

Discussion: Galileo's Defense of Copernicanism

Purpose: There are two goals of this group assignment. First, students will learn how to reconstruct philosophical arguments. Second, students will learn about Galileo's epistemology and defenses of Copernicanism.

Directions: Reconstructing Arguments

Reconstructing an argument involves six steps:

1. Copy all the assumptions and conclusions. Label
 - (a) Which assertions are assumptions and which are conclusions.
 - (b) Of which premises each conclusion is purportedly a consequence
2. Copy the author's definitions of all technical terms. If the author does not define key terms, copy all passages in which the author explains or gives examples of key terms.
3. Rewrite all definitions, assumptions, and conclusions in your own words.
4. Add plausible premises to render the argument valid. Similarly, explain critical terms that the author seems to have left undefined.
5. Provide textual evidence that supports your hypothesis that the author likely endorsed the premises and definitions you have added.
6. If appropriate, repeat the above five steps if the author provides arguments with conclusions that are identical to the premises of the argument that you have just reconstructed.

Galileo's Argument

Either those who are to be persuaded are capable of understanding the reasons of Copernicus and others who follow him, or they are not; moreover, either these reasons are true and demonstrative, or they are fallacious. If those who are to be persuaded are incapable, then they will never be persuaded by the true or by the false reasons; those who are capable of understanding the strength of the demonstrations will likewise never be persuaded

if these demonstrations are fallacious; so neither those who do nor those who do not understand will be persuaded by fallacious reasons. Therefore, given that absolutely no one can be dissuaded from the first idea by fallacious reasons, it follows as a necessary consequence that, if anyone is persuaded of the contrary of what he previously believed, the reasons are persuasive and true. But as a matter of fact there are many who are already persuaded by Copernican reasons. Therefore, it is true both that these reasons are effective, and that the opinion does not deserve the label of ridiculous but the label of worthy of being very carefully considered and pondered.

Source: Galileo. “Considerations on the Copernican Opinion, Part I.” In [Galilei, 2008, p. 151]

References

Galileo Galilei. *The Essential Galileo*. Hackett Publishing, 2008.