

# Plato's Theory of Forms

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Phil. 373

February 1st, 2017

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## Small-Group Discussion: Innate concepts in Phaedo

# The Equal

Plato claims not only that we have some innate concept, called “equality,” but that we **know** something, which he calls “the Equal.”

**Question:** What is this “Equal” (with a capital E) thing?

# Mathematical Forms

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- **Premise 2:** If a statement  $T$  is literally true and describes some object  $O$ , then  $O$  exists.
- **Conclusion 1:** Lines, circles, etc. exist.

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- **Premise 3:** There are no physical objects that are infinitely thin lines, perfectly round circles, etc.
- **Conclusion 2:** Circles, lines, etc. are existent non-physical objects.

# Definition of Forms

**Definition:** A **form** is a non-physical object or relation.



# What the Forms Explain

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- The truth of mathematical theorems, moral assertions, etc.
- How recollection is possible,
- How effective communication is possible,
- How knowledge is possible,

And a few other phenomena.

# Recollection and Forms

- **Premise 1:** We possess the concept of equality innately (by previous arguments).
- **Premise 2:** If we possess a concept innately, then the concept cannot denote a physical object or property of physical objects.
- **Conclusion 3:** Our concept of equality denotes a non-physical object, i.e., a Form.

## Small-Group Discussion: Properties of Forms

# Properties of Forms

What **properties** do forms have?

- Immaterial/Non-Physical (i.e., they don't occupy space, aren't made of atoms, etc.)
- Insensible,
- Mind-independent,
- Eternal, and
- Unchanging.

See Plato [1997] and Cohen [2007].

Because mathematical objects do not change, Plato recommends revising *some* mathematical language . . .

# Mathematical objects are unchanging

*Now, no one with even a little experience of geometry will dispute that this science is entirely the opposite of what is said about it in the accounts of its practitioners. How do you mean? They give ridiculous accounts of it, though they can't help it, for they speak like practical men, and all their accounts refer to doing things. They talk of "squaring," "applying," "adding," and the like, whereas the entire subject is pursued for the sake of knowledge . . . That's easy to agree to, **for geometry is knowledge of what always is.***

**Republic.** Line 527a.

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- **Premise 2:** Mathematical objects (e.g., the number two, a 345 triangle, etc.) exist now, have always existed, and will continue to exist.
- **Conclusion 1:** Mathematical objects are not physical objects.
- **Conclusion 2:** Mathematical objects are forms.

Up Next

# Where We're Going



# Today's Response Question

**Response Question:** Discuss one or two phenomena the theory of forms is meant to explain, and one or two properties of forms.

# References I

Cohen, M. (2007). Theory of Forms.

Plato (1997). Phaedo. In Cooper, J. M. and Hutchinson, D. S., editors, *Complete works*, pages 49–100. Hackett Publishing.