GLOBAL PRECEDENCE

Global precedence refers to the question of whether information about the more global aspects of a stimulus are processed faster than information about the local characteristics (details) of the stimulus. Some researchers suggest that a global precedence effect might occur because global information is carried in the faster magnocellular pathway, and local information is carried by the slower parvocellular pathway.

Global and local processing frequently have been studied using stimuli composed of letters. Small letters are arranged to form a larger letter. All of the small letters are the same in a single stimulus, but the large letter varies. Research participants are asked to respond as to which letter is presented. In some conditions the response is made in reference to the large letters (global condition) and in other conditions the response is to the small letters (local condition). The letters that are irrelevant are often varied so that in some cases global and local information is consistent (both S) and in some cases inconsistent (small S arranged in an H). This variable allows the idea of faster global processing to be further tested.

In this experiment you will replicate an experiment originally conducted by Navon. The experiment uses reaction times to examine the difference in global and local processing. You should carefully read the instructions before beginning. Also, remember to respond as rapidly as possible, without making too many mistakes. Complete the practice trials so that you are familiar with the stimuli and procedures.

RESULTS & DISCUSSION

1. Report your data for both global and local processing conditions. How does global processing compare to local processing overall?

2. Does consistency make a difference? Is the consistency effect the same for both local and global processing? What does this suggest concerning the nature of the global precedence effect?

3. Reaction time data is very useful, but it must be interpreted carefully. If you were slower responding to one letter, what conclusions are possible? If you were faster in one condition than another, but you also made more errors in that condition, what problem does this create in interpreting your data?

Assignment must include a signed statement verifying that you did the work alone.