



Analyzing Speech Rhythm

An overview and perceptual approach to isochrony

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Overview

- **Introduction: What is rhythm**
- **Division of languages**
- **Computational check of the hypothesis**
- **Further, perceptual check of the hypothesis**
- **Summary**

What is rhythm

- **Everyday rhythm**
- **Rhythm and speech**

Division of languages

F. Ramus et al. / Cognition 73 (1999) 265–292

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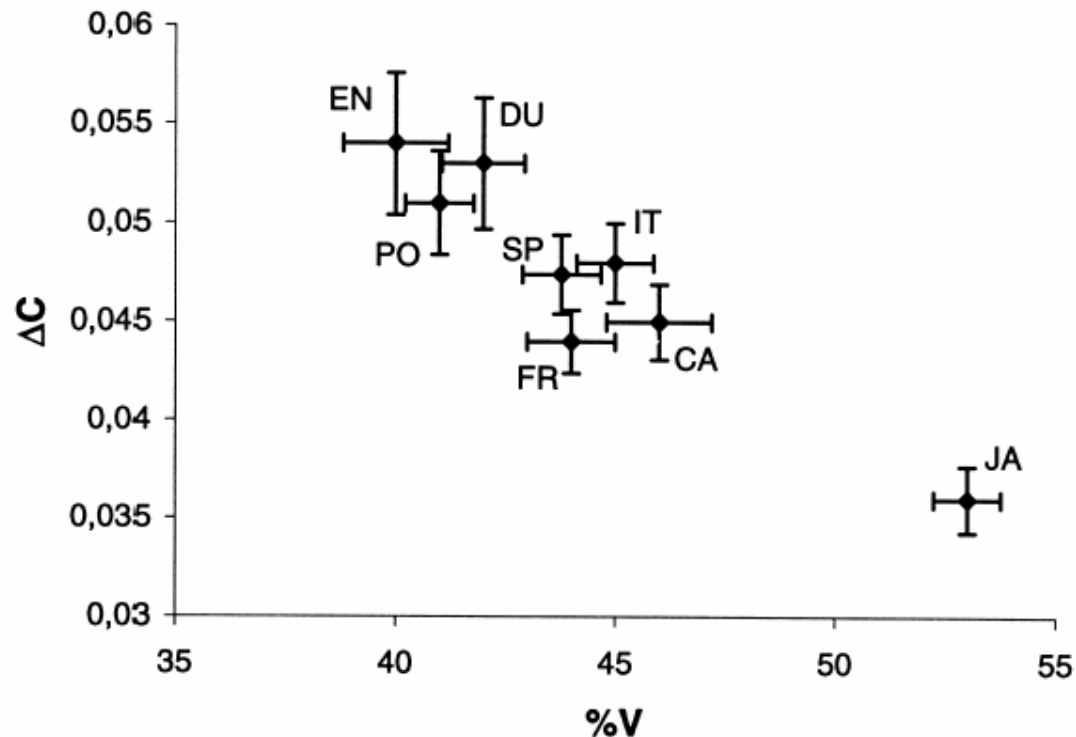


Fig. 1. Distribution of languages over the (%V, ΔC) plane. Error bars represent ± 1 standard error.

There is a certain grouping: stress vs. vowel length based isochrony!

Computational check of the hypothesis

Here we present the demo we constructed in lecture 2 of the tutorial and compare it to the one in the previous slide.

The conclusion:

Our experiment is in concert with the existing theory!

It shows though only that languages are different: but if vowel length and equal stress timing really are part of the rhythm or just features of language is not clear.

Further, perceptual check of the hypothesis

Here we put something from the program that we did together.

Summary

There is a certain grouping of the languages and our experiments are in concert with the theory.