

The ultimate role of the perirhinal cortex in familiarity : a novel hypothesis

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Abstract for a talk or poster presentation (max. 120 words)

Neurocognitive investigations indicate a clear implication of the perirhinal cortex (PRC) in familiarity (i.e. acontextual sense of prior exposure). Yet, the nature of this implication remains unknown. Recent evidence in perception showed that PRC is viewpoint-invariant and critical to discriminate resembling items. Here, we propose the novel hypothesis that PRC, ultimately representing the entity-level, supplies through its processing fluency (i.e. ease with which processing occurs, known to be enhanced when processing reoccurs) the major, even if not unique, contribution to familiarity. This original hypothesis would explain long-lasting discrepancies regarding the nature of PRC and fluency contributions in familiarity, prescribing new ways to probe it and promising new insights on the onset of Alzheimer's Disease whose neuropathology starts in PRC.

118 words.