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## Homework 7 Part 1

Q1 – Google form was submitted.

Q2 – I think consciousness is based on having independent thought, which gives the ability to make one's own decisions. The things I considered conscious in the google form were those that are biologically considered to be living. I do not believe any machine or computer can be conscious, because all decisions are made by the mathematical result of an algorithm. If faced with an input that it is not programmed to encounter, such a machine cannot even make a decision. If it is programmed to "learn" and change its decision-making based on its experiences, it is brought slightly closer to consciousness. However, even this is the result of an algorithm of some sort, so it is not actually making its own decisions. It is generating an ouput based on many inputs. Whether this is one input, or an optimized result of many inputs, does not make a difference here. Living beings – conscious beings – have the ability to make (or not make) their own decisions, and they do not have a set range of outputs or inputs.

## **Q3**

There is no way of knowing that we see the same colors. The speaker in the video "What is it like to be a bat? Summary and Analysis", thinks it is possible that humans experience taste differently. He explained that each person's experience with a certain food might be unique, which is what causes us to have preferences for certain foods. I believe our experience with color may be similar to this. The experience of seeing the color red might be one that is unique to each individual. However, we have no way of quantifying or measuring the experience of seeing the color red and communicating that to one another as to compare our experiences.

An interesting personal experience about the difficulty of quantifying or measuring qualia has to do with pain. Every so often, I will have an annoying pain in either one of my legs. I have been experiencing this specific pain my whole life. It is a kind of pain that is diffused throughout the whole leg, and makes movement mildly painful. As a child, I would tell my mother that my leg hurts, and she would tell me it was "growing pains". However, I still have these pains today, as a fully grown adult. I can never measure or quantify the experience of this specific pain in a way that can make someone else experience it or understand it exactly as I do. I can never make someone else feel the same pain in their leg, so that they can characterize the pain for me.

## **Q4**

The Chinese Room experiment falls in line with my own intuitive definition of consciousness, as described in Q2. Consciousness includes one's ability to form independent thoughts and make one's own decisions. A computer is much like the man in the experiment, who is simply taking an input and producing an output. A machined does not actually know anything; it only contains data and is programmed to complete a task. Similarly, the man does

not know any Chinese. He has a book of inputs and corresponding outputs, and is told to copy the exact output that matches up with the given input. He does not have the ability for independent thought in this case, because he is not able to change the output in any way. He cannot make his own decision about what to reply, because he does not know anything. A machine is similarly not able to decide what its output is. That is determined for it by the people who program it. The input and output which may be conscious experiences for us, are data and mathematical values for machines. Such information is exact, whereas it is malleable and open for interpretation in conscious beings.

The Mary's Room experiment further illustrates this by exploring the concept of qualia. As much as a machine, or perhaps a born blind person, can know about the science of color perception or the processes associated with it in the brain, they can never experience it for themselves. Even if a machine can take the color green as an input based on its wavelength, the machine is never truly experiencing the color green. We can attempt to describe the color blue to a born blind person and we will always attempt to compare it to other visible things. We can try to say that it is cold, but that would assume that the person has seen something cold, like water or ice, in order to associate coldness with blueness. There is no way in our current language to describe, quantify, or measure such qualia.

## **Q5**

Some believe that consciousness is a spectrum, such that a gorilla is more conscious than a spider, which is more conscious than an amoeba. Do you think humans are the most conscious beings? How would we know?