The Fractal Structure of Language: Phonetic Measurements from the American South

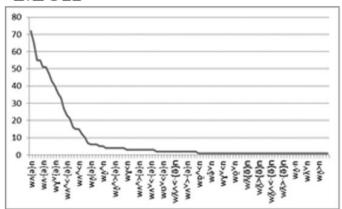
William A. Kretzschmar, Jr., University of Georgia, University of Oulu



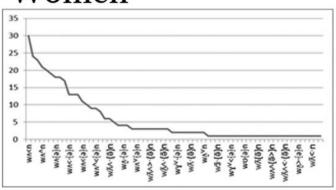


Frequency profiles of four subsets of pronunciations of *one*

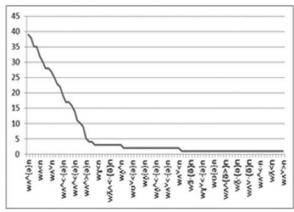
Men



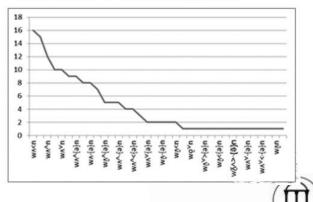
Women



Least educated



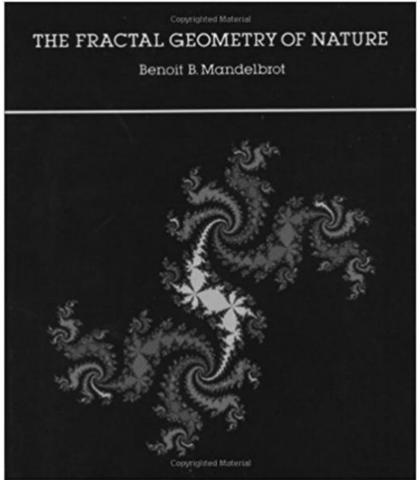
Most educated







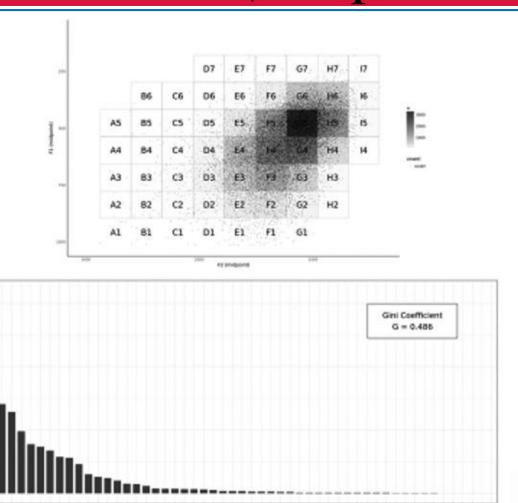
Fractal design (cover of Mandelbrot 1982)





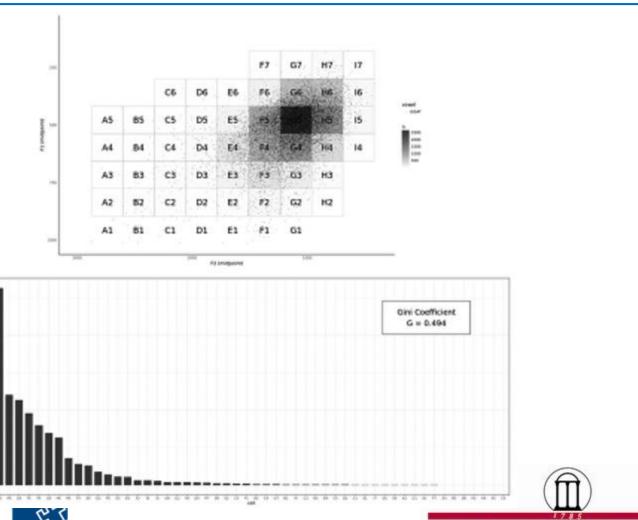


F1/F2 plot of realizations of the GOAT vowel (50 speakers)

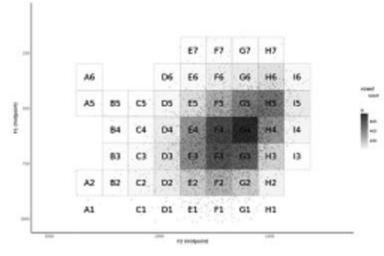


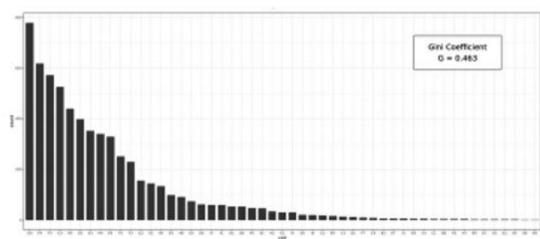


F1/F2 plot of realizations of the GOAT vowel (25 male speakers)



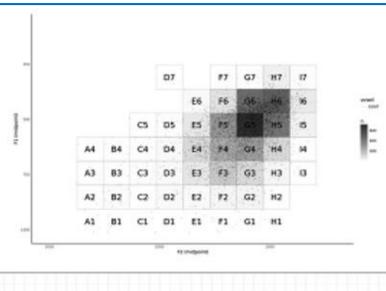
F1/F2 plot of realizations of the GOAT vowel (25 female speakers)

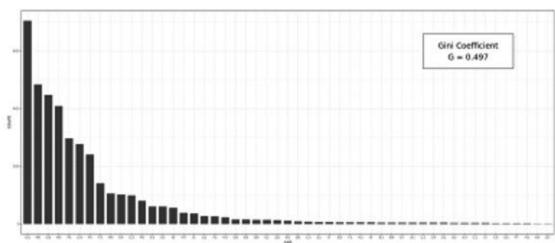






F1/F2 plot of realizations of the GOAT vowel (10 Black speakers)

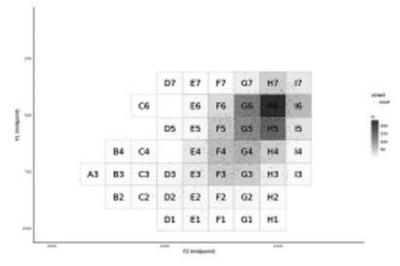


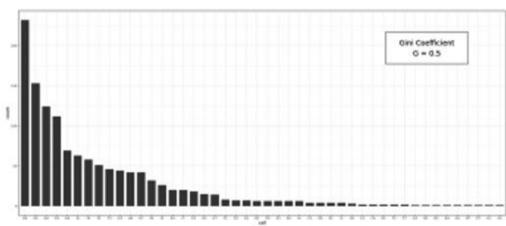






F1/F2 plot of realizations of the GOAT vowel (4 female Black speakers)







Thanks for listening!

References

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