

YOUR BRAIN AND YOU

Translated from Spanish by Lucas Orton

28. It is not true that we only use 10 percent of our brain

The Guardian says this false belief is “the biggest myth about the brain in history”; 48% percent of British professors still believe it. According to *Snopes*, it’s not even clear where this belief originated. The truth is that we use all areas of our brain, even when we are resting. It’s true that the brain is very plastic (we can live with half) and that we don’t use all of it at once, since some areas are specialized. For example, when we walk, the components related to motor activity are more active than others. However, there is no area of the brain that does nothing and is waiting until we activate it in order to have superpowers.

29. Perceptual reality is generated in the brain

We give meaning to voices and sounds drawn from pressure waves in the air. The same happens with colors and objects. In fact, our brain only receives reflected photon signals. For this reason, it’s not surprising that optical illusions can trick us.

30. We see the world in narrow disjointed fragments

We only see a very small portion of space. We have to keep moving our eyes to read because actually most of the page is blurred. We don’t realize this because the moment we feel curious about anything in the world, our eyes move to fill in any details that were missed. While our eyes are in motion, we should see a blurry spot, but our brains edit this out and complete the image.

31. Body image is dynamic and flexible

We can trick our brain to make it believe that a rubber arm or a virtual hand is part of our body. There are people who suffer from body integrity identity disorder (BIID), which makes them think that one of their limbs doesn't belong to them. A man believed that doctors had sewn a limb onto his body from a cadaver to play a joke on him.

32. Behavior is mostly automatic, even though we feel we are in control

The fact that we can drive a car at 100 kilometres per hour on the highway while thinking about other things is an example of how the brain knows what to do next. Addiction is possible because much of what we do is automatic, including goals and desires. Many people can pick up and begin to use a comb given to them without knowing why. When we are impulsive, we act even though we know we shouldn't.

33. Neurons are very slow

It may seem like we think much faster than computers, but neurons only send signals few times per second and the beta waves of the brain have between 14 and 30 cycles per second. In comparison, computers do millions of operations per second.