New Research From Psychological Science

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Seeing in 3-D With Just One Eye: Stereopsis Without Binocular Vision

Dhanraj Vishwanath and Paul B. Hibbard

Researchers have long thought that *stereopsis* — the sense of depth and immersive space — is a byproduct of binocular vision, but can stereopsis also be induced by monocular vision? In a series of studies, the researchers determined that observers report the same characteristics for monocular and binocular stereopsis. They also found no support for several standard theories used to explain variations in stereopsis under different viewing conditions. According to the researchers, these findings point to the need for alternative conceptualizations of stereopsis.

The Invisible Gorilla Strikes Again: Sustained Inattentional Blindness in Expert Observers

Trafton Drew, Melissa L.-H. Võ, and Jeremy M. Wolfe

Many studies have found that people often miss the presence of task-irrelevant stimuli — a phenomenon known as *inattentional blindness*. Studies of inattentional blindness usually examine people who are performing a novel task, but does inattentional blindness also occur in people who are experts at the task they are performing? Radiologists were asked to detect lung nodes in chest CT scans, some of which contained a small image of a gorilla. Eighty-three percent of radiologists failed to notice the gorilla in the scan, which indicates that inattentional blindness is not confined to novel tasks.

Tactile Localization on Digits and Hand: Structure and Development

Takashi Yoshioka, Moira R. Dillon, Graham C. Beck, Brenda Rapp, and Barbara Landau

Although localization of tactile stimuli to the hand is important for somatosensory perception, little is known about the development of this ability. The researchers examined tactile localization ability of children and adults with and without Williams syndrome, a genetic developmental disorder characterized by severe visual-spatial deficits. In the participants who did not have Williams syndrome, errors in localization dropped dramatically and reached adult levels by age 10; however, in participants with Williams syndrome, localization errors remained high regardless of age. This indicates that tactile localization undergoes a lengthy period of development that may be impaired in those with genetically based developmental disorders.

Mental- and Physical-Health Effects of Acute Exposure to Media Images of the September 11, 2001, Attacks and the Iraq War

Roxane Cohen Silver, E. Alison Holman, Judith Pizarro Andersen, Michael Poulin, Daniel N. McIntosh, and Virginia Gil-Rivas

When a disaster occurs, there is often widespread media coverage of the event. What is the cost to viewers of this type of coverage? Participants reported their level of media exposure and acute stress directly after 9/11 and after the start of the Iraq War. Participants were also assessed for mental- and physical-health problems and posttraumatic stress disorder (PTSD) symptoms 1, 2, and 3 years after 9/11. The researchers found that early media exposure to 9/11 and the Iraq War predicted PTSD symptoms 2 to 3 years after 9/11. This demonstrates the harmful long-term effects of early media exposure to traumatic events.

Genetic and Environmental Influences on the Longitudinal Structure of Neuroticism: A Trait-State Approach

Odilia M. Laceulle, Johan Ormel, Steven H. Aggen, Michael C. Neale, and Kenneth S. Kendler

When examining genetic and environmental influences on neuroticism in monozygotic and dizygotic twins, the authors found that both trait and state components contributed to the longitudinal structure of neuroticism. State components were found to be more strongly affected by environmental than by genetic influences, whereas trait factors were found to be affected equally by both. These results shed light on the ways genetic and environmental influences change neuroticism over time.