Explain Occam's Razor and its significance to science and philosophy.

Present at least one example of its use in the Early Modern Period (e.g., Descartes, Bacon, Galileo, Newton, etc.).

Can we defend ‘simplicity’ as a genuinely scientific concept? Why or why not?

Named after **WILLIAM of Ockham (1285-1347)**

**Scholastic** Philosopher

Basics: Always pick simpler solutions, since they are more likely   
 to be correct than complex ones

Basics pt2: When there are two competing theories that make the same predictions or reach the same conclusion, the simple theory is better

Quote: **“Plurality should not be posited without necessity”**

Razor explanation: Used to Shave away extraneous details (unrelated to the topic at hand)

Nature is the simple truth, therefore simple hypotheses get closest to truth

The more complex explanation means the more conditions are needed to make that explanation true.

Ontology: Study of existence, whether something exists, does god exist?

Your **ontology** Is a list of what you believe to be true (I believe the following to be true)

Believe the explanation that requires the least amount of supposition (supposing)  
AND requires the least number of entities to be true.

If you previously believe something to be true, its more likely to be the choice you make  
Because choosing the other will require you to add a belief to your **ontology list**

Occam’s Razor says go with the simpler explanation with **equal explanatory power**

Choice Bias in prebelieved Ontology – human flaw

**OR** is a more specific Inference to the best explanation, where best = simple.

THEROY IS ABOUT WHAT IS **RATIONAL NOT ABOUT WHAT PEOPLE ACTUALLY DO**