









The World

Listen to the Show

Podcasts

Global Hit Photos and Videos Music Heard on Air

Science Forum >

Forum 26

Science Podcasts

Who We Are

Geo Quiz

Blog

Magic and the Human Mind



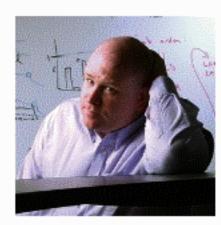


Download MP3

Listen to our interview with Susana Martinez-Conde and Stephen Macknik.

They are scientists at the Barrow Neurological Institute in Phoenix, and they have teamed up with magicians and illusionists to learn about the human mind.

Martinez-Conde and Macknik describe what they have discovered in their new book Sleights of Mind: What the Neuroscience of Magic Reveals about our Everyday Deceptions.



Why are our brains so susceptible to illusions?

How do magicians use humor to perform tricks?

What do artists like Leonardo Da Vinci have in common with magicians?

Join the conversation with Macknik and Martinez-Conde. They're taking your questions through January 12, 2011.

Additional Resources:

Best Illusion of the Year Contest: Click here for award winning illusions from around the world.

Change Blindness: British illusionists Derren Brown tests people's attention in this video. Click below to watch the video and tell us, would you notice the swap?



Black Art: Watch French magicians Michelle and Ernest Ostrowsky perform this classic acticalled Omar Pasha. Then ask Macknik and Martinez-Conde how it works.



ShareThis

Your Comments













Galina

December 29, 2010 at 3:57 PM

Hi,

Just saw the video. I am referring to the video of Derren Brown – people switch. Pretty interesting experiment.

First of all, I would have noticed that it was a different person.

Second. How do you know if the people didn't notice that it was a different person, did you ask them later? Maybe they did notice, but only 1 guy actually said something. Maybe the other people just didn't want to say anything.

When you are approached by a person, you pick up on their vibe, their tone of voice, height. I would have totally noticed the switch.

What do you think contributes to people not realizing that they have been duped? 🐸 Maybe they were in their own little world and weren't paying attention.

Thank you

REPLY



Stephen Macknik

December 29, 2010 at 8:29 PM

Thanks for your comments Galina.

First, if you've ever been tricked by a magician who used. misdirection, you probably would be tricked by the personswap trick (first created by Daniel J. Simons at the University of Illinois) about half the time.

In Simons's experiments, he did indeed follow up and ask questions from the respondents. They would sometimes say things like, "Oh yeah, you changed to a different person in the middle there". How could that statement ever be said?

The fact is that this effect works not because these people don't pay attention well, but rather because they pay attention very closely ***to the task at hand***, which is giving directions. When you pay attention to something, we've shown in our research that everything else gets. suppressed in the brain.

REPLY



Joe the New Guy

December 29, 2010 at 11:00 PM

@Galina-

Everyone says they would notice the swap, or they would have seen the card switch, or would have notice the magician hide the object, and so on.

There's a world of difference when you've been told how something works and expect versus having it play out unsuspectingly in real-time. That's the beauty of so much of magic.

Do a quick test:

Hide behind a door, wait for someone about to walk through it, and scream like mad when they do. I bet they jump. Now do the same thing, with the same person after you've told them you're going to do it. Heck, even use a new person BUT TELL THEM FIRST. I expect quite a different reaction from the informed person 🗡

REPLY



Stephen Macknik December 30, 2010 at 11:18 AM.

Expectation is an important cognitive trick that magicians use. But we've seen great magicians like Juan Tamariz who manipulate your attention through misdirection even though you fully expect what will happen next (ie. he's set you up). When achieved, its a truly magical feeling. Don't underestimate the power of your attentional systems to suppress distractors (which in magic is the actual method) even when you think you know what is happening.