

The effect of salience on co-variation in Brazilian Portuguese

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The study of co-variation investigates whether multiple variables in a speech community cohere in forming sociolects (Guy 2013). Since patterns of social stratification and style-shifting are recurrent for different variables and communities, one can reasonably expect that variables should also correlate with one another. Previous works have shown co-variation not only between structurally related variables (e.g. *aeh* and *oh*-raising in NYC English, Labov 1966; NP and VP agreement in Brazilian Portuguese, Guy 2013), but also between structurally *unrelated* pairs (e.g. denasalization and NP number agreement in Brazilian Portuguese, Guy 2013). But it is still unclear which internal and external constraints promote co-variation.

This paper examines the effect of phonic salience (Naro 1981, Scherre 1988) on co-variation, in a set of 5 variables of Brazilian Portuguese: retroflex pronunciation of coda /r/ (*porta* ‘door’); coda /r/ deletion; nominal agreement (NP); and verbal agreement in first and third person plural (1PP-VP, 3PP-VP). We show that speakers who use more salient forms (e.g. nonstandard 1PP-VP as in *nósvai* ‘we goes’) also tend to use other relatively less salient forms (e.g. nonstandard NP as in *os menino-Ø* ‘the(pl.) boy(sg.)’), but the reverse is not always true. Furthermore, highly salient variants co-vary more strongly with other highly salient variants.

In a sample of 118 speakers, each variable was first analyzed separately in mixed-effects models in R, with speaker as a random effect, and cross-correlations were calculated through Pearson correlation coefficients, based on speaker’s weights for nonstandard variants ($p < .05^*$, $.01^{**}$, $.001^{***}$). We found that r-deletion correlates with r-retroflexion ($r = .31^{***}$), and the two phonological variables co-vary with NP ($r = .22^*$; $r = .23^*$) and with 3PP-VP ($r = .34^{***}$; $r = .31^{***}$), with which they share no structural relation. All morphosyntactic pairings are significantly correlated, but, contrary to what might be structurally expected, correlation between NP and 3PP-VP ($r = .70^{***}$) is stronger than that between 1PP-VP and 3PP-VP ($r = .30^{**}$). A closer examination shows that use of nonstandard 1PP-VP correlates with nonstandard 3PP-VP, but use of standard 1PP-VP doesn’t predict the use of 3PP-VP. This implies that co-variation between a pair of variables is not necessarily symmetrical, and that there is an implicational scale based on variants’ social markedness.

Given that non-agreement in 1PP-VP is the most socially marked among these variants, we tested the hypothesis that the phonic salience of variants constrains co-variation, by running alternative cross-correlation analyses with only more salient tokens of 3PP-VP (Naro 1981; e.g. *disse/disseram* ‘they-spoke,’ which is appreciably more salient than *come/comem* ‘they-eat’) and NP (Scherre 1988; e.g. *caminhão/caminhões* ‘trucks,’ vs. *menino/meninos* ‘boys’). In comparison to the previous analysis, salient 3PP-VP correlates less strongly with NP ($r = .49^{***}$ vs. $r = .70^{***}$) and more strongly with 1PP-VP ($r = .34^{***}$ vs. $r = .30^{**}$); salient NP correlates less strongly with 3PP-VP ($r = .63^{***}$ vs. $r = .70^{***}$) and more strongly with salient 3PP-VP ($r = .48^{***}$ vs. $r = .45^{***}$) and 1PP-VP ($r = .30^{**}$ vs. $r = .26^*$). Correlations with phonological variables are overall unaltered. Thus phonic salience plays a significant role in co-variation between structurally related variables in enhancing the correlation between more salient variants, which explains why structural similarity alone doesn’t predict the correlational hierarchy.

References

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