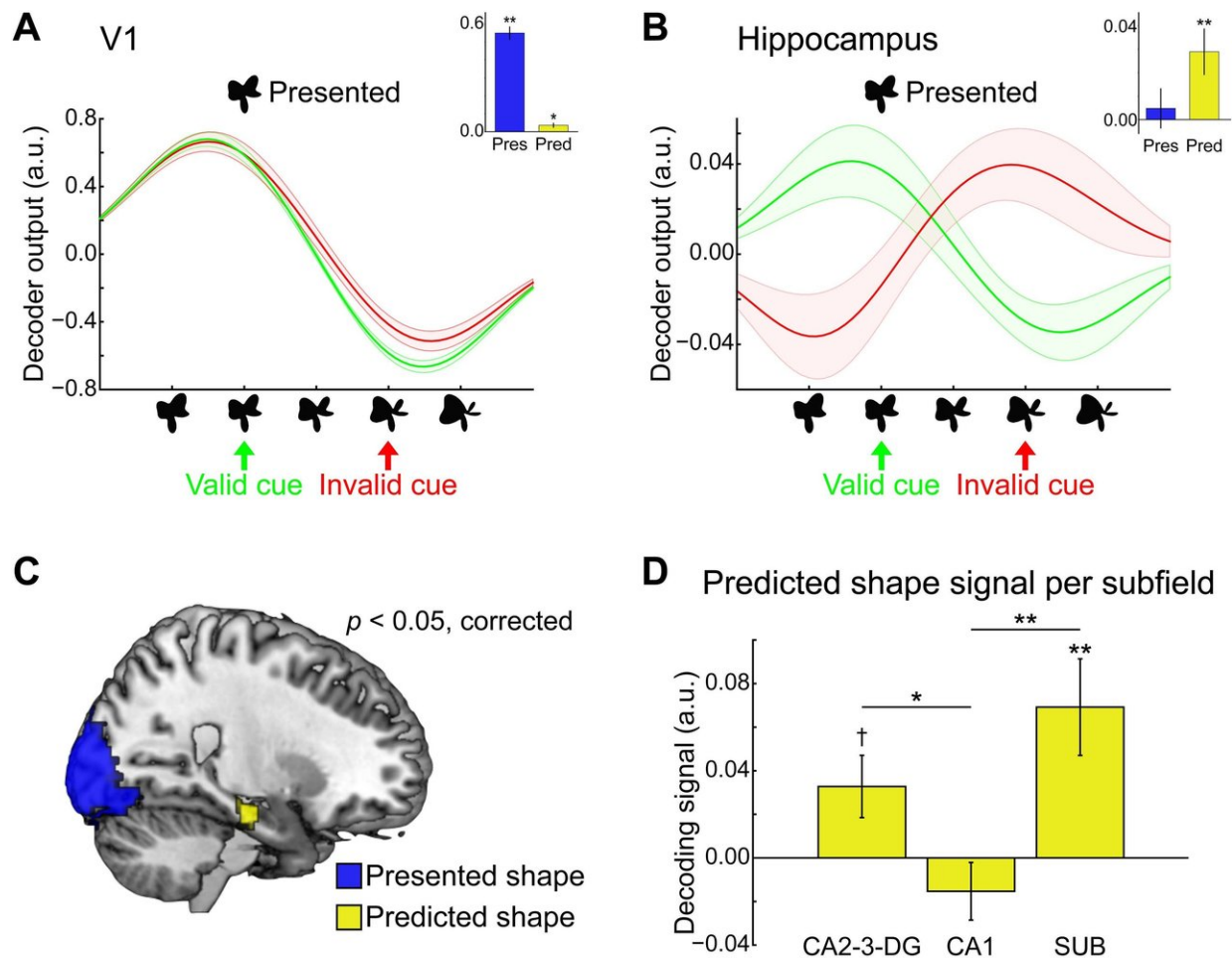


# Bridging the gap between human memory and perception

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The hippocampus may relay predictions about what we expect to see based on past experience to the visual cortex, suggests a human neuroimaging published in *JNeurosci*. The study is among the first to examine the interaction between these two aspects of cognition. Credit: Kok and Turk-Browne, *JNeurosci* (2018)

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Associating two different sensory experiences, such as hearing a bark with seeing a dog, allows people to perceive the world more efficiently than relying on [sensory input](#) alone. How the brain "fills in" this perceptual information, however, is unclear.

Investigating the relationship between sound cues and visual shapes in the brain, Peter Kok and Nicholas Turk-Browne found that the [hippocampus](#) represents what one expects to see while the [visual cortex](#) represents what is actually seen. Expectations in the hippocampus were related to visual processing, suggesting a mechanism by which memory can inform perception.

**More information:** Peter Kok et al, Associative prediction of visual shape in the hippocampus, *The Journal of Neuroscience* (2018). [DOI: 10.1523/JNEUROSCI.0163-18.2018](https://doi.org/10.1523/JNEUROSCI.0163-18.2018)

Provided by Society for Neuroscience

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