Journal articles

Hald, L. A., Steenbeek-Planting, E. G., & Hagoort, P. (2007). The interaction of discourse context and world knowledge in online sentence comprehension: Evidence from the N400. Brain Research, 1146, 210-218. doi:10.1016/j.brainres.2007.02.054.

In an ERP experiment we investigated how the recruitment and integration of world knowledge information relate to the integration of information within a current discourse context. Participants were presented with short discourse contexts which were followed by a sentence that contained a critical word that was correct or incorrect based on general world knowledge and the supporting discourse context, or was more or less acceptable based on the combination of general world knowledge and the specific local discourse context. Relative to the critical word in the correct world knowledge sentences following a neutral discourse, all other critical words elicited an N400 effect that began at about 300 ms after word onset. However, the magnitude of the N400 effect varied in a way that suggests an interaction between world knowledge and discourse context. The results indicate that both world knowledge and discourse context have an effect on sentence interpretation, but neither overrides the other.

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