Will the human race evolve further?

Business



Will Humans Significantly Evolve Further From Where They Are Now? In 1859, Charles Darwin published his book, The Origin of Species, in which he formulated a theory on how animals have changed over time to what they are today from a common ancestor. Darwin claimed that a process called Natural Selection was responsible for the accumulation of changes in various species as they progressed through time. Natural Selection is the process in which nature, or the environmental pressures of a habitat, chooses which traits, or phenotypes, are more beneficial to a population of organisms. These would be traits that help to ensure the survival of individuals until they reach reproductive maturity, and, in turn, reproduce. The phenotypes selected come are come across by random means, such as mutations, gene recombination and crossing over, genetic drift, etc.

If these phenotypes are adaptive, they will help to ensure the survival of the organism until reproduction, where the genotype, or genetic coding, for the trait is passed on. Now, these changes don't happen quickly or simply over a generation; they take many years to accumulate until either that group of organisms becomes a new species, or the rest of the population perishes or conforms. Note, however, that the phenotypes passed on must be heritable traits, not acquired traits (such as memories, skills, or personal preferences). In our modern time, species are still continuing to evolve through Darwin's natural Selection, but a new question has arisen: is it plausible that humans will continue to significantly evolve in the future? This question has become quite a controversy in the science fields, as many argue that evolution is only nature, and humans will continue to evolve, while others argue that our superior intelligence- which led to medicines, transportation, and other such

devices that ensure survival regardless of favorable or unfavorable traitshas cancelled out Natural Selection, and thus stopping our evolutionary path.

This essay will highlight the arguments for both sides of the question,
providing the reader with sufficient information to choose their own side of
the argument. Stance One: Further Human Evolution is Possible As stated,
one side of the argument states that it is plausible, and in fact very likely,
that humans will continue to evolve, and significantly enough to show major
changes in the species.

BBC news interviewed Oliver Curry, an evolutionary theorist from London School of Economics, and gathered the following from him: The human race would peak in the year 3000, he said – before a decline due to dependence on technology. People would become choosier about their sexual partners, causing humanity to divide into sub-species, he added. The descendants of the genetic upper class would be tall, slim, healthy, attractive, intelligent, and creative and a far cry from the "underclass" humans who would have evolved into dim-witted, ugly, squat goblin-like creatures (Human species 'may split in two', 2006). This idea is based off of Darwin's "survival of the fittest" simply based on physical traits. Dr. Curry suggested that physical traits would lead to more sexual selection in mating, leading to the more attractive race, whilst the other, less favorable, peoples breed to make the goblin-like sub-species.

This argument is plausible based on the fact that, for millions of years, animals have been evolving based on physical traits successfully, and the evidence is everywhere. Take whales for example, they were once land mammals, but they moved to the water and, over time, developed the https://assignbuster.com/will-the-human-race-evolve-further/

necessary adaptations to physically accommodate living in the water. The same principle is being applied to humans with Dr. Curry's theory- that our physical traits will change to fit our environment, and humans will evolve. A second argument on the "evolution is possible" side is the stance that unnatural selection rather than natural selection will cause human evolution. National Geographic stated, "A philosophy known as transhumanism sees humans taking charge of their evolution and transcending their biological limitations via technology.

Transhumanism raises a spectacular array of possibilities, from supersoldiers and new breeds of athletes to immortal beings who, having had their brains scanned atom by atom, transfer their minds to computers" (Owen, 2009). In essence, the sheer intelligence of the human species will lead to it evolving itself through technology. Even in our time, technological advances are opening a window to this possibility: the military, for example, has created a prosthetic limb system that analyzes the normal movements of the wearer and conforms to their natural body's movements- a soldier with a leg like this is able to move so fluidly that he is going back into battle. As seen above, evolution does not need to take place through natural selection. Through the advances and actions we take as humans, unnatural selection may very well be on its way to evolving the human race.

However, this does not completely rule out natural selection. Sexual selection may lead to the evolution of the human race into two sub species, both differing in physical attributes. Stance Two: Humans Will Not Evolve Further The latter side of the controversy argues that the human species has reached its peak place in the evolutionary change, and any further changes https://assignbuster.com/will-the-human-race-evolve-further/

will harm the species, thus humans will not further evolve. Thomas Hills of the University of Warwick and Ralph Hertwig of the University of Basel studies the possibility of further evolution of human intelligence, and found that the human mind is at a peak spot, and any further improvements will come with consequences. Hills and Hertwig "point to how groups of people with enhanced cognitive abilities – including 'savants, people with photographic memories, and even genetically segregated populations of individuals with above average IQ' – and these groups generally suffer from much higher rates of cognitive disorders like autism, extreme synesthesia, and other neural disorders" (Wilkins, 2011).

This detail suggests that, at the peak of evolution, humans cannot evolve further without severe trade- offs. Although the study described only a mental- evolution standpoint, the concept can be applied to the physiology of humans. For example, if we grow too large or muscular, we may not have the energy output needed to move around enough or survive long without a constant energy supply, and the human race may see a decrease in size and/ or life span. Others argue that the human race will not further evolve because they swiftly reached a new evolutionary point, and then seemed to stop. Humans have been around for about 110, 000 or 50, 000 years, but were only located in Africa 50, 000 years ago.

Suddenly, the species boomed and was found throughout the world, and forced previous species, such as Homo Neanderthalus and Homo Erectus into extinction (Palme, 2012). This shows characteristics of punctual evolution, thus, after this rapid evolution, it is likely that the species will cease to evolve. As shown, it is very plausible that the human species has reached its https://assignbuster.com/will-the-human-race-evolve-further/

resting point from an evolutionary standpoint, and will stop changing significantly from here. One argument is that the human race evolved in a punctual way, and, by design, will stop evolution after a rapid period of significant evolution. Another argument states that further evolution will lead to too many trade offs to be adaptive enough to change the species. In the end, there is no clear- cut facts of whether or not the human species will evolve further.

Based on the information presented by both sides of the controversy, the argument could be settled either way. Everybody will have a different answer based on his or her opinions and morals, and the world will just have to wait and see what happens. References Human species 'may split in two'. (2006, October 17). Retrieved from BBC website: http://news. bbc.

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