

## Evolution: The past of humans?

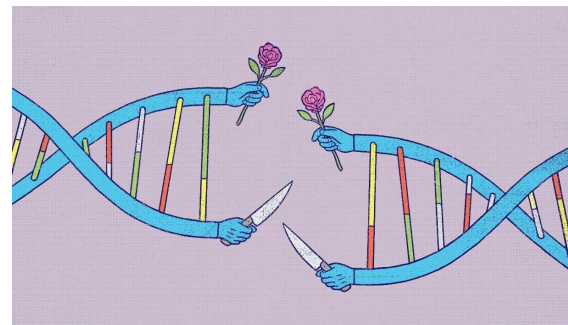
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The gene-centered view of evolution infers that no detail of animal behavior mattered unless it could be explained in terms of the selective competition of genes. For some time it was thought that humans were exempt from this and emancipated from evolution.

The gene-centered view on evolution states that evolution occurs through the survival and replication of competing genes, which clashes with the organism-centered view on evolution, where the principles of natural selection only apply organisms. The most famous arguments for the gene-centered view evolve around altruism, selfishness, and intragenomic conflict.

As Richard Dawkins puts it, “organisms are the survival machines for genes”. As much as the interest of a single gene is selfish, which is the replication, to achieve that, it has to cooperate with other genes that share this common goal of replication, which is why genes “grouped” into genomes. Even though a gene might be present only once in an individual genome, it competes with other genes in the population. Paradoxically, following this theory, competition is at the origins of altruism, since the same gene is present in a different organism, thus if a gene aims to promote its replication, it is natural for organisms containing similar genes to prone to behave

towards each other altruistically, which provides a link to the kin selection.



(<https://www.quantamagazine.org/are-genes-selfish-or-cooperative-20170914/>)

Even though the gene-centered view has its rebuttals and opposers, often labeled as “radically reductionistic”, yet a lot of empirical evidence has already provided relatively solid evidence that backs it up. Since the purpose of genes is replication and organisms are the vehicles for the genes, the purpose of organisms should be a reproduction, while the types of reproduction that are favored are all sets of evolutionary strategies for the survival of genes. These principles are well-explained through several specific examples in the animal kingdom in *The Red Queen* by Matt Ridley, which also shows that parasites are the reasons for organisms reproducing sexually.

The Red Queen Hypothesis explains that a species must adapt and evolve not just for reproductive advantage, but also survival

because competing organisms also are evolving. The name is based on a fictional character from Lewis Carroll's *Through the Looking Glass*. In the book, the Red Queen explains to Alice that her world works differently: "Now, here, you see, it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!"

Furthermore, as shown by peacock males that have colorful feathers to attract females, or male birds of paradise that prepare special dances for the same purpose, in the animal kingdom, courtship is an important factor for the reproduction of species and thus the replication of genes.



However, as it happens to be in human nature to put humanity in the *Homo Deus* position, it has been argued that humans are no longer slaves to genes, thus we "emancipated" from evolution. Ever since Charles Darwin published *On the Origins of Species*, society, especially religious Europe, was having trouble admitting that natural selection applies to

humans, as to any other animals. Since humans display greater genetic unity than most other species, it has led many to assume that human evolution ended with the origin of modern humans. At the core of this argument is a set of all the social constructs we have created and labeled as a culture – morals, art, social behavior,...

It is true that due to the creation of culture we have suppressed several selection pressures that would drive our evolution. We invented medicines that protect us from deadly diseases, invented technology that makes our lives easier. Does that mean there are no selection pressures though? Firstly, it is necessary to acknowledge that not all parts of the world are leading economies, which means that selection pressures, such as diseases, are still highly influential in some of these locations. Furthermore, as biological entities that harm us, such as viruses, are still subject to evolution, as often discussed in the case of SARS-CoV-2. Referring to Red Queen Hypothesis, this means that we need to undergo some form of evolution too to protect ourselves.

Even if selection pressures, such as diseases, did not fully apply to us, it would still be possible to argue that we are subjects to evolution. Since our society "transcended" from a natural state into an artificial one, why would not evolution do the same?

In the past, evolution favored strong individuals that could survive and reproduce in tough conditions. These days we do not require these predispositions to thrive in society, and yet, some people seem to be doing better than others. These very well might be because of the highly evolved brain – the organ which seemingly draws a

line of difference between a bunch of chimps and society. These days, the world functions based on advancing what our minds are capable of, whether through art, or technology, which is arguably our most significant “transcended“ selection pressure.



Children are raised with technology being their best friend. Everything seems to start and end with technology. The basis of our modern survival in the developed world lies in technology and those that became masters of it thrive. Our brains are subjected to changes, which determine our chances of success in society, which also links to one’s reproductive potential, since these days, arguably, as Irene Adler from the Sherlock Holmes series said: ”Brainy is the new sexy.” Simply put, as smarter individuals are more likely to do well in modern society, it became a new weapon not only in natural selection, but also sexual selection, which drives the replication of our genes.

That implies that we have not been emancipated from evolution, we have just transcended higher as species, yet took the evolution with us. In the end, we still are vehicles for our genes.

*For references, click [here](#).*