

Hum9: Knowledge and Reality, Winter 2013  
Assignment 3: short response  
Due Tuesday, Feb 26

You will write a short response paper on the Demarcation problem – that is, what separates science from non-science. The paper should be 300-600 words and should focus exclusively on making one clear point. You should be responding to the kinds of concerns that Popper and Kitcher raise, but there is no need to directly engage with what they say.

Here are issues that you might want to consider. You should think about all of these (and more) when crafting your response, but you should only focus on one particular claim in your response.

1) Is there something that marks the distinction between science and non-science? What about a theory being *scientific* but a bad scientific theory? Is this different? What do we mean when we say that homeopathy is “pseudoscience”?

2) Is there some reason to think that something unites physics, chemistry, biology, geology, etc.? Or do they each have their own characteristics but no single thing in common which makes them scientific?

3) Do other disciplines like mathematics, psychology, economics, sociology, history, or English literature count as science? Is there a “scientific” way to do these things? If they are not science, is that in any way a problem?

4) Can particular statements be scientific or not? For example, the universal law of gravitation might be scientific while “Quietness is wholeness in the center of stillness” might not be? What about “13.7 billion years ago the universe began with a big bang.” What about “this universe is merely one of many universes in the larger multiverse.”

5) Can a particular claim or theory be scientific without making any predictions?