

## Are your values right or left? The answer is more literal than you think

## April 13 2011

Up equals good, happy, optimistic; down the opposite. Right is honest and trustworthy. Left, not so much. That's what language and culture tell us. "We use mental metaphors to structure our thinking about abstract things," says psychologist Daniel Casasanto, "One of those metaphors is space."

But we don't all think right is right, Casasanto has found. Rather, "people associate goodness with the side they can act more fluently on." Right-handed people prefer the product, job applicant, or extraterrestrial positioned to their right. Lefties march to a left-handed drummer. And those linguistic tropes? They probably "enshrine the preferences of the right-handed majority."

Casasanto, of The New School for Social Research, and Evangelia G. Chrysikou, of the University of Pennsylvania, wanted to find the causes of these correlations. Does motor experience "give rise to these preferences, or are they hardwired in the <a href="mailto:brain">brain</a>?" If the former, "how flexible are these preferences? How much motor experience does it take" to instill them?

Their surprising findings are published in *Psychological Science*, a journal of the Association for <u>Psychological Science</u>.

To investigate the first question, the researchers recruited 13 right-handed patients who'd suffered cerebral injuries that weakened or paralyzed one side of their bodies. Five remained right-handed. The rest



lost their right side and became effectively left-handed. The patients were shown a cartoon of a character's head between two empty boxes and told that he loves zebras and thinks they are good, but hates pandas and thinks they're bad (or vice versa). Then they were asked to say which animal they preferred and which box, left or right, they'd put it in.

All the patients who were still right-handed put the "good" animal in the right box. All but one of the new lefties put it in the left.

Could these results be explained by neural rewiring? To rule out that possibility, the researchers experimented with 53 healthy righties. They asked 26 to wear a ski glove on the left hand and 27 on the right. The experimenters attached the other glove to the same wrist, letting it dangle. In a putative dexterity test, participants were instructed to pull dominos from a box, two at a time using one hand for each, and place them symmetrically on dots spaced across a table. If a domino fell, they were to set it aright with the appropriate hand only.

They were then escorted to another room and administered three questionnaires (two fillers), supposedly irrelevant to the first task. In one, the participants performed the same animal-box task as the brainingured patients.

Three-quarters of those with ungloved right hands put the good animal in the right box, two-thirds of the temporary lefties in the left. How much motor experience did it take to switch their loyalties? About 12 minutes' worth.

What does it all mean? "People generally believe that their judgments are rational and their concepts are stable," says Casasanto. "But if a few minutes of gentle training can flip our judgments about what's good or bad, then perhaps the mind is more malleable than people think."



## Provided by Association for Psychological Science

Citation: Are your values right or left? The answer is more literal than you think (2011, April 13) retrieved 19 April 2024 from <a href="https://medicalxpress.com/news/2011-04-values-left-literal.html">https://medicalxpress.com/news/2011-04-values-left-literal.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.