

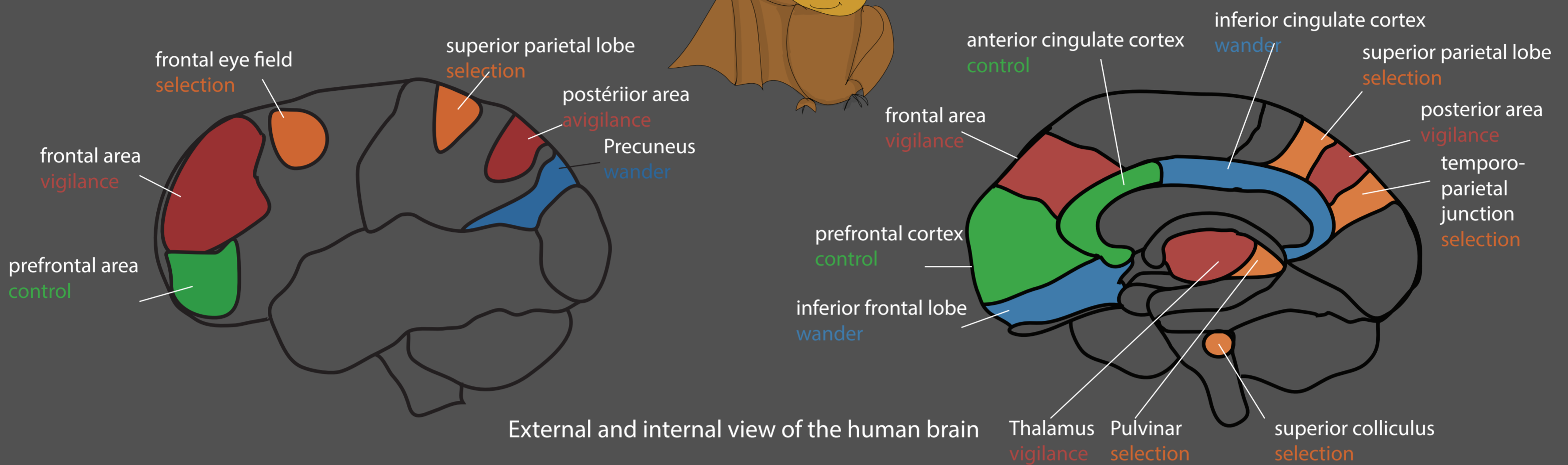
Do you know about the "Cocktail party effect"? It's the ability to hear our own name whatever the ambient noise is. Well, us, bats, we know it well!



We are particularly sensitive to the echo of our own voice. Actually, it's through this manner that we locate ourselves (bats) in space, and is what allows us to detect prey when hunting.



There exist three systems that made up attention. Let's take the human brain as an example.

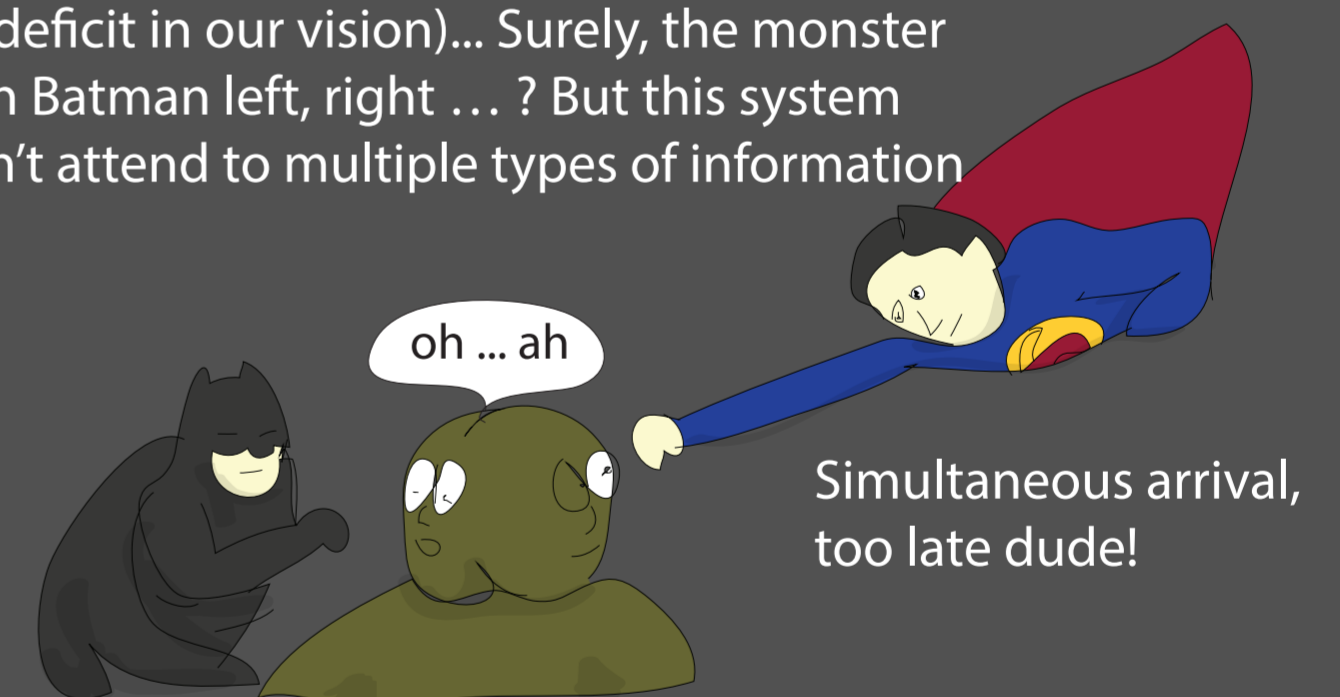


Vigilance: this is "when one is attentive to a situation", particularly in an emotion alone. Two neurotransmitters, chemicals that are involved in communication between neurons, Acetylcholine and Serotonin, modulate the excitation and inhibition.

Selectivity: when one attends to relevant information. This process enables us to be attentive to important things in a situation and to ignore



This monster is a victim of inattentional blindness (where a lack of attention leads to a deficit in our vision)... Surely, the monster should have seen when Batman left, right ... ? But this system has a limitation. We can't attend to multiple types of information at a single moment.



The last system is Executive Control, i.e. the necessary step to analyse the information in the situation (e.g., to plan, select, initiate, execute certain information and/or behaviour). Concentration allows us to make use of executive control, and enables us to complete a task from beginning to end. Executive control is a flexible and pliable process, which mean that we can train ourselves to be attentive to certain situations and to inhibit ourselves from others. Executive control develops and improves with age, until we are about 21 years old. It involves the development of the frontal part of the brain, this makes sense why as teenagers we sometimes do silly things...!

So how can you improve your executive control and work on your ability focus? By training the frontal part of your brain! Things like: Motor training (playing a sport), practicing an instrument, or practicing meditation

Great, so I can become a super (bat)man. I will isolate myself in a cave with you guys and train myself.



Well, yes but, research also shows that distraction is good: for memorisation, for creativity and even for focusing. So there's no need to become a batman-the-hermit.

