

Choosing a MA topic and forming final project groups

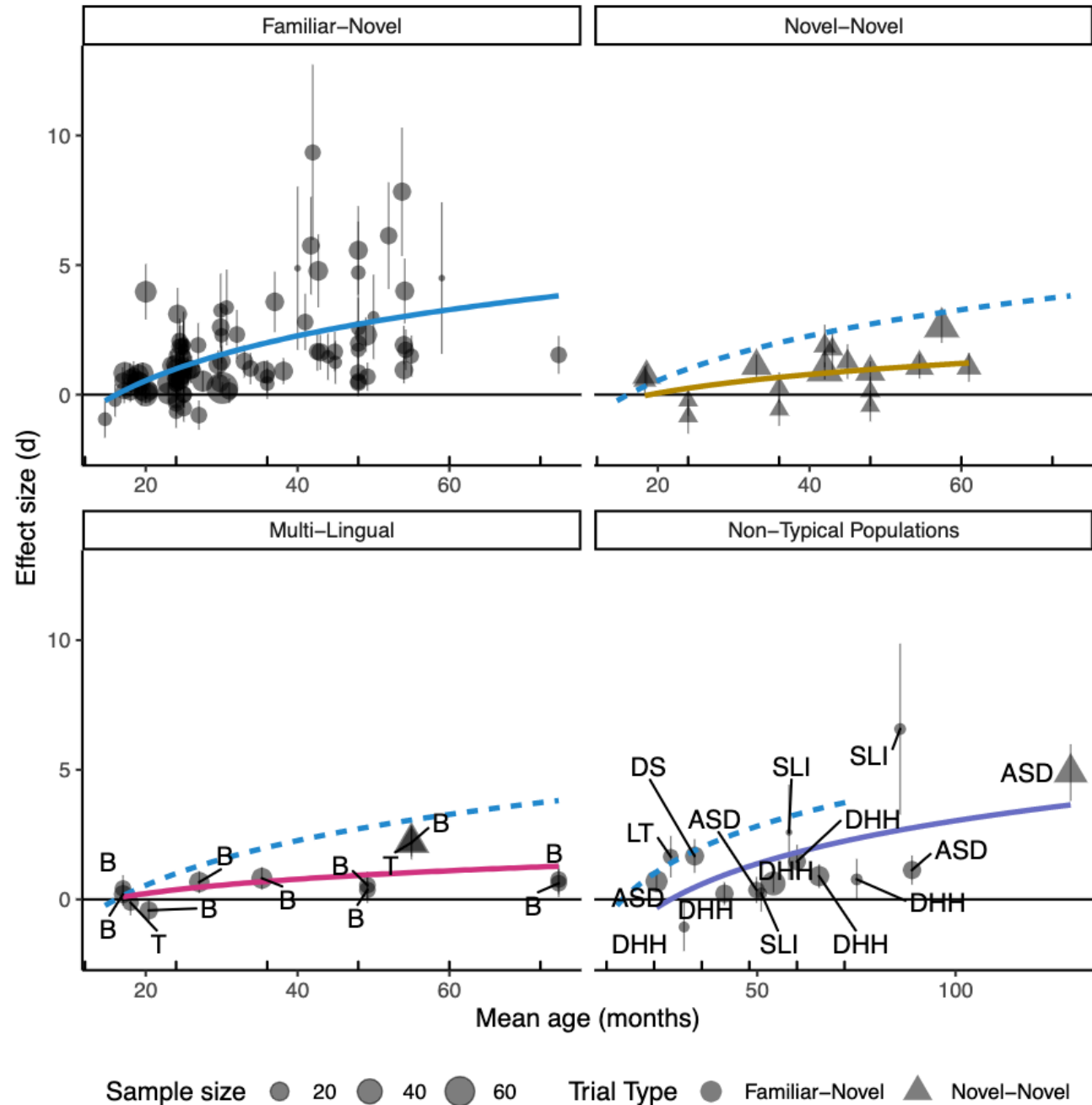
29 October 2021

Modern Research Methods

Meta-analytic Moderators

- = anything you think might influence the effect size
- Age
- Design
- Stimuli type
- # of languages spoken
- ...
- Metalab

Mutual Exclusivity across Development from Meta-Analytic Data



META-ANALYSIS FINAL PROJECT

For the remaining portion of the semester, we will be working on your final projects – an original meta-analysis on a question in developmental, cognitive, or social psychology. You will complete your project in groups of ~4, and you will decide on your topic in consultation with me and your group members. The goal is that you could go on to publish your meta-analysis with a little more work beyond this class.

There are broadly five steps to conducting a meta-analysis:

1. Identify topic
2. Conduct literature search
3. Code studies and calculate effect sizes
4. Plot and analyze data
5. Report and discuss results.

Project overview

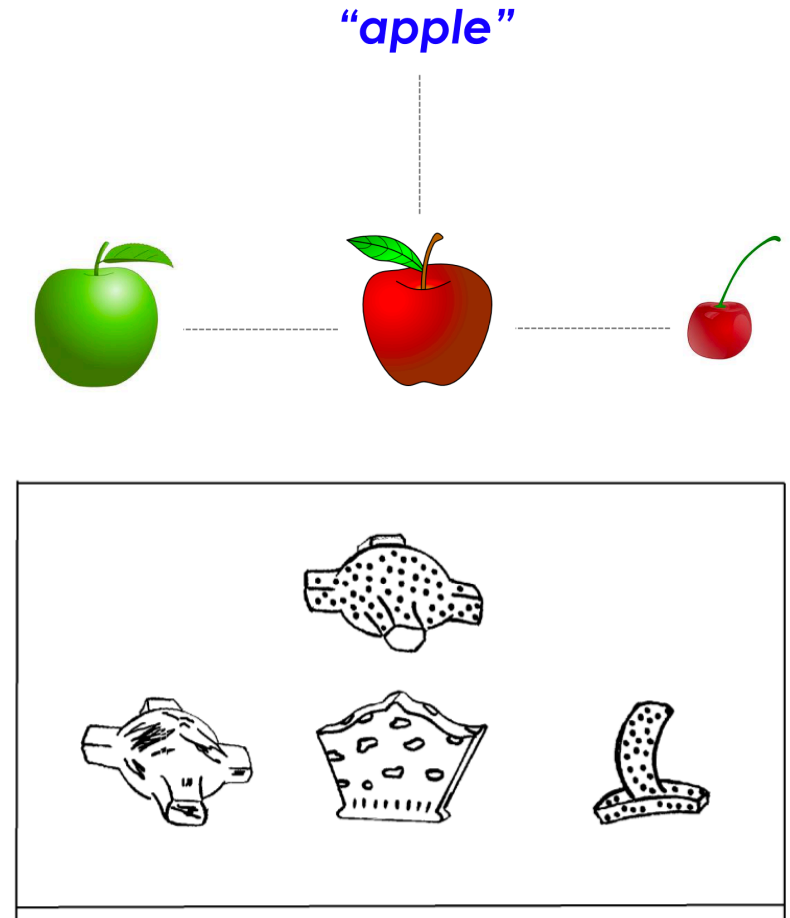
- Complete project as a group
 - Presentation will be as group
 - Final paper will be done individually
- Three more assignments (6-8)
 - Each assignment will help you complete part of your project
 - Assignment 6: identifying topic
 - Assignment 7: conducting literature review
 - Assignment 8: coding studies
 - We will give you feedback on your assignment -- this feedback should be incorporated into your final paper.

Final paper details

Clarity of writing evaluated in addition to content!

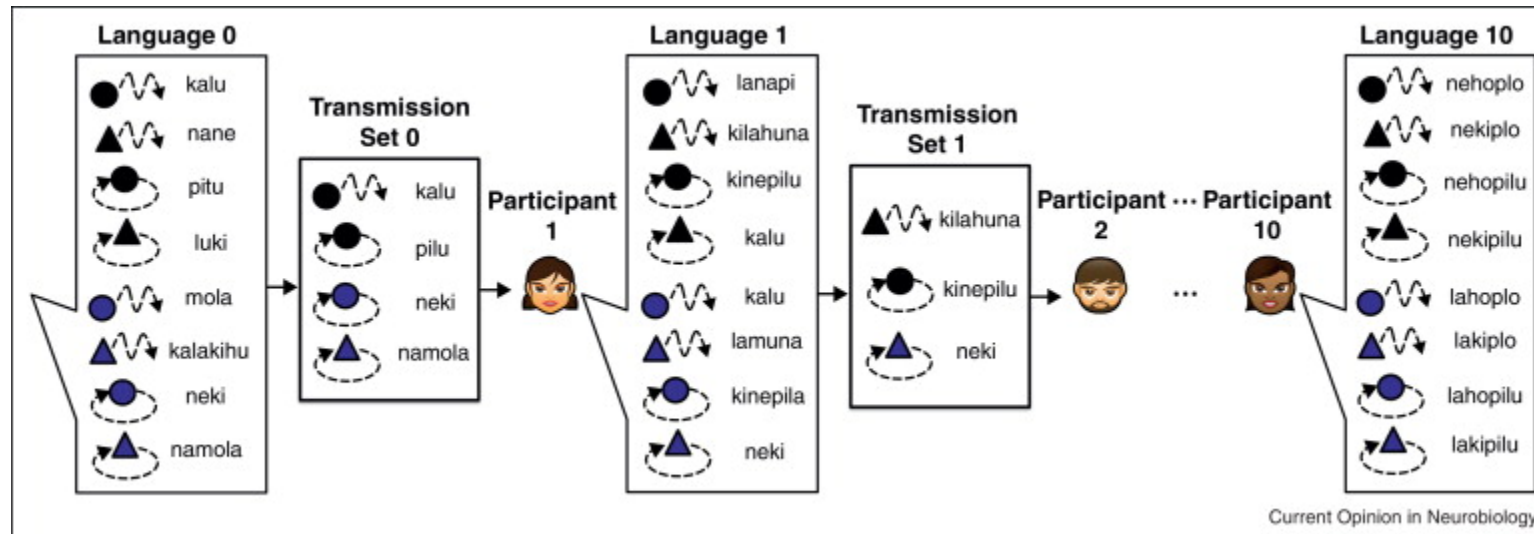
- Introduction
 - 3-4 pages
 - Introduce question your MA addresses and why it is important
 - Introduce seminal paper (method, finding, results)
- Method:
 - Paper selection method (inclusion criteria)
 - Description of variables coded
 - Effect size measure
- Results
 - Forest plot
 - Funnel plot
 - Grand mean effect size
 - Moderator analyses
- Discussion:
 - 2-3 pages
 - Summary of findings
 - Interpretation: What do your findings mean? How does the grand effect size compare to other effects in psychology and in your domain?

Topic 1: Shape bias in word learning



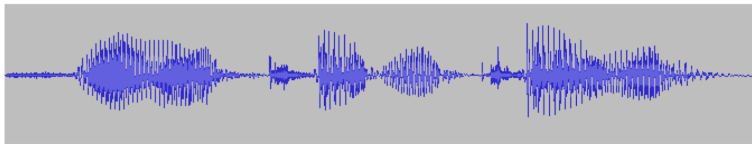
Topic 2: Language evolution

- How does culture change time?
- How does language change over time?
- Hard to study in the lab!



Less error in transmission across generations, and more "structure" over time

Topic 3: Transitional probability learning in adults



He re ki tt y ki tt y

buladobigokudatibabuladotadupabigoku

Test: bigoku (word) vs. dobigo (partword)

o look what a pretty baby
what a pretty shirt
oh look at the happy baby
it's pretty late already
there's a baby can you see it

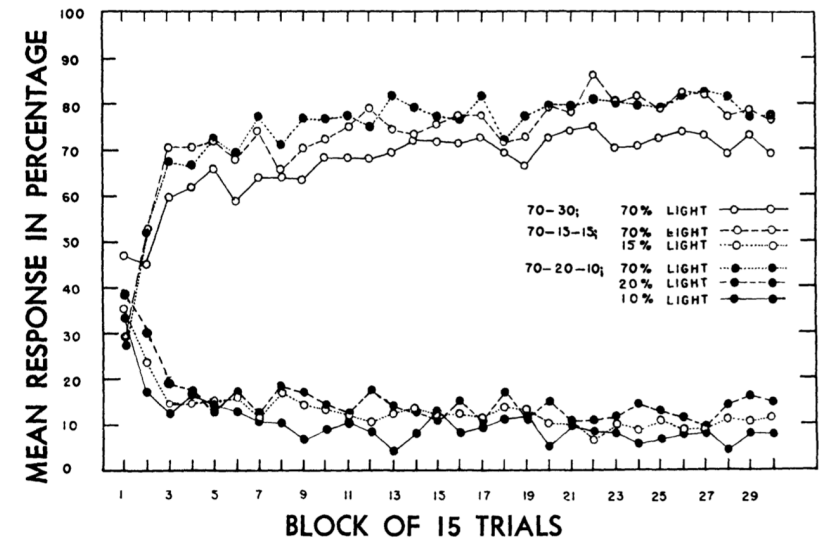
If you just heard **ty**, you can't predict whether you will next hear **ba**

If you just heard **ba**, you are very likely to next hear **by**

Topic 4: Probability matching

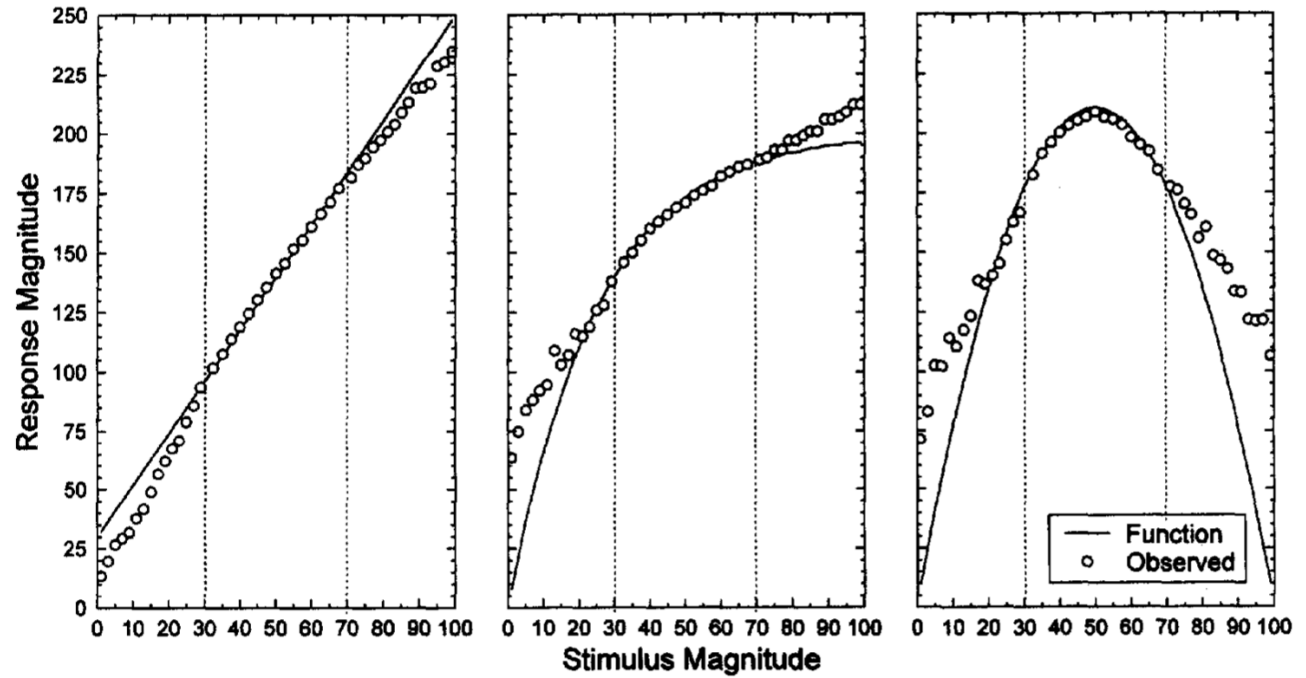


70% time when you hit green get \$1
30% of the time when hit red get \$1



Topic 5: Function Learning

E.g., Height \rightarrow Mile time



Seminal Paper: DeLosh, et al. 1997

Assignment 6

- Form groups and decide on topic
- Write "Introduction" part of your final paper
- Read seminal paper