New Research From Psychological Science

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Hierarchical Encoding in Visual Working Memory: Ensemble Statistics Bias Memory for Individual Items

Timothy F. Brady and George A. Alvarez

Current models of visual working memory assume that people encode memories of objects individually. Yet, new research has shown that items surrounding an object can influence a person's recollection of it. When observers were asked to recall the size of a single circle after viewing an image with multiple circles, they tended to report a larger size if the other circles were large and a smaller size if the surrounding circles were small. Therefore, items in visual working memory may not be stored independently, and aspects of surrounding items may affect how items are recalled.

Popular Consensus: Climate Change Is Set to Continue

Stephan Lewandowsky

While most climate scientists agree that the global climate is changing, members of the general public do not perceive the same level of risk that the experts do. One reason for this difference could be the manner in which lay people are interpreting climate data. To test how people would extrapolate information from climate data, 200 participants were presented with a graph that was labeled either as climate data or as stock share prices. When the participants were asked to predict three future data points from the graph, they predicted conservative increases regardless of how the data was labeled or whether the volunteers believed in climate change. This result suggests that even though people make an initial judgment using their beliefs, they will adjust those beliefs when data is presented to them**.**

Holistic Processing Predicts Face Recognition

Jennifer J. Richler, Olivia S. Cheung, and Isabel Gauthier

Holistic processing is when a person views a face or an object as a whole instead of viewing individual parts. To evaluate the connection between holistic processing and a person's ability to identify faces, participants were asked to perform a face recognition task in which they identified one half of the face. Depending on the trial, the researchers could replace the top or bottom portion of the face with a face that was familiar or unfamiliar to the participant. A correlation was found between viewing the entire face and face recognition accuracy. These results contradict a recent study that found no connection between face recognition and holistic processing.