Dimensionality reduction
(high-level abstraction)

α-, β-band oscillations
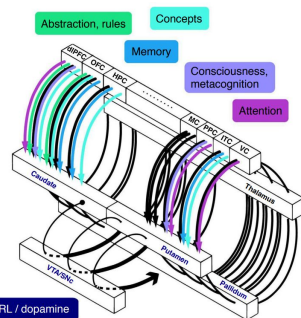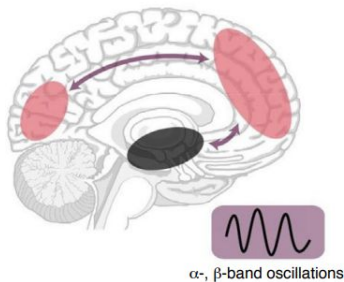
Reward is enough

David Silver *, Satinder Singh, Doina Precup, Richard S. Sutton
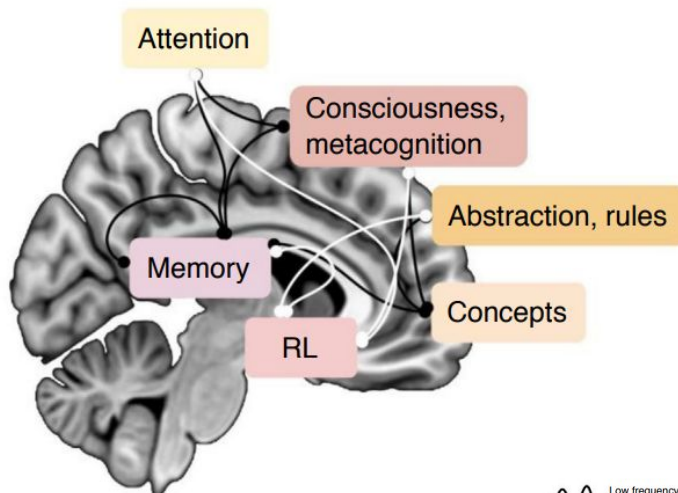
Feature selection
(low-level abstraction)

γ-band oscillations

Attention

Consciousness, metacognition

Abstraction, rules

Memory

Concepts

RL

Abstraction, rules

Concepts

Memory

Consciousness, metacognition

Attention

dlPFC OFC   HPC   MC /PPC / ITC   VC

Caudate   Thalamus

Putamen

VTA/SNc   Pallidum

RL / dopamine

Low frequency sync (abstractions)

High frequency sync (specifics)

Between areas general connections

Between/within areas recurrent connections

Coarse spatial resolution (abstractions)

Fine spatial resolution (specifics)

Image credits: The neural and cognitive architecture for learning from a small sample (2019)