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**Meta-Essay 3**

Gödel thought that mathematics was a system, that it was incomplete but consistent. The only reason that made it incomplete was because we had no real way of proving math, because we cannot prove mathematics with mathematics. We would need a greater, more robust system to try to explain the mathematical system. Which we cannot do. Math would need to be a meta-system. So in short, for us to understand mathematics we must take a leap of faith.

Fire in the equations also mentions this, by saying that mathematics can be seen as a religion, in which we believe in a lot of but cannot really prove (that leap of faith). Religion also has this leap of faith in which we only accept certain facts and don’t know where they come from. The same also happens in science. Chapter 3 of A Philosopher looks at science also expands on this.

An interesting question that arises from this in in Fire in the equations in the matter of talking of mathematical consistency. Ferguson talks about how the world could’ve been made by mathematical consistency and if at the time of the Earth´s creation, if God could be constrained by this mathematical consistency. Ultimately she reaches the question that if this mathematical consistency could be God. Consistency is what makes mathematics beautiful and more believable.

Another thing that I think was considered to be beautiful, in the same sense as mathematics, was Ptolemy´s solar system. It was complete but inconsistent. This was one of the reasons why people had a hard time accepting the Copernican solar system; they had already seen the beauty in Ptolemy´s proposal.

I think that this beauty deal has a lot to say about what appeals our senses. We have managed to interpret the universe throughout our senses, we can see this clearly in The Ascent of Man and in The Copernican Revolution. But there is a problem in this, and this is maybe why we can’t see beauty in everything. It is that our senses can also limit us. Take for example Ptolemy´s solar system, in The Copernican Revolution, Kuhn mentions that people used to think that everything outside of the earth, the universe, rotated around it. Our senses told us that this was true, we would see the stars in the same place every night, at the same hour and also when we jump we land in the same place. In all of this, our senses tell us that the earth is still. This proved to be wrong, that our senses were wrong and that there are other things that our senses can`t make out.

Out of what our senses tell us, we come up with theories, and these theories can be like spectacles, we start to look at everything through that theory (like Ptolemy again). So depending on what kind of spectacles we have on, we have a different perspective.

We should be open to try new spectacles, to modify the ones we have on, to not put on any spectacles, or to try to put on all of the spectacles at the same time. I found especially interesting the anecdote in Fire in the Equations that mentions a room drawn from various perspectives: a kid, an adult and a cubist painter. The cubist painter is like having all of the spectacles on at the same time, in one drawing he can have different perspectives of different objects. I wonder what it would be like If we apply the view of a cubist painter in the field of theories. Maybe then can one reach a theory of everything.

All of this perspective talk, reminds me of On Dialogue and Difficult Conversations, in the sense that to communicate we all have to listen to others opinions and points of view with openness. But sometimes, this isn’t enough. In order to improve our difficult conversations both sides have to be on the same page. If only one person is committed to improve, there is no way to have an easy conversation. A conversation means to remodel something (an idea), not to construct something from our own opinion (impose). Most of the time it could be our own opinion that we are remodeling. In a dialogue one speaks in order to give a piece of a puzzle that is being built. Our input can also be valuable to the rest, as long as one is not trying to impose ideas on the rest of the people.

I believe imposing ideas on others, and being closed to new ideas is part of what makes us human. We try to express ourselves, maybe because we are selfish beings, or because we want the approval of the rest or because of the fear we have of getting our feelings hurt or hurting someone else’s feelings.

This brings me to my next topic, what is the essence of the human being, its identity? This was mentioned a lot this last week, in Gödel, Escher, Bach, Meno, and The Ascent of Man. What is it that makes us more human? Or more specifically, what makes me be me?

An interesting answer to this question that my classmates gave was that we are constantly changing and evolving. So maybe this is the human essence that we are looking for. But I don’t think this is it, I mean every animal also changes and evolves. The only change that makes us different is our cultural change that other animals don’t have. But this is because we have a certain kind of culture that the rest of the animals don’t.

For me, what makes us human, the human essence relies in the experiences we have had. If we relate this to Nozick´s Closer Continuer Theory, I would say that experience is what makes us different from our copies or clones that we can have, especially in the case of a transporter, and from any other animal. Here are two examples of this: In the case that we are still alive but we have a copy of ourselves somewhere else. Both the real one and the copy will have different life experiences, and the experiences that the copy will have, wont affect my personality, thought and identity in any way. So for me, what makes me different, my human essence are the experiences I have had that make me think the way I do, that make we see the world the way I see it. No one else can have my experiences but me.

And going back to theories, the reason that we have different spectacles in science is because of experience that we have had in the past (what makes us us), in a way, chooses the spectacles that we will be using.