

When natural selection breaks

What happens when the mechanism of natural selection is interfered with? One example that most people should be familiar with is the phenomena of hip dysplasia in dogs. Hip dysplasia is a painful and debilitating breakdown of the canine hip joint. Susceptibility is inherited and is most prevalent in large breeds that have been bred for low hips with hindquarters angled well back. The low hips and angled legs give the dog an alert appearance and a striking posture. These features are coveted by man the breeder. But they place unnatural stresses on the hip joints and are not favored by natural selection.

Hip dysplasia is one example of what happens when something “breaks” natural selection. However, the more interesting examples are found in mankind. We will find that mankind has two important characteristics which other animals generally don't have and that both these characteristics “break” natural selection.

One characteristic of mankind that “breaks” natural selection is his technology. Medical technology provides the most obvious examples.

Corrective lenses allow men and women with poor vision to function without penalizing their reproductive success. Imagine for a moment a zebra on the African plains. The zebra has astigmatism because of a genetic defect. As a result, that zebra is significantly less able to identify predators as such. That zebra is therefore much more likely to be identified as “dinner” by a predator. Unlike the man or woman with impaired visual acuity, that zebra cannot avail itself of one hour service at Lenscrafter's. On average, such zebras are therefore much less likely to contribute to the continuation of the zebra gene pool. Recall that such an advantage or disadvantage operating on successive generations will alter the gene pool to favor the genes responsible for the more successful variation. In this case the successful variation is a zebra with the highest possible visual acuity. In contrast, visual acuity is no longer a source of significant selection pressure for most men and women.

There are many other examples of man's technology creating exceptions to the rules of strictly natural selection. Antibiotics allow men and women with less than optimal disease resistance to continue to contribute to the gene pool. In vitro fertilization allows men and women with less than optimal reproductive abilities to continue to contribute to the gene pool. With continued reliance on medical intervention one may easily predict more and more inherited weaknesses in the human gene pool.

Another characteristic of mankind which “breaks” natural selection is his culture. The more obvious examples of cultural mechanisms interfering with strict natural selection are found among mankind’s various religions.

Let us for a moment consider a wild animal, perhaps a bear somewhere near Yellowstone National Park in Wyoming. This particular bear is a male and his reproductive drives are erroneously modulated toward other male bears. It is obvious that he is a “biological error” and genes like his are not passed to future generations. In contrast a human male with similarly modulated reproductive drives has until the most recent generations been likely to reproduce despite his faulty genetic programming. That is because religion has historically coerced human males into reproductive acts regardless of their genetically programmed drives.

Our culture in general and religion in particular have eliminated the need for a genetically-based imperative to reproduce. Human culture has established roles for men and woman and rigorously enforces those roles through taboos and other mechanisms. Religion amplifies procreation even further through mechanisms such as the imperative to “be fruitful and multiply.” Thus human reproduction continues without filtering out genes for aberrant sex drives.

Child protective services and much of the system of foster parents may be considered in a similar light. When a human mother does not have the inclination or ability to raise her child due to alcohol dependency, then her child and genes are not reliably filtered from the human gene pool. In contrast it is rare indeed to hear of a wild animal killing her offspring for insurance money or because her offspring are perceived by her as an impediment to a new romantic interest. In fact, wild animals quite often take extraordinary risks to protect their progeny. A moose may seem to be an incredibly dumb animal. A moose will stand for hours peering at an inviting houseplant through a glass window. The moose brain is too feeble to realize a hoof strike could easily break the window. The very simple programming of the moose brain is to move forward and browse on green stuff. When thwarted by the unnatural barrier the moose remains fixated rather than immediately targeting alternate and accessible green stuff. Yet that same moose brain contains millennia of experience regarding the risks which she should take to protect her calf. The remarkable stimulus sorter contained within her brain can instantly identify the threat to her and her calf. That stimulus sorter will also balance the risk that she will die and make no further contribution to the pool of moose genes against the risk of losing the investment of time and resources which have gone into this particular calf.

Most human mothers have similar programming built into their brains. For example, in 2007 a woman in Fremont, California successfully protected her infant from an attack by a vicious Pit Bull Terrier. The recounting of the attack

is a heart-rending story. She was able to use a garbage can to hide her infant and then sustained serious bites to her arms as she stood her ground between the attacking dog and the garbage can. The woman had bites all the way to the bone and required over fifty stitches to close her wounds. The difference between humans and other mammals is that there are an increasing number of human mothers who for various reasons do not protect their children. The woman involved in the Pit Bull attack placed her infant in a garbage can for temporary protection. But news stories pop up periodically involving women who have placed their infants in garbage cans as an act of abandonment.

In contrast other mammals protect their young much more consistently.

It should in fact be obvious that any wild animal with other than ideally modulated reproductive drives will automatically filter their genes out of the gene pool for their species. In contrast, men and women may have all sorts of drives and urges yet pass their genes on at essentially the same rate as everyone else. Women may also lack genetically based maternal drives yet have their genes continue in the human gene pool.

It is clear that man's technology and religious culture are degrading his gene pool.

This is one of the key issues that mankind will have to confront if it is collectively decided to rise above our religions and avoid our own self-destruction.