Learning and Creativity in the Global Workspace

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Abstract. The key goal of cognitive science is to produce an account of the phenomenon of mind which is mechanistic, empirically supported, and credible from the perspective of evolution. In this talk, I will present a model based on Baars' [1] Global Workspace account of consciousness, that attempts to provide a general, uniform mechanism for information regulation. Key ideas involved are: information content and entropy [4,8], expectation [3,7], learning multi-dimensional, multi-level representations [2] and data [5], and data-driven segmentation [6].

The model was originally based in music, but can be generalised to language [9]. Most importantly, it can account for not only perception and action, but also for creativity, possibly serving as a model for original linguistic thought.

References

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