 'coolness', the speech of Rio was again ranked significantly higher than that in Rondônia, the Norte, or the Centro-Oeste. Finally, with respect to 'friendliness/pleasantness', the dialect of the Norte and Rondônia received average evaluations, with Carioca (Rio) speech again receiving high evaluations. It is interesting to note that for non-Nortistas, Rio's dialect was evaluated very high according to all three variables. This dialect remains particularly influential in the media, especially in novelas to which most Brazilians are frequently exposed, including Amazonian Brazilians (see Reis 1998, Pace 2009).

5. Conclusion

While the results in section 4 reveal significant disparities in the perception of the speech of different Brazilian regions, by Nortistas and others, it is interesting to note that the disparities are in general relatively small. For all three variables, the mean responses tend to vary only about 1 to 2 points on the scale utilized, which ranged from 1-10. Similar work conducted in the US tends to reveal larger disparities across regions. For example, when I surveyed 80 students in an introductory class in anthropological linguistics at the University of Miami, utilizing the same questionnaire (translated of course), the range of

responses pertaining to American regions varied much more substantially, with means that varied 4-5 points on the same scale. Similar findings are evident in other works on perceptual dialectology as well (e.g. Preston 1999). It is interesting to note then that, while the perceptions of the dialects of Brazilian regions are very real and certainly significant, they are somewhat modest in scope. This suggests that the attitudes of BP speakers towards other BP dialects are not typically very marked. The results of this study are consistent with this claim anyhow.

It is interesting to note as well that all the mean responses evident in Figures 6-8 are well over 5, suggesting an overall positive evaluation of all dialects tested. This is in sharp contradistinction to findings for the US, for instance, where perceptions of some dialects (e.g. Southern English) are often quite negative according to a host of studies by perceptual dialectologists. The Norte region has received waves of immigrants in recent decades, in large part due to government incentive programs. It is possible that the relatively weak (and non-negative) attitudes towards the Nortista dialect are due to this recency, as well as the conflation of various regional dialects in the Norte. Anecdotally I should add that, based on my experience, metalinguistic awareness of any particular linguistic features of this dialect by Brazilians from other regions is often quite low.

Finally, the results presented here suggest that the Norte and Rondônia more specifically can be considered regions of linguistic insecurity. Preston (1999:xxxiv) makes the following observation:

"...areas with a great deal of linguistic security rate the local area as uniquely correct, but they include a larger region in the area they consider most pleasant; respondents from areas of linguistic insecurity rate the local area as most pleasant, but they rate a number of areas as most correct"

Based on the results obtained for this study it seems clear that BP speakers in the Norte region consider their dialect to be very pleasant, but they do not rate it as being particularly correct. It is interesting to note that the results obtained here for Nortistas parallel closely those obtained in Preston (1999) for residents in another area of linguistic insecurity, Alabama. Those results suggest that speakers from Alabama rate their dialect as being the most pleasant in the US, but view the speech of their nation's capital as the most correct. Interestingly, this same pattern surfaced here for BP speakers from Rondônia. They considered their speech to be the most pleasant, while rating that of Brazil's capital as the most correct.

In this paper we have made an initial attempt to better document the dialect of the Norte region of Brazil. We have seen that in this dialect there may be differences in the vowel locations in the F1-F2 plane, when contrasted to Paulista vowels at least. More interestingly, perhaps, we have seen that this region can be characterized as an area of linguistic insecurity, and furthermore that BP speakers from other regions in Brazil tend to perceive the dialect of the Norte as sounding *relatively* uncool and uneducated.

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