

Wednesday 15th March, 2017

Summary: CICASP Seminar 52
Mini-debates: Historical Context (1 of 3)

In this set of the ever-popular mini-debates, we will be re-visiting various historical scientific debates that have now been settled (they are not on-going). However, while we think critically about the subject and argue 'for' or 'against', we will imagine that we are in the period of history when the topic was being debated (i.e. without the perspective and knowledge we have in 2017).

Andrew introduced this topic with two short debates between opposing teams of students, addressing debates set in the prehistoric period:

1. arguing 'for' and 'against' the use of fire;
2. 'hunting' vs. 'gathering'

One person from each team was chosen to be the spokesperson, putting across a concise overview of the team's argument in an 'opening statement'. After each team had given their opening statement, the debate grew very lively, with counter-arguments flying between the opposing sides.

Wednesday 22nd March, 2017

Outline: CICASP Seminar 53
Mini-debates: Historical Context (2 of 3)

We will focus on a particular historical scientific debate in this Seminar:

- Copernicus vs. everyone else

This was a key debate in the history of science. It happened in the 16th Century.

Geocentric model of the Solar System:

The assumption then was that the sun revolved around the Earth – clearly the Earth must be at the centre because we live there (!)

Heliocentric model of the Solar System:

Copernicus was a scientist, from Poland, who developed a theory that the sun is at the centre of the solar system and that the Earth revolves around the sun.

Preparation:

You will need to read around the topic to prepare for the next seminar.

Remember to evaluate the source and content of information you find on the web and to think critically.

To make it more interesting, you will not discover which side of the debate you will be arguing until you turn up to the seminar, so be prepared to argue either side.

Next week:

We will split into two teams; each team will have some time to prepare their argument; we will hear each team's opening statement; then the debate will start!

Mini-debates: Historical Context

1. **Introduction: Embracing the Context** (15th March)

2. **Copernicus vs. Everyone else** (22nd March)
Heliocentric vs. Geocentric

3. **Huxley vs. Wilberforce** (29th March)

This block is to encourage you to think about science in a historical context...

- Science does not happen in a vacuum – progress is affected by the time-period in which it is done and the human personalities involved.
- How do scientific ideas come about? Which scientific ideas spread and why?
- Consider that people without the right background knowledge might not recognise the importance/use of new inventions/theories even when presented with them.
- Scientific progress is guided/constrained by the historical context, e.g. current knowledge states, societal trends, values held by the population.