Kant Lecture 4

Review Synthetic a priori knowledge

Statements involving necessity or strict universality could never be known on the basis of sense experience, and are thus known (if known at all) a priori. Hume has claimed that the only statements we can know a priori are statements where the subject is contained in the predicate, i.e., statement whose negations are contradictory. This seems eminently plausible. Statements whose negations are not contradictory tell us something substantive. They are not true merely in virtue of the meanings of the words. How could it be possible for us to know such statements without the use of sense experience? So, for Hume, the only statements involving necessity or strict universality (the only statements we could know a priori) would be statements where the subject is contained in the predicate, i.e., what Kant would call analytic statements. So Hume would deny the possibility of synthetic a priori knowledge.

Claims of arithmetic and geometry are synthetic, not analytic. But they are necessarily true, and hence, if known at all, must be known a priori.

This means that they are not, in Hume’s terms, mere relations of ideas. It is not the case, in these statements, that the predicate is contained in the subject. These statements are not such that their negations are contradictory. So, if we do indeed know them to be true, then it must be possible to know some synthetic statements that are necessarily or universally true.

Kant thinks this is a devastating blow to Hume. Hume’s challenge is good one. It does not seem possible to know in advance of experience anything that is not logically true. But the claims of mathematics and geometry are known independently of sense experience, and are not logically true. So, either we don’t know them at all (a claim Kant thinks Hume would never have accepted), or else it is indeed possible to have synthetic a priori knowledge.

Kant has claimed, in the Preface and suggested in the Introduction, that such knowledge could be possible only if it reflected something, in our experience of objects that was due to the nature of our consciousness of objects rather than to the intrinsic nature of the objects of our consciousness. This would be something, in our experience of objects, that reason contributed after a plan of its own. Initially, this is merely a hypothesis, a possible explanation. In the next section, Kant begins to more fully explain how this hypothesis could explain the possibility of our a priori knowledge of the synthetic truths of arithmetic and geometry. Knowledge of these statements is possible because they reflect something reason has contributed. Kant’s claim is that time and space are not features of reality as it is in itself, but the necessary forms of our perceptions of objects. They are due not to the independent
nature of reality, but to the way our minds work. Knowledge of arithmetic is possible because time is the form of inner sense. Knowledge of geometry is possible because space is the form of outer sense. So, for Kant, time and space are empirically real but transcendentally ideal.

**Sensibility and Understanding**

I have thus far used the metaphor of the rose-colored glasses to explain what Kant meant by saying that there is something, in our experience of objects, that “reason contributes after a plan of its own.” The idea is that there are certain parts of our experience of objects that reflect not the intrinsic nature of the things (in themselves) that appear to us, but rather the subjective necessity for how anything can appear to us through consciousness. At this point Kant makes clear that there are two distinct aspects to this “contribution.” The “Understanding” makes a “contribution” to the concepts we necessarily use in order to “think” of something as an object, and the “Sensibility” makes a “contribution” to how our sensations must be organized. The next major section of the text, “The Transcendental Doctrine of Elements” discusses both of these two contributions. The first section, the “Transcendental Aesthetic,” discusses sensibility, our “faculty” of being affected by objects in sensations, and the following section (which we will not be reading), “The Transcendental Logic,” discusses our “faculty” of understanding. Though we are only reading the first of these two sections, I will have a little to say about both in explaining the difference, and why Kant thinks there must be two such “contributions” that the mind makes to how things must necessarily appear to us in conscious experience.

So, to continue with our metaphor, the rose-colored glasses (that we must wear in order to be conscious of objects) perform two distinct functions: first, the “raw data” of the senses must be organized into a spatio-temporal array. This is the subject matter of the section we are reading, the “Transcendental Aesthetic.” But after this, this “spatio-temporalized” array of sense data must be categorized (or “synthesized”) according to the rules for what it is for something to be experienced as an enduring object that persists through changes of its properties.

**Intuition as our Faculty of Sensibility**

In order to understand these two distinct “faculties” (or these two distinct subjective contributions to how we experience objects), Kant thinks that we must first “isolate sensibility, by taking away from it everything which the understanding thinks through its concepts, so that nothing remains save empirical intuition.” [p. 221 of our text] If you think of your sense experience right now, you have a kind of “inner TV or computer screen,” composed of colored shapes which you understand or interpret as an experience of a room full of people and other objects. It is the “understanding” that does this interpreting. You “understand” that it is certain collections of colors that represent a table, other groups of shapes and colors that represent me, etc.
Thinking of this “screen” as a kind of computer monitor, you can think of these colors and shapes as collections of pixels. It is your understanding that “categorizes” these collections of pixels into experiences of objects. When we “isolate” sensibility, we consider these arrangements of pixels as such, without thinking about how we group them into experiences of objects. The rules for how we do that are what Kant discusses in the next section, which we aren’t reading. The data on the computer screen changes from moment to moment. The computer doesn’t “know” that a certain arrangement of pixels at one moment—in one “frame”—are representations of the same object as some arrangement of pixels at another moment—on the next “frame.” The general rules for organizing pixels from one moment to the next, of “synthesizing” them or holding them together to count them as representations of the same enduring object, these are the what Kant calls the “Categories of the Understanding.” These are rules that the mind uses to “understand” the ever-changing data of sensations as constituting the same (or different) objects of experience.

But what Kant is concerned with in this section is the organization of those pixels within and across “frames.” That is, even after we isolate sensibility from the concepts used to interpret it, we must still distinguish between what Kant calls the “matter” and the “form” of intuition. (Kant calls these “uncategorized” or “unconceptualized” aspects of our experiences of objects “intuitions.”) The “matter” of intuition are the actual sensations that occur in us by being affected by objects. The “form” is the organization of those sensations that is supplied by the mind itself. This “form” of intuition, Kant calls “pure intuition,” or “the pure form” of our empirical intuition of objects.

In the passage cited above, Kant says that we must “isolate” sensibility from the contributions of the understanding. To get to the form of intuition, Kant continues, “we shall also separate off from it [i.e., from sensibility] everything which belongs to sensation, so that nothing remains save pure intuition and the mere form of appearances, which is all that sensibility can supply a priori.” [p. 221] And what sensibility can “supply a priori” are two forms of intuition, namely time, as the pure form of “inner intuition” and space as the pure form of “outer intuition.”

**Time and Space as the pure forms of inner and outer intuition**

We have sensations (intuitions) of our own inner states. Kant calls this “inner sense.” In addition, we have intuitions of things outside of our minds, that is, of things that exist in a different spatial location. Kant calls this “outer sense.” Kant claims that time is the form of inner sense and that space is the form of outer sense.

Let me continue to use the metaphor of a computer screen. You can think of this as explaining what goes on (in the mind) in order to create the “picture” that you see in your mind’s eye.
The computer doesn’t send (analog) “pictures” to the computer screen. Likewise, your eyes don’t send little pictures to your brain. What the computer sends to the screen (to the “display driver”) is a series of zero’s and one’s, a linear (or one-dimensional) stream of information. Something in the display software (the display driver) tells the monitor how to display this information. The first “packet” of bytes tells it how to light up the top-left pixel on the screen. The next packet tells it how to light up the next pixel to its right, all the way until the top line of pixels is lit up. Then it tells it after so many pixels to go down one row, and go back to the far left, and provides information on how that pixel is to be illuminated. And then the rest of that row, etc., all the way down to the bottom of the screen. After the entire screen has been illuminated, it tells it to start over again at the top of the screen, with a new set of instructions. And all of this is repeated dozens of times per second.

Something similar must go on inside your own mind. The data sent from the sense organs to the brain is just a linear series of information. Something inside of us must tell us how to “display” this information. Something “inside us,” that is, organizes the data of sensibility and organizes it into a spatio-temporal “manifold.”

So, Kant is saying, it is something in us, something contributed by the nature of the conscious subject, that spatio-temporlizes the data we receive from sensibility. That means that space and time and not features of reality in itself, but are instead necessary features of how we organize the data we receive from independent objects. Time is the form of inner sense, and space is the form of outer sense. (Arithmetic formalizes the rules for how we organize inner sense, i.e., as one moment after another, after another, etc. The form of time is, if you will, “plus one more, plus one more, plus one more, etc.”) So, synthetic a priori knowledge of arithmetic is possible because time is the form of inner sense. Synthetic a priori knowledge of geometry is possible because this represents how we arrange sense data spatially. That is, we can have synthetic a priori knowledge of arithmetic and geometry because they reflect something that “reason has contributed,” i.e., time and space. Time and space are thus, for Kant, not features of independently real things in themselves, but features of our experience that are contributed by the mind. Time and space are thus “transcendentally ideal.”

But time and space are the necessary ways in which we organize this data of sensibility. That is why we can know in advance that everything we will ever perceive will be perceived as existing in time and or time and space. Since they are necessary features of our how we must always experience objects, space and time are “empirically real.” That is, they are necessary part of all of our experiences of objects.
Time and space (as well as the objects in them) are thus at once empirically real (real within the realm of how we necessarily experience things) and yet transcendentally ideal (not parts of reality in itself, but merely of how we necessarily experience things.)

**Diagrams:**

We started in this course with what we might call “Naïve Realism.” On this view, our consciousness of object is a direct relation between the mind and the object we are conscious of. We could picture it thus:

![Naive Realism Diagram](image)

*A direct relation between mind and thing.*

Subject → Object

Object Independently Real

Immediately aware of

But, we saw, we have trouble explaining things like hallucination on this kind of picture. When we hallucinate, it seems that we see *something*, but it
cannot be an independently existing object. When we hallucinate, there is no independent object there for us to see. And so it seems plausible to say that in such cases, what we see is something that exists only in our mind, something like an idea or sensation. We might represent this view with the following diagram: in consciousness, what we are immediately aware of is not something outside our mind, but rather something that exists only in our mind. Thus:

![Diagram 1]

In this case, how do we understand what happens in perception, i.e., when we are not hallucinating, and there really is some external object there for us to see? We would then represent it like this:

![Diagram 2]

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**Locke's Casual Theory of Perception**

- **Mind's Eye**
- **Directly Aware of**
- **Idea**
- **Causes**
- **Object**
- **External World**
So, on this model, in all cases what we are directly and immediately aware of is always merely an idea or sensation that exists in our mind. In the case of hallucination, there is no object in the external world that this idea actually represents. In the case of perception, the idea we are directly aware of is caused by an external object, and correctly represents that external object. This is the account of perception we find in both Descartes and Locke. (For what it’s worth, it is also found in many other views throughout the history of philosophy, including some there are still held today.)

But, we saw, both Berkeley and Hume pointed out problems with this account. (They are essentially the same sorts of problems that we began with in Descartes.) If all that we ever directly perceive are ideas in our minds, how can we ever justify our belief that there is any world that exists outside our minds? Descartes thought he could argue for the existence of such a world by making an appeal to the fact that God is not a deceiver. Berkeley argued that if all that we can conceive of are ideas in the mind, then we cannot even conceive of a world of material substances that were not ideas in the mind. (That is the thrust of his “Master Argument.”) Hume argued that we have no evidence for the existence of such material substance, and that, likewise, we have no evidence for the existence of mental substance either. In both cases, their reasoning stemmed from taking seriously the claim that we directly perceive only ideas in our minds. Once we accept this, it seems, we are led either to Berkeley's idealism or Hume’s skepticism.

Kant’s transcendental idealism, I think, avoids these problems. The “representational realist” (what is pictured in the diagram above labeled “Locke’s Causal Theory of Perception”) argues that the objects of experience are different from what (as Naïve Realists) we originally thought they were: the objects of direct and immediate experience are merely ideas in our minds, and not objects that exist independently of our consciousness of them. Kant’s transcendental idealism, on the other hands, argues that is the experience of objects (how objects necessarily appear to consciousness) that is different form what (as Naïve Realists we originally thought: we experience object only as they appear to us (through the interpretive lens of consciousness), and not as they are in themselves. On Kant’s view, the object that we experience are just what we always thought they were: mind independent things in themselves. It is just that we never (not even in introspection of the ideas or sensations inside our own minds) experience these object as they are in themselves, but only as they appear to us through our subjective experiential “faculties.” And so Kant’s transcendental idealism could be represented thus:
Here, it is (in the diagram) the “arrow” that is different than we initially thought, not the object that the arrow is pointing at. This big “bulge” in the line represents what I have called the “rose-colored” glasses. This represents what “reasons produces after a plan of its own,” i.e., the conditions of the possibility of consciousness of objects that are due to the nature of consciousness itself, and not to the nature of reality in itself.

In class today, we talked more about these two aspects of what lies a priori in the mind, that is, about the roles of the “understanding” and of “intuition.” I won’t try to convey all of that here. But hopefully these diagrams, and the discussion above, helps to understand Kant’s Transcendental Idealism.