

Class 7 - The Oneness of Being and the Paradoxes of Motion  
Parmenides' Poem

I. Parmenides and the Oneness of Being

In the first portion of the course, we wondered about the reality of the external world. We discussed Locke's empiricism and his arguments for the existence of a material world, Berkeley's idealism, and the skeptical views that motivated both Moore and Wittgenstein. Let's put aside the skeptical question of the existence of the external world. Maybe Moore is right that its existence is obvious and easily demonstrated. Maybe Kant and Wittgenstein are correct that our very actions presume already the existence of the external world. We can also put aside Berkeley's idealism, and assume that the world is a physical world. Still, there is a question about what that world is like. Descartes and Locke argued for a contrast between appearance and reality. Even if we abandon the skeptical and idealist hypotheses, we have to figure out what the real properties of the external world are. In particular, we are going to start asking questions about the nature of space and time. These questions are related to each other and to questions about motion and change. As the physicists tell us, motion is displacement, change in spatial location, over time. Furthermore, according to contemporary physical theories, time is just a fourth dimension of the world, not essentially different from space. Our best theories of the world posit at least three spatial dimensions and a fourth temporal one. Some physical theories posit many more dimensions than that.

Some of the earliest known concerns about the distinction between appearance and reality came from the pre-Socratic philosopher Parmenides. He argued that all change, including motion, is an illusion. Parmenides agreed with us that we need not be skeptical about the existence of an external world. But, he denied that it had the properties which we ordinarily ascribe to it.

The first part of Parmenides' poem, which I have assigned, describes what he calls the way of truth, as opposed to the way of opinion. It starts by describing the impossibility of falsehood. The argument that lying is impossible was influential in ancient philosophy. Plato's dialogue [\*Sophist\*](#) deals directly with Parmenides' argument that one can not lie.

- NL NL1. Lying is saying what is not.
- NL2. That which is not has no sort of being.
- NL3. When I say something, it has at least some sort of being.
- NLC. So, lying is impossible.

Parmenides' central argument supporting NL, in specific NL2, appears briefly.

What is for being and for thinking must be; for it can be, and nothing can not (132).

The argument for NL2 seems to be that 'that' attributes singularity, which is some sort of being. To speak or think falsely is to say what is not.

But what is not can not exist and so can not be described.  
You can't say anything true about nothing.

What does exist, for Parmenides, is what he calls being, or the one.  
Being has no beginning.  
If being had a beginning, there would have to be a time at which being did not exist.  
Similarly, being can not cease.  
If being were to cease, then there would be a time when what is is not.  
So being is eternal.

Furthermore, and here is the key for our studies, what is can never change.  
If what exists were to change, then some aspect of what is would not be, or some aspect of what is would not have been.  
Either way, we would find the same sorts of contradictions that supported Parmenides' claim that being is eternal.

## II. Zeno's Paradoxes

In defense of Parmenides' claim that motion and change are impossible, Zeno developed a set of paradoxes.  
Each of these paradoxes is supposed to show something contradictory about the possibility of change.  
We are going to look at four of those paradoxes, in a group exercise called a jigsaw.  
Each student will be a member of two separate, interwoven groups.  
There will be base groups and work groups.  
Each group will have four students.  
You start, briefly, in base groups.  
Each member of each group chooses one of four paradoxes to study.  
Then, you will all move to your work groups.  
Each work group is focused on the study of one paradox.

In work groups, try to answer the following questions:

1. What assumptions about space, motion, or time does Zeno make? Are these assumptions commonsensical? Are they defensible?
2. Can the paradox be solved by abandoning one or more assumptions?
3. Consider the standard solution. Are there alternatives?

After you are finished with the work group discussion, 10-15 minutes, return to your base groups.  
In base groups, take turns teaching the other members of the group about your paradox.  
In base groups, try to answer the following questions:

1. How are the standard solutions similar?
2. Do Zeno's paradoxes point to a serious worry about space?
3. Can we solve the paradoxes without denying the existence of change?

When base groups are finished, we will get back together for discussion.  
For Thursday: Is space absolute or relative?  
We'll get to the Heinlein story when we talk about time.