Business

- Course Evaluations
- Papers: not yet
- Caleb: this evening at 7, KJ 110
- Final Exam:
  - Thursday, May 14, 2pm
  - Review Session Wednesday, May 13, noon?
  - Preparatory questions are on the website.
- Hume as atheist?
P Kant argues that philosophy largely consists of synthetic *a priori* judgments.
- metaphysics
- mathematics
- physics

Claims are synthetic iff they are not analytic.

Claims are *a priori* iff they are not empirical (or *a posteriori*).

Let’s talk about those classifications.

Introduction to Kant’s *Critique*
Analyticity
A linguistic or conceptual property

- For Kant, analyticity and syntheticity are characterizations of judgments.
  - Mental acts
  - Contemporary Philosophy applies them to sentences or propositions.
- Judgments, for Kant following Aristotle, are all of subject-predicate form.
  - Problem: ‘I give a rose to Emily’.
  - We’ll not worry about it now.
- A judgment is analytic if the concept of the predicate is contained in the concept of the subject.
  - ‘Bachelors are unmarried’ is analytic.
- A judgment is synthetic if the concept of the predicate adds to the concept of the subject.
  - ‘Bachelors are unhappy’ is synthetic.
- Other analytic judgments
  - If you’re running then you’re moving.
  - All neurologists are doctors.
Concepts

- Concepts may be taken either as mental objects (thoughts) or as abstract objects.
- If we take concepts to be thoughts, then different people can not share concepts.
  - My thoughts are not your thoughts, even though we can think about the same judgment/proposition.
- It’s preferable to take concepts as abstract objects, and to take our thoughts to be about concepts.
- When I think of a concept, like the concept of a bachelor, I perform a mental act which we can call grasping the concept.
- These concepts are structured, so that they can contain, or not contain, other concepts.
Kant uses what Frege (in the late nineteenth century) calls beams-in-the-house analyticity.
- When we look at a house, if we want to see if it contains a certain structure, we merely peel back the walls.
- We literally see the beams.

In contrast, Frege defends a plant-in-the-seeds analyticity.
- A statement can be analytic as long as it follows from basic axioms according to analyticity-preserving rules of inference.
- Frege can handle statements that are not in subject-predicate form.
  • ‘I give a rose to Emily’
  • ‘Astrid walks with those with whom she strolls’
  • ‘If it is snowing, then it is cold’
- The latter sentence is analytic, true in virtue of the conceptual containments of its parts.
‘Snow is white’ is empirical.
- We need to see particular snow in order to know that snow is white.

‘2 + 3 = 5’ is a priori.
- We need experiences with no particular objects in order to know that 2+3=5.
- No empirical experiences will undermine that claim.
  - 2 foxes plus 3 chickens does not equal 5 of anything.
  - Still, two and three are five.

Analyticity and syntheticity concern concepts.
- This distinction is linguistic or conceptual (or even psychological).

The distinction between a priori justifications and empirical ones is epistemological.
The two distinctions are independent.
Some claims hold necessarily.
  ▶ mathematical claims

Other claims are merely contingent.
  ▶ snow is white

Many philosophers consider claims necessary only if they are believed *a priori*.
  ▶ Kant makes that claim explicitly.
  ▶ As Hume argued, one can not arrive at a necessary truth from contingent experiences.

One might also think that all *a priori* claims must be analytic.
  ▶ One reasons to the truth of an analytic claim without appeal to experience.

Similarly, one might align contingency with empirical justification and synthethicity.
  ▶ A claim is contingent when it is justified by appeal to sense experience and it brings together concepts that are not necessarily related.

Put aside the necessary/contingent distinction, since Hume and Kant agree on it.
Hume’s Alignment
epistemology and semantics

- Relations of ideas are justified *a priori* and analytic.
  - and thus necessary
- Matters of fact are justified empirically (by tracing ideas back to initial impressions) and synthetic.
  - and thus contingent

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# Kant’s Big Claim

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<td>Most Mathematics, Metaphysics, and Some Physics</td>
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- Metaphysics is possible, and it consists of synthetic *a priori* judgments.
- “Experiential judgments, as such, are one and all synthetic” (A7/B11, AW 725a).
  - Hume
- There are also synthetic claims that are not experiential.
  - Kant’s innovation
Mathematical propositions, properly so called, are always \textit{a priori} judgments rather than empirical ones; for they carry with them necessity, which we could never glean from experience...It is true that one might at first think that the proposition $7 + 5 = 12$ is a merely analytic one that follows, by the principle of contradiction, from the concept of a sum of 7 and 5. Yet if we look more closely, we find that the concept of the sum of 7 and 5 contains nothing more than the union of the two numbers into one; but in [thinking] that union we are not thinking in any way at all what that single number is that unites the two. In thinking merely that union of 7 and 5, I have by no means already thought the concept of 12; and no matter how long I dissect my concept of such a possible sum, still I shall never find in it that 12. We must go beyond these concepts and avail ourselves of the intuition corresponding to one of the two... (B14-5, AW 726a).
The Synthetic *A Priori*
In Metaphysics

- For example: Every effect has a cause.
- The universality of the statement entails that it is not an empirical judgment.
- But Kant claims that it is not an analytic judgment.
- “In the concept of something that happens I do indeed think an existence preceded by a time, etc., and from this one can obtain analytic judgments. But the concept of a cause lies quite outside that earlier concept and indicates something different from what happens...” (A9/B13, AW 725b).
The Synthetic A Priori In Physics

- “Natural science contains synthetic a priori judgments as principles. Let me cite as examples just a few propositions: e.g., the propositions that in all changes in the corporeal world the quantity of matter remains unchanged; or the proposition that in all communication of motion, action and reaction must always be equal to each other” (B17-18, AW 726b).
  - i.e. Newton’s Laws of Motion
- Such laws hold necessarily, and so can not be learned from experience.
- Kant’s conception of physics is closer to that of Galileo and Descartes than it is to contemporary physicists.
- While some contemporary physics is highly speculative, it is generally held that a mark of a good theory is whether it is testable, or refutable, or otherwise confirmed or contravened by experimental results.
  - String theory
- Kant agrees that some portions of physics must be empirically testable.
- He also believes that certain physical principles are synthetic a priori.
- “Experience would provide neither strict universality nor apodeictic certainty…” (A31/B47, AW 733b).
To make room for metaphysics, Kant argues that there are synthetic *a priori* judgments.
- mathematics
- physics
Since these judgments are synthetic, they do not follow simply from conceptual analysis.
Since these judgments are *a priori*, they can not be learned from experience.
The door is open to serious metaphysical work.
Kant works backwards, or transcendentally, to the conditions that must obtain in order for us to have synthetic *a priori* knowledge.
Such conditions will be the necessary structures of our logic, or reasoning.
The Transcendental Aesthetic and the Transcendental Analytic

- These two parts of the Critique correspond to two distinct functions of our psychology.
- The transcendental aesthetic
  - How objects and the world are given to us
  - Intuition (imagination)
- The transcendental analytic
  - How our minds determine and understand that which is given.
  - Concepts (understanding)
- We are presented, in sensibility, with a world having certain properties.
- We cognize that world according to certain concepts.
- By examining the properties that form the foundations of all our experiences, we can find (transcendently) the necessary properties of our experience.
- By examining the concepts that determine all our understanding, we can find (transcendently) the necessary properties of our thought.
The Transcendental Aesthetic

“Psychology shall once more be recognized as the queen of the sciences, for whose service and equipment the other sciences exist. For psychology is once more the path to the fundamental problems” (Nietzsche, Beyond Good and Evil §23).
“The effect of an object on our capacity for representation, insofar as we are affected by the object, is sensation. Intuition that refers to the object through sensation is called empirical intuition. The undetermined object of an empirical intuition is called appearance” (A19-20/B34, AW 729b).

Not all intuitions are empirical.

But in empirical intuitions we can divide the matter from the form.

- The matter is what corresponds to sensation in the strictest sense possible.
- If I am holding a pen and looking at it, I am given some appearance in intuition.
- Additionally, this appearance has certain abstract properties, a form.

The particulars of any experience are unique to it.

The abstract form of the experience has general properties.

We can think about the forms of intuition by themselves by considering intuitions with no empirical matter.
Pure Intuitions

“If from the representation of a body I separate what the understanding thinks in it, such as substance, force, divisibility, etc., and if I similarly separate from it what belongs to sensation in it, such as impenetrability, hardness, color, etc., I am still left with something from this empirical intuition, namely, extension and shape. These belong to pure intuition, which, even if there is no actual object of the senses or of sensation, has its place in the mind *a priori*, as a mere form of sensibility” (A20-1/B15, AW 730a).
Getting to Pure Intuitions

- We can consider pure intuitions by performing what might be thought of as Lockean abstraction.
  - The kind of abstraction that Berkeley did not disallow
  - The consideration of some properties of an idea, rather than others.
- Or, we can consider pure intuitions by thinking about intuitions without any matter.
- But however we arrive at our consideration of pure forms of intuition, Kant does not claim that our knowledge of them is derived from abstraction.
- We are discovering that knowledge of the forms of intuition is necessarily presupposed in any empirical intuition.
When we focus on pure intuition, we discover that there are two underlying forms of all intuitions: space and time.

- We represent objects as outside of us using our outer sense.
- All objects outside of us are represented as extended in space.
  - Space is the form of outer sense.
- “The representation of space must already be presupposed in order for certain sensations to be referred to something outside me (i.e. referred to something in a location of space other than the location in which I am)...We can never have a representation of there being no space, even though we are quite able to think of there being no objects encountered in it. Hence space must be regarded as the condition for the possibility of appearances...” (A23-4/B38-9, AW 730b-731a).
Similarly, time must be presupposed for all experiences.

- We represent objects according to our inner sense as in time.
  - Time is the form of inner sense.
- “Simultaneity or succession would not even enter our perception if the representation of time did not underlie them *a priori*” (A30/B46, AW 733a).
Kant’s argument for the presupposition of space and time recalls Plato’s argument for the doctrine of recollection, or *anamnesis*.

- In *Phaedo*, Plato argues that our knowledge of equality cannot come from looking at equal things.
- All things are unequal in some way.
- Even if we were to find some perfectly equal things, like atoms, our concept of equality could not come from our experiences with them.
- We must presuppose an idea of the equal in our claims that two objects are equal, and can not learn that concept from unequal objects.

Kant: our experiences with objects presuppose that they are given in space and time.

The idea of a possible experience occurring outside of space or time is nonsense.

Instead of despairing of learning of space and time from experiences which presuppose it, Kant inverts his account to make space and time subjective forms of intuition.

They are ways in which we structure the world of things in themselves, not ways in which the world exists in itself.
Hume’s Influence

- Taking space and time to be forms of intuition, Kant extends Hume’s claims about causation.
- Hume reinterpreted ‘cause’ as a mental phenomenon.
- By taking space and time to be forms of our intuition, rather than things in themselves, Kant is able to take objects in space and time to be empirically real even though they are transcendently ideal.
- “Our exposition teaches that space is real (i.e. objectively valid) in regard to everything that we can encounter externally as object, but teaches at the same time that space is ideal in regard to things when reason considers them in themselves, i.e., without taking into account the character of our sensibility. Hence we assert that space is empirically real (as regards all possible outer experience), despite asserting that space is transcendently ideal, i.e., that it is nothing as soon as we omit [that space is] the condition of the possibility of all experience and suppose space to be something underlying things in themselves” (A28/B44, AW 732b).
Kant’s Twin Doctrines

Empirical Realism
and
Transcendental Idealism

- We can say nothing of the noumenal world of things in themselves.
  - not even that they are in space and time
- Berkeley’s empirical (or material) idealism made the mistake of denying an outer, material world on the basis of the transcendence of the noumenal world.
- The rationalists, as transcendental realists, made the mistake of asserting knowledge of things in themselves.
- Kant’s claim is that we can have significant knowledge of an external world (of appearances) without claiming any knowledge of the noumenal world.
- Space and time are properties of our representations of the world, not the world as it is in itself.
- Space and time are real properties of empirical objects.
Kant’s transcendental exposition of space and time explains how we can have certainty of both geometry and pure mechanics.

- Geometry is the study of the form of outer sense, of pure, \textit{a priori} intuitions of space.
- Pure mechanics is the study of the form of inner sense, time.
  - “Only in time can both of two contradictorily opposed determinations be met with in one thing: namely, \textit{successively}. Hence our concept of time explains the possibility of all that synthetic \textit{a priori} cognition which is set forth by the - quite fertile - general theory of motion” (A32/B48-9, AW 734a).

- Arithmetic, too, depends essentially on construing addition as successions in time.
- But, constructing numbers in intuition also requires combination under the synthetic unity of apperception behind the categories of the understanding.
Kant separates two faculties of cognition.
- sensibility (the faculty of intuition)
- understanding

The faculty of intuition gives us appearances.
- Appearances are the raw data, the content, of experience.
- Our intuitions are passive.

The raw data of intuition is processed in the understanding by the imposition of concepts.
- “All our intuitions, as sensible, rest on our being affected; concepts, on the other hand, rest on functions. By *function* I mean the unity of the act of arranging various representations under one common representation” (A68/B93, AW 738b).

This act of arranging what is given in intuition is what Kant calls synthesis of the manifold.

This synthesis is then cognized by the structured application of concepts in the understanding.

If the synthesis is empirical, then we have an ordinary empirical cognition.
If the synthesis is pure, then we can arrive at pure concepts of the understanding, which are nevertheless the conditions of possible experience.

Intuition and understanding work together to produce experience.

“Thoughts without content are empty; intuitions without concepts are blind” (A51/B76, AW 737b).

The transcendental aesthetic consisted of Kant’s explications of the pure intuitions of space and time.

The transcendental analytic is the much longer explication of the categories of the understanding, how we impose our conceptual apparatus on what is given in intuition.
Un-Cognized Appearances

- What is given in intuition is not necessarily structured by the understanding.
- We are given appearances in space and time but without any conceptual structure.
- “Appearances might possibly be of such a character that the understanding would not find them to conform at all to the conditions of its unity. Everything might then be so confused that, e.g., the sequence of appearances would offer us nothing providing us with a rule of synthesis and thus corresponding to the concept of cause and effect, so that this concept would then be quite empty, null, and without signification. But appearances would nonetheless offer objects to our intuition; for intuition in no way requires the functions of thought” (A90-1/B 123, AW 744a).
Our Conceptual Apparatus
both subjective and objective

- In order to think about appearances, we have to cognize them.
- We cognize using whatever conceptual apparatus we have.
- That conceptual apparatus is subjective, in that it belongs to us individually.
- But it is also objective, because the world of objects is precisely the world of appearances, what is given in intuition.
There are two coordinated aspects of our cognition: intuition and understanding.
- In intuition, we are given the matter of cognition.
- In understanding, we apply concepts to intuitions to create thought.

There are two pure forms of intuition: space and time.
- All possible experience presumes space and time.

Space is the form of outer sense.
- “The representation of space must already be presupposed in order for certain sensations to be referred to something outside me (i.e. referred to something in a location of space other than the location in which I am)...We can never have a representation of there being no space, even though we are quite able to think of there being no objects encountered in it. Hence space must be regarded as the condition for the possibility of appearances...” (A23-4/B38-9, AW 730b-731a).

Time is the form of inner sense.
- “Simultaneity or succession would not even enter our perception if the representation of time did not underlie them a priori”(A30/B46, AW 733a).

The pure forms of intuition are ways in which we structure the world of things in themselves, not ways in which the world exists in itself.
The Transcendental Analytic

Applying Concepts to Intuitions
Metaphysical and Transcendental Deductions

- Kant presents two deductions of the concepts.
- In the Metaphysical Deduction, Kant presents the categories.
- In the Transcendental Deduction, he argues that they must apply to all understanding.
Kant and Aristotle

- The Transcendental Analytic is Kant’s transcendental derivation of the concepts we impose on appearances given in intuition.
- Kant presents what he takes to be a complete table of concepts, dividing them into four classes.
- In presenting the table, he recalls Aristotle’s work on the categories.
- Ten categories of being
  - A1. substance (e.g. man, horse)
  - A2. quantity (e.g. four-foot)
  - A3. quality (e.g. white, grammatical)
  - A4. relation (e.g. double, larger)
  - A5. where (e.g. in the market)
  - A6. when (e.g. yesterday)
  - A7. being-in-a-position (e.g. is-standing)
  - A8. having in addition (e.g. has-hat-on)
  - A9. doing (e.g. cutting)
  - A10. being affected (e.g. suffering, passion)
- According to Aristotle, all language, indeed all thought, belongs to one of these categories.
- When we say, or think, something, we combine instances from two or more of the categories.
Adapting Aristotle’s List

- If Aristotle’s list were complete, we could adopt it as a fundamental theory about our thought.
- If, further, this list were not merely accidentally complete, but necessarily complete, we might see it as indicating *a priori* conditions of human cognition.
- Such a list could not be gathered empirically.
- Hume presented an empirical collection of psychological capacities, as did Hobbes and Locke.
  - Look where it got those guys: skepticism!
- Kant wants to make sure that the list is complete and *a priori*.
- For Kant, the categories will function as laws of thought, as logical.
- “[The categories] are concepts of an object in general whereby the object’s intuition is regarded as *determined* in terms of one of the *logical functions* in judging” (B128, AW 745b).
- Kant’s logic is thus a psychological program.

Marcus, Modern Philosophy, Slide 35
Four Conditions for the Transcendental Analytic

(1) The concepts must be pure rather than empirical.
(2) They must belong not to intuition and sensibility, but to thought and the understanding.
(3) They must be elementary concepts, and must be distinguished carefully from concepts that are either derivative or composed of such elementary concepts.
(4) Our table of these concepts must be complete, and the concepts must occupy fully the whole realm of the pure understanding (A64/B89, AW 737b).
The Categories of Thought

twelve categories in four classes

- Quantity
  - Unity
  - Plurality
  - Totality

- Quality
  - Reality
  - Negation
  - Limitation

- Relation
  - Inherence and Subsistence (substance)
  - Causality
  - Community (Interaction)

- Modality
  - Possibility and Impossibility
  - Existence and Non-Existence
  - Necessity and Contingency
The development of these categories proceeds transcendentally, rather than empirically.

Hobbes, Locke, and Hume proceeded empirically, looking at our psychological processes and generalizing.

Kant insists that such empirical deductions could never yield the necessity that underlies synthetic a priori reasoning.

“Experience contains two quite heterogeneous elements: namely, a matter for cognition, taken from the senses; and a certain form for ordering this matter, taken from the inner source of pure intuition and thought. It is on the occasion of the impressions of the senses that pure intuition and thought are first brought into operation and produce concepts. Such exploration of our cognitive faculty’s first endeavors to ascend from singular perceptions to universal concepts is doubtless highly beneficial, and we are indebted to the illustrious Locke for first opening up the path to it. Yet such exploration can never yield a deduction of the pure a priori concepts, which does not lie on that path at all. For in view of these concepts’ later use, which is to be wholly independent of experience, they must be able to display a birth certificate quite different from that of descent from experiences” (A86-7/B118-9, AW 742b-743a).
Consider the difference between an instance of causal connection and one of accidental conjunction.

- A massive object falling to the surface of the Earth
- Checking my mail and then having lunch at the diner

The causal relation has an element that necessitates the effect.

The accidental relation has no such aspect.

- I could check my mail without going to the diner.
- I could have lunch without checking my mail.

If the world were Humean (i.e. a world of conjunction rather than connection), then all relations among events would be like that between the mail and diner.

But the world is full of causal connections.

- “This concept [causation] definitely requires that something, A, be of such a kind that something else, B, follows from it necessarily and according to an absolutely universal rule. Although appearances do provide us with cases from which we can obtain a rule whereby something usually happens, they can never provide us with a rule whereby the result is necessary” (A91/B124, AW 744a).

We could do a similar case study with 7+5=12.
The Transcendental Deduction: An Overview

- Intuition presents us with bare appearances.
  - an unordered, unstructured, mess
  - the manifold of representation
- These bare appearances have to be structured in order to be thought.
- We impose concepts, the categories of thought, on the manifold.
- The deduction is an attempt to show that the categories necessarily apply to the manifold given in intuition.
  - to show how the sensible and intellectual functions of our cognitive capacities align
- Two Stages
  - §15-§21, Kant argues that the categories apply to any being with sensible intuition.
  - §24-§26, Kant argues that they apply to any being with human sensible intuition, i.e. with our sensory apparatus.
  - “For if I were to think of an understanding that itself intuited (as, e.g., a divine understanding that did not represent given objects but through whose representation the objects would at the same time be given or produced), then in regard to such cognition the categories would have no signification whatever. The categories are only rules for an understanding whose entire faculty consists in thought, i.e. in the act of bringing to the unity of apperception the synthesis of the manifold that has been given to it from elsewhere in intuition” (B145, AW 750a-b).
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 \textit{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).
Kant’s claim is not the overly dogmatic and implausible claim, held by Descartes, 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).

Kant argues that 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.

Marcus, Modern Philosophy, Slide 47
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.
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.
- We’ll look at just the third, briefly.
Third Antinomy

Freedom and Determinism
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
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
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
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.
- ‘(∃x)Gx’ or ‘(∃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