



New Scientist TV



Friday Illusion: Impossible straw and pin trick

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Friday Illusion Illusions

Caitlin Stier, video intern

In this video, a straw appears to pass through a safety pin. Wonder what the trick is?

Developed by illusion enthusiast Greg Ross of Greenpro Productions in Pennsylvania, it's a variation of a well-known sleight of hand that exploits the limitations of sight.

Ross devised the set-up while tinkering with a straw, toothpick, and safety pin. He first pierced the straw and toothpick and fastened the two with the pin. By applying pressure on the pin with the straw and toothpick combo, the straw spins around 180 degrees. But it moves so fast that neither our eyes nor the camera can detect the half-rotation.

"I wanted to somehow create a solid through solid effect, which took that a step further into the realm of optical illusions rather than magic," Ross explains. Super-fast motion is necessary for the trick to work. According to psychologist Stephen Macknik, author of the book *Sleights of Mind*, assuming the narrow straw is about the same size as a nail, we don't see it until it stops if it completes more than about one rotation in three seconds. Macknik estimates that the straw in this clip takes a mere 100 milliseconds to complete nearly half a rotation. That's fifteen times faster than the human motion system can detect for an object of that size.

If you would like to recreate the illusion yourself, you can follow a tutorial prepared by Ross that demonstrates how to make your own straw and pin trick.

For more fast spinning illusions, check out a colourful disc or shifting lines that create a phantom spin.



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4 Comments

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Jen on November 20, 2011 5:48 AM

figured it out... good try tho

daniel kachiros on November 21, 2011 7:09 AM

simple the straw snaps back faster than the camera can see

O.T. Getomov on November 21, 2011 9:58 AM

As seen in Merlin Mandrake's Magical Mystery Tour first published in 1978. I still remember this and several other tricks I learned as a five year old. F- must try harder, see me after class.

alfie on November 28, 2011 10:41 PM

that's kindof obvious isn't it?

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