

Left Brain Right Brain is a Myth (After Skool)

This is a brain. It's one of the most complicated things to exist in the universe. That's no **exaggeration**. There are more neurons in your head than there are stars in the galaxy, and we understand much more about how those stars and planets interact than we do about what's in our heads. So, since it's such a confusing web of nerves and cells and connections, most of us like to simplify things and one thing everyone knows about is that the brain is split into two halves; the left brain and the right brain. It's said that the left side is mostly in charge of logical behavior such as mathematics, putting things in **sequence**, language, facts and so on. The right brain has more creative parts like imagination, intuition, visualizing your feelings and all those kinds of things. Because of this, it's becoming a common idea that most people are either left-brained or right-brained just like they are left or right-handed. The accountants, lawyers and bankers are all smart, serious left-brainers. The painters, musicians and hairdressers are all wild and **impulsive** right-brainers, but is this really true? Can you have a **dominant** side of your brain? The answer is no, and your brain is also nowhere near as divided as most people believe. The two sides are much more similar than we think, and most processes are found on both sides.

The two parts do have different functions, but they are not divided up as simply as logic on one side, creativity on the other. To give you an example, it's true the left brain will handle a mathematical equation, but the right will deal with a comparison or an estimate. Both of these are a part of mathematics, so the two halves work together. And when we say the left brain deals with language, it really deals with words and grammar while the right handles context and tone. That's how you can separate talking to a person from talking to a machine.

So, where did this left versus right idea come from?

Well it's actually based on the work of a Nobel prize-winning neuroscientist named **Roger W Sperry**. He was trying to find a way to help people with extreme forms of **epilepsy** and he pioneered a surgery that cut the corpus callosum, which is the biggest connection between the two halves. By doing the surgery and studying the patients afterwards he noted that there were differences between the two halves. Newspapers and magazines just took this idea and ran with it, but modern research is disproving this theory. A study published in 2013 looked at a thousand people and used MRI scans to see if one side of the brain dominated for certain functions but they never found this kind of favoritism. Instead they saw that both halves work together to perform tasks.

This is really because most tasks are more complex than they appear on the surface. For example, when you're trying to recognize an object there are actually a number of different steps going on. The left brain is looking for details while the right is looking at the overall shape. In general, the right looks at things more holistically, meaning it takes in the bigger picture, while the left examines the fine print. You cannot say that one or the other is doing the task. They both work together to find the answer.

And if we needed any final proof that the left versus right idea is not based on fact then we have some very extreme examples. It turns out that humans can still function quite normally with only half a brain. In 1923, a surgeon named **Walter Dandy** pioneered an operation at Johns Hopkins University on a brain tumor patient. The operation, which is known as a hemispherectomy, involved removing half the brain. It was performed hundreds of times in the 20th century, primarily on children who suffered from **relentless** seizures.

Doctors were astonished to find that even with half their brain gone memory, personality and speech developed normally. Hemispherectomies were 86% successful in curing seizures and most children went on to function normally in school. Of course, there are a few downsides to only having half a brain. Patients lose their eyesight and the use of their hand opposite the hemisphere that was removed. However, this procedure demonstrates just how incredibly **elastic** our brains are. Many brain functions can be **shifted** to different areas of the brain. This is how some people can recover from brain damage or from having parts of their brain removed. So, the left and right sided idea is a myth, but who knows what else there is to discover about the most incredible part of our bodies.