Philosophy 203
History of Modern Western Philosophy

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Hamilton College
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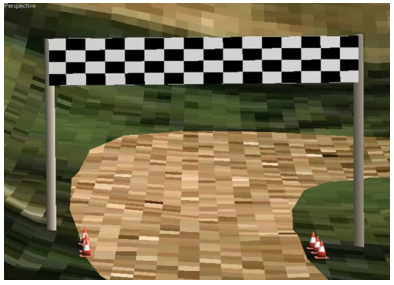
Class #28
The Limits of Reason



Business

- Final Exam:
  - Sunday, May 18, 9am
  - Review Session on Friday, May 16 at noon
  - Alternative test time:
    - Wednesday, May 14, noon
  - Preparatory Questions are on the website.
- Course Evaluations
- Panel Presentation Grades...

The Aesthetic and the Analytic

Review

- Introduction: There are synthetic *a priori* judgments
  - Mathematics, Science, Metaphysics
- The transcendental aesthetic describes how objects and the world are given to us.
  - Pure intuitions
  - Space and time
    - Transcendental derivation
  - But, what is given in intuition is messy, lacking conceptual structure.
    - intuitions without concepts are blind
- The transcendental analytic describes how our minds determine and understand that which is given.
  - We impose our conceptual apparatus on what is given in intuition.
  - The transcendental deduction attempts to show that the categories of the understanding apply necessarily to the manifold given in intuition.
  - How the sensible and intellectual functions of our cognitive capacities align

Van Cleve on the Deduction

1. *The Unity Premise*: All representations of which I am conscious have the unity of apperception.
2. *The Synthesis Premise*: Representations can have such unity only if they have been synthesized.
3. *The Category Premise*: Synthesis requires the application of Kant's categories.

Conclusion: The categories apply to all representations of which I am conscious.

The Synthetic Unity of Apperception and the Self

- Raw appearances come to us as an unordered, unstructured, mess.
- The imposition of concepts on that manifold turn that mess into an orderly thought.
- But we must apply the categories on a representation which is already synthesized and orderly.
- So a representation must be synthesized (or combined) in order even to be a thought.
- A thought thus has a cognizer to perform the combination, as an implicit component.
  - Implicit thinking is what Kant calls apperception.
  - "The understanding is nothing more than the faculty of combining *a priori* and of bringing the manifold of a given intuition under the unity of apperception - the principle of this unity being the supreme principle in all of human cognition" (B135, AW 747a-b).

The Categories and Human Sensibility

- The categories apply to any intellect which receives appearances in intuition.
- They apply specifically to our intuition which is sensible in the forms of outer sense (space) and inner sense (time).
- We do not, via abstraction, create the categories.
- Abstracting away from space and time, we find that the categories were presupposed.
  - Again, it's a transcendental argument.
  - What must be the case for us to have the knowledge that we do?
- We discover the categories already imposed on our experiences.
  - "The *possibility of experience* is what provides all our *a priori* cognition with objective reality. Now experience rests on the synthetic unity of appearances, i.e., on a synthesis of appearances in general performed according to concepts of an object. Without such synthesis, experience would not even be cognition, but would be a rhapsody of perceptions (A156/B195, AW 761a).

Making Nature Possible

- By applying our concepts to the synthesized manifold given in intuition, we construct the natural world.
- “We must now explain how it is possible, through *categories*, to cognize *a priori* whatever objects *our senses may encounter* - to so cognize them as regards not the form of their intuition, but the laws of their combination - and hence, as it were, to prescribe laws to nature, and even to make nature possible” (B159-60, AW 753a).
- Notice the strength of Kant’s claim.
- We do not make the noumenal world possible.
- But nature is not a property or aspect of the noumenal world.
- It is a result of our structuring the raw data of experience.

Knowledge and Possible Experience

- Since the categories only apply to those with some sort of intuition, any pure concepts will only apply to objects of possible experience.
- Mathematical propositions are not claims about a transcendent (platonic, say) world.
  - They hold for objects of possible experience.
  - "The pure concepts of the understanding, even when they are (as in mathematics) applied to *a priori* intuitions, provide cognition only insofar as these intuitions...can be applied to empirical intuitions... Consequently the categories cannot be used for cognizing things except insofar as these things are taken as objects of possible experience" (B147-8, AW 751a).
  - Conceptualism
- Even my own existence is known only through the categories and so only as an appearance, not as it is in itself (or noumenally).
  - "Although my own existence is not appearance (still less mere illusion), determination of my existence can occur only in conformity with the form of inner sense and according to the particular way in which the manifold that I combine is given in inner intuition" (B157-8, AW 752b).
- These are just facts about our cognition, ones we can discover by transcendental analysis (or deduction) and ones which must apply to any cognizer with a separation between intuition and understanding.

Idealism

- Appearances conform *a priori* both to the forms of sensible intuition and to the categories of the understanding which combine the manifold.
- Kant's idealism may, at this point, seem prominent.
  - "Just as appearances exist not in themselves but only relatively to the subject in whom the appearances inhere insofar as the subject has senses, so the laws exist not in the appearances but only relatively to that same being insofar as that being has understanding" (B164, AW 754b).
- The forms of intuition meet up with the categories of the understanding in large part because they are both *a priori* impositions of the subject.
- We don't know about the conditions in the noumenal world.
- There may be some lawlike connections.
  - "Things in themselves would have their law-governedness necessarily, even apart from an understanding that cognizes them" (B164, AW 754b).
- But our representations of laws hold for our structured cognition.
- For us, experiences (i.e. appearances of objects in nature) must have certain abstract features.
  - "What connects the manifold of sensible intuition is imagination, and imagination depends on the understanding as regards the unity of its intellectual synthesis, and on sensibility as regards the manifoldness of apprehension" (B164, AW 754b).

Kantian Idealism and Nativism

- Kant's claim is not the overly dogmatic and (perhaps) implausible claim that the laws of nature are innate.
- Instead, Kant argues that some laws of nature are synthetic *a priori*, arising from the general conditions for experience.
  - "Nature (regarded merely as nature in general) depends...on the categories as the original basis of its necessary law-governedness. But even the pure faculty of the understanding does not suffice for prescribing *a priori* to appearances, through mere categories, more laws than those underlying a *nature in general* considered as the law-governedness of appearances in space and time. Particular laws, because they concern appearances that are determined empirically, are *not completely derivable* from those laws..." (B165, AW 754b-755a).
- Only the most general laws of nature, those which arise from structuring our experience, can be known *a priori*.
- The categories make experience possible.
  - Our experience is not whimsical or rhapsodic or fantastic.
  - It is ordered and structured and lawlike.
  - Such experience presupposes certain cognitive faculties as conditions, both intuitions and conceptual structure along with a unifying self which we can know, like everything else, only as an object of possible experience and not as it is in itself.

After the Transcendental Deduction

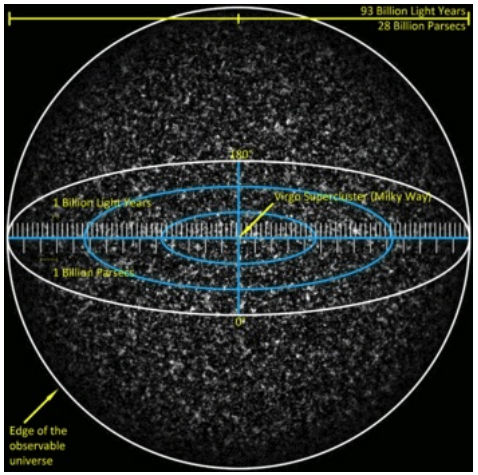
- Kant explains, or transcendentally deduces, all of the particular categories.
- Then, he shows how his transcendental idealism applies to a variety of traditional philosophical problems and paradoxes:
  - the question of the existence of an external world
  - whether space and time are absolute or relational
  - whether we have free will
- In some cases, Kant sides with the rationalists, claiming that we have knowledge.
  - certainty of mathematics
  - knowledge of an external world
- In other cases, Kant finds the rationalists' claims overly dogmatic, exceeding the limits of pure reason.

Four Antinomies

- Kant presents four antinomies, or paradoxes, to supplant his claim that reason has limits.
- While some proper metaphysics can be established using synthetic *a priori* reasoning, other topics (e.g. God, free will) are beyond our ken.
- Our reason, wanting answers to such questions, speculates.
- The problem with such speculation is that we can argue on either side of the debate.
  - For example, 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

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

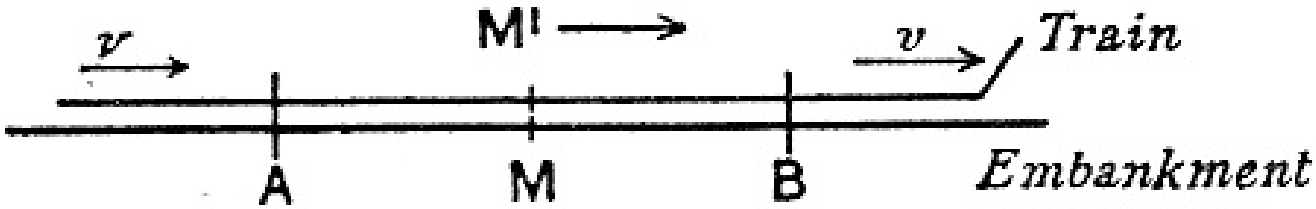
- Kant has argued, *a priori*, to both sides of a contradiction.
- He concludes that pure reason has exceeded its reach.
- There is no knowledge to be had of whether the universe is finite or infinite.
- Like a Humean empiricist, Kant concludes that we can not know any facts of the matter.

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).



Kant on Infinity

- Kant assumes an obsolete concept of infinity.
  - “The true (transcendental) concept of infinity is this: that the successive synthesis of unit[s] in measuring by means of a quantum can never be completed” (A432/B460, AW 793a).
- George Cantor’s work on transfinite numbers established that there are different sizes of infinity.
  - To count from one size of infinity to the next, we consider the smaller infinity as complete.
- We define a set to be infinite if it can be put into one-one correspondence with a proper subset of itself.
  - the integers and the even integers

Kant on Mathematics and Non-Euclidean Space

- Kant argues that we have *a priori* knowledge of Euclidean geometry arising from its role as a form of pure intuition assumed in all appearances.
- Kant: All space is necessarily Euclidean.
  - "Our exposition...establishes the *reality*, that is, the objective validity, of space in respect of whatever can be presented to us outwardly as object" (*Critique* B44/A28).
  - We construct our intuitions in Euclidean space.
  - Our knowledge of geometry is *a priori* knowledge of the necessary structure of space.
  - Our knowledge of arithmetic is *a priori* knowledge of the necessary structure of "combinatorial" aspects of space and time.
- But there are different kinds of space: Euclidean and non-Euclidean.
  - Consider an interstellar triangle.
  - The sum of its angles will not be 180°, due to the curvatures of space-time corresponding to the gravitational pull of the stars, and other large objects.
  - Space-time is not Euclidean, but hyperbolic.
- Given the different structures of space, Kant would have to argue that we can know, *a priori*, which space we are using in our intuition.
- But there seem to be facts about the matter discoverable only by experience.
- Kant may be wrong about the indeterminateness of such questions.

Second Antinomy

On Simples (Monads or Atoms)

Infinite Divisibility

- The materialist atomists (e.g. Gassendi, Hobbes) and the idealist Leibniz argued that the world must be made of some sort of simple objects.
  - Thesis: the dialectical principle of monadology
- Descartes argues that the material world is, like a geometric object, infinitely divisible.
  - Antithesis

For the Thesis

Simples

- Kant adopts Leibniz's arguments for simples.
  - Without simples, we have no composites.
- Leibniz's monads are not really elements of composites.
  - Monads are given directly, not as parts of wholes.
  - So Kant is refocusing the argument on complex material objects.
- We must assume the existence of simples to explain the composition of matter.

For the Antithesis

Infinite Divisibility

- Kant emphasizes the impossibility of experiencing a simple.
- We have no conception of the noumenal world.
  - So we can not argue that simples exist there.
- We can not experience simples or think about them.
  - They are not objects of possible experience.
- Since nature is the set of possible experiences, simples literally can not be part of nature.
- The world of objects is a world of appearances given in the forms of intuition: space and time.
  - "Since, therefore, nothing can ever be given as an absolutely simple object in any possible experience, but since the world of sense must be regarded as the sum of all possible experiences, nothing simple is given in it at all" (A437/B465, AW 795b).
- The monadists would be correct if our experiences were of the world of things in themselves.
  - There would have to be some determinate elements of the objects.
  - But our experiences are only mere appearances.
  - And our experiences are in the form of an infinitely divisible space.

Third Antinomy

Freedom and Determinism

Thesis

There is Cartesian, libertarian free will.

- Kant's argument for the thesis is that the contrary, strict determinism, is impossible.
- We might think that every event has a cause.
- But that would lead to an infinite regress and the need for some exception to the rule that every event has a cause.
- "If everything occurs according to mere laws of nature, then there is always only a subordinate but never a first beginning, and hence there then is on the side of the causes originating from one another no completeness of the series at all. The law of nature, however, consists precisely in this: that nothing occurs without a cause sufficiently determined *a priori*. Hence the proposition, in its unlimited universality, whereby any causality is possible only according to natural laws contradicts itself..." (A444/B472, AW 798a)

Antithesis

- There is no libertarian free will
- On the thesis, every freely chosen act is the absolute beginning of a causal chain.
- For the antithesis, strict determinism, Kant argues that freedom is not merely the absence of constraint but the chaotic lack of all rules.
- A so-called free act would be utterly inexplicable and unthinkable.
- “The coherence of appearances determining one another necessarily according to universal laws -which is called nature -would for the most part vanish, and along with it so would the mark of empirical truth which distinguishes experience from a dream” (A451/B479, AW 800b)
- A libertarian act would not be a possible experience.

On the Antinomies

- The point of Kant's discussion of the antinomies is to demonstrate the bounds of reason.
- All of the theses and antitheses are equally defensible.
- There is thus no claim that we can establish about questions of the infinitude of space, whether there are simples, or whether we are free.
- Such claims are beyond our ability to know.

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.
- “A hundred real thalers do not contain the least coin more than a hundred possible thalers” (AW 822a).

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.

Kant and Caterus

- Kant's objection accounts for the objection from Caterus
  - the necessarily existing lion
- Both urge us to distinguish concepts from objects.
- In predicating existence of a concept, we are just restating the concept.
- We are not saying anything about the object.

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