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GEQ1000H Final Reflection

Tutorial Group WD3

After taking GEQ1000H in academic year 18/19 semester 2, I wish to reflect upon one of the most valuable insights I gained from this module. Initially, as a Computing student, I viewed this module as a waste of time, since I am always the one solving problems instead of asking them. However, as the lessons commenced, I found out that some knowledge gained from this module is highly valuable and could not be learned elsewhere, especially the concept of confirmation bias and pseudoscience.

In the philosophy thread, which is the first session of GEQ1000H, I was exposed to a card-flipping game, which in turn introduced an important concept in asking questions, the confirmation bias. As I constantly deal with formulas and learned to spot patterns in my curriculum, I can easily find a way to flip the correct card in the game, but still do not fully comprehend the underlying connection between it and confirmation bias. However, I came across a forum post which mentioned the flat earth theory, and gained epiphany after connecting it with the confirmation bias.

The flat earth theory has existed long before I took this module. Members of the Flat Earth Theory Society claim the earth to be flat as it looks like and feels like it is, but do not understand how it originated or why it is incorrect. By linking it with with confirmation bias, which is the tendency to seek evidences that prove one’s theory instead of disproving it, I find it relatable to the evidences provided to prove the Flat Earth Theory. Flat-Earthers yield evidence such as distance between two cities measured in the concept of a line, and when countered with the fact that “no one ever sailed of the edge of the flat Earth”, they quickly claimed that the Earth is shaped like a doughnut, which also capable in explaining the formation of day and night perfectly. Instead of finding evidence to prove themselves wrong, they yield themselves with “facts” that are in favour of explaining their theory. This flaw in supporting their theory answered my question and would continue to be a mystery if I had not taken GEQ.

In response to the counterargument of the flat earth theory, evidences yielded to prove the earth is flat by disproving it all shows that the earth could only be in the form of a sphere. As one of the evidence of the flat earth theory is that the horizons seem flat, people try to disprove that by showing pictures of the curvature of the earth. Eventually, those photos all show that the curvature of the earth to be round, which refutes the flat earth theory.

In addition to confirmation bias, another concept I learned in Q that is closely related to the flat earth theory is pseudoscience. Although I understood the invalidity of the Flat Earth Theory, I do not know why there are still people who supports it. From the lecture notes, pseudoscience is defined as the searching for “evidence” on the assumption that the desired conclusion is true regardless of any counterarguments and contrasting evidence. In the case of the flat earth theory, despite the evidences that disprove it, flat earth conspiracy theorist equip themselves with ridiculous reasons, such as the “Zetetic Method”, which believes that one’s senses have exact dominance over everything else, and the Earth can be flat just because one believes it is. Other claims such as edited space photos from NASA, jaunty sun rays that fell on Earth when they are in fact parallel, all exemplify pseudoscience at play. After taking GEQ1000H, I finally realize that it is pseudoscience that draws people in to support this theory, despite the large amount of evidences that refute it.

While confirmation bias and pseudoscience led to the invalidity of the flat earth theory, I learned that they are not necessarily negative and in fact, beneficial to some degree. With confirmation bias, we are able to research extensively and find specific information to unanimously prove that the earth is round. By applying this in real life, I learned to prove and make verifications in the right direction and is able to defend my viewpoints in most discussions. In conclusion, I am fortunate I am able to shift my mindset on this module by the end of the semester, but I am more grateful for what I have learnt in GEQ1000H, and is certain the knowledge gained will benefit me in the long run.