

HCSNet Workshop: Tools and Techniques for
Conducting EEG and MEG Experiments



Stroop Interference in Native Users of Sign Language.

David Cottrell & Suzy Murdoch

Psychology, JCU

Psycholinguistics, Multisensory Processing,
Cross Language comparisons



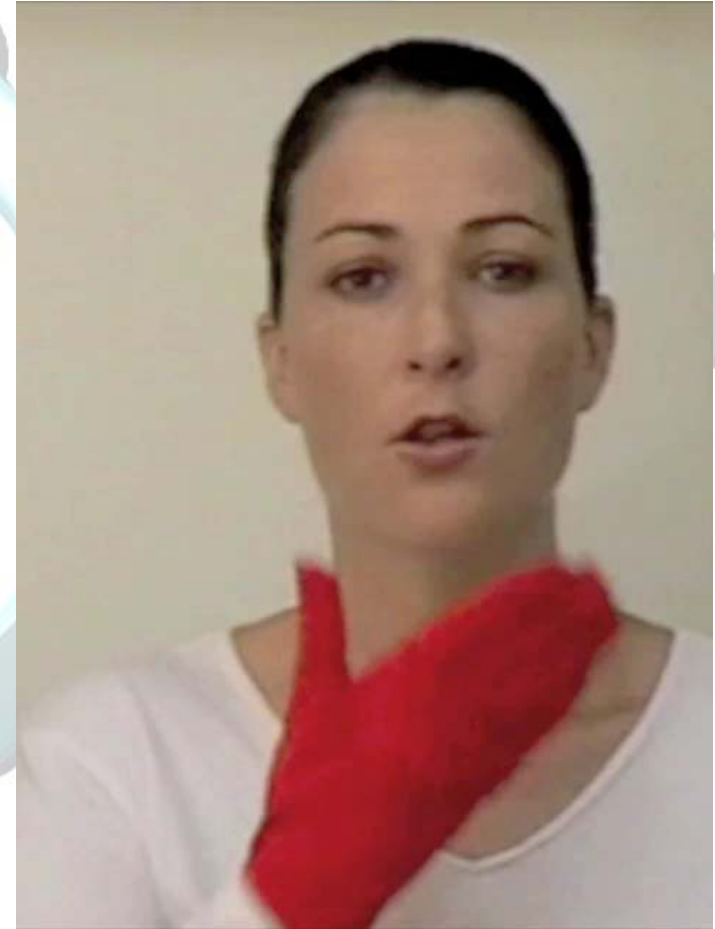
HCSNet

The ARC Network in Human Communication Science



Inconsistent

Glove - Red
Sign - Yellow



Neutral

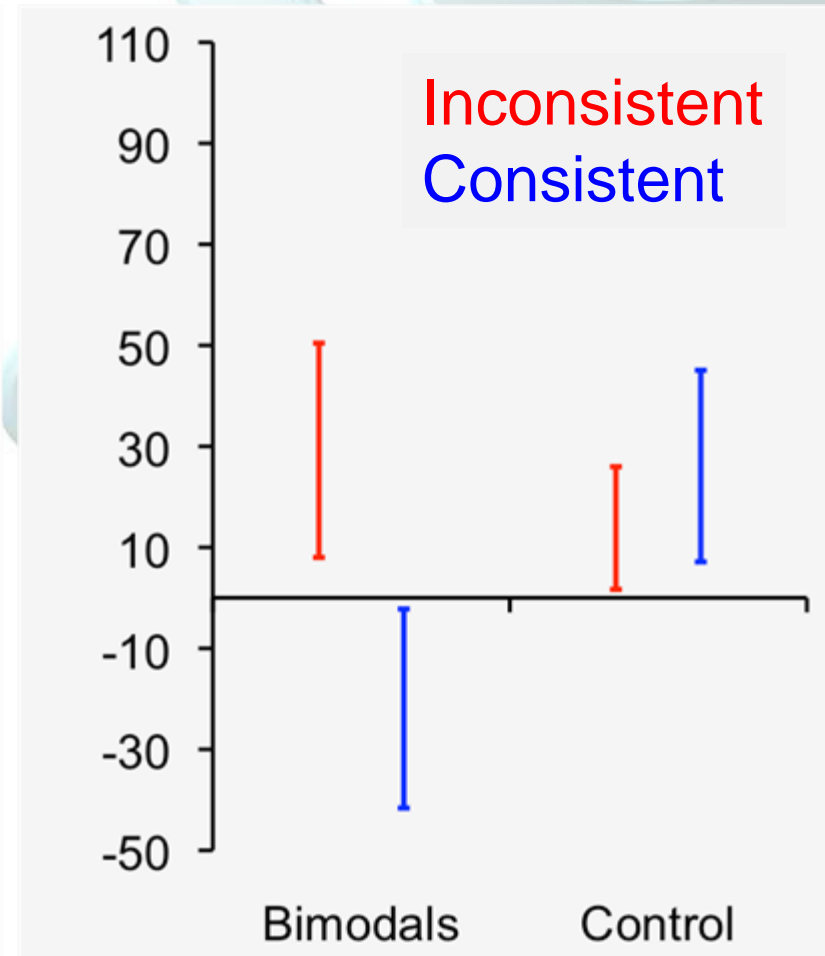
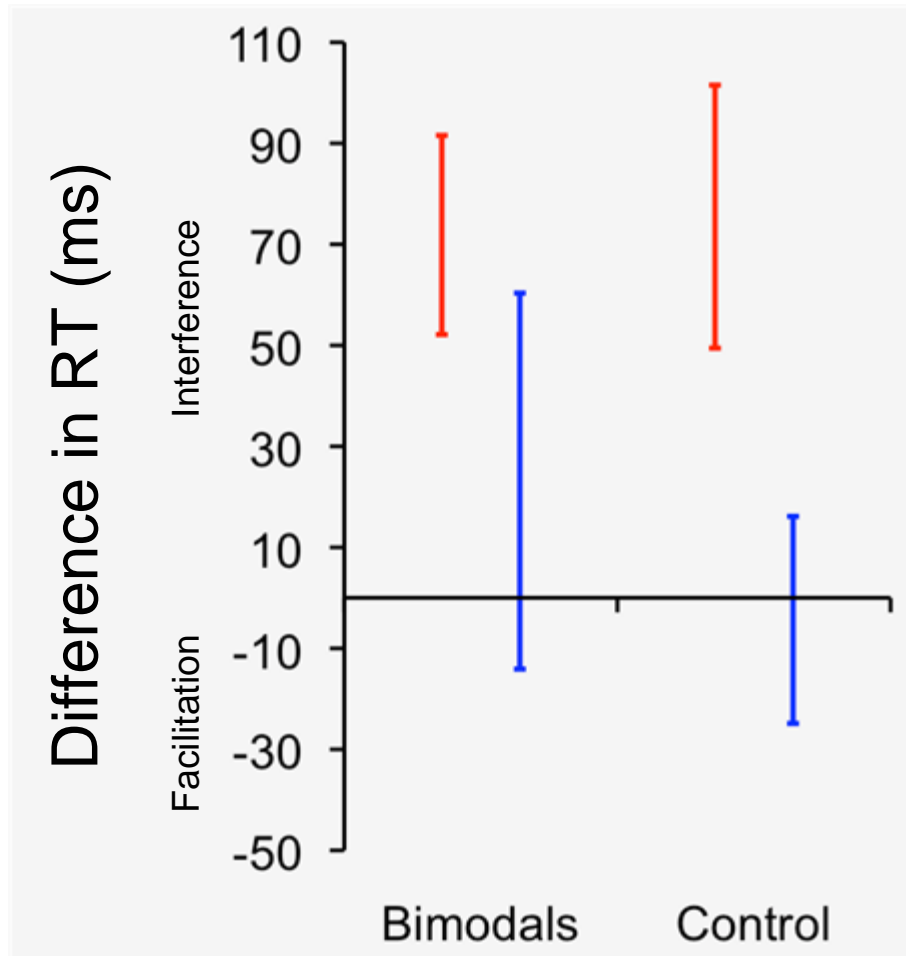
Glove - Red
Sign - "Nice"



Stroop Results so far...

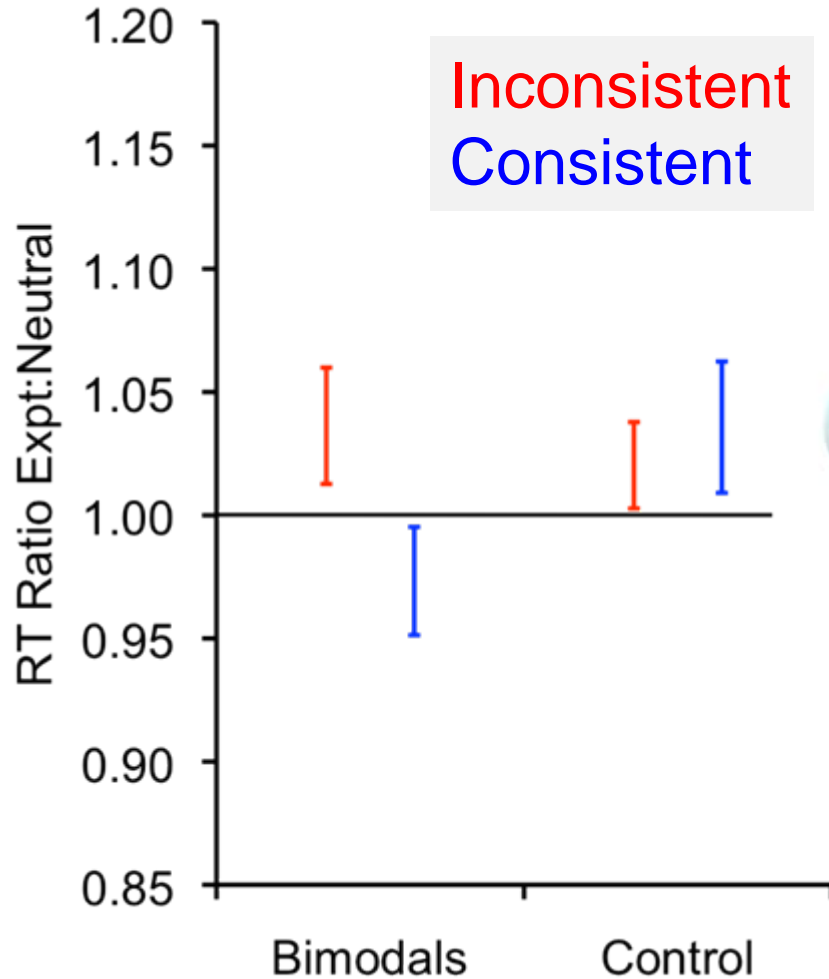
Written Stimulus
Spoken Response

Signed Stimulus
Spoken Response

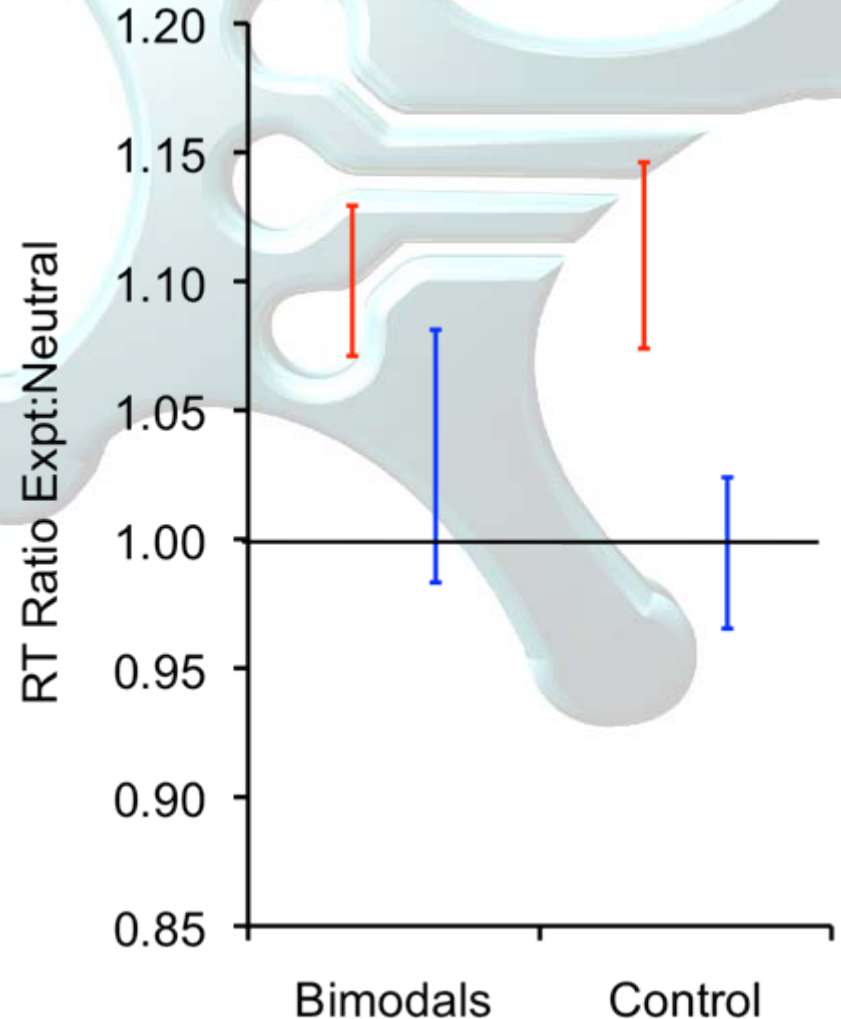


Stroop Results so far...

Written Stimulus
Spoken Response

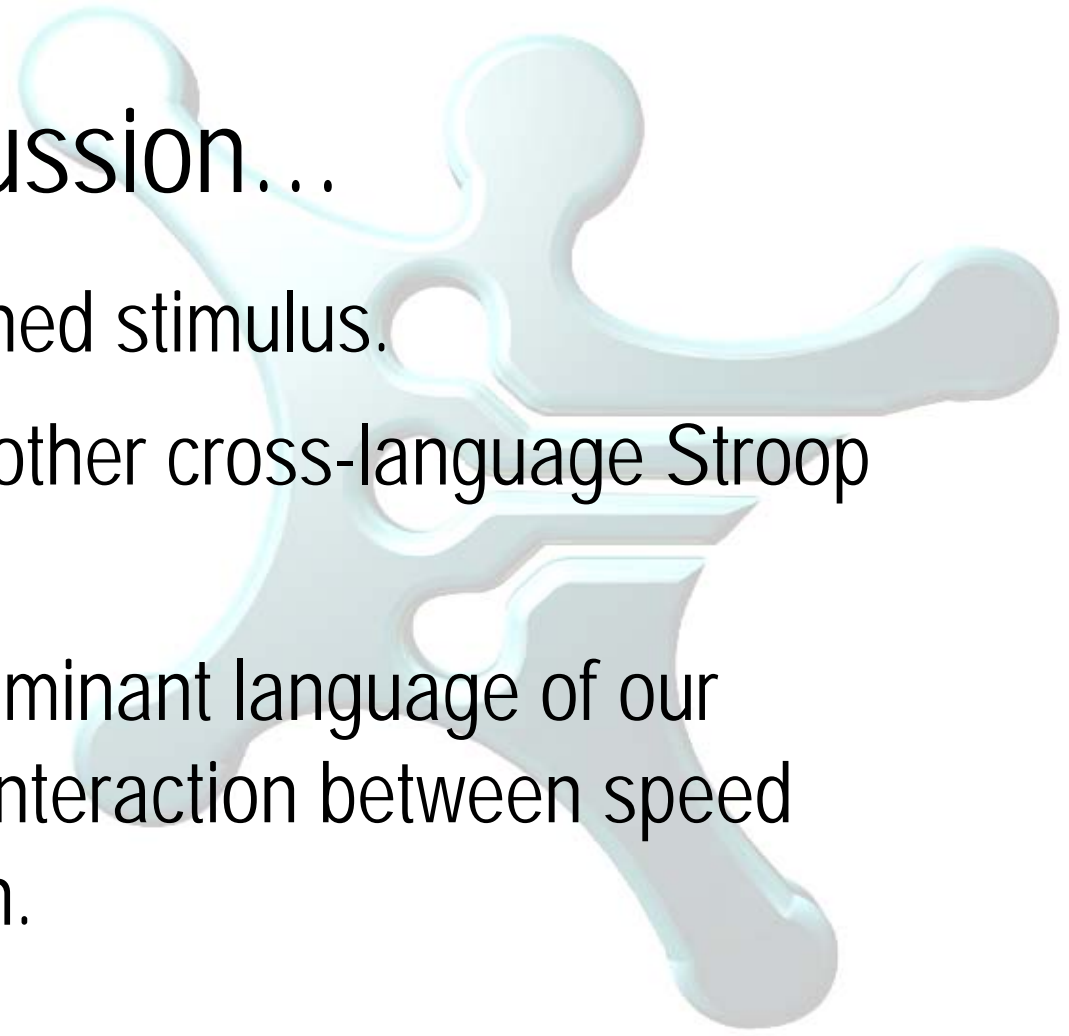


Signed Stimulus
Spoken Response



Discussion...

- Stroop effect with a signed stimulus.
- Data is consistent with other cross-language Stroop studies.
- English might be the dominant language of our bimodal bilinguals OR Interaction between speed and facilitation/inhibition.



Where would we like to go?

- Modality differences enable the exploration of questions difficult to explore in unimodal bilinguals.
- Role of mirror neuron system in processing sign language.
 - Speakers hear themselves speak but signers do not see themselves sign as others see them.

