

Printed from

THE TIMES OF INDIA

Brain shows the way when we are lost

10 Jan 2009, 1229 hrs IST, IANS

LONDON: All of us are familiar with the feeling of being lost or disoriented, an unsettling experience which passes quickly. It's our brain that keeps our confusion in check and points us in the right direction. Research has suggested that animals and young children mainly rely on geometric cues to help them get reoriented.

Adults, however, can also make use of feature cues (colour, texture, landmarks) in their surrounding area, in addition to the geometric cues (lengths, distances, angles). But which method do we use more often?

Psychologists Kristin R. Ratliff of the University of Chicago and Nora S. Newcombe from Temple University conducted a set of experiments probing if human adults prefer geometric or feature cues to become reoriented. Their results were reported in *Psychological Science*, a journal of the Association for Psychological Science.

The first experiment took place in either a large or small white, rectangular room with a landmark (a big piece of colourful fabric) hanging on one wall. The study volunteers saw the researcher place a set of keys in a box in one of the corners.

The volunteers were blindfolded and spun around, to become disoriented. After removing the blindfold, they had to point to the corner where the keys were.

After a break, the volunteers were told the experiment would be repeated, although they wouldn't watch the researcher hide the keys.

Unknown to them, during the break the researchers moved the landmark to an adjacent wall. This change forced the volunteers to use either geometric cues or feature cues, but not both, to reorient themselves and locate the keys. For the second experiment, the researchers used a similar method, except they switched room sizes (the volunteers moved from a larger room to a smaller room and vice versa) during the break.

The results reveal that the brain does not have a distinct preference for certain cues during reorientation. In the first experiment, volunteers reoriented themselves by using geometric cues in the smaller room but used feature cues in the larger room.

However, the volunteers who went from the larger room to the smaller room in the second experiment also relied on feature cues, searching for the landmark to become reoriented, said a Chicago release.

During the second experiment, the researchers surmise, the volunteers had a positive experience using feature cues in the large room, so they kept on relying on the landmark in the smaller room to become reoriented.

These findings indicate that the brain takes into account a number of factors, including the environment and our past experiences, while determining the best way to reorient us to our surroundings.

[About Us](#) | [Advertise with Us](#) | [Careers @ TIL](#) | [Terms of Use](#) | [Privacy Policy](#) | [Feedback](#) | [Sitemap](#)

Copyright © 2009 Bennett Coleman & Co. Ltd. All rights reserved. For reprint rights: [Times Syndication Service](#)

This site is best viewed with Internet Explorer 6.0 or higher; Firefox 2.0 or higher at a minimum screen resolution of 1024x768