Analysis of reptilian brain as a step of human evolution

Sociology



Over the long years during evolution the human brain has grown and evolved in a rather interesting way; by adding to parts that are already there. In other words, the human brain has evolved by basically joining interdependent neural coatings on top of the other and thus also increasing the practical abilities of it. This theory is one formed by the 1950s neurologist Paul McLean and is referred to as the "triune brain" (Kazlev, 2013). McLean argues that over time the brain didn't entirely change but simply formed over the older brain. The triune brain consists of the reptilian brain, the limbic brain and the neocortex. This paper will explore the reasons as to why the reptilian brain has been given the nomenclature it has by analyzing what the reptilian brain is, the factors that contribute to its name, and what it stands for.

The reptilian brain is sometimes referred to as the R-complex, and it consists of the brain stem and the cerebellum. It's the oldest brain and is believed to have evolved over 500 million years ago, and possibly prior to humans (Mobbs, 2003). As mentioned earlier, in the triune brain theory neurological layers have grown over one another, and the layers that evolved did so over the reptilian brain primarily. "The reptilian brain controls the body's vital functions such as heart rate, muscles, digestion, breathing, body temperature, and balance" (Griffiths, 2013). Surprisingly enough, the current human reptilian brain looks exactly like the brain of a reptile. A reptile's brain is controlled by the brain stem and cerebellum; it doesn't consist of any other brains as humans do. Some believe the reason as to why it's named the reptilian brain goes back to this small fact, but not many realize it's much deeper than that.

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The reptilian brain's name isn't simply due to its similarity to a reptile brain, but also due to the functions of the cerebellum and the brain stem. The cerebellum and brain stem have evolved over years to suffice for human activities like "survival, mating, feeding, and self-maintenance. Some of the traits associated with the reptilian brain include: aggression, dominance, seeking a mate, sex, rigidity, obsessiveness, compulsiveness, worship, fear, submission, and greed (" Beating the Reptilian Brain", 2013). Due to these functions the reptilian brain is deemed as rather primitive. It has a mindset of making sure to stay alive and spread its genes. The reptilian brain of the human could be compared to a crocodile who is aggressive and dominant as well. The reptilian brain can also be referred to as the little monster lying inside of all of us, but it can also be considered as the hero of humans. "The reptilian brain is command control for your survival instinct – the fight or flight response" (Wilson, n. d.) The fight or flight response in the human brain senses danger and makes the decision of either fighting if success seems possible or fleeing if necessary in order for survival. Just like the lizards running around on the streets of Miami who run away when they sense a human foot approaching but fight for a possible snack.

The reptilian brain proves that the human brain has evolved and that it shares many characteristics with other being on this Earth that aren't even mammals. However, it's significant to understand what the reptilian brain stands for. The reptilian brain is humans when their anger overcomes them, when fear has taken them, when they're thirsty with revenge, when they're controlled by their sexual desires, and when they're obsessive. The reptilian brain is the most animalistic but at the same time most natural instinct

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within all humans. Its name reveals so much about not only of its physical similarity to lizard's brains, but of the animalistic side of humans as well.

Although many think that the brain is just one large organ that evolved completely all at the same time, as can be seen they are mistaken. The reptilian brain, the oldest brain that evolved over 500 million years ago, is the foundation of our current brain. Thanks to the reptilian brain humans occupy a fight-or-flight instinct that ensures their survival but also curses them with aggression, obsession, fear, and other unfortunate instincts. The reptilian brain is a brain shared by all the other reptiles and mammals on the planet, and is the cause of the animalistic instinct within humans. Due to these reasons, the cerebellum and the brain stem have been given the name reptilian brain.