

Change blindness animation captures top illusion prize

May 19 2011, by Bob Yirka

(PhysOrg.com) -- After discovering by accident through a quirk in his laptop that random dots arranged in a circle and constantly changing color, appeared to stop changing color if they began to move, Jordan Suchow a grad student at Harvard, in conjunction with his advisor George Alvarez, produced a video of the effect and wound up winning first prize in this year's "Best Illusion of the Year" contest held by the Vision Sciences Society every year in Naples, Florida. The illusion showed that there exists a form of change blindness that until this example arose, no one knew about.

In the video there is a tiny red speck in the center of the screen, surrounded by white space and beyond that a band of colored dots three of four layers deep. When the video starts, the colored dots change color randomly, creating the effect of a twinkling Christmas wreath; but when all the dots begin to move as one in a circle around the red speck in the center, if you focus on the just that red speck, the dots appear to stop twinkling; but it's just an [illusion](#) that can be easily seen if you focus instead on the dots and see that they do in fact go right on twinkling the whole time.

Suchow and Alvarez have [published a paper](#) on *Current Biology*, where they describe how the effect was created and how it doesn't matter if you change the colors, size or shape of the dots; the result is the same. They call the effect [change blindness](#) because of the fact that the illusion works even though the person looking at it knows it's happening. They theorize that the illusion happens because the brain tends to ignore what

is happening with a moving object, focusing instead on the movement itself.

Taking second place in the contest was an illusion called “[Grouping by Contrast](#).” In this illusion by Erica Dixon, Arthur Shapiro & Kai Hamburger, there are four illuminated disks; on the left are a pair of disks on a black background that alternate between black and white as they are illuminated and then turned off; on the right is a similar pair of discs shown on a yellow background. The disks appear to alternate in going on and off. At the bottom of the screen there is a bar that reads “Click to add or remove background.” Clicking on that bar causes the background of both sides to become grey, and in so doing causes the disks to appear to change from alternating in their luminescence, to doing so in tandem.

Third place was captured by “[The Lock Ness Aftereffect](#)” which is a video by Mark Wexler, that also has a red dot in the center and a wreathlike object spinning around it. This time though, the wreath is comprised of many short lines of varying degrees of blacks and grays. As the viewer stares at the red dot, the wreath suddenly jumps followed by what appears to be the wreath spinning faster in the opposite direction; which of course it isn’t. The illusion gets its name from the well known effect of staring at a particular waterfall in Scotland that leads to Lock Ness, home to a certain, well known, mythological beast.

More information: illusioncontest.neuralcorrelate.com/

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