

## Nerves: Unnerving Evolution

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We constantly are aware of the world around us. We see sunsets, smell the fresh air, taste a satisfying meal, touch the smooth texture of a seashell, and hear the serene sound of a bird chirping outside our window. At times, it is mind-boggling to comprehend just **how** we are able to experience these wonderful senses. There lies within the body a network of nerves that is so complex, yet so discreet, that it rarely is given any notice.

### THE PERIPHERAL NERVOUS SYSTEM

The nervous system is divided into two subdivisions: the central nervous system (CNS) and peripheral nervous system (PNS). While the central portion, including the brain, interprets the senses, the peripheral portion acts as a “mail service” between the outside world and the CNS. Imagine touching your hand to a hot stove. The PNS is constantly sensing for any sign of danger that may exist outside of the body, and it refers those stimuli to the brain for processing. When you touch the hot stove, the PNS almost instantly sends a signal to the brain, saying “hot!” The brain then can send a message back to the PNS, saying: “Take your hand away from the stove!” Under normal circumstances, most people will pull away their hand within the space of **one second**. You may wonder how all of this happens. So far, we have considered only what is evident externally. Now, let us look closer—beneath the skin.

The peripheral nervous system can be broken down further into two groups: the sensory-somatic nervous system and the autonomic

nervous system. The main difference between the two is that we can consciously control and experience sensory-somatic actions, while the autonomic nervous system participates in reflexes and other involuntary movements.

### The Sensory-Somatic Nervous System

Twelve pairs of cranial nerves and thirty-one pairs of spinal nerves work together and independently to create a world of sense and movement. The cranial nerves can best be explained in chart form (after Clayton, 1993, p. 463).

Imagine the complex achievements that would need to be accomplished for all of these nerves to work in unison. In order to determine the amount of information that is delivered to the CNS from all of the sensory-somatic nerves in the body in one day, we would need to multiply **3 billion pieces of information by the number of milliseconds in a day—86,400,000** (see Simmons, 2004, p. 98). Soon, the amount of information produced by the nervous system becomes inconceivable. Still, the brain must be able to sort through all of this information, and choose what to ignore, or what to respond to. Simmons went on to say:

One might liken this to the president of the United States simultaneously listening to the six billion people who inhabit Earth, selecting the many who need immediate attention, and deciding appropriate actions—**all in less than a second** (p. 98, emp. added).

Nerve	Sense or Motion	Function
<b>I.</b> Olfactory	Sense	Sense of smell
<b>II.</b> Optic	Sense	Vision
<b>III.</b> Oculomotor	Motion	Moves the eye
<b>IV.</b> Trochlear	Motion	Moves the eye
<b>V.</b> Trigeminal	Both	Facial and mouth sensation/ability to chew
<b>VI.</b> Abducens	Motion	Moves the eye
<b>VII.</b> Facial	Both	Taste/moving the facial muscles (smiling) and the salivary glands
<b>VIII.</b> Vestibulocochlear (Auditory)	Sense	Hearing and balance
<b>IX.</b> Glossopharyngeal	Both	Sense of taste/allows for swallowing
<b>X.</b> Vagus	Both	Slows the heartbeat, constricts air flow in the lungs
<b>XI.</b> Accessory	Motion	Controls swallowing and moving the head and shoulders
<b>XII.</b> Hypoglossal	Motion	Moves the tongue muscles



After the information is sorted by the brain, it then must be responded to, noting what stimuli are of higher priority, and responding to them accordingly. This is where the “motion” nerves play a role. For example, imagine that you are enjoying a wonderful meal in a fancy restaurant. As you cut the food and bring it to your mouth, your eyes are constantly moving and judging the distance of the food from your mouth. You need nerves I, III, IV, and VI working jointly just to get the food to your mouth. Once the food is in your mouth, you might want to chew the food and move it around a little. This action alone requires nerves V and XII. Now, to satisfy your hunger, you must use nerves IX and XI to swallow your food.

The design of the cranial nerves alone is enough to refute the idea of any type of naturalistic origin of the nervous system, but the spinal cord provides the finishing blow. As mentioned earlier, there are 31 spinal nerves that control the rest of the body. Traversing the length of the spinal cord are 8 nerves in the neck, 12 nerves in the middle back, 5 in the lower back, and 6 nerves near the pelvis (one of these, at the very tip of the coccyx, falls into a separate category). All of these nerves diverge from the spinal cord, yet they all exercise control over separate parts of the body. They report any senses to the spinal cord and brain, thus accomplishing the same tasks as the cranial nerves. Think of the coordination needed to play a sport such as football or soccer. The nerves in your legs and feet receive stimuli from the grass, allowing your body to compensate for any alterations in the terrain. Your arms are automatically swinging from front to back in order to retain balance while you run to the ball. Every muscle in the body is being controlled with explicit precision, constantly compensating for every move you make. The coordinated effort of these nerves could not possibly be explained by a naturalistic concept such as organic evolution. Each of these nerves would need to have evolved in unison with its counterparts—lest you end up with a human who can chew but not swallow, or someone who can look left but not right.

## Autonomic Nervous System

While much of the nervous system allows for conscious control of the body, other portions are completely automatic, and for good reason. Most internal structures in the body, such as the heart, spleen, and stomach, are controlled automatically, thus sparing us the trouble of thinking about every motion of our digestive system, or forcing the blood to circulate throughout our bodies. Many of the same cranial and spinal nerves that work in the sensory-somatic system also are involved with the autonomic nervous system. These nerves control the processes routinely taking place in many of the body’s organs, such as the lungs, heart, liver, spleen, stomach, pancreas, large intestine, small intestine, adrenal gland, kidneys, urinary bladder, and the genitals (Van De Graaff and Fox, 1985, p. 507).

One scientific prerequisite for being considered “alive” is the ability to achieve homeostasis. Basically, this refers to our capacity to adjust to temperature (e.g., sweating when hot, or shivering when cold), and to danger in our surroundings (e.g., adrenaline is used to heighten the senses and prepare the body for action, while norepinephrine counteracts these effects), as well as many other environmental factors. The body accomplishes these actions by means of two counterbalancing subdivisions of the autonomic nervous system: the sympathetic and parasympathetic nervous systems.

## The Sympathetic Nervous System

As a runner kneels at the starting block, and begins to focus on a race, his heart begins to beat faster, his stomach becomes somewhat queasy, and his muscles seem to be burning up. The same thing can happen when a speaker is in front of a crowd. It may seem like an unnecessary discomfort that is interfering with the individual’s performance, but in reality, those reactions are preparing the body for the activity in which the person is about to engage. Kent Van De Graaff and Stuart Fox explained:

Mass activation of the sympathetic division prepares the body for intense physical activity in emergencies; the heart rate increases, blood glucose rises, and blood glucose is diverted to the skeletal muscles (away from the visceral organs and skin) [p. 509, parenthetical item in orig.].

As a person becomes conscious of a stressful situation, unconscious signals are sent across the body to many of the organs via the sympathetic nerves, involving a few slight adjustments, along with a dose of adrenaline, thus helping the body to deal with that stress.

## The Parasympathetic Nervous System

The parasympathetic nervous system is the means by which the body counters changes being made by the sympathetic nervous system. These two systems cause the body to work somewhat like a pendulum. The sympathetic nerves work to prepare the body for action by slowing down systems that are not needed at a certain point in time, such as the digestive tract. The parasympathetic nerves send the body back in the other direction, towards relaxation, slowing down any systems that no longer are needed after exercise or a stressful situation. Instead of causing the entire body to relax at the same time, various structures in the body can be stimulated at different times. While eating a meal, the only portion of the body that needs to be stimulated is the digestive system. Therefore, the parasympathetic nervous system can cause that portion of the body to become active, without interfering with blood pressure or breathing. The autonomic nervous system is far more than just a “simple system.” It slows down, speeds up, alters, and aids the body with silent control mechanisms that boggle the mind.



## CONCLUSION

Through their use of science, many intelligent people have formulated an extravagant theory of evolution. But science also has uncovered wonderful intricacies—such as the nervous system—that defy evolution at every point. The elaborate conception of the nervous system can bring us to one ultimate conclusion: the existence and intervention of a Designer Who created life from nonlife, and existence from non-existence.

## REFERENCES

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**Q** Same-sex “marriage” is in the news a lot. Is homosexuality acceptable?

**A** Homosexual activists have achieved what Americans fifty years ago would have thought impossible and unthinkable. In addition to systematically securing legal sanction with the help of liberal judges who act as legislators, they are gradually convincing more and more Americans that same-sex relations should be accepted as legitimate behavior. In 1965, 82% of men and 58% of women said that homosexuality represented a “clear threat” to the American way of life. By 1993, only 66.3% of the American population believed that sexual relations between two consenting adults of the same sex were always wrong (Singer and Deschamps, 1994). A 2001 Gallup poll showed a continuation of a slow, but steady, liberalization of American public opinion toward homosexuality (Newport, 2001). A poll in the same year by the Barna Research Group found that nearly half of all adults (48%) believe that sexual relations between consenting adults of the same gender should be legal. Two years later, Gallup found that six out of ten Americans feel that homosexual relations between consenting adults should be legal. This is the highest level of acceptance of the legality of homosexuality that has been measured over the 26 years that Gallup has been asking such a question. A slightly smaller percentage (54%) says that homosexuality should be considered an acceptable lifestyle (Newport, 2003).

Observe the obvious erosion of American moral sensibility—from 82% to 46% in just 40 years. This alarming desensitization process is typical of human civilizations throughout history (cf. the Old Testament nation of Israel). Those who are ignorant of the past are indeed doomed to repeat it. The extent to which America has digressed from its original moral moorings becomes shockingly apparent when one examines the stance taken by American society for the first 150 years of national existence. For example, the U.S. Supreme Court handed down a ruling in 1885:

For certainly no legislation can be supposed more wholesome and necessary in the founding of a free, self-governing commonwealth, fit to take rank as one of the coordinate States of the Union, than that which seeks to establish it on the basis of the idea of the family, as consisting in and springing from **the union for life of one man and one woman in the holy estate of matrimony; the sure foundation of all that is stable and noble in our civilization; the best guaranty of that reverent morality which is the source of all beneficent progress in social and political improvement** (*Murphy v. Ramsey*, emp. added).

And yet the current U.S. Supreme Court eliminated all state sodomy laws in 2003, opening the floodgates to the legalization of homosexuality and same-sex marriages state by state. Justice Scalia, who penned the dissenting opinion for his fellow dissenters, Justices Rehnquist and Thomas, correctly concluded that if homosexual marriages are to be legalized, no legal/rational basis exists upon which to forbid all other sexual relationships, regardless of the perversity involved.

State laws against bigamy, same-sex marriage, adult incest, prostitution...adultery, fornication, bestiality, and obscenity are likewise sustainable only in light of *Bowers*' validation of laws based on moral choices. **Every single one of these laws is called into question by today's decision** (*Lawrence et al.*..., 2003, italics in orig., emp. added).

Scalia added: **“This effectively decrees the end of all morals legislation.... [N]one of the above-mentioned laws can survive rational-basis review”** (*Lawrence et al. vs. Texas*, italics in orig., emp. added).

How far are American's willing to go? To be consistent, they cannot logically oppose any other form of sexual promiscuity. If a woman were to want multiple husbands, on what basis could anyone object? The same may be said for those who wish to marry their child, their sister—or their pet. Once the objective moral framework provided by God in the Bible is abandoned or brushed aside, the slippery slope to complete moral breakdown is inevitable. “Blessed is the nation whose God is the Lord” (Psalm 33:12). “Righteousness exalts a nation, but sin is a reproach to any people” (Proverbs 14:34).

#### REFERENCES

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