Anne Treisman, 1935-2018

February 28, 2018

 APS Past Secretary **Anne Treisman**, considered one of the world's most influential cognitive psychologists, died February 10, 2018.

An APS William James Fellow, Treisman developed a classic psychological model of human visual attention. Her pioneering research led President Barack Obama to award her the National Medal of Science in 2013.

Treisman's research focuses on how humans perceive the world around them and turn those perceptions into meaningful thoughts, memories, and actions. One of her most noteworthy achievements is the Feature Integration Theory (FIT), which has been enormously influential in psychological science and related disciplines.

According to FIT, human visual perception allows us to encode characteristics such as color, form, and orientation even in the absence of spatial attention. Attention is what allows us to relate these features in a meaningful way and recognize objects.

In the absence of spatial attention, Treisman has demonstrated, the features that people perceive can bind randomly and cause perceptional errors. For example, people who are shown an image of a blue triangle and a red circle might report seeing a blue circle and a red triangle if they are not focusing their attention on the shapes and their colors.

Treisman's work has formed the basis for thousands of experiments in vision, cognitive, and neurological sciences. Her papers have been cited more than 8,200 times. FIT has sparked neuroscientific discoveries about the functions of pathways involved in representing locations and actions. Additionally, applied psychological scientists have relied on her work to help improve operations ranging from traffic signal design to airport baggage inspection.

A professor in Princeton University's Department of Psychology, Treisman held appointments at Oxford University, the University of British Columbia, and the University of California, Berkeley. She was elected to the Royal Society of London in 1989, the US National Academy of Sciences in 1994, and the American Academy of Arts and Sciences in 1995. In 2009, she received the University of Louisville Grawemeyer Award in Psychology for her explanation of how our brains build meaningful images from what we see. Look for a remembrance of Treisman in an upcoming issue of the *Observer*.