

CUSPEX ARTICLE 1 – METHODS OVERVIEW

Collected data:

- Before scanning: Questionnaire on each participant's deafness history, relationship to language and cued speech in particular; short pretest on their cued speech production and comprehension skills
- 2 fMRI tasks:
 - Static localizer
 - Video localizer
- After scanning: Debriefing questionnaire on how much they understood the stimuli

CUSPEX ARTICLE 1 – PARTICIPANTS

Study conducted on 3 groups of 20 participants each:

- Group 1: Prelingually deaf cued speech users  
- Group 2: Hearing cued speech users 
- Group 3: Hearing control participants (paired with other subjects)  

Main difficulty: deaf cued speech users' recruitment (cochlear implants)

Other difficulties: rare population, MRI and participants hardly available

CUSPEX ARTICLE 1 – VIDEO LOCALIZER METHODS

Goal: Delineate the network involved in cued speech perception

Stimuli: Short videos (8x13s; pseudo-random order):

- Sentences/pseudowords in full cued speech (with sound or silent)
- Sentences in lipreading only (silent)
- Sentences with manual cues only (silent)
- Rest (fixation cross)

Task: Remain attentive to stimuli



CUSPEX ARTICLE 1 – STATIC LOCALIZER METHODS

Goal: Map visual object category-sensitive regions in the ventral occipitotemporal cortex (VOT) of individual participants (Main ROI: VWFA)

Stimuli: Series of pictures of either faces, bodies, words, houses or tools (8x6s each; random order)

Task: Press a button when the picture of a star appears

