

New study debunks myth about popular optical illusion (Update)

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Silhouette Illusion. If the foot touching the ground is perceived to be the left foot, the dancer appears to be spinning clockwise (if seen from above); if it is taken to be the right foot, then she appears to be spinning counterclockwise.
Image: Wikipedia.

A psychology professor has found that the way people perceive the [Silhouette Illusion](#), a popular illusion that went viral and has received substantial online attention, has little to do with the viewers' personality, or whether they are left- or right-brained, despite the fact that the illusion is often used to test these attributes in popular e-quizzes.

Niko Troje says that a reported preference for seeing the silhouette spinning clockwise rather than counter-clockwise is dependent upon the angle at which the viewer is seeing the image.

"Our visual system, if it has a choice, seems to prefer the view from above," says Dr. Troje. "It's a perceptual bias. It makes sense to assume that we are looking down onto objects that are located on the ground below us rather than floating in the air above us."

In the Silhouette [Illusion](#), a silhouetted woman is seen spinning on one foot, her leg extended. The appeal of the illusion is in the way the woman is spinning – she can be perceived as spinning clockwise or counter-clockwise.

Dr. Troje and his team found that a view-from-above bias (VFA) is what makes the viewer prone to seeing the silhouette in a certain way, not one's personality or whether the viewer is left- or right-brained. When shown the silhouette illusion, the study's 24 participants most often reported that the woman was spinning counter-clockwise if viewed from above, and clockwise if viewed from below. Thus, the viewing angle causes the difference in perception.

Watch a video demonstrating the researchers' findings below.

The theory can also be applied to other popular illusions, including Necker Cubes, that are often used in online [personality](#) tests.

More information:

- The study was [published this week](#) in i-Perception, the new open-access sister journal of the established British journal *Perception*.
- www.biomotionlab.ca/projects/depthambiguity.php
- Silhouette Illusion: www.michaelbach.de/ot/sze_silhouette/index.html

Provided by Queen's University

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