drnikolatesla.tumblr.com

Nikola Tesla on the Mechanistic Theory of Life

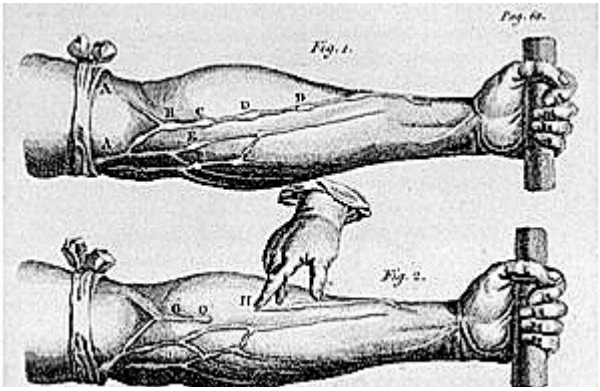
12-15 minutes

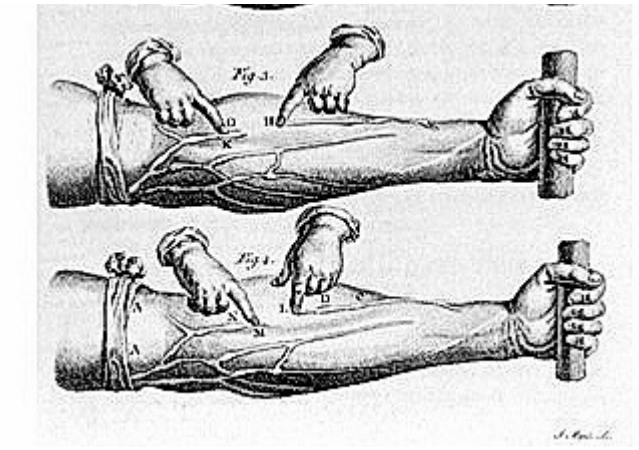
By. J. J. J.

The Mechanistic Theory of Life is a philosophical perspective assuming that the entire universe is determined by causation and the laws of physics, and therefore, can be fully explained using mechanical principles. Nikola Tesla held a firm belief that every living organism is devoid of free

will, and is compelled by an infinitude of external influences prompting them into action. According to Tesla, humans, although being more complex than most organisms, are all similar in nature. Any thought humans may conceive and every act they perform from conception to death are governed by external effects. Before we get into Tesla's philosophy, I will briefly go over who and what influenced him to subscribe to this paradigm.

In the seventeenth century, a physician by the name of William Harvey laid the groundwork to the Mechanistic Theory of Life. Harvey is best known for his contributions to the science of anatomy and physiology. He was the first to correctly explain the circulation of the blood in the human body and provided experiments to prove his arguments. Harvey recognized that the heart and arteries acted like a pump and were subject to limitations like any other mechanical pump. Harvey provided evidence that the human organism operated like a machine that functioned just like any other machine made by humans. Although his work was not focused on a philosophical theory of life, the benefaction of his discovery placed him among those who altered the entire perspective and approach to the theory of life.





Alongside Harvey, the great philosopher Rene Descartes also contributed to this mechanistic train of thought. With the contribution of Harvey's work, Descartes envisioned all life as simply automata incapable of actions other than those executed by a machine. It was his philosophy that opened up a whole new perspective and conversation about the nature of humankind–humans as machines. A new belief that all organic actions in life arose, based on the disposition of sensory organs simply reacting to the environment. Descartes' work would promote dualism, which portrays mind and body as separate from each other (a belief Tesla wouldn't subscribe to), and his ideas would dominate European thought for years to come. This would create two polarizing belief systems—free will versus determinism. With Descartes' influence, the science of anatomy and botany would be changed tremendously.

The Darwinian Revolution followed next, which had a great effect on Nikola Tesla's philosophy, but it was Herbert Spencer's work who influenced him the most. Spencer was the first to coin the term, "survival of the fittest," which coincided with Charles Darwin's theory of natural selection. Both Spencer and Darwin put forth a hypothesis for the

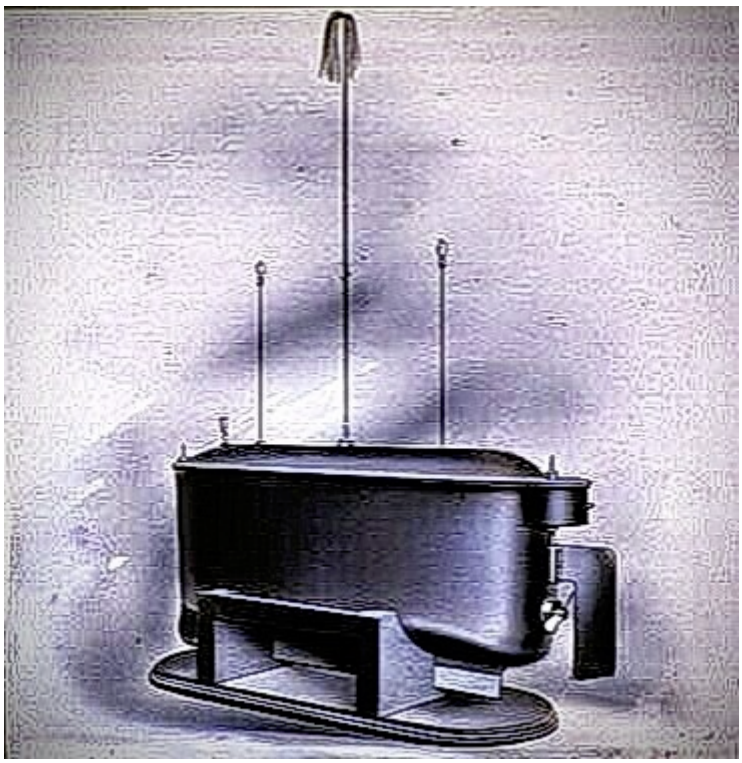
theory of evolution of organisms. In his Principles of Psychology, Herbert Spencer said, “to be conscious is to think; to think is to form conceptions—to put together impressions and ideas; and to do this, is to be the subject of internal changes. It is admitted on all hands that without change, consciousness is impossible.”

In 1893, in a lecture given before the Franklin Institute in Philadelphia, Spencer’s and Descartes’ words would echo in the auditorium as Tesla presented his idea of the human being:

“What is the foundation of all philosophical systems of ancient and modern times, in fact, of all the philosophy of men? I am I think; I think, therefore I am. But how could I think and how would I know that I exist, if I had not the eye? For knowledge involves consciousness; consciousness involves ideas, conceptions; conceptions involve pictures or images, and images the sense of vision, and therefore the organ of sight. But how about blind men, will be asked? Yes, a blind man may depict in magnificent poems, forms and scenes from real life, from a world he physically does not see. A blind man may touch the keys of an instrument with unerring precision, may model the fastest boat, may discover and invent, calculate and construct, may do still greater wonders—but all the blind men who have done such things have descended from those who had seeing eyes… but sometime or other, during the process of evolution, the eye certainly must have existed, else thought, as we understand it, would be impossible; else conceptions, like

spirit, intellect, mind, call it as you may, could not exist.”

According to Tesla, the philosophers and scientists of the past were in the dark with their hypotheses and experiments, and since their time, many functions of the branches of science have evolved significantly. He believed that the human being is simply a self-propelled biological machine, whose actions (similar to the rest of the universe) can only be governed by external influences.



In order to prove this theory further, Tesla set out to invent a mechanical device similar to the human body, with sensitive organs that react to external influences (inspired by Herbert Spencer and his work on the nerves in the human body). These organs would be receivers which react to electrical waves sent from a transmitting device; propelling the machine into motion. This device would then lead to the invention of Tesla’s remote controlled boat which would be

the basis to all wirelessly controlled devices today (e.g. T.V. remotes, drones, vehicle starters, robots, satellites, etc.).

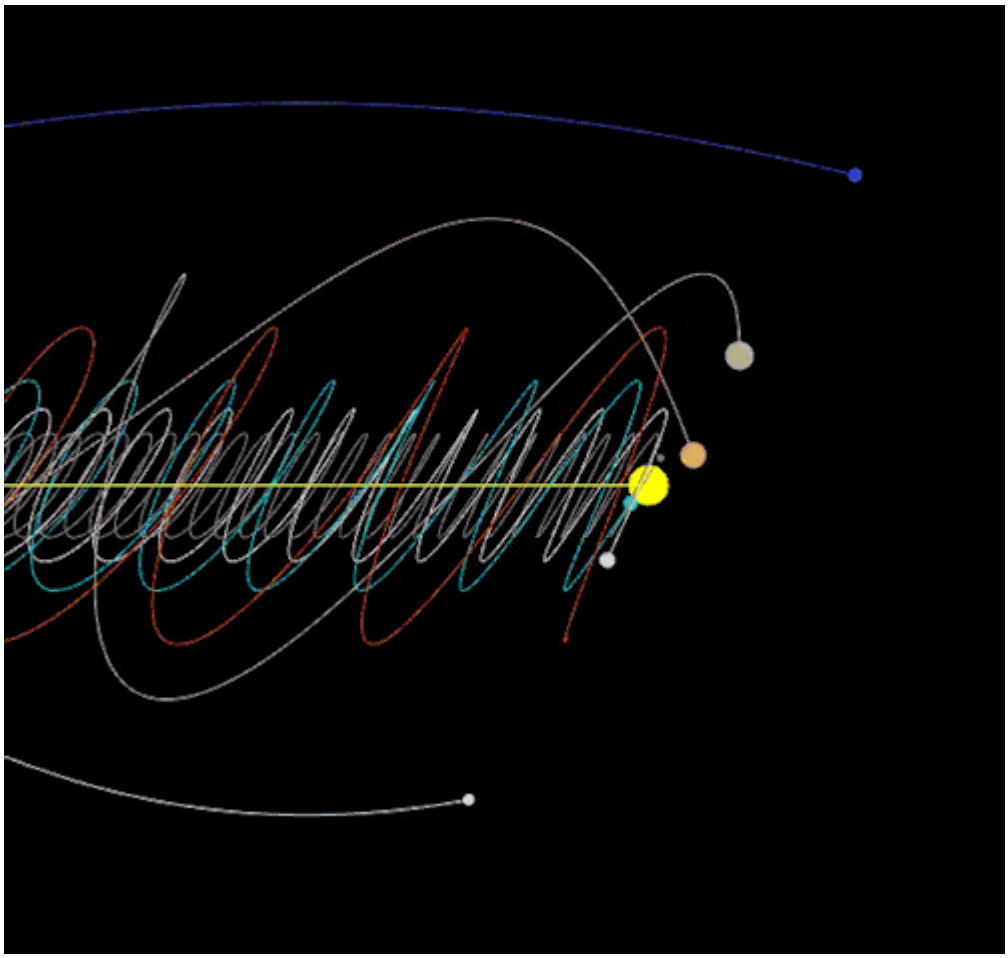
In an article titled “How Cosmic Forces Determine Our Destinies,”(1915) Tesla would go into meticulous detail describing his Mechanistic Theory of Life. In his article, and in his own words, he came to five conclusions:

1. The human being is a self-propelled machine entirely under the control of external influences. Though free-will might appear so, the actions of humans are governed not from within, but from without. He is like an empty bottle tossed in the ocean.
2. There is no memory bank. What we designate as memory is but increased responsiveness to repeated stimuli.
3. Descartes was wrong, there is no stored knowledge in the brain. Memory is something akin to an echo that needs to reflect on something to be called into being.
4. All knowledge, memory, or form conception is exposed to the eye externally, either in situations the human is conscious of, or situations they are not aware of.
5. Contrary to the most important tenet of Cartesian philosophy that the perceptions of the mind are illusionary, the eye transmits to it the true and accurate likeness of external things. This is because light propagates in straight lines and the image cast on the retina is an exact reproduction of the external form and one which, owing to the mechanism of the optic nerve, can not be distorted in the transmission to the brain. What is more, the process

must be reversible, that is to say, a form brought to consciousness can, by reflex action, reproduce the original image on the retina just as an echo can reproduce the original disturbance If this view is borne out by experiment an immense revolution in all human relations and departments of activity will be the consequence.

In summary, Tesla illustrated a strong stance on how natural forces influence humans. He portrayed how earth rotates at a velocity of 1,520 feet per second, and is carried through space at a speed around the sun–19 miles per second; the kinetic energy imparted is over 25,160,000,000 foot pounds (a “foot pound” translates to a force of energy equal to the amount required to raise 1 pound a distance of 1 foot). Therefore, the kinetic energy stored in our bodies relative to this motion should calculate to nearly 6,000,000 foot pounds. The centrifugal force would range to about .55 of a pound. Since the sun is 332,000 times larger than earth and is 23,000 times further away, the gravitational effect on humans should be about .1 of a pound. This weight constantly changes with different positions of the earth and the sun. He then explains that, “the circumference of the earth has a speed of 1,520 feet per second, which is either added to or subtracted from the translator velocity of nineteen miles through space. Owing to this the energy will vary from twelve to twelve hours by an amount approximately equal to 1,533,000,000 foot pounds, which means that energy streams in some unknown way into and out of the body of the automaton at the rate of about sixty-four horse-power.” To further his point, Tesla went on to

detail how the whole solar system is urged towards the Hercules constellation, and this too has major effects on the human translating simply as local cosmic disturbances. He would then explain the effects of the human on earth, including static electricity effects from the earth, atmospheric pressure (a force of 16 tons), the sun's heat, sounds from the surrounding environment, temperature changes due to seasonal weather conditions, sleep routines based off day and night, and many other external changes in the environment humans are unconsciously accustomed to.



Originally posted by solidandstrong

Based on other notions later in Tesla's life, he believed humans are also unaware that they are affected by a

shower of cosmic rays constantly shooting through their bodies, night and day, at the speed of light. Tesla would poetically say, “Like a float on a turbulent sea, swayed by external influences, he moves and acts. The average person is not aware of this constant dependence on his environment; but a trained observer has no difficulty in locating the primary disturbance which prompts him into action, and continued exercise soon satisfies him that virtually all of his purely mechanical motions are caused by visual impressions, directly or indirectly received.” (“Tesla’s Tidal Wave to Make War Impossible.” New York World, April 21, 1907.)

According to Tesla, humans are completely ignorant to the constant dependency on their environment. He believed that if humankind’s power of observation were more precise, they could recognize that they live in the illusion of perfect choice and freedom in their thoughts and actions. They could recognize and locate the external influences promoting them into motion, soon they would realize that all their actions are purely mechanical motions caused by visual impressions, directly or indirectly received through their sensory organs. To Tesla, the universe was simply a marvelous machine, infinite in nature (a nature which humans could never comprehend with their finite minds). He was raised as a Christian (entangled with Hinduism and Buddhism), but was also a scientist at heart. To him, discovering the workings and the complete picture of the universe was a scientist’s ultimate goal and purpose.

“There is no conflict between the ideal of religion and the ideal of science, but science is opposed to theological dogmas because science is founded on fact. To me, the universe is simply a great machine which never came into being and never will end. The human being is no exception to the natural order. Man, like the universe, is a machine. Nothing enters our minds or determines our actions which is not directly or indirectly a response to stimuli beating upon our sense organs from without. Owing to the similarity of our construction and the sameness of our environment, we respond in like manner to similar stimuli, and from the concordance of our reactions, understanding is born. In the course of ages, mechanisms of infinite complexity are developed, but what we call “soul” or “spirit,” is nothing more than the sum of the functionings of the body. When this functioning ceases, the “soul” or the “spirit” ceases likewise. —Nikola Tesla, (“A Machine to End War.” Liberty Magazine, February, 1937.)

Tesla would conclude later in his life that there is no randomness that occurs in nature. No matter how complex life seems, all the universe is linked and all can be explained using a mathematical formula. He trained himself throughout his whole life to trace the external influences which regulated his life, leading him to deny the existence of individuality, and viewed the universe as a singular entity:

“We are just waves in time and space, changing continuously, and the illusion of individuality is produced through the concatenation of the rapidly succeeding phases

of existence. What we define as likeness is merely the result of the symmetrical arrangement of molecules which compose our body…there is no soul or spirit. These are merely expressions of the functions of the body. These life functions cease with death and so do soul and spirit. What humanity needs is ideals. Idealism is the force that will free us from material fetters."—Nikola Tesla ("Tesla Seeks to Send Power to Planets." New York Times, July 11, 1931.)