

BOOKEYWOKEY

LITERATURE GOOD AND BAD, THEATER, AND NEUROSCIENCE... NO REALLY.

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Now you see it. Now you see it. Now you don't



Now you see it. Now you see it. Now you don't. No, I'm not stuttering. That sentence more accurately describes what happens when the visual cortex pays attention to sudden changes in the environment, according to Dr. Susana Martinez-Conde of the Barrow Neurological Institute in Phoenix. After the sudden disappearance of an object, an after-image of it lingers behind for a very short time, but just long enough that the brain is distracted, and that distraction provides the cover for the magician's manipulation which the human eye is unlikely to see. Benedict Carey's [article](#) in today's *Science Times* is about a [paper](#) in Nature Reviews Neuroscience written by two neuroscientists and a magician, that explores how the magician exploits the compensatory strategies our brains have evolved to overcome the limits of our perceptive and attentional systems.

...the brain focuses conscious attention on one thing at a time [not everyone agrees with this], at the expense of others, regardless of where the eyes are pointing. In imaging studies, neuroscientists have found evidence that the brain suppresses activity in surround visual areas when concentrating on a specific task. Thus preoccupied, the brain may not consciously register actions witnessed by the eyes.

Perception is my research area, and performing on stage is my former life but my very first work when in my teens was as a magician. I had a business doing shows for kids' birthday parties and the like. Perhaps I really have come full circle. There are [six film clips](#) in the supplementary section of the Nature Review Neuroscience article of magicians doing various tricks that illustrate the phenomena discussed in the article. Enjoy the show.