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Leadership as it Relates to Science and Society

As a society, we have become more and more accepting of the lack of leadership displayed by those around us. Leadership has developed into a role of learning how to play a part and follow those rules while teaching those around us to follow the same rules. The importance of quality leadership more so now than ever is that a good leader allows for continuous improvement of this great nation. We have hit a stalemate in the process of innovation and collaboration, using the same techniques and practices in many fields that have in a way created this grimey totem pole of hierarchy. Combine this with the fact that many people are now afraid of the possible confrontation that can result from challenging the ideas of higher-ups and it allows the lack of quality leadership to continue. Leading a group of people is a general topic that can be broken into, the qualities of a leader/ how it can affect a person, which can lead into a time where I displayed leadership, and how it ties back to the responsibilities encompassed within the application of a process known as The Scientific Attitude.

What makes a good leader? A good leader is someone defined by the success he has had in his career or the accomplishments he has made. A great leader is someone who challenges and creates a new standard that allows for progression as well as being someone who motivates and inspires. For example, an outstanding man who challenged society at the cost of his own life was Dr. Martin Luther King Jr. as he was able to stand up in the face of injustice and rally huge groups of people to support his fight for civil rights and in turn is remembered as one of the most prolific leaders of the civil rights movement. Dr. King created a path for others such as Barack

Obama, and Obama even stated that he would be remembered as a permanent inspiration for to fight for what we believe in and to seek justice regardless of age, race, or gender. (Hanson) Had it not been for Dr. King, President Obama would have perhaps not even be allowed to run for president. As stated by William Deresiewicz in his lecture, Solitude and Leadership, that especially in military and business leadership has become . He speaks upon how generals, commanders, officers, etc...reach their position by learning a role and sticking to the responsibilities of that role. In a sense, kissing ass to those above you, and kicking the face in of those who have helped [beneath] you. However, he also includes the example of great leadership in which General David Petraeus trained soldiers in a certain manner that did not appease his higher-ups and was punished but ended up being so effective in his war strategies that he would go on to be appointed as the head of the US/NATO forces as well as the director of the CIA.

To begin, leadership in my life was something that I did not choose, however I was born into this role and have never backed down. I was forced into being a leader by a simple idea argued in psychology today called The Birth-Order Theory. Essentially, the birth order theory states that as the oldest child (which can be paired with patriarchal ideas of the oldest MAN), I am supposed to be the oldest, most responsible and comformative role. Whether by science or by sheer chance, I ended up being that exact stereotype, setting an example for my younger siblings, taking care of my mother and her emotional well-being as a child while also never having a father to show me how to be a man. I often questioned my masculinity because of this in the sense of, whether I was man enough to fill the figure that my sisters needed in my life. It forced me to grow up and challenge the ideas of those around me... I believe that this leadership experience, taking care of my sisters, and showing them how to be young women when I did not even know how to be a young man entirely solidified my idea of work ethic and leadership skills

not in a sense of standing up to those for my ideas. However, this example of leadership showcased my ability to adapt to the situation thrown at me and overcome adversity in the face of the world falling upon my shoulders.

Furthermore, leadership is not only applied in a practical/personal sense, but also expected to be practiced through science. The character qualities that one must adhere to when conducting science in any form should be to hold true to your personal telos while also understanding the ideas of the Scientific Attitude. The Scientific Attitude in summary describes the idea that “We must care about empirical evidence... [and we must be] willing to change our theories in light of new evidence.” (McIntyre) An example of this can be found in the experiments of Dr. Ignaz Semmelweis who sought to understand the cause of deaths within the largest maternity ward in Vienna. Dr. Semmelweis through repeated applications of The Scientific Attitude concluded that the cause of death following these medical students was the spread of germs/bacteria from the autopsies they would perform before births. This did not sit well with higher-ups as well as with the medical students who took his results as him saying that they were unclean which was something that men were not considered to be at the time. Even though the deaths decreased drastically post-implementation of antiseptic cleansing of their hands, his colleagues did not want to accept his hypothesis. Semmelweis solidified himself as a leader by challenging those who doubted him holding true to his ideas while also looking for flaws in his theory which shows his great care for empirical evidence. His leadership also exemplifies his significant care for innovation and breakthroughs in his field of medicine similar to Petrus’ innovation in war strategy.

To summarize, there are many great examples of leadership, however, they are severely overshadowed by the extreme saturation of mediocre leaders whose main goal is to climb the

totem pole of hierarchy. Through the qualities of a leader, personal experiences of leadership, and applications of leadership in science we can continue to make huge leaps toward demanding a higher standard for our leaders. Similar to Semmelweis, King, and even myself, there are strong spurts in the history of leadership that are unequivocally sufficient for the advancement of our people, and to avoid a stalemate of innovation that many people may fear we are reaching we must continue to fight for the right to lead.

Works Cited

Hanson, Meg. "5 Powerful People Inspired by Martin Luther King." Liberty Project, 11 June 2019, www.libertyproject.com/people-martin-luther-king-inspired-2626640542.html.

McIntyre, Lee. *The Scientific Attitude: Defending Science From Denial, Fraud, and Pseudoscience* (The MIT Press). The MIT Press, 2020.

Deresiewicz, William. "Solitude and Leadership." *The American Scholar*, 28 May 2019, theamericanscholar.org/solitude-and-leadership.