A Bayesian Anlaysis of Flanker Effects on Perception

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April 1, 2017

(Just following along with my talk for right now. It's how it makes sense in my head for right now as a "story".)

Pupose

Relationship between assimilation and contrast

Individuals ability to ignore distracting information

Introduction

Eriksen & Eriksen (1974)

Flanker effect description

How it can be interpreted as assimilation

Rouder & King (2003)

Changes from E&E

Negative flanker effect description

Contrast effects in the morphed letters

Other Supportive Articles (COMING SOON)

Palmer, Neisser, McClollund & Rumelhardt

Experiment 1: Replication Study

Goals

Replicate Rouder & King's previous results

Find assimilation as well in the pure letters

Methods

Stimulus description

Display details

Reasons for more pure letters than morphed

Results

Graphs: average, individual effects

Descriptive statistics

Discussion

Found contrast effect, shown in graphs

Assimilation was not as prominent

Lead in to Experiment 2

Experiment 2: Contrast/Assimilation Study

Goals

Find both contrast and assimilation

Do they occur at the same time?

Way to measure the relationship

Methods

Stimulus description

Display details

Reasons for more morphed letters

Results

Graphs: average, individual effects

Descriptive statistics

Discussion

Found contrast and assimilation effects, shown in graphs

Relationship can be localized in relationship between individual's contrast and assimilation levels

Lead in to Model

Bayesian Model

(I'm not sure how to go about writing this section up. I have an example from Julia but I'm not sure what to include or change because I don't want to copy from the example.)

Basic definitions

Transformation and reasons

Decompositions and definitions

Albert & Chib (1995)

Priors

Two comparisons: α, β, histogram; ρ, histogram

Discussion