# Philosophy 203 History of Modern Western Philosophy

Russell Marcus Hamilton College Spring 2014



Class #27
Apperception,
the Application of Concepts,
and the Transcendental Deduction
Plus the Aesthetic!

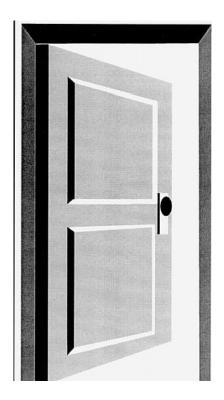
#### **Business**

- Course Evaluations
- We'll talk about the final exam and perhaps a review session on Friday.

#### Review

#### Introduction

- To make room for metaphysics, Kant argues that there are synthetic *a priori* judgments.
  - mathematics
  - ► physics



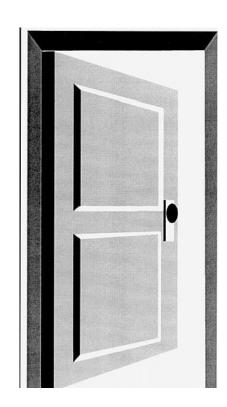
# The Synthetic *A Priori* In Physics

- "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).

#### **Review**

#### Introduction

- 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
- The transcendental analytic
  - ▶ How our minds determine and understand that which is given.
- We are presented, in sensibility, with a world having certain properties.
- We cognize that world, using understanding, according to certain concepts.
- By examining the properties that form the foundations of all our experiences, we will find the necessary properties of our experience.
- By examining the concepts that determine all our understanding, we will find 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).

#### Intuition

- "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**

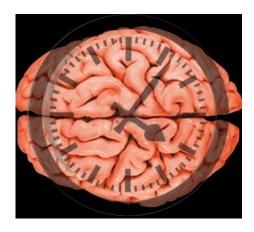
- We can consider pure intuitions by performing what might be thought of as Lockean abstraction.
  - ► The kind of abstraction that Berkeley did not disallow
  - ► The consideration of some properties of an idea, rather than others.
- Or, we can consider pure intuitions by thinking about intuitions without 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.

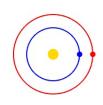
#### **Outer Sense**

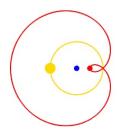
- When we focus on pure intuition, we discover that there are two underlying forms of all intuitions: space and time.
- We represent objects as outside of us using our outer sense.
- All objects outside of us are represented as extended in space.
  - Space is the form of outer sense.
- "The representation 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).

#### **Inner Sense**

- 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).







### The Copernican Revolution

#### Intuition Installment

- 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 can not 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

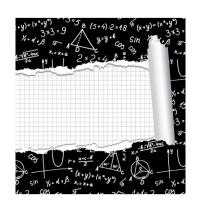
- Taking space and time to be forms of intuition, Kant extends Hume's claims about causation.
- Hume reinterpreted 'cause' as a mental phenomenon.
- By taking space and time to be forms of our intuition, rather than things in themselves, Kant is able to take objects in space and time to be empirically real even though they are transcendentally 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 transcendentally 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.

# Geometry, Mechanics, and the Pure Forms of Sensibility



- 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, 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, successively. Hence our concept of time explains the possibility of all that synthetic 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.

### From Intuition to 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.

## **Pure Synthesis**

- 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.





#### Review

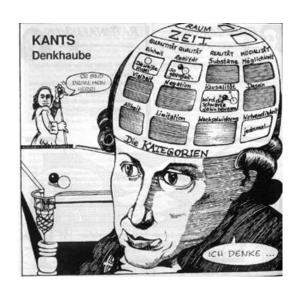
#### Transcendental Aesthetic

- 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.

### 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

# Transcendental Deduction and the Categories

- 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).

# **Causation: A Case Study**

- 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 Transcendental Deduction: Stage One

#### **Combination**

- The application of categories which results in a thought presupposes more structure and organization than is given in bare, thin, messy intuition.
- Kant calls the imposition of concepts on the manifold of representation by the understanding combination.
  - ▶ 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.
  - ▶ "Combination is representation of the *synthetic* unity of the manifold. Hence this unity cannot arise from the combination; rather by being added to the representation of the manifold, it makes possible the concept of combination in the first place... Hence a category already presupposes combination" (B131, AW 746b).

## **Apperception**

- A thought has a cognizer, something which performs the combination, as an implicit component.
- The Implicit thinking is what Kant calls apperception.
- Apperception has to unify the messy manifold into an orderly cognition.
- As it does so, It presupposes a particular thinker or apperceiver.
  - ► "For the manifold representations given in a certain intuition would not one and all be *my* representations, if they did not one and all belong to one self-consciousness" (B132, AW 746b).

# The Synthetic Unity of Apperception

- We proceed from a diverse manifold given in intuition to a single thought of a single, conscious person.
- When we do so, we combine (either by synthesis or otherwise) the manifold.
- This combination is an active function of our cognition in contrast to the passivity of intuition.
- We act on the manifold in intuition, unifying it and subjecting it to the conditions of the synthetic unity of 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).

# **Unity and Synthesis**

The unity is both objective and subjective.

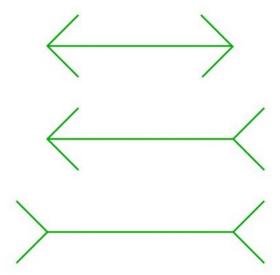
- It is subjective because it is my unity.
  - ▶ When we determine an intuition, we make it ours.
  - Everyone's individual experiences are independent.
    - "The empirical unity of apperception...is only derived from the original unity under given conditions *in concreto*, has only subjective validity. One person will link the representation of a certain word with one thing, another with some other thing; and the unity of consciousness in what is empirical is not, as regards what is given, necessary and universally valid" (B140, AW 749a).
- It is objective, since it represents to me external objects
  - ▶ "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).

#### Contrast:

- 'if I support this body, then I feel a pressure of heaviness'
- 'this body is heavy'
- Since we have knowledge of physical laws, we are able to make the latter claim.
- Unless the subjective unity of apperception were also objective, we could only make the former claim.

  Marcus, Modern Philosophy, Slide 36





"These lines look like they differ in length, but they are actually the same length."

#### **Objectivity**

- Relations among appearances are not merely arbitrary or accidental.
- We know of causal relations.
- Thus, we must be able to make objective claims about objects, not merely subjective claims.
  - ► Hume's skepticism was problematic precisely because we do know about causal relations.
  - ▶ Balls of uranium and balls of gold
- Instead of opposing subjectivity merely to objectivity, Kant is making a three-part distinction:
  - ▶ subjective
  - ▶ objective
  - ► transcendental/noumenal

# Objectivity and the Synthetic Unity of Apperception

- Every act of cognition presupposes the synthetic unity of apperception as an a priori condition of judgment.
- It is only by combining representations objectively that relations can hold a priori or necessarily.
  - ▶ "Bodies are heavy. By this I do not mean that these representations belong *necessarily to one another* in the empirical intuition. Rather, I mean that they belong to one another *by virtue of the necessary unity* of apperception in the synthesis of intuitions; i.e., they belong to one another according to principles of the objective determination of all representations insofar as these representations can become cognition all of these principles being derived from the principle of the transcendental unity of apperception" (B142, AW 749b)
- Intuitions become objects for an individual through the synthesis of the manifold.
- But they are still objects.
- We can distinguish between fantasies and appearances
  - between merely empirical judgments and objective a priori ones.

#### Form and Content

- So all of our cognitions have these two aspects
  - the matter given in intuition
  - the structure imposed by the understanding (on what is combined in apperception).
- The matter may be pure and a priori
  - e.g. when we reflect on the structure of intuition itself
- The matter may be empirical.
  - e.g. as when we have an ordinary sense experience
- The imposition of concepts by the understanding presupposes a self which unites the raw matter and, by doing so, makes it objective.
- The process of turning pure intuition into conceptual content is precisely the application of the categories.

#### **Limits of the Categories**

- Any creature that uses Intuition, that represents the world, will necessarily apply the categories in order to have experiences.
- An infinite mind might, in contrast, work not by representation but by direct awareness.
- That mind would have no use for the categories.
- Moreover, we can not explain why we are constructed as we are, with these two aspects of cognition or with these particular categories of understanding or forms of intuition.
- Such questions are unanswerable and any attempt to provide answers extends reason beyond its bounds.
  - ▶ "But why our understanding has this peculiarity, that it brings about unity of apperception a priori only by means of the categories, and only by just this kind and number of them for this no further reason can be given, just as no reason can be given as to why we have just these and no other functions in judging, or why time and space are the only forms of our possible intuition" (B145-6, AW 750b).
- All we can do is describe our experiences and their a priori preconditions.
- Such descriptions will have limits.
- They will only describe our experiences and our possible experiences.

#### **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, for example, are not claims about a transcendent world.
  - They hold only 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).
- 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.

# The Transcendental Deduction: Stage Two

#### **Toward Human Sensibility**

- In the second stage of the transcendental deduction, Kant shows that the categories necessarily apply not merely to any cognizer with intuitive and conceptual functions, but specifically to human sensibility.
  - ► mainly §26
- It might be possible, one supposes, to imagine creatures who also have both intuitions and conceptual cognition, but with different forms of intuition.
  - We experience the world in space and time.
  - ► All of our cognition presupposes these forms.
  - Anything not in space and time is not an object of our possible experience.
- Our concepts might apply to another kind of intuition.
  - ► They are mere forms of thought, after all.
- But we could not cognize such an object.
- These particular categories apply to our particular intuition to create a world which is both objective and knowable.

#### **Making Nature Possible**

- "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 that we are given in intuition.

# **Space and Time on Double Duty**

- We intuit the world in space and time.
- They are also themselves available for intuition.
  - ► "Space and time are represented *a priori* not merely as *forms* of sensible intuition, but as themselves *intuitions* (containing a manifold), and hence are represented with the determination of the *unity* of this manifold in them..." (B160-1, AW 753b).
- Since space and time are pure forms of intuition, they are presupposed in all experience.
- Since any experience is already structured, or determined, space and time, as we experience them, are deeply embedded in those experiences.
- Since any experience also presupposes the application of the categories, space and time themselves must be subject to the categories.
- Pretty trippy, right?

# Presupposing Magnitude (in Space)

When I turn the empirical intuition of a house into a perception by apprehending the intuition's manifold, then in this apprehension I presuppose the *necessary unity* of space and of outer sensible intuition as such; and I draw, as it were, the house's shape in conformity with this synthetic unity of the manifold in space. But this same unity, if I abstract from the form of space, resides in the understanding, and is the category of the synthesis of the homogeneous in an intuition as such, i.e. the category of *magnitude*. Hence the synthesis of apprehension, i.e. perception, must conform throughout to that category (B 162, AW 754a).

# **Presupposing Time and Change**

- Apprehending the freezing of water
- When I perceive the water changing states, I presuppose time, in order that I can represent change.
  - ➤ This synthetic unity, as an *a priori* condition under which I combine the manifold of an *intuition as such*, is if I abstract from the constant form of *my* inner intuition, i.e., from time the category of cause; through this category, when I apply it to my sensibility, *everything that happens is, in terms of its relation, determined* by me *in time as such*. Therefore apprehension in such an event, and hence the event itself, is subject as regards possible perception to the concept of the *relation of effects and* causes; and thus it is in all other cases" (B163, AW 754a).

# The Categories and Human Sensibility

- The categories apply to any intellect which receives appearances in intuition.
- But now we see that they apply specifically to our intuition which is sensible in the forms of outer sense (space) and inner sense (time).
- Abstracting space and time, we find that the categories were presupposed.
- We do not, via abstraction, create the categories.
- We discover them 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).

#### **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 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.

#### 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.

# **Exceeding Pure Reason**

- 1. The antinomies
  - ► Infinitude of space and time
  - ► Simples
  - ► Free Will
- 2. The ontological argument for the existence of God