



Seminar by Dr. Freek van Ede "Attention for behaviour in working memory"

~~Desa~~ el Jue, 20/10/2022 - 13:00

Thursday,
October 20th,
2022, 13:00
Sala de
conferencias 1,
CIMCYC

"Attention for
behaviour in
working
memory"

Freek van Ede

Vrije Universiteit in Amsterdam



Abstract

Working memory regards the past but serves the future. Adopting this future-focused perspective shifts the narrative of working memory as a temporary storage with limited capacity, to working memory as an anticipatory buffer that enables us to prepare for potential and sequential upcoming behaviour. In such a framework, selective attention plays a vital role because it serves not only to bring selected information into working memory but also to dynamically prioritise internal representations for guiding anticipated behaviour. Starting from this functional perspective of working memory and selective attention for serving behaviour, I will discuss three complementary lines of research in my lab – in turn considering visual working memory and attention for action, through action, and in action. I will discuss (i) how visual working memory and parallel action planning work hand-in-hand to support effective memory-guided behaviour, (ii) how the brain's system that controls our eyes also participates in controlling our inner attentional focus, and (iii) how working memory may rely on multiple spatial frames in moving participants.

<http://masteres.ugr.es/neurocg/>

Collectively, these findings demonstrate how working memory looks forward, not backward, and incorporates actions rather than merely preceding them. Zooming out, these studies show how studying working memory, selective attention, and action together paves way for a rich and integrated understanding of how mind serves behaviour.