

Geography of Thought

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Several years ago in the Psychology Department at the University of Michigan, a student said something to Richard Nisbett that changed Nisbett's way of thinking and studying about cognition.

"There is a difference between you and me," the student, Kaiping Peng, from China, told him. "You think the world is a line, and I think it's a circle." This comment led to a whole new area of research, and a new book that Nisbett has just written, *The Geography of Thought: How Asians and Westerners Think Differently...and Why* (Free Press, 2003). This was also the subject of his talk "Culture and Point of View" at the Eastern Psychological Association meeting in Baltimore, Maryland, March 14, 2003. Nisbett, an APS Fellow, delivered this year's APS William James Distinguished Lecture in Psychological Science.

Most current cognitive researchers have assumed that everyone reasons and perceives things in the same way. This began with British Empiricist philosophers like Hume and Locke, who took a universalist approach and assumed that there were basic, universal cognitive and perceptual processes.

Through research and experience, Nisbett has started to realize that there may in fact be concrete differences in how people of different cultures think and perceive the world. To study this he first looked back to Ancient Greece and China, to examine differences in the ways of thinking between these two ancient cultures.

In Ancient Greece, there was a focus on the object to explain behavior. Aristotle believed that a stone falling in water has the property of gravity, while a piece of wood floating in water does not have the property of gravity. There were no unseen media or forces that could be in effect. Meanwhile, the Chinese were much more concerned with relationships. The Chinese made significant advances in understanding the moon and the changing tides, and the concept of acoustics. The Greeks were more concerned with associating objects with rules and categories, while the Chinese focused on the relationships between objects. Greek philosophy and science emphasized stability and lack of change, while the Chinese were constantly concerned with change. Nisbett gave the example of the ying-yang symbol. In this symbol there are two states of the world, ying and yang, but the "seed of the opposite state of the world is included in the current state of the world." And philosophers expected that it would only be a matter of time before those would be reversed.

Why were there such significant differences in thinking between these two cultures? Nisbett speculates that they may have evolved from the differing occupations in Greece and China. The Chinese people were primarily agricultural, and thus harmony was more important between villagers. Farmers had to get along with each other to ensure a good crop production. The Greeks on the other hand, were employed in more professions and there were fewer confining roles and constraints on behavior. Since they had more personal control, they could be more goal-oriented, and there was less concern for relationships and more of a focus on individual objects and people. Nisbett argued that even in agriculture, the Greeks

operated more as businessmen than farmers. These early, differing philosophies have led to great cultural differences between East Asians and people of European culture, or Westerners.

To study this concept of differing cognitive processes further, Nisbett ran some experiments in which subjects were asked to look at objects and then reply to questions about their attributes and the categories they belonged to. In one study by Nisbett et al, subjects were shown pictures of a panda, a monkey and a banana, and asked which two belonged together. Americans paired the panda and monkey, because they were both animals, while the Chinese paired the monkey and the banana, because monkeys eat the bananas. Westerners tend to assign objects based on rules and categories, whereas East Asians tend to assign objects based on relationships. These differences form very early in life, as one study demonstrated with mothers showing toys to their children. American mothers showed their children toys, and talked to them about their attributes (“Look at the object, attributes, and category.”) Whereas Japanese mothers emphasized social relationships like giving and taking the object, with the appropriate emotional reactions.

In another study with Taka Masuda, Nisbett showed Japanese and American students a picture of an aquarium scene. When asked about the scene, the Americans described the objects they saw and their attributes. The Japanese, on the other hand, started describing the background elements, and in fact the Japanese students remembered 60 percent more of the background elements than the Americans did. The second part of the experiment was a recognition task in which the students were given a list of objects and asked if they were in the aquarium scene. Some objects were shown with the original background, some with a new background, and some with no background at all. The experimenters wanted to know to what extent the background influenced people’s ability to correctly identify objects in the scene. For the Japanese, showing the object with the original background made a big difference, and they were much more accurate in recognition when compared to a novel background or no background at all. For the Americans though, there was very little difference in recognition between the backgrounds.

Nisbett extended his research into looking at the composition of pictures to examine differences in perception between Western and East Asian cultures. Nisbett and Yuri Miyamoto compared pictures and photographs of Western and East Asian scenes. In the American scenes the objects are “relatively distinct, discontinuous, and discrete. Japanese scenes, to the Western eye, are somewhat chaotic, with more objects, inter-penetrating substances and less structure.” Nisbett and Miyamoto compared pictures of big cities, towns, and rural villages. In comparing the big cities, the Japanese city was much more complex. The business signs overlapped, and overhead wires cut through the picture, while the photo of New York City seemed much less complex, with fewer, more distinct objects, in comparison. Then a software program schematized the pictures and counted the number of objects, and the number of pixels between lines and edges. These results reinforced the participants’ ratings of the complexity of the different scenes.

Nisbett’s results indicate fundamental differences in the ways Westerners and East Asians view the world.

And like all good psychologists who question whether their laboratory research can be applied to the real world, Nisbett ended his presentation by noting that, “These are all laboratory demonstrations, do we think it really matters in the real world? Yes, we do. We think the world looks to be a different place, on a moment-to-moment basis. I think that Westerners go through life seeing the world as protagonists

doing things intentionally, because they have control. Whereas East Asians are seeing relationships including more emotional events than Westerners do.”