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**WHY WE JUST CAN'T HELP PASSING OFF OTHERS' STORIES AS OUR OWN**  
**BYLINE:** By Fiona MacRae Science Correspondent  
  
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IF your colleague steals one of your ideas, don't blame their ambition.

Blame their paracingulate sulcus.

Scientists have pinpointed this as the part of the brain key to distinguishing truth from reality.

They found that when it is underdeveloped, people are more likely to claim others' ideas Ð and stories Ð as their own.

But as they are unlikely to realise there is anything wrong with their memory, any plagiarism will be unintentional.

It could lead them to believe, for example, that the fantastical events in a story they heard in the pub actually happened to them.

Dr Jon Simons gave 53 men and women well-known word pairs such as 'Laurel and Hardy' or incomplete pairs such as 'Laurel and ?' and asked them to imagine the missing word.

Then, they or the scientist had to read the word pair aloud.

Later, the volunteers were asked to remember whether they had seen or imagined the second word of each pair and who read the words out.

Those with a well-developed paracingulate sulcus were right 85 per cent of the time, while those where it was underdeveloped were correct in only 75 per cent.

Dr Simons wrote in the Journal of Neuroscience that this suggests an underdeveloped paracingulate sulcus makes it harder to remember, leading to the blurring of lines between real events and what you've been told.

**REUTERS**

**Brain memory finding may help schizophrenia research**

By Simon Roach

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A variation in a part of the brain may explain why some people have a better memory of reality than others and could advance understanding of brain disorders like schizophrenia, scientists said on Tuesday.

In a study scheduled to be published in the Journal of Neuroscience, researchers from Cambridge University tested 53 volunteers and found differences in their ability to distinguish between real or imagined memories.

The scientists then found a direct link between these results and the size of a specific area of the brain called the paracingulate sulcus, or PCS.

The PCS is one of the last regions of the brain to develop before birth, and the study found that people with a larger PCS were better at discerning real experiences from imagined ones.

"The [memoryhttp://images.intellitxt.com/ast/adTypes/icon1.png](http://uk.reuters.com/article/2011/10/05/health-us-brain-memory-idUKTRE7936V520111005) differences we observed were quite striking. It is exciting to think that these individual differences in ability might have a basis in a simple brain folding variation," said Cambridge's Jon Simons, who led the research.

The findings may also help scientists understand more about schizophrenia, he said, because an inability to recognize what is real and what isn't is a hallmark of the disease.

"Hallucinations are often reported whereby, for example, someone hears a voice when nobody's there.

Difficulty distinguishing real from imagined information might be an explanation for such hallucinations," Simons said.

"The person might imagine the voice but misattribute it as coming from the outside world."

Schizophrenia is a severe mental disorder which affects 24 million people worldwide, according to World Health Organization [datahttp://images.intellitxt.com/ast/adTypes/icon1.png](http://uk.reuters.com/article/2011/10/05/health-us-brain-memory-idUKTRE7936V520111005), yet relatively little is known of its causes.

"We've found evidence that suggests this particular (brain) region might be reduced in people with schizophrenia, and that this could be the beginning of an explanation for why these people experience hallucinations," Simons said in a telephone interview.

The 53 volunteers in the study first had brain scans which showed whether they had either a clear presence or absence of PCS in the left or right brain.

The researchers then showed them well-known word pairs -- such as "Laurel and Hardy" for example -- which were sometimes complete and sometimes had the second word blanked out.

The volunteers were then asked to remember whether they had seen a completed pair, or whether they had completed the pair in their own mind.

"What we're interested in linking next is whether individuals with schizophrenia who also have that reduction in the PCS are definitely more likely to experience hallucinations," Simons said, adding that his team is planning further research in the coming months.

SOURCE: [bit.ly/3R3hSm](http://bit.ly/3R3hSm) Journal of Neuroscience, scheduled for October 5, 2011 issue