

Enhanced μ -rhythm suppression during self-observation

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embodied cognition, perception, action

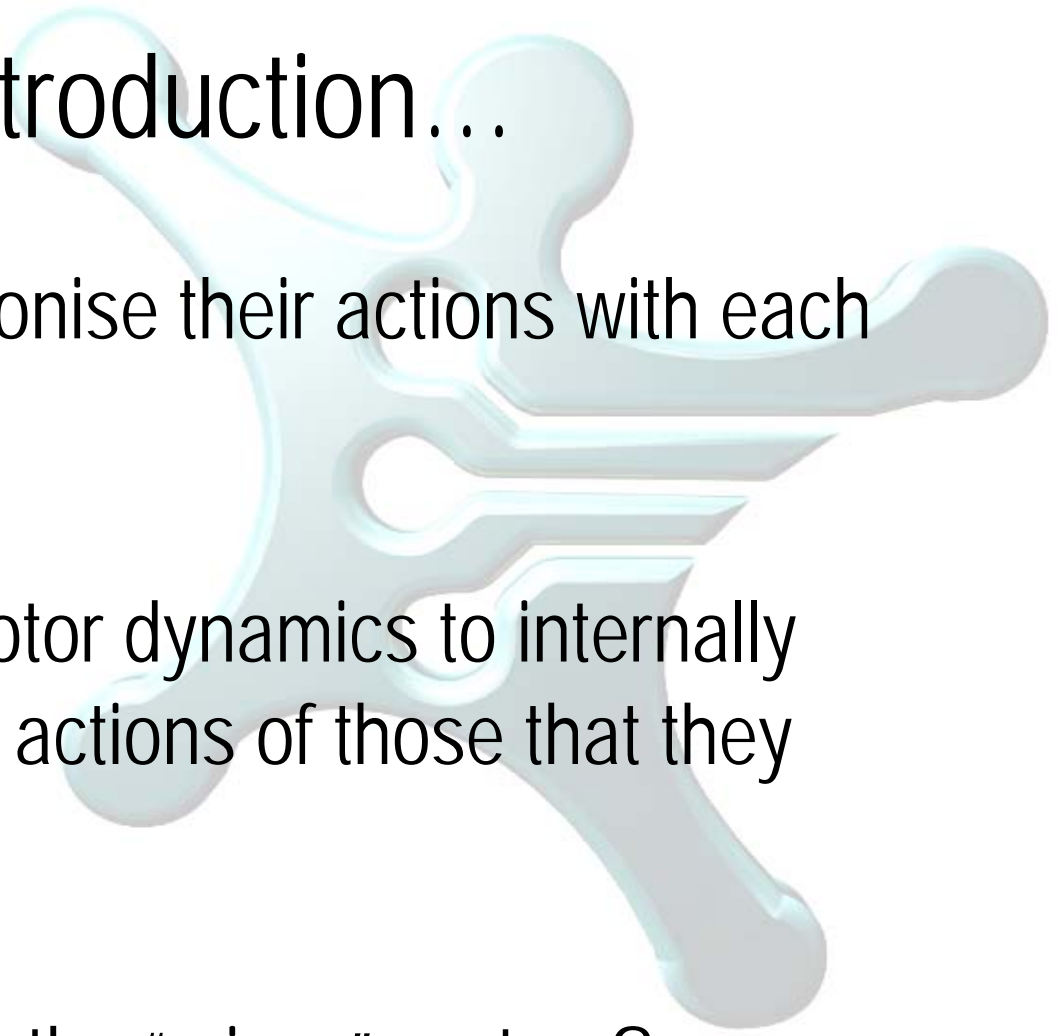


HCSNet

The ARC Network in Human Communication Science

Project Introduction...

- (How) do people synchronise their actions with each other...
- ... by using their own motor dynamics to internally simulate and predict the actions of those that they observe...
- Could there be a role for the “mirror” system?



Previous Results...

- Recorded MoCap of Ss performing rhythmic actions
- ... watched MoCap animations, and synchronised a button press with the onscreen action...
- ... Ss were significantly better when the animations were of SELF compared to OTHER
- Other lit. suggests that factors that enhance prediction also enhance "mirror" activity...
- ... Our paradigm can make this link explicit...



Proposed Methodology (and questions for you)

- Record μ -rhythm (E/MEG) while Ss view animations...
- Stimuli: 7–10s MoCap videos, 5s ISI
- 3 Conditions: View SELF / View OTHER / Rest (movement condition?), 90–100 trial per con. (too many/few?)
- Mark out μ -band based on view action - rest
- EMG to control for overt movements (necessary?)
- Identification task: was it SELF or OTHER



How can YOU help...

- I need feedback on whether...
 - The idea is viable?
 - The idea is novel (i.e. has it already been done)?
 - Methodology is adequate and appropriate?
- You can give suggestions on...
 - Anything I may have overlooked...
 - People who might be able to provide advice/help...
 - Anything else?

Thank you for listening!

