## Disputes In Human Sciences And The Natural Sciences: Social Darwinism Versus Darwin's Theory Of Natural Selection

Through the Areas of Knowledge (AOKs) of the human sciences and the natural sciences the accuracy of this claim will be explored. Although the claim of the title holds elements of viability, in certain contexts it can be inaccurate and, thus, disproved. Knowledge is mankind's cognitive possession of justified beliefs. When considering the "quality of knowledge", Ways of Knowing (WOKs) can be used to assess how valid the knowledge we retain is as well is its value. The claim suggests that the most reliable way to measure the quality of knowledge is through the observation of what is most accepted by people. However, as a society we are prone to blindly accepting what we deem to be "quality" knowledge due to its popularity. This innate human tendency distorts the line between what otherwise would be classified as factual knowledge and pseudo-knowledge; the latter has the contradiction of opinion which results from humanity's acclimation to using deductive reasoning. Yet, what is "fact"? While there remains an element of uncertainty in what is defined as "fact", for the purpose of this essay fact is defined as conclusions reached through logical reason. Through the WOKs of sense perception, emotion, reason and faith I will answer the question: "Is the "fact" behind knowledge best measured by its popularity?"

The concept of heat was widely accepted by society throughout time within the natural sciences. Through the WOK of sense perception, we are able to recognize changes in temperature; hot and cold, and its effect on our bodies. Even prehistoric cavemen relied on fires to stay warm and prepare meals. The acceptance of the concept of temperature and its existence reflected the quality of the knowledge. It was only through societal acceptance that the pursuit of thermodynamic laws commenced. Although the science behind "temperature" was not previously quantified or named, sense perception allowed societies to recognize its presence. Later on, through reason, the understanding behind heat's existence was deduced. It was a result of sense perception and reason that they created the "zeroth law of thermodynamics". Although historical societies were not familiar with the science behind their observations, it was ultimately their acceptance of knowledge through sense perception and reason that allowed theories to exist, thus validating the claim.

Do the natural sciences always agree with the claim? I believe knowledge within the natural sciences is often subject to human interpretation, thus undermining the validity of the claim. Through biology, we observe the role of interpretation in hindering "quality knowledge". Darwin's theory of natural selection was victim to interpretation in the late 1800s when the "Social Darwinist" movement emerged. Darwin's theory claims that organisms develop by natural selection through different inherited variations as a result of genetic competence. Confronted with this knowledge, philosopher, Herbert Spencer, drew parallels between his beliefs and Darwin's theory. Through the WOK of emotion and deductive reasoning, he illicitly applied his own interpretation of this theory in the form of "Social Darwinism", creating the concept of "survival of the fittest". The "shared knowledge" was ultimately victim to Spencer's "personal knowledge". He used the theory to enforce imperialism and racial policies. Society previously accepted Spencer's Social Darwinist theory as opposed to Darwin's original theory.

Although scientific fact existed in Darwin's intended theory, society's adaptation of it proved to be an attempt to justify preconceived notions. Moreover, the quality of Darwin's knowledge remained consistent over the following centuries, as published in his book: "On the Origin of Species" (1859). However, society's more contemporary outlook agrees with what Darwin intended in his published book in contrast to Spencer's Social Darwinism. This shift in public opinion illustrates that while the knowledge itself remained the same, people's interpretation and acceptance of it changed over time. Interpretation, due to emotion and bias, reflects that the quality of knowledge is not necessarily measured by its popularity as seen by the shift of the majority's opinion.

Although Spencer's Social Darwinist theory had hindered Darwin's theory of natural selection, I was taken aback when I noticed that the term he coined, "survival of the fittest", was present in my IB biology textbook. This suggests that society's acceptance of Spencer's theory, as a result of interpretation and the WOK of emotion, was partially accurate and evidently contributed to the field of biology, especially considering Darwin rarely commented on the social implications of his findings. In genetics, we understand that dominant genes are prevalent in our physical and genetic features while recessive genes are obscured. There are also lethal alleles that exist which cause the death of the organism that carries them, most of these appear when two recessive genes are inherited showing that Spencer's theory is in fact supported by evidence. The notion allows us to understand that, by adhering to the WOK of reason regarding Darwin's theory, Spencer had strengthened the quality of knowledge within biology. Although Spencer's use of the WOK of emotion manipulated the knowledge for personal objectives, the reasoning he used when doing so ultimately developed our knowledge on reproduction. It is, thus, suggested that the popularity of Spencer's theory was reflected by society's own reasoning regarding the nature of our world. This helps further illustrate that although Spencer used the knowledge, he interpreted to develop his oppression against different races, society's acceptance of his reasoning deepened the quality of the knowledge we retain regarding genetics.

I continually attach value to things which, from an objective standpoint, have no substantive value. Nowhere is this fallacy more dominant than in the man-made economic institutions which govern society. Through economics and the human sciences, I am able to understand the power of the WOK of faith to inform the quality of knowledge. I found this point especially profound when considering the nature of money, a legal tender which I make use of on a daily basis. While money possesses no real value, it is faith in this entity as a mitigator of trade that has given it perceived value. With this under consideration, the "shared knowledge" of the value of money rises from people's acceptance of it as opposed to any intrinsic value. Furthermore, the financial institutions to which money plays a dominant role, such as the stock market and its volatile nature, have also made this point apparent. When considering fluctuations in the price of a stock, it's important to note the role of speculation. People's faith in a stock leads to increased demand for it and as a result increased value and vice versa. Furthermore, it is emotion that ultimately allows societies to determine the fluctuating value of stocks as quality knowledge. Therefore, the quality of knowledge regarding value is obtained through the AOK of faith and the number of people that accept it.

The theory of the "social desirability bias" disproves the claim when observed through the human sciences under the scope of psychology. The theory is explained through the manipulation of truth in order to be perceived as appealing. In my life, emotion allows me, through self-deceit, to alter my characteristics in order to be perceived desirably by individuals

of society and adhere to their opinions. An example of this is my everyday use of social media, specifically platforms such as Instagram. On Instagram, the photos I share are ones that will portray an exciting lifestyle, in lieu of the full truth. Emotion as a WOK illustrates that my personal opinions can be influenced by my social need to appeal to society, ultimately reducing the objective value of my "personal knowledge", whilst hindering the truth regarding society's "shared knowledge". Although individuals have distinct personalities and lives, the collective "reality" is one that does not comply with their own truths but rather with how they want to be perceived. When individuals are able to place themselves away from society, they are able to form more profound and thoughtful opinions, making the knowledge they retain of higher quality as it is based on their own truth. As a result, psychology proves that quality knowledge can't be measured by the popularity of its acceptance as individuals tend to distort the truth when exposed to society; a result of emotion. Thus, the collective opinion does not accurately translate the individual truth, further diminishing the quality of "shared knowledge" and altering the truth behind "personal knowledge".

In conclusion, through the areas of knowledge of the human sciences and the natural sciences, it can be established that there is no correlation between the amount of people that accept knowledge and its quality. The quality of knowledge can only be measured through the WOK of reason and rigorous testing to confirm claims. However, it is vital to recognize that although acceptance of "knowledge" does not affect the broad-view of its quality, it may slightly hinder or contribute to said "knowledge" formation. This is because understanding knowledge is different to accepting it. Additionally, through the WOKs of emotion and sense perception, opinion is a consequential part of the formation of "knowledge", thus undermining the general validity due to the various contrasting perspectives. In the natural sciences, this can be seen through social Darwinism and the creation of the term "survival of the fittest" as a result of Spencer's misinterpretation of Darwin's scientific theory. In human sciences, the correlation between the quality of knowledge and the amount of people who accept it is defined through the social desirability bias, as knowledge and the presence of "truth" is hindered and questioned by the merging of collective viewpoints. Thus, the quality of knowledge is not measured by the amount of people that accept it, but instead the amount of "truth" that embodies said "knowledge".

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