

# Detecting linguistic variation with geographic sampling

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# Outline of the talk

- introduction
- blar

# Introduction

As [Dorian \(2010\)](#) mentioned

# Approach

## Simulated data

- total number of locations ( $N$ ): 20, 40, 60, 80, 100, 120
- type of spatial relations:
  - random
  - two more or less separable regions
  - central and periphery
- proportion of variation in the explored variable ( $p$ ): 0.1, 0.2, ... 0.5
- amount of clusters ( $k$ ):  $0.1 \times N$ ,  $0.2 \times N$ , ...  $0.9 \times N$
- percentage of observations taken from each cluster ( $r$ ):  
0.1, 0.2, ... 0.9

From those values we could derive a number of sampled locations ( $n$ ):

$$n = \frac{N \times r}{k}$$

# Conclusion

Dorian, N. C. (2010). *Investigating variation: The effects of social organization and social setting*. Oxford University Press.