Philosophy 203
History of Modern Western Philosophy

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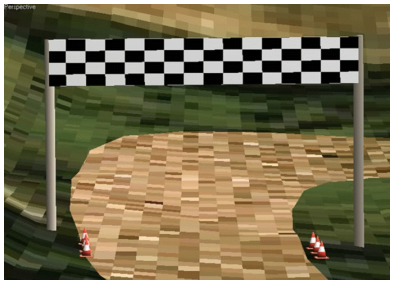
Hamilton College

Spring 2016

Class #28
The Limits of Reason



Business

- Final Exam
  - For those who did the End-of-Unit-4 Writing Assignment
  - Friday, May 13, 2pm
  - Preparatory Questions are on the website.
  - Look for an email about a review session
- End of Unit 5 Writing Assignment
  - For those who wrote the paper and are not taking the final
  - Due to me by Friday, May 13, 2pm
    - Hard copy
    - Philosophy department mailbox
  - We'll pick numbers at the end of today's class.
- Three other things
  - Course Evaluations (Hamilton)
  - Peer Evaluations: required assignment for this course
  - Also, a very short survey (for posterity) from me

The Critique of Pure Reason

Review

- Starts with the claim that there are synthetic *a priori* judgments
- The transcendental aesthetic
  - Pure intuitions of space (outer sense) and time (inner sense)
- The transcendental analytic
  - Abstract categories of thought apply necessarily to all possible experience.
  - Sensibility and understanding align to form thoughts
    - Empirical judgments are subjective and objective
    - A priori judgments are the result of reason turning on our cognitive capacities themselves.
- After the Deduction
  - Kant explores the categories in detail.
  - Then he shows the consequences for our knowledge.
  - Some proper metaphysics can be established using synthetic *a priori* reasoning.
  - Other topics (e.g. God, free will) are beyond our ken.
    - Antinomies
    - Ontological argument

Four Antinomies

- An antinomy is a paradox.
- Our reason, wanting answers to questions, speculates.
- But, for some themes, we can argue successfully on either side of the debate.
  - We can establish that the universe is infinite.
  - But we can also establish that it is finite.
- Since such antinomies can not hold, Kant sees such proofs as demonstrating that reason has exceeded its limits.
  - We can commit such arguments to the flames.
    1. The temporal and spatial finitude of the universe
    2. The existence of simples (atoms, monads)
    3. Free will and determinism
    4. Ariew and Watkins omit the fourth on the existence of God.

First Antinomy

Space and Time

But First...
Some Background

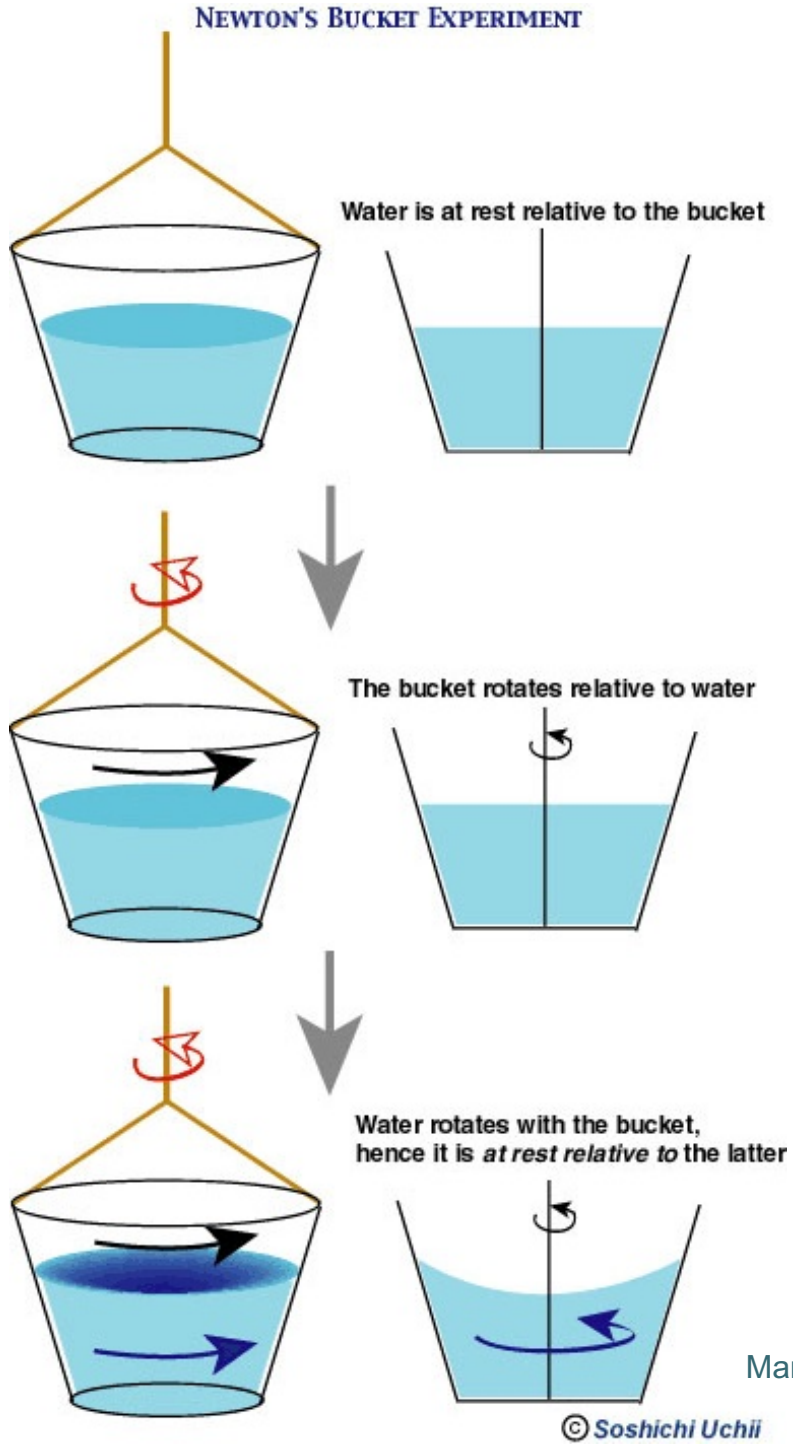
Newton and Leibniz on
Space and Time

Sir Isaac Newton (left) and Gottfried Wilhelm von Leibniz (right)

Newton and Leibniz

Do space and time have absolute reality, or are they merely relational concepts?

- Newton's view is absolutist.
  - Space is something distinct from the bodies that occupy it.
    - Absolute space exists without relation to anything external.
    - Relative spaces are measures of absolute space defined with reference to some system of bodies.
  - Time is something that passes uniformly without regard to events in the world.
  - Space is an empty container, and time marches inexorably forward.
    - Space is the sensorium of God.
- Leibniz is a relationalist
  - Space and time are idealizations.
  - They are abstractions from the realities of the material world.
  - "I hold space to be something merely relative, as time is...an order of coexistences, as time is an order of successions" (LIII.4, AW 297b).
  - Phineas and Ferb


NEWTON'S BUCKET EXPERIMENT
Water is at rest relative to the bucket
The bucket rotates relative to water
Water rotates with the bucket,
hence it is at rest relative to the latter
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Newton's Bucket

- We know that the motions are different in the two states, but we can not differentiate them in terms of local changes of place.
- In both state 1 and state 3, the water and the bucket are at relative rest.
- But state 3 is measurably different to state 1.
- The relationalist seems unable to describe the difference between the two states.
- The absolutist needs merely to point out that in state 3, the system is in absolute motion, while in state 1, the system is at absolute rest.
- Absolute acceleration (change in motion) is thus a measurable quantity.

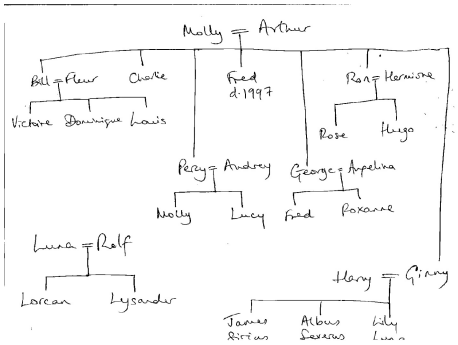
Leibniz, Against Newton

Absolute Space and Time are Nonsense

- “Those two states, the one such as it is now, the other supposed to be the quite contrary way, would not at all differ from one another. Their difference therefore is only to be found in our chimerical supposition of the reality of space in itself. But in truth, the one would exactly be the same thing as the other, they being absolutely indiscernible, and consequently there is no room to inquire after a reason for the preference of the one to the other” (LIII.5, AW 297b-298a; see also LIV.13, AW 300a-b).
- Could the universe, for example, have been created at a different time?
- Could it be moved three inches to the left?
  - Or east changed for west?
- There would be no way to distinguish two universes that were identical in all their relations among objects, but put into a different space or reoriented.

Leibnizian Space and Time

- Space is a set of relations among bodies.
- Time is an abstract relation among events (or perceptions).
- Those systems of relations might be thought of as abstract, but they should not be reified.
- The family tree analogy



Team Activity

Absolute and Relational Theories of Space

- Newton argues that space and motion are absolute.

  "We have some arguments to guide us, partly from the apparent motions, which are the differences of the true motions, partly from the forces, which are the causes and effects of the true motions. For instance, if two globes, kept at a distance one from the other by means of a cord that connects them, were revolved about their common center of gravity, we might, from the tension of the cord, discover the endeavor [force] of the globes to recede from the axis of their motion... "

- Leibniz argues that space and time are relative.

  "Those two states, the one such as it is now, the other supposed to be the quite contrary way, would not at all differ from one another. Their difference therefore is only to be found in our chimerical supposition of the reality of space in itself. But in truth, the one would exactly be the same thing as the other, they being absolutely indiscernible, and consequently there is no room to inquire after a reason for the preference of the one to the other."

- Considering all of their arguments, determine, as a group, which view is best defensible.

  A. Space is absolute; Newton is correct.

  B. Space is relative; Leibniz is right.

  C. Space is neither absolute nor relative.

  D. The question is unanswerable.

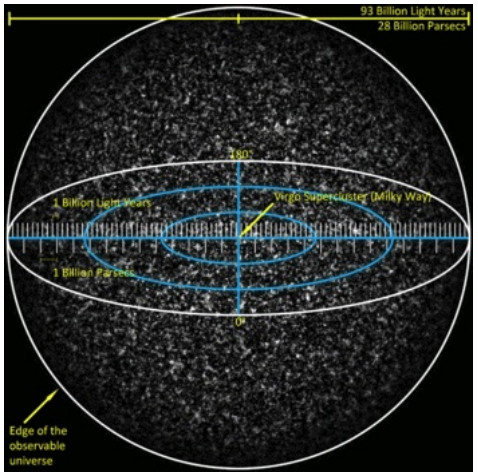
Kant’s First Antinomy

Team Activity

Kant on Space and Time

- Match each quoted (abridged) argument to its proper conclusion.
  - A. Assume that the world has no limit. In that case, the world will be an infinite given whole of things existing simultaneously. Now in the case of a *quantum* that is not given within certain limits of any intuition, we can think of this quantum's magnitude in no other way than through the synthesis of its parts, and can think of the totality of such a quantum only through the completed synthesis, or through repeated addition of unit to unit. Accordingly, in order for the world to be thought as a whole, the successive synthesis of the parts of an infinite world would have toe regarded as completed.
  - B. Assume that the world has no beginning. In that case, up to every given point an eternity has elapsed and hence an infinite series of successive states of things in the world has gone by. However, the infinity of a series consists precisely in the fact that it can never be completed by successive synthesis.
  - C. Suppose that the world has a beginning. In that case, since the beginning is an existence preceded by a state in which the thing is not, a state must have preceded wherein the world was not, i.e. an empty state. In an empty state, however, no arising of any thing is possible; for no part of such a state has, in preference to another part, any distinguishing condition of existence rather than nonexistence (whether one assumes that the world arises of itself or through another cause).
  - D. Assume that the world is limited. In that case the world is located in an empty space that is not limited. Hence we would find here not only a relation of things *in space* but also a relation of things *to space*. Now the world is an absolute whole, outside of which there is to be found no object of intuition, and hence no correlate of the world to which the world stands in relation; therefore the relation of the world to empty space would be a relation of it to *no object*. But such a relation—and hence also the limiting of the world----is nothing
  - 1. Space is infinite
  - 2. Space is finite.
  - 3. Time is infinite.
  - 4. Time is finite.

Finitude



- In Time
  - An infinite series can not be completed.
  - If the universe existed from infinitely long ago, the present time would be the end of an infinite series.
  - So, there must have been some beginning.
- In Space
  - The concept of simultaneity presupposes a spatially finite universe.
  - If the universe were infinitely large, we could not think of all of the universe as existing simultaneously.

Infinitude

- In Time
  - Creation is logically impossible.
  - If there were a beginning point, there would have to be something before it.
  - But, that time would have nothing in it, since the universe has not been created yet.
  - So the universe would have no way to begin.
- In Space (from Leibniz)
  - Imagine you were to go to the end of the universe.
  - Stick out your arm past the edge.
  - You could always perform this task.
  - Thus, the container has to be infinite.
- Remember, space is an *a priori* form of intuition, presupposed by all possible experience.

Resolving the Antinomy

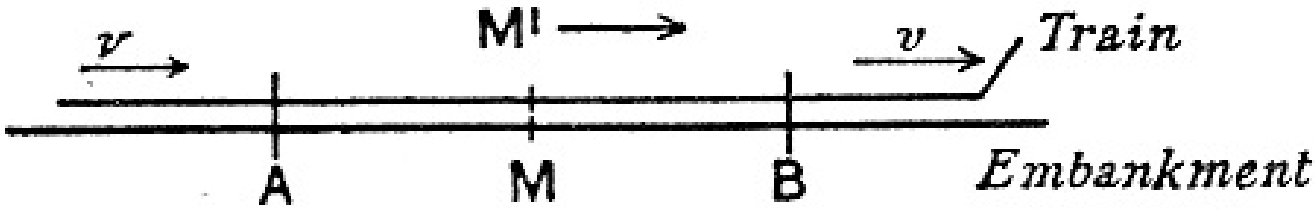
- Kant has argued, *a priori*, to both sides of a contradiction.
- He concludes that pure reason has exceeded its reach.
- There is no knowledge to be had of whether the universe is finite or infinite.
- Like a Humean empiricist, Kant concludes that we can not know any facts of the matter.

Are There Facts About the Finitude of the Universe?

- Kant assumes that claims about whether the universe is finite or infinite are matters for *a priori* metaphysical reasoning.
- But there are some mathematical and physical facts that undermine his claims.
- Kant: the universe must be spatially bound because otherwise we could have no definite concept of simultaneity.
- According to the theory of relativity, simultaneity and time itself are not definite concepts.
- They depend on the arbitrary choice of a frame of reference.

Einstein on Simultaneity

"Events which are simultaneous with reference to the embankment are not simultaneous with respect to the train, and vice versa (relativity of simultaneity). Every reference-body (co-ordinate system) has its own particular time; unless we are told the reference-body to which the statement of time refers, there is no meaning in a statement of the time of an event" (Einstein, *Relativity: The Special and General Theory*, Chapter IX).



The Ontological Argument

Descartes's Ontological Argument

- Existence is part of the essence of the concept of God.
  - having angles whose measures add up to 180 degrees is part of the essence of a 'triangle'.
  - the concept of a mountain necessarily entails a valley.
- The essence of the concept of God is perfection.
  - the three omnis
  - existence

On Existence

- Gassendi said that existence is not a perfection, but no one believed him!
- “The idea of existence, then, is the very same with the idea of what we conceive to be existent. To reflect on any thing simply, and to reflect on it as existent, are nothing different from each other. That idea, when conjoined with the idea of any object, makes no addition to it. Whatever we conceive, we conceive to be existent. Any idea we please to form is the idea of a being; and the idea of a being is any idea we please to form” (Hume, *Treatise* §I.II.VI).
- Kant, following Hume, claims that existence is not a property in the way that the perfections are properties.
- Existence can not be part of an essence, since it is not a property.

Real (Determining) Predicates and Logical Predicates

- A logical predicate serves as a predicate in grammar.
- Any property can be predicated of any object, grammatically.
  - The Statue of Liberty exists.
  - Seventeen loves its mother.
- A real predicate tells us something substantive about an object.
  - The Statue of Liberty is over 150 feet tall.

Existence is a grammatical predicate, but not a real predicate.
Grammatical form is not a sure guide to logical form.

Team Activity

Kant on the Ontological Argument

- "The actual contains no more than the merely possible. A hundred actual thalers do not contain the least more than a hundred possible thalers. For, the possible thalers signify the concept and the actual thalers signify the object and the positing thereof in itself; hence if the object contained more than the concept, then my concept would not express the entire object and thus would also not be the concept commensurate with this object. In the state of my assets, however, there is more in the case of a hundred actual thalers than in the case of the mere concept of them (i.e. their mere possibility). For in the case of the hundred thalers' actuality the object is not merely contained analytically in my concept (which is a determination of my state), but is added synthetically to my concept; yet these thought hundred thalers themselves are not in the least augmented by their being outside my concept."
- Which of the following best captures Kant's view about the ontological argument?
  - A. The concept of the one hundred thalers is identical to the one hundred thalers themselves; so the concept of God, which contains existence, must be identical to an existent God.
  - B. The concept of the one hundred thalers is identical to the one hundred thalers themselves; so since we cannot know that God exists, existence can't be part of the concept of God.
  - C. The concept of the one hundred thalers cannot be identical to the one hundred thalers themselves; so my concept of God is apparently inadequate.
  - D. Concepts and objects must correspond; so existence is not the kind of thing that can be part of a concept.
  - E. Concepts and objects must correspond; so the concept of God must include both possible and necessary existence.

Is Existence a Predicate?

- Kant: existence is too thin to be a real predicate.
- We do not add anything to a concept by claiming that it exists.
- The real and possible thalers must have the same number of thalers in order that the concept match its object.
- So, we do not add thalers when we mention that the thalers exist.
- But, do we add something?

Debates About Existence

- The tooth fairy
- Black holes
- We seem to consider an object and wonder whether it has the property of existing.
- Theories of time
- We thus may have to consider objects which may or may not exist.
- E.g. James Brown

Meinongian Subsistence

- Meinong attributes subsistence to fictional objects and dead folks.
- James Brown has the property of subsisting, without having the property of existing.
- Kant's claim that existence is not a real predicate, while influential, may not solve the problem.

The Fregean Argument for Kant's Solution

- First-order logic makes a distinction between predication and quantification.
- In our most austere language, existence is not a predicate.
- '$(\exists x)Gx$' or '$(\exists x)\ x=g$'
- Note the distinction between the concept (represented by the predicate or object) and existence (represented by the quantifier).

Kant and First-Order Logic

- First-order logic was developed a full century after Kant's work
- But, it uses the distinction he made between existence and predication.
- The quantifiers deal with existence and quantity
- The predicates deal with real properties, like being a god, or a person, or being mortal or vain.
- First-order logic is supposed to be our most austere, canonical language, the *Begriffsschrift*'s microscope.
- But, is first-order logic really the best framework for metaphysics?

The End

Team Activity (if time)

Empirical and Transcendental Realism and Idealism

- Kant calls himself an empirical realist and a transcendental idealist. His use of these categories presupposes the following possible positions.
  - Empirical Realism
  - Empirical Idealism
  - Transcendental Realism
  - Transcendental Idealism
- Apply the appropriate names of positions to each of the following philosophers:
  1. Descartes
  2. Locke
  3. Berkeley
  4. Hume