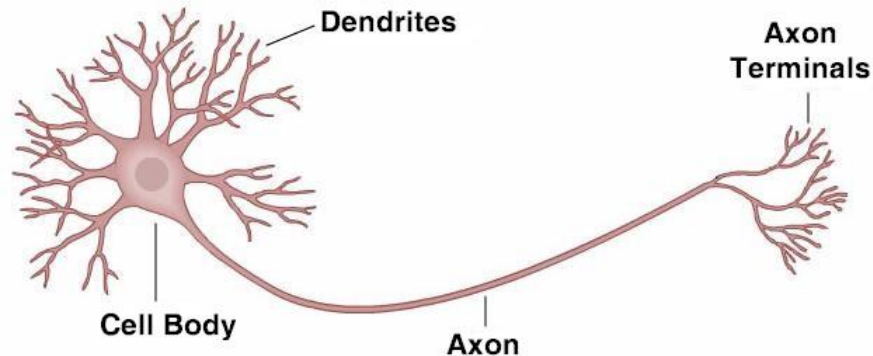
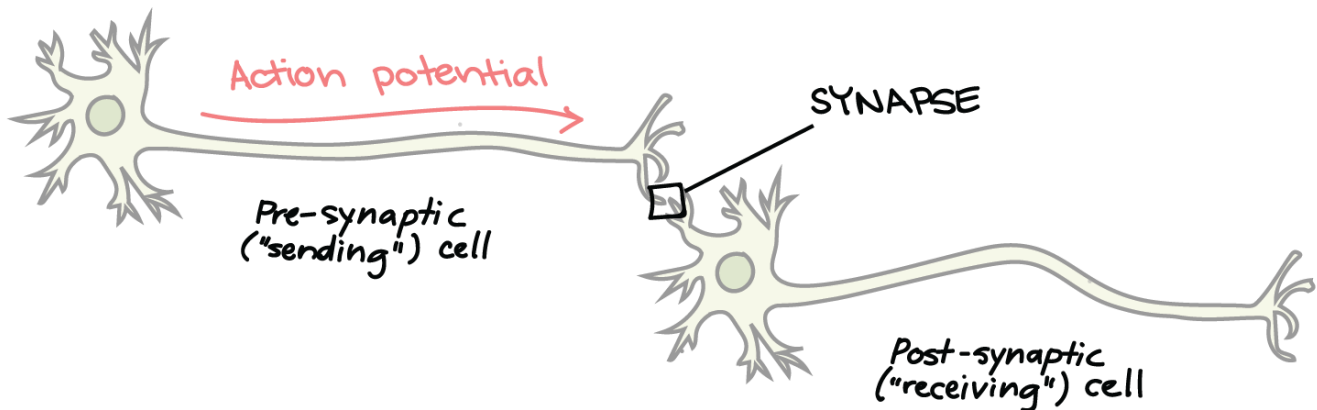


Immersed in a Sea of Irrefutable Realities Inside Our Bubbles of Rightness

Understanding Our Humanness Series Module #02



Neurons are the cells that make up the brain and neural systems of the body. The control center of a neuron is the *cell body*. In the brain, an average *neuron* has about ten thousand dendrites (inputs) and about ten thousand axon terminals (outputs). Information enters through dendrites, flows into the cell body, then down the axon to axon terminals, exits the neuron and then enters dendrites of the next neurons in line.



The cortex is main information processing area of the brain and it contains about 30 billion neurons. When we consider the number of possible synaptic connections in just the 30 billion neurons in cortex, we are dealing with hyper-astronomical numbers:

10 followed by at least a million zeros.

Now, compare the number of possible synaptic connections in the brain above to the total number of particles (atoms) in the known universe below:

10 followed by 79 zeros (*give or take a few*).

This makes the human brain the most complex known object in the universe!

How the Brain Creates Realities & Bubbles of Rightness

Our *realities* -- **waking lives and dreams** -- **emerge from the brain's billions of zapping cells and trillions of synaptic connections**. It is from this inner universe of **synaptic constellations** that human decisions arise and imaginations are forged. *All of our **life experiences** take place in storms of activity within the computational material of our brains.*

From the moment we awaken in the morning, we are surrounded with a rush of light and sounds and smells. Our senses are flooded. *All we have to do is wake up every day and without thought or effort we are immersed in our irrefutable reality.* It is our awareness of everything we sense, believe and think. It includes the ways we perceive ourselves, others and our world, as well as our appetites, desires, longing and fears.

We all assume our "irrefutable reality" to be that of the entire objective world. We all live in our own *bubbles of rightness*, in which *we are the ultimate standard for determining what is right.*

Why would anyone ever stop to consider there's something beyond his or her reality?

Stomachs digest solids and liquids and turn them into energy. Brains ingest electrochemical information from the specialized biological receptors in our sensory organs and turn them into realities. **It "feels" as though you have direct access to the world through your senses.**

- *You can reach out and touch things, but this sense of touch is not happening in your skin.*
- *You see things, but seeing isn't happening in your eyes.*
- *You hear things, but hearing isn't taking place in your ears.*
- *You smell things, but smell isn't happening in your nose.*
- *You taste things, but taste isn't happening on your tongue.*

Biology has discovered many ways to convert information from the world into electrochemical signals. Just a few of the translation machines that you own: hair cells in the inner ear, several types of touch receptors in the skin, taste buds in the tongue, molecular receptors in the olfactory bulb, and photoreceptors at the back of the eye.

Our "*specialized biological receptors*" are created by the genetic instructions of our DNA. They only perceive "a thin slice of the world" that actually exist. Our eyes can only perceive visible light, which constitutes only a tiny fraction of the electromagnetic spectrum — *less than one ten-trillionth of it.*

Each creature picks up on its own slice of reality.

- *In the blind and deaf world of the tick, the signals it detects from its environment are temperature and body odor.*

- For bats, it's the echolocation of air compression waves.
- For the black ghost knifefish, its experience of the world is defined by perturbations in electrical fields.

These are the slices of their ecosystem **that they can detect**. No one creature is having an experience of the **total objective reality** that really exists -- *each creature perceives only what it has evolved to perceive. And presumably, every creature assumes its slice of reality to be the entire objective world.*

*Why would we ever stop to imagine
there's something beyond what we can perceive?*

Despite the feeling that we're directly experiencing the world out there, the realities we are experiencing are ultimately created in the dark confines of the skull. The activities churning across vast neural networks get turned into your experience of life -- *your private experience of the world -- the feeling in your hands, the light in the room, the smell of roses, the sound of others speaking, the taste of things, etc.*

Your brain serves up your private narrative — *your story about life*. Each of us believes whatever narrative the brain tells. Whether you're falling for a visual illusion, or believing the dream you happen to be trapped in, or experiencing letters in color, or accepting a delusion as true during an episode of schizophrenia -- *we each accept our realities however our brains script them*. Even more strangely, every brain tells a slightly different story. For every situation with multiple witnesses, **different brains are having different private subjective experiences.**



*With over seven billion human brains wandering the planet
(and trillions of animal brains), there's no single version of reality.
Each brain produces its own "Bubble of Rightness" -- with its own "truths."*

So what is your reality? *It's like a television show that only you can see, and you can't turn it off. The **good news** is that it is the most interesting show you could ask for: edited, personalized, and presented just for you! The **bad news** is that only you can see it!*

SOURCES

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