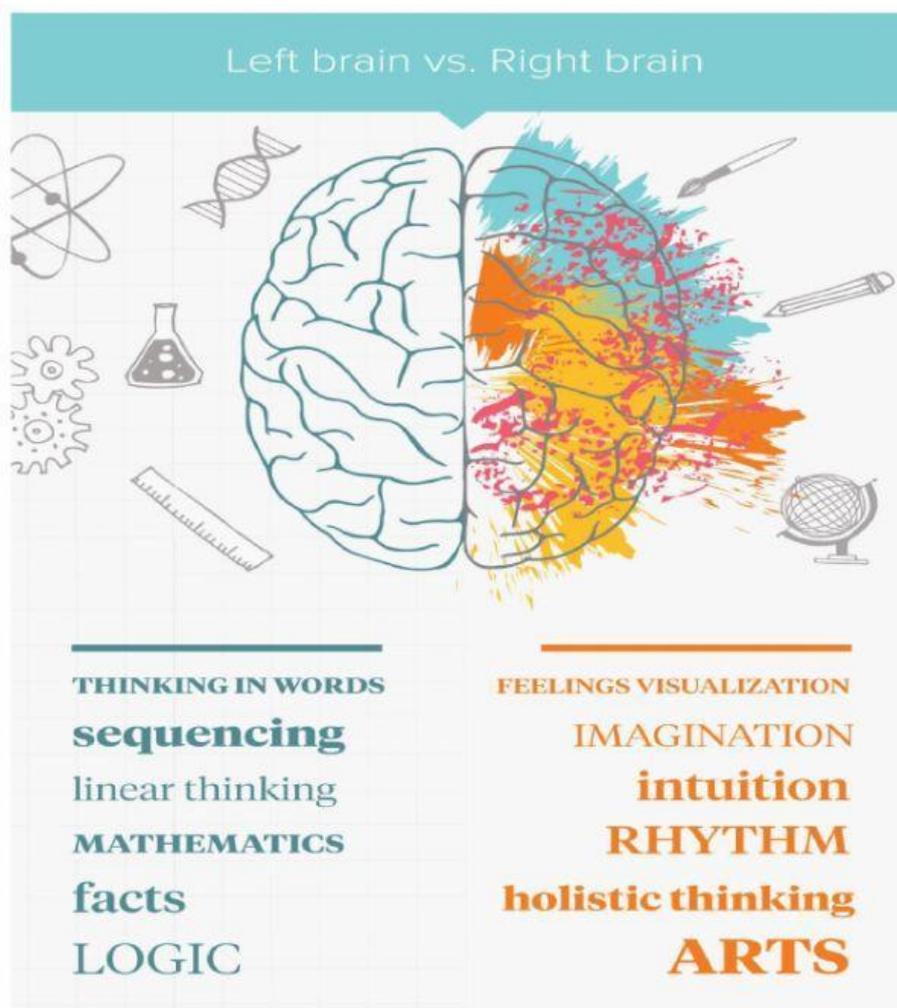


# Solving the Mystery of the Left-Brain and Right-Brain Myth



There is a fascinating myth in modern culture of people being right-brained or left-brained. There is indeed a grain of truth to this myth; for example, the brain really does have two hemispheres, one left and one right. But, like many misconceptions in life, when it is studied, it unravels pretty quickly.

## 1. Before reading, study the vocabulary

<i>Recurring myth</i>	Долговечный миф	<i>Frequent</i>	Частый/ повторяющийся
<i>A grain of truth</i>	Доля истины	<i>To separate the part of the brain</i>	Отделить часть мозга
<i>Indeed correct</i>	На самом деле верно	<i>Give the creeps</i>	Бросать в дрожь/ наводить страх
<i>Led to</i>	Привели к	<i>Grab onto</i>	Вцепиться во что-то
<i>Loss of abilities</i>	Потеря способностей	<i>Veracity</i>	Достоверность
<i>Spatial abilities</i>	Способность ориентироваться в пространстве	<i>Dispassionate genius</i>	Невозмутимый/ хладнокровный гений
<i>To reside</i>	Свойственно	<i>Either/ or</i>	Или/ или

<i>Severe epilepsy</i>	Тяжёлая форма эпилепсии	<i>Defensible merit</i>	Заслуженное преимущество
<i>Seizures resisted treatments</i>	Лечение не действовало на приступы	<i>Portrayed</i>	Изображается

## 2. Read the article

### The Myth of Left-Brained and Right-Brained People

Perhaps, this is why there is this fascinating and **recurring myth** in modern culture about people being right-brained or left-brained. There is indeed **a grain of truth** to this myth, for example, the brain really does have two hemispheres, one left and one right. So, that part is **indeed correct**. But, like many things in life, when brain function is studied, it becomes complicated very quickly.

Scientists have known for many decades that the brain isn't monolithic and that different parts of the brain have different purposes. The earliest reported data was in the 1800s when brain scientists took note of the fact that different types of brain trauma **led to** different yet specific **loss of abilities**. For instance, **spatial abilities** seemed **to reside** more in the right side of the brain, while language, for example, seemed to be preferentially located in the left.

### The Origin of the Left-Brain Right-Brain Myth

In the 1960s, these observations appeared both into the scientific literature and in the public sphere when some impressive (and, frankly, scary) experiments were performed. It was during this decade that researchers including Roger Sperry and Michael Gazzaniga were experimenting to find ways to treat **severe epilepsy**.

There was a class of patients whose **seizures resisted** treatments like psychotherapy and psychotherapeutic drugs. No matter the treatment, these people would have **frequent** seizures. It was no way to live.

Gazzaniga and Sperry and others explored additional treatments. One treatment was to **separate** the part of the brain that connected the right and left hemispheres. The whole prospect may have **given others the creeps**, but the surgeons had some success in treating epilepsy.

It was from studies like this that scientists became aware of some of the regional differences present in the functioning of the brain. In fact, there is an absolutely fascinating body of scientific work done by studying these split-brain individuals. Actually, the study of how specific brain damage affects the abilities of individuals is incredibly interesting. In any event, these studies found differences in the left and right side of the brain. Popularizers, marketers, and others **grabbed onto these very early studies** and ran with them. Society was told that the left brain is the analytical, logical, verbal half while the right brain is the creative, emotional, visual, and spatial half.

### Checking the **Veracity** of the Left-Brained, Right-Brained Claim

Taking this to the next step, people were told that if they were **dispassionate** scientific **geniuses**, they used the left side of the brain, while the artsy, creative, caring people used the right side of the brain. But people are rarely so, thinking versus feeling. It is not at all difficult to imagine that a scientist would be sad when his kitten unexpectedly died. Nor is it so difficult to imagine a singer being a shrewd businessman. The world is not **either/or**.

So, what is correct? Well, it is true that there are right- and left-brain differences. The biggest is, of course, that the left side of the brain controls the right side of the body and vice versa.

There is also handedness, meaning being left-handed or right-handed. That seems to arise in individual differences in the right and left brain and the development of the fine muscle control centers of the hand.

There is some **defensible merit** in bits of the left-/right-brain ideas. For instance, language processing, once believed to reside only in the left hemisphere, is now understood to take place in both: the left side processes grammar and pronunciation while the right processes intonation.

Similarly, experiments have shown that the right hemisphere is not only responsible for spatial ability: the right hemisphere seems to deal with a general sense of space, while the left hemisphere deals with objects in specific locations. And it is relatively recent, with modern imaging techniques, that scientists can watch thoughts develop in real-time.

With studies like this, it is clear that the whole right-/left-brain idea is not real, at least not in the way that is often **portrayed** in the media and some classrooms.

### 3. Answer the questions:

1. When did the brain scientists first take note of brain peculiarities?
2. What were Roger Sperry and Michael Gazzaniga experimenting and why?
3. Which experiment was the scariest? Did it help?
4. Who grabbed onto these studies and what happened next?
5. Is it true that there are right- and left-brain differences?
6. How does it explain language processing?
7. Is the whole right-/left-brain idea real?

### 4. Watch the video and answer the multiple-choice questions.

**Which statement below is a myth?**

- A The human brain is clearly divided into two parts
- B The left side of the brain controls logic, and the right controls creativity
- C The outer layer of the brain is called the cortex
- D Both A and B are myths

**The right side of the brain controls the movement of the:**

- A Right side arm and leg
- B Left side arm and leg
- C Both arms and legs
- D The eyes

**When patients who had both hemispheres of their brain separated were tested, what was the result?**

- A they had no creativity
- B they had no logic
- C the patients showed both logical and creative behaviors
- D patients lost their eyesight

**Attention is more localized to the \_\_\_\_\_ side of the brain,  
while language is more localized to the \_\_\_\_\_ side of the brain.**

- A Left, right
- B Right, left