

Assignment #2

Due Date: Tuesday March 14th, 2016

Instructions: Ancient Greeks started the tradition of using a fictional dialogue to present the pros and cons of an argument, as opposed to an essay only favoring one side. For example, check out Meno by Plato. This tradition has continued; two classic texts both about the philosophy of mathematics and physics also employ this tactic, “Gödel Escher Bach” by Douglas Hofstadter and “Proofs and Refutations” by Imre Lakatos.

Pick one of the two prompts and write a fictional dialogue (in the form of a play for example) between the “for” and “against” side of each issue, somewhere between 500 and 1000 words. I have to read 120 of these so please make them interesting pieces of literature, on top of the sound scientific reasoning.

- 1) You’re at a cocktail party and suddenly a spacetime vortex appears near the canapé table and out pops Ptolemy. At first he’s confused, not only because he appears to be almost 2000 years in the future, but also because he can speak and comprehend perfect American English. Write a dialogue between you and him where you prove to him the superiority of the heliocentric model of the solar system. Make sure to give him many valid critiques of your reasoning as well. (HINT it’s not as easy as ‘stating facts’. Ptolemy had lots of good reason to believe the geocentric model, talk about what we talked about in class.)
- 2) You’re at my grandfather’s house, and he seems convinced that climate change is a vast liberal conspiracy aimed at funneling tax payer dollars to “Big Solar” and other Californian hippy companies. You, on the other hand, think it’s the most paramount issue facing humanity today. Write a dialogue between you and him, using actual facts for both sides. (HINT the climate is VERY complicated. Even if there’s warming, even if there’s CO₂, causation between our actions and the relationship of these proxies is subtle. Make the discussion convincing)

For both of these prompts, you will have to do some original research. Especially the second one. So don't just wing this, include actual experimental evidence for Ptolemy and actual explanations and statistics regarding ocean acidity and greenhouse gases to my grandfather. Also, give grandpa credit and include real government subsidies to green energy and whether that money has ameliorated the problem of global warming and to what extent. An important takeaway from this assignment is that no matter what side of an debate you're on, the person on the other side isn't dumb and has reasons and we're **all** responsible for having reasons, no matter what we believe.