

To "Think Outside the Box", Think Outside the Box

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Want to think outside the box? Try actually thinking outside of a box. In a study to be published in an upcoming issue of [*Psychological Science*](#), a journal of the [Association for Psychological Science](#), researchers had students think up solutions to problems while acting out various metaphors about creative thinking and found that the instructions actually worked.

The authors of the new paper were inspired by metaphors about creativity found in boardrooms to movie studios to scientific laboratories around the world and previous linkages established between mind and body. Angela Leung of Singapore Management University and her coauthors from the University of Michigan, Cornell University, and others wondered if the same was true of metaphors about creativity. "Creativity is a highly sought-after skill," they write. "Metaphors of creative thinking abound in everyday use." Their experiments went beyond metaphors that activate preexisting knowledge and demonstrated for the first time some metaphors "work" by activating psychological processes conducive for generating previously unknown and therefore creative ideas.

People talk about thinking "outside the box" or consider problems "on the one hand, then on the other hand." So Leung and her colleagues created experiments where people acted out these metaphors. In one experiment, each participant was seated either inside or outside of a five-by-five-foot cardboard box. The two environments were set up to be otherwise the same in every way, and people didn't feel claustrophobic in the box. Participants were told it was a study on different work environments. Each person completed a test widely used to test creativity; those who were outside did the test better than people who were inside the box.

In another experiment, some participants were asked to join the halves of cut-up coasters before taking a test—a physical representation of "putting two and two together." People who acted out the metaphor displayed more convergent thinking, a component of creativity that requires bringing together many possible answers to settle on one that will work. Other experiments found that walking freely generated more original ideas than walking in a set line; another found truth in "on the hand; on the other hand."

All this suggests that there's something to the metaphors we use to talk about creativity. "Having a leisurely walk outdoors or freely pacing around may help us break our mindset," says Leung. "Also, we may consider getting away from Dilbert's cubicles and creating open office spaces to free up our minds."