

Understanding the “Vagueness” of Accents with Acoustic Methods: A Case Study of the Eastern Tokyo Metropolitan Region

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This presentation demonstrates acoustic methods for understanding the “vague accent” that is seen in the Eastern Tokyo Metropolitan Region (encompassing Northeastern Tokyo, Western Chiba and Eastern Saitama), and attempts a speaker typology based on those methods. Based on this attempt, it examines factors in the “vagueness” of the accent that have not been clarified up until now.

Based on the two acoustic indicators of “drop range” and “relative peak position,” which reflect the distinctive characteristics of the Eastern Tokyo Metropolitan Region Accent, an analysis was carried out on the vague accents in the Eastern Tokyo Metropolitan Region. The subjects of the analysis were 37 speakers from the Eastern Tokyo Metropolitan Region and, for the purposes of comparison, 7 speakers from Tokyo’s Central Region, for a total of 44 individuals. Speakers were typified using a multivariate cluster analysis.

As a result of the analysis, the speakers were typified into three groups: “clear group,” “unclear high-low difference group,” and “unclear formal distinction group.” Based on a detailed analysis of acoustic indicators, the drop range of the “clear group” was large, and the relative peak position displayed a large distance between forms. On the other hand, the two “unclear groups” showed a small high-low difference, and the “unclear formal distinction group,” in addition to the small size of the high-low difference, also displayed a small distance between forms in terms of relative peak position.

Finally, after ordering each group from the analysis according to level of high-low difference and the difference in acoustic decline placement, the changes to the accents in this region could be grasped anew as a linked relationship between multiple acoustic indicators. Moreover, this study demonstrates the potential for acquiring an understanding of all Japanese dialect accents based on the same methods.