Stephanie Harrison

PHYS 301

“Survival of the Fittest”

Charles Darwin developed his theory of evolution and the origin of species in the mid 1800’s; this would become the ground work for sciences like ecology and botany. Darwin coined the term Natural Selection and used this idea to support his theories. However, he did not coin the term “Survival of the Fittest”; we owe that to Herbert Spencer (a social Darwinist). Social Darwinism and survival of the fittest were manifestations of societal figures in the times after Darwin’s publication of The Origin of Species, and regard the interactions and struggle of only one species: *Homo sapiens*.

Natural Selection is the process in which a particular trait will facilitate the survival and reproduction of a specific individual. Over the course of many generations that trait or feature will be selected for and allow for the survival of the species. For example, a mutation develops in an individual Galapagos Finch that increases the length of its beak, and makes this individual able to have a different food resource. If this food resource is plentiful it is likely that this finch will survive to reproduce and pass this feature to its offspring. Eventually over time this species may have two substantial groups with different beak types, and maybe they no longer mate outside of their beak type, resulting in a new species.

Social Darwinist, as they came to be known, saw a connection between the survival and reproduction of finches and the survival of different societies. If a society of peoples has the characteristics that will allow them to make use of their available resources then that society will survive and reproduce. It is understandable that Herbert Spencer and Social Darwinists would find relation in the struggle of life between human populations and plant and animal species However, a society can choose and act to better itself, it can change its form to fit the needs it faces, in the natural world a plant or an animal cannot want to have a feature and then have it, it is by chance that that occurs. Humans have the ability to understand and adapt to changes in superficial ways (i.e. if it is cold we start a fire or put on a coat, but an animal of the natural world cannot change its condition as easily. If it cannot find somewhere warm or create a den, it will truly struggle for survival).

“Survival of the fittest” was created by Herbert Spencer after he read Charles Darwin’s The Origin of Species and Darwin himself used it in a later edition of the book. The meaning of this phrase has changed since Spencer and he even stated that by fittest he did not mean the best, which was and is the connotation society made. Nevertheless, Social Darwinist and other political groups took the meaning of the phrase to mean the best in what characteristic that suited a particular society, group, or organization.

Beyond the usage of “Survival of the Fittest” Social Darwinism brought forth dangerous ideas into the minds of many people, from dictators to conflicts between social/cultural groups. The idea that not only are humans the supreme species but that there are certain people that are unjustly better than others is very disconnected from Darwin’s study of nature. As an example, Adolph Hitler believed that in order for Germany to be prosperous all other cultures, races, and beliefs besides German would need to be removed from the picture and this lead to the genocide of many groups. There are also conflicts today within society, politics, and economics; a lot of people have the belief that their idea, culture, or ethnicity is the best one. It is no longer a form of experimental or observational science when there are people who wrongly justify their means as the best.

Junk Science is when an individual or group represents false information as truthful to gain advantages. Social Darwinism is Junk Science because there is no such thing, scientifically or in any sense, as a supreme race or culture and every person, idea, culture, etc. has its’ flaws. Science accepts that things are not ideally perfect but rather simple (i.e. Keep It Short and Simple or Ockham’s razor). Communism, Fascism, and Capitalism are all different types of system that strive to be the best way or belief but each has their flaws, some more than others, and in the end something as disorganized as a group of free-willed people can’t be perfect or the best, at some point there is a downfall in the system. It is up to the individual to survive with what resources they have and to work for the benefit of the whole. In a way Junk Science is used to further the survival/fitness of the individual or a certain group rather than the whole of the population.

To conclude, it is unfortunate that Darwin’s great achievement of Evolutionary theory and Natural Selection were taken out of scientific context and into the world of human politics and economy. It is important to understand that the science is only a foundation when it is sound: has been supported by evidence, experiment, observation, and peer-review. Social Darwinism is unsound because it doesn’t pass any of the previously mentioned criteria. Social Darwinism may have been the Junk Science foundation that led to the development of intolerant social, political, and cultural groups. The struggle of mankind to survive and reproduce is universally known among all people, but when something is placed on a pedestal as the greatest it can lead to corruption and dangerous actions against others (i.e. genocide and eugenics, or gangs and politics).

In the big picture, it is not only the struggle of mankind but also the natural world. We have also placed our entire species on the pedestal of the best and do not realize that there is a world beyond mankind- out of sight out of mind. Thus, by making our lives easier to survive and reproduce we harm all species, plant and animal, survival prospects in the process. This includes our own as well because in the long run there will be an overshoot of the Earth’s carrying capacity. This is the biggest danger of all.