

The Urge to Conform Can Impair Judgment

By SANDRA BLAKESLEE

A new study uses advanced brain-scanning technology to cast light on a topic that psychologists have puzzled over for more than half a century: social conformity.

The study was based on a famous series of laboratory experiments from the 1950's by a social psychologist, Dr. Solomon Asch.

In those early studies, the subjects were shown two cards. On the first was a vertical line. On the second were three lines, one of them the same length as that on the first card.

Then the subjects were asked to say which two lines were alike. But Dr. Asch added a twist:

Seven other people, in collaboration with the researchers, also examined the lines and gave their answers before the subjects did. And sometimes they intentionally gave the wrong answer.

Dr. Asch was astonished at what happened next. After thinking, three out of four subjects agreed with the incorrect answers given by the confederates at least once. And one in four conformed 50 percent of the time.

Dr. Asch, who died in 1996, always wondered about the findings. Did the people who gave in to group pressure do so knowing that their answers were wrong? Or did the social pressure change their perceptions?

The new study tried to find an answer by using functional magnetic resonance imaging scanners that can peer into the working brain,

a technology not available to Dr. Asch.

The researchers found that social conformity showed up in the brain as activity in regions that are entirely devoted to perception. But independence of judgment — standing up for one's beliefs — showed up as activity in brain areas involved in emotion, the study found, suggesting that there is a cost for going against the group.

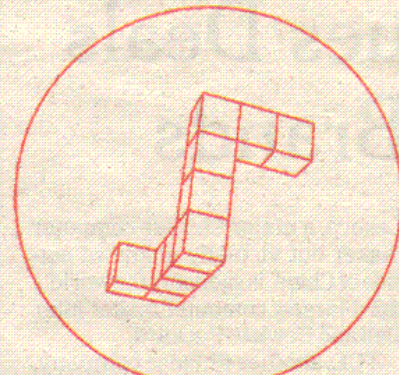
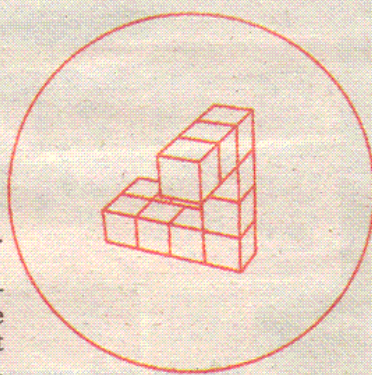
"We like to think that seeing is believing," said Dr. Gregory Berns, a psychiatrist and neuroscientist at Emory University in Atlanta who led the study. But the study's findings, he said, show that seeing is believing what the group tells you to believe.

"It's a very important piece of work," said Dr. Dan Ariely, a pro-

Other people's views can call the truth into question.

fessor of management and decision making at the Massachusetts Institute of Technology, who did not work on the study. "It suggests that information from other people may color our perception at a very deep level."

The new study involved 32 volunteers who were asked to mentally rotate images of three-dimensional objects to determine if the objects were the same or different.



Dr. Gregory S. Berns

A new study showed how people went along with wrong answers when asked about these shapes.

In the waiting room, the subjects met four people who they thought were other volunteers, but who in fact were actors, ready to fake their responses.

Then the participant went into the M.R.I. machine. The participant was told that the others would look at the objects first as a group and then decide if they were same or different.

As planned, the actors gave unanimously wrong answers in some instances and unanimously correct answers in others.

Next, the participant was shown the answer given by the others and asked to judge the objects.

Were they the same or different?

The brain scanner captured a picture of the judgment process.

In some trials, instead of being told that the other volunteers had given an answer, they were told that a computer had made the decision. Dr. Berns said this was done to make sure it was social pressure that was having an effect.

As in Dr. Asch's experiments, many of the subjects submitted to group pressure. On average, Dr. Berns said, they went along

with the group on wrong answers 41 percent of the time. The implications of the study's findings are huge, he said.

In many areas of society — elections, for example, or jury trials — the accepted way to resolve conflicts between an individual and a group is to invoke the "rule of the majority." There is a sound reason for this: A majority represents the collective wisdom of many people, rather than the judgment of a single person.

But the superiority of the group can disappear when the group exerts pressure on individuals, Dr. Berns said.

The unpleasantness of standing alone can make a majority opinion seem more appealing than sticking to one's own beliefs.

If other people's views can actually affect how someone perceives the external world, then truth itself is called into question.

There is no way out of this problem, Dr. Ariely said.

But if people are made aware of their vulnerability, they may be able to avoid conforming to social pressure when it is not in their self-interest.