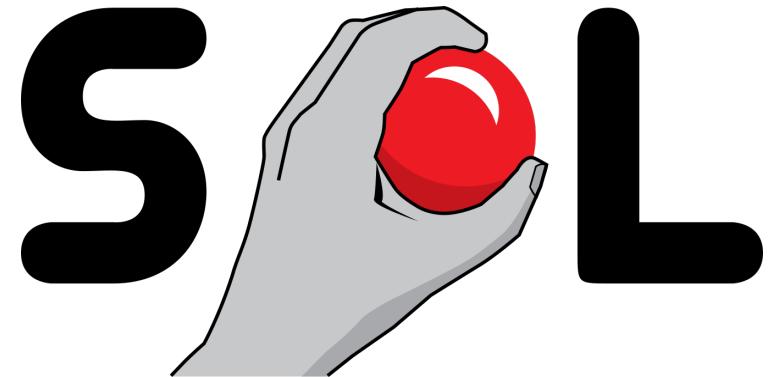


# Sensorimotor Control & Learning

Prof. Loes van Dam

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# Control confusion



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# Sense of Agency (SoA)



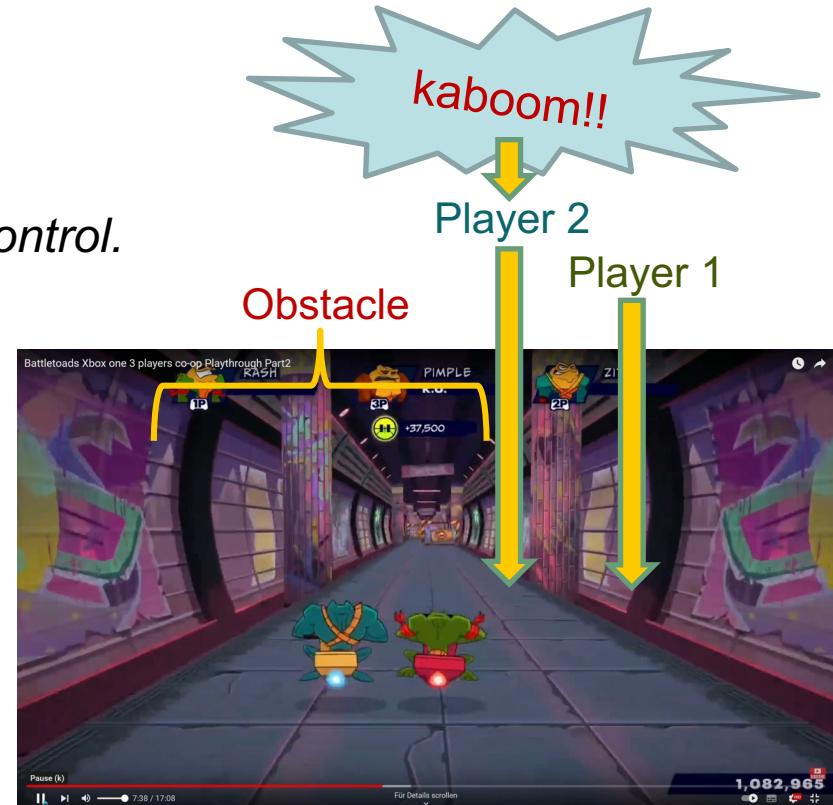
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A behavioural measurement of the SoA

Hypothesis:

*A loss of Agency is reflected in confusion of control.*

- What internal/external factors drive confusion?
- Can we use control confusion as a behavioural marker for psychoses (such as Schizophrenia)?
- Can we capture confusion with optimal control?
- How is Agency applied in multi-agent embodied learning?



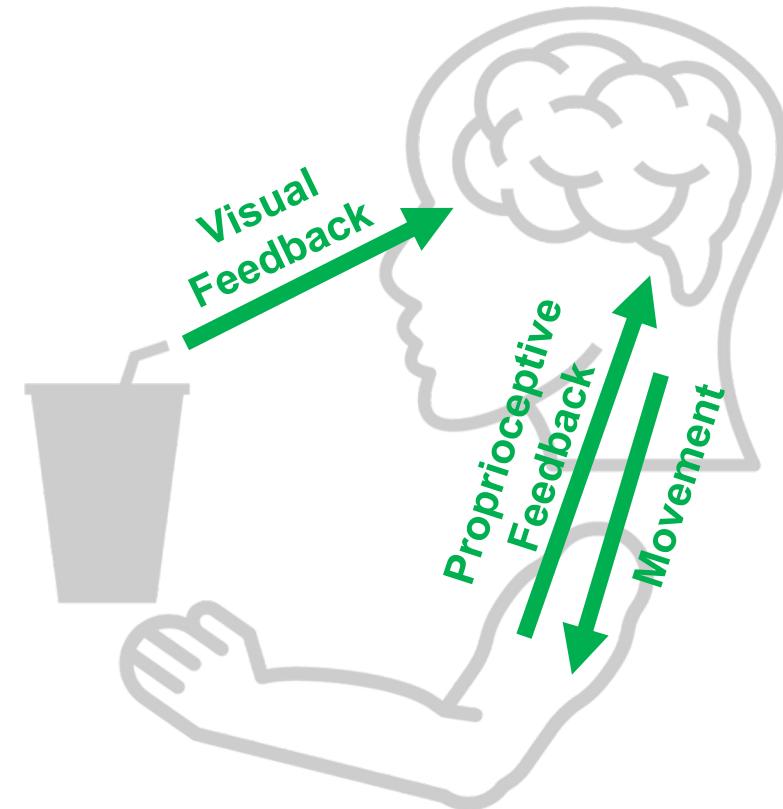


# Tactile Feedback as Sensory Substitution in motor control



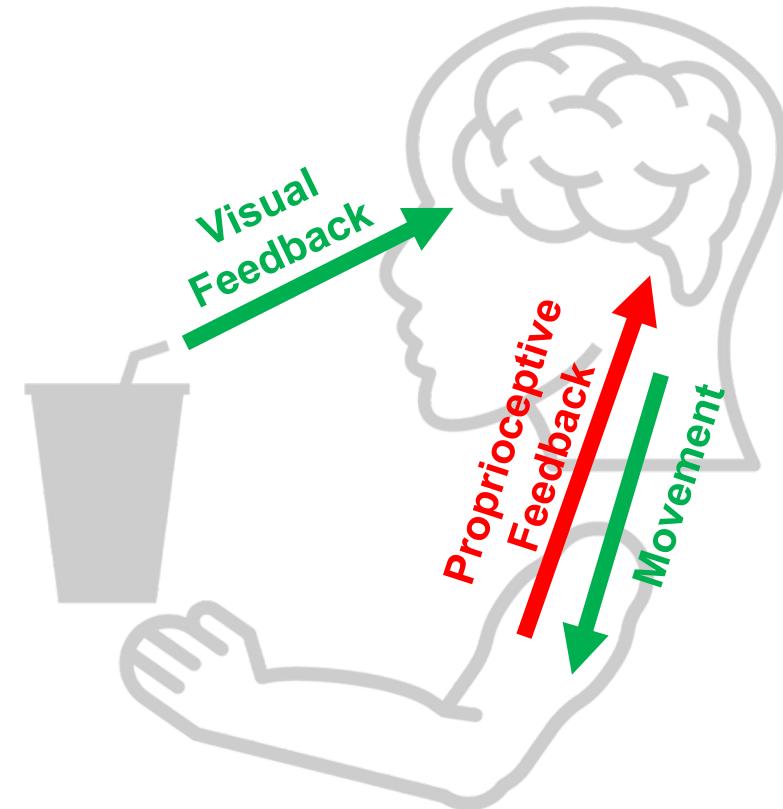


# Tactile Feedback as Sensory Substitution in motor control





# Tactile Feedback as Sensory Substitution in motor control

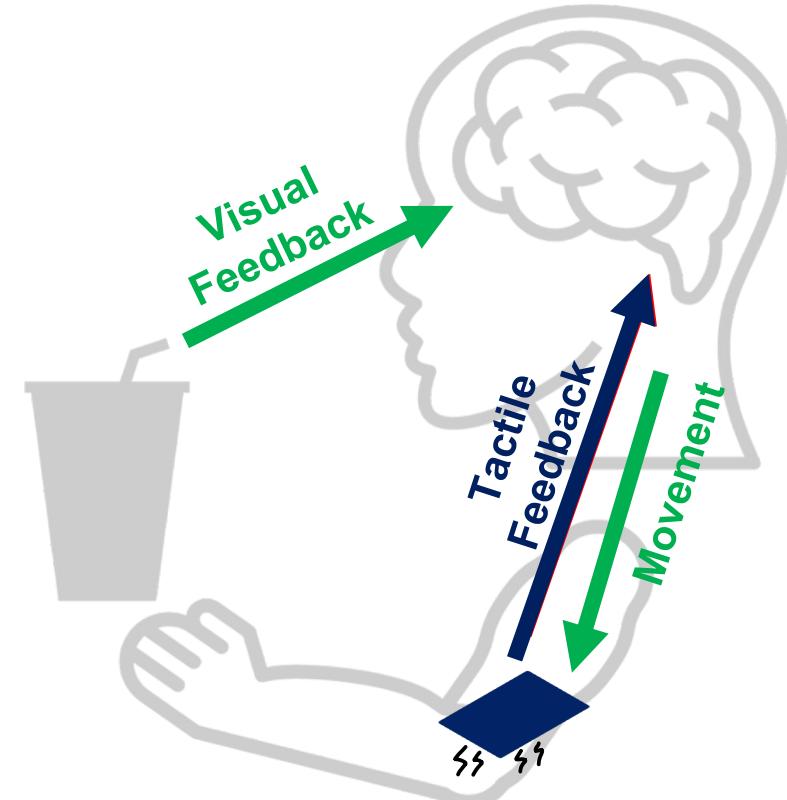
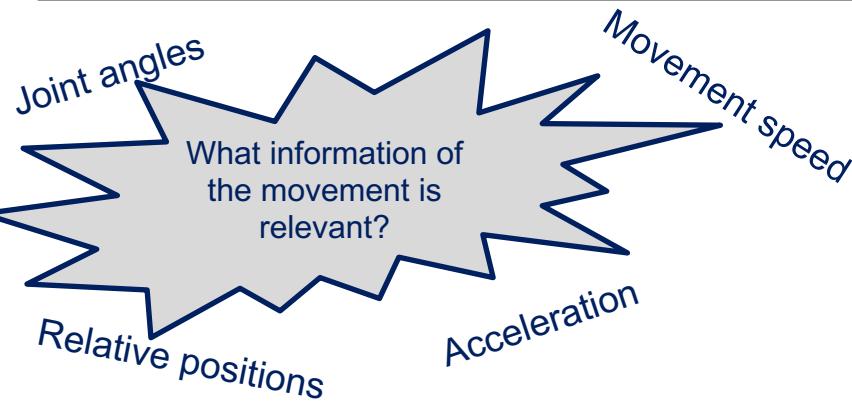




# Tactile Feedback as Sensory Substitution in motor control



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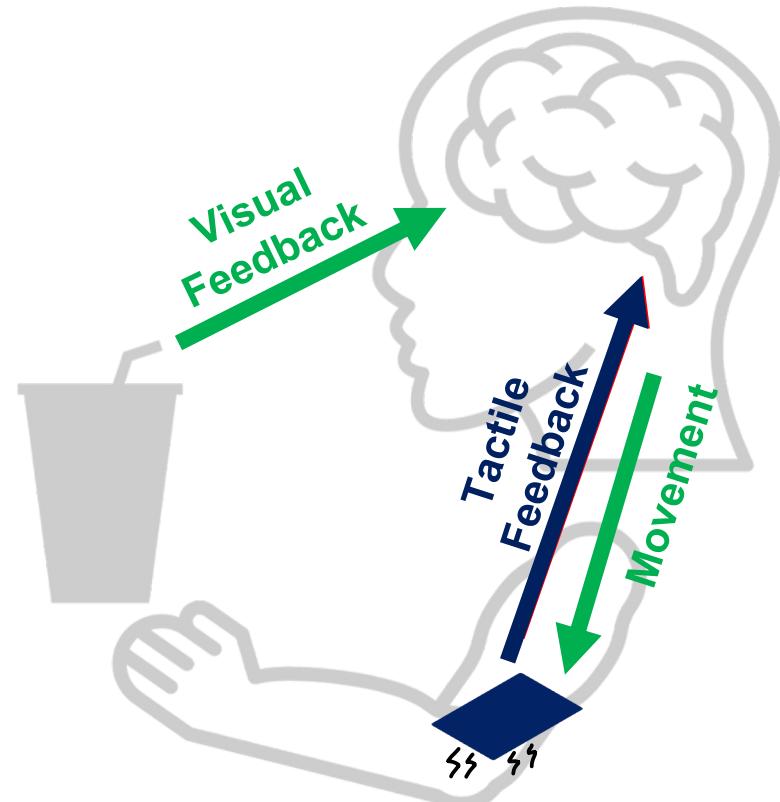
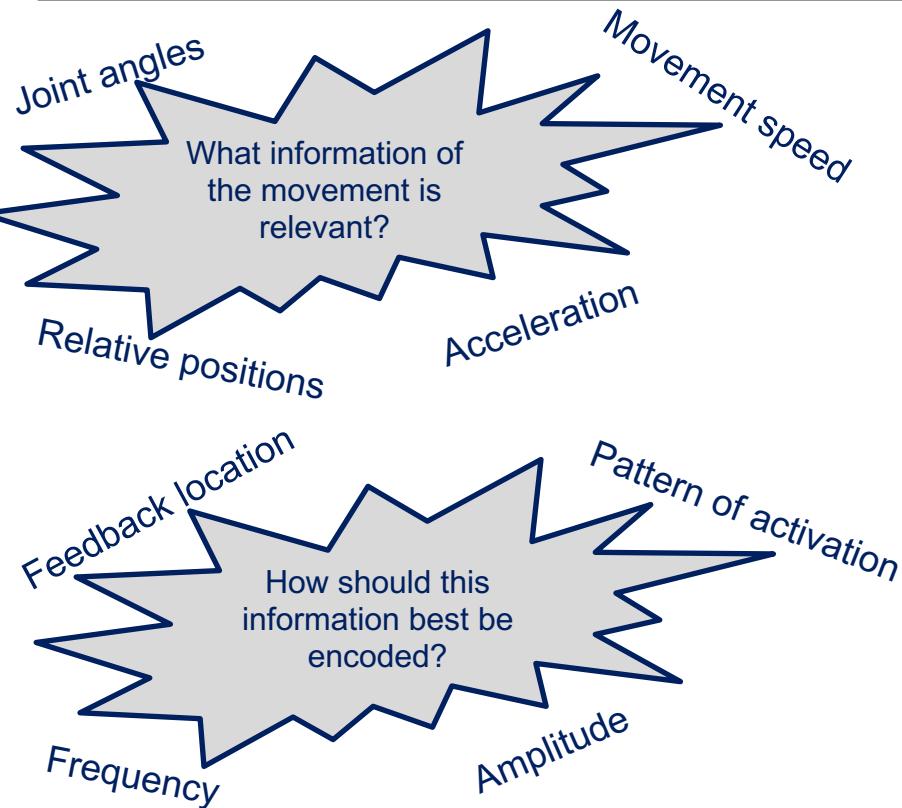




# Tactile Feedback as Sensory Substitution in motor control



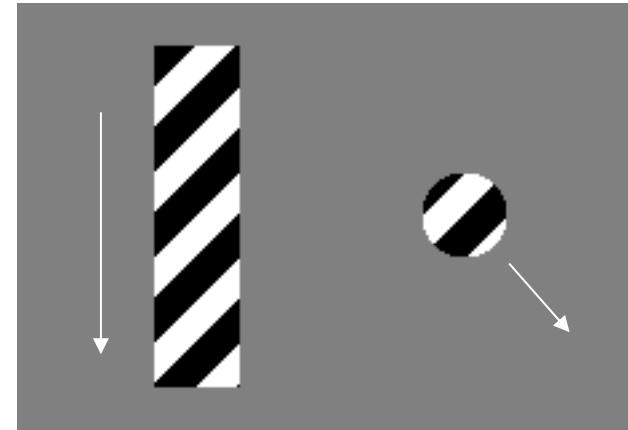
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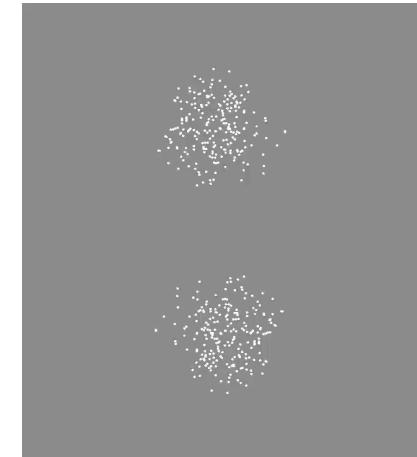
# Visuomotor behaviour in motion illusions



Dazzle camouflage



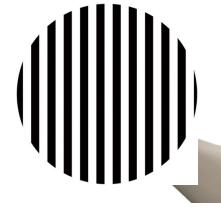
Barberpole illusion



MIPS

How do such illusion prone patterns influence our behaviour in motor tasks?

# Visuomotor behaviour in motion illusions



How do such illusion prone patterns influence our behaviour in motor tasks?



## Further themes...

We are also happy to talk about themes such as...

*Body ownership*

*Modelling*

*Multisensory perception*

*Sensorimotor adaptation*

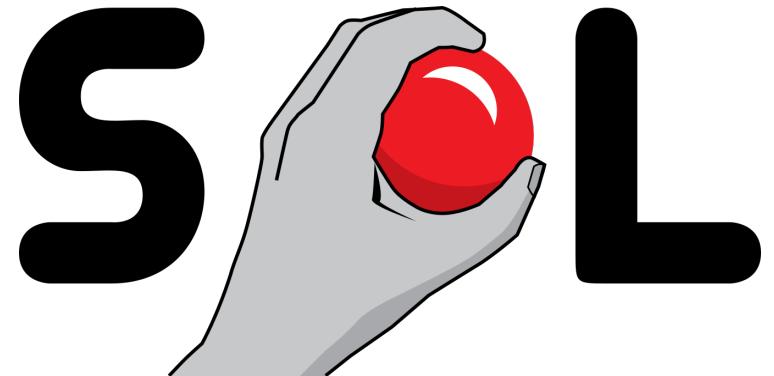
*Tracking*

*Psychophysics*

and more....

# Sensorimotor Control & Learning

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