

PERCEPTION EXERCISE

Part 1 Categorical Perception

For this activity, you will participate in a pair of categorical perception experiments found online: an identification task and a discrimination task. After completing the tasks, you will produce graphs of your results and write a short report of the experiments.

/ba/ - /da/ - /ga/ Categorization: www.ling.gu.se/~anders/KatPer/Applet/index.eng.html

- Some practical hints: Before you begin, make sure the volume on your computer is turned up. And when you click on the link to start the experiment, be patient—it may take a little time for the page to load.
- At the end of each experiment, a graph of your results will appear. You don't need to print these single graphs. When you have finished both experiments, click on the "Combined Results" button and print out that screen (using Print on your browser).

Your report of this study can be brief, but it should include an introduction (identifying the issues that the two experiments are designed to explore), methods (including information about the stimuli, the response measure, and the independent variable(s)), results (with your graphs and descriptions of your graphs, as well as generalizations about your results), and discussion (summarizing what the 2 experiments demonstrated).

Part 2 Creating Spliced Stimuli

For this activity, you will create sample spliced stimuli of the type you might use in perception experiments. This process is described in detail in the Splicing handout.

/æ/-velar tokens

For some speakers, /æ/ is raised before /g/ (so it sounds a little more like [ɛ]), but not before /k/ or any other segment. Your task is to create a set of Cæg words with a regular /æ/ in them so that the perception of words with this standard vowel pronunciation ([æ]) could be compared to the perception of the same words with the different but natural [ɛ].

1. tag – Create a minimal triple including a cross-spliced version of *tag* (with t[æ] from *tack*), a same-spliced version of *tag* (with t[ɛ] from another *tag*), and a same-spliced version of *tack* (with t[æ] from another *tack*). Remember to normalize vowel duration. You will have 3 tokens.
2. bag – Create a minimal triple, as for *tag*.

stop burst tokens

3. Splice the initial stop burst and aspiration (in the voiceless case) of *tack* onto *back*, and vice versa. Use the splicing methods you learned for the /æ/-velars (e.g., splicing at 0-crossings, etc.). You will have 2 spliced tokens.

Turn in your spliced files by email. There is no formal report for this part of the assignment; however, you should write up notes on which tokens you used for which parts, how you made your duration manipulation, and any problems you encountered. You should also assess the success of your spliced tokens (i.e., how good they sound) and comment on the perceptual effect of swapping the initial stops in the third token.