Cross-modal spoken word recognition and attention: An event-related potential experiment with masked repetition priming

Jyrki Tuomainen, SHaPS, email: j.tuomainen@ucl.ac.uk

This experiment is inspired by Lachter et al. (2004) results on visual word recognition. **No recognition** without attention!

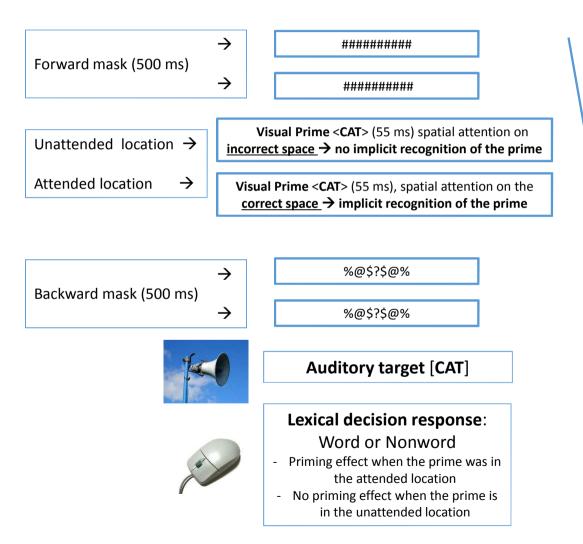
Current experiment: At the beginning of a *cross-modal trial*, a forward mask is presented at two vertically different locations on the screen, and the participant is asked to focus on *the bottom location*. The prime is presented for 55 ms either in the top or bottom location, and then backward masked so the *participant is not aware of the identity of the prime*.

<u>Attended location</u>: Congruent trials (the visual prime on the correct location and the auditory target are identical), <u>Unattended location</u>: The prime is presented in an incorrect spatial location.

Prediction: Priming effect observed only in the attended location trials (when implicit recognition takes place) but no priming effect in the unattended location condition.

Conclusion: Attention is needed for spoken word recognition.

The results will inform about the effects of attention and time course of spoken word recognition. The student will help with stimulus selection and learn the event-related potential technique.



Time