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## Art and Science Team Up To Steal Your Attention With Magic

By Susana Martinez-Conde | November 22, 2014 |

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When we focus our attention, we sometimes fail to detect changes—even spectacular, seemingly impossible-to-miss changes—that have taken place right in front of us. Cognitive scientists call this "change blindness".

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Artist <u>Ellen Levy</u> teamed up with neuroscientist <u>Michael E. Goldberg</u>, Director of the Mahoney Center for Brain and Behavior at Columbia University in New York, to apply the concept of change blindness to an interactive art installation. The resulting animation, "Stealing Attention", was recently shown at the Pratt Manhattan Gallery in New York City, as part of the "Sleuthing the Mind" exhibit that Levy curated. Watch the video and see if you can count how many times the Queen of Hearts appears in the hands of the card shark:

You may have taken some time to realize that, as you busied yourself watching the Three-Card Monte, antiquities were being stolen in front of your eyes. The rapidly changing cards cheated you into not paying attention to the stolen relics.

This is not so different from what happens in your brain when card tricks fool you. Whenever you pay attention to something, your brain automatically and powerfully suppresses other information that is not relevant to the task. Magicians don't distract us in a literal sense, but create attentional points that our perceptual and cognitive systems are helplessly drawn to. The result is that our brains do the dirty work of throwing in the garbage anything that the magician doesn't want us to attend to.

To pay attention is not to highlight something that interests us, but to obliterate everything else around it.

Levy found inspiration for "Stealing Attention" while attending a 2008 lecture by Donny George Youkhanna, who was the Director of the National Museum of Iraq in 2003. One evening after the US invasion of Iraq, Youkhanna stayed late in the museum, as it was rumored that looters would raid it that night. During the looting of antiquities that did ensue, one of the looters approached Youkhanna to let him know that he himself was not stealing from the museum, but instead had hidden among the looters as one of them, with the goal of rescuing some of the most important pieces to return them later, once it was safe.

In Levy's art, the hands with the cards "obscure the fact that antiquities were being removed from museum shelves, one-by-one, as a cultural heritage and lives were being lost".

Just like magic.