



1:00	<p>To summarize last week...we were looking at the "Metaphysical Exposition of Space" which contains two arguments.</p> <p>Two arguments demonstrate that space is a priori and two demonstrate that space is an intuition.</p>
	<p>The first argument is that space must be a priori because it is presupposed as a condition for the possibility for anything to be either outside our mind or for objects to be outside one another.</p> <p>The twist in this argument is that the notion of outsidedness—which he is taking here as primitive, as that which is not 'in my mind', because what we want after all if independent objects—is not <i>analytically</i> equivalent to "in space".</p> <p>Rather it turns out for "us human beings" that we can only know an object to be outside our mind if it is somewhere where we are not or an other object is not <i>in space</i>.</p> <p>So the first argument turns on demonstrating that there is a synthetic a priori relation between the concepts of outside and spatiality.</p>
3:00	<p>The second argument says that we can never represent to ourselves objects without space, but we can't represent to ourselves space without objects.</p> <p>The temptation is to read this argument psychologically or even logically—but it is neither.</p> <p>The question is a question of—remember throughout all we do that like Descartes and Leibniz and Hume that Kant is a representationalist—he thinks that we have representations of the world. And the reason that we can represent space as without objects is because we are doing just that when we do <i>geometry</i>.</p> <p>Doing a geometrical proof of any kind just is a representation of the formal features of space. Hence the entailment, and what it adds to the first argument, is that not only is space necessary for our experience of objects outside of us, but it is necessary for the possibility of the objects of outer experience: namely, appearances.</p>

5:30	<p>Kant then presents two arguments to show that space is an intuition, where the opposite of intuition is concept.</p> <p>Both of the arguments about the a priori and now about the intuition are criticisms of Leibniz.</p> <p>Leibniz thought that space could not be anything in itself—you can't touch it, you can't feel it, etc.—therefore it was truly nothing. It represented confusedly relationships between objects.</p> <p>And once we have deeper knowledge of objects—the idea being that each monad is like a little computer program—then we wouldn't need the notion of space, the identity of an object would be given by its computer program or by its "complete concept".</p> <p>Since only monads are real for Leibniz space is an illusion.</p>
7:00	<p>Kant thinks space is an intuition, and individual, and his first argument for that is that the relation one-to-many with respect to space is a relation of part to whole.</p> <p>For anything to count as or to be a space is for it to be spatially related to some other space.</p> <p>So the right question about any representation of space is "where is it?" and we answer by saying 'it is to the left, above or below, 100 miles from' some other space.</p> <p>So the parts of space are grasped or represented through their relationship to other spaces and there is no point at which we would think of their being two spaces. Because with respect to any possibility of any two spaces, we want to know where is each space with respect to the other one.</p> <p>And the only thing that would account for us as knowledge of where each space is is a spatial account.</p> <p>So space must be one.</p>
8:30	<p>The second argument for intuition concerns the idea of an infinite given magnitude.</p> <p>Here the idea is that we always conceive of space such that for any given space there can be another space outside it. We understand the idea that to represent any possible space we would necessarily represent it as being bounded by some further space. That further space bounded again by a further space, etc., etc.</p> <p>And that is the sense in which we have already an awareness space as infinite given magnitude.</p>

10:30	<p>And then last week we went on to present a third argument for why space is a pure intuition—on that is not in the <i>CPR</i> but scattered throughout other works—namely the argument from incongruent counterparts.</p> <p>Basically this is the argument from the irreducible difference between right and left hands.</p> <p>And we suggested that the argument from incongruent counterparts, that these things are qua object qualitatively identical. That is, if you do all the descriptions of the relationship of one's pinky to one's thumb, all the analyses, all the angles and measurements and angles would come out the same.</p> <p>And yet they are different and their difference is irreducible. It is not therefore conceptually to be understood, that right and left first are spatial properties. And secondly that our knowledge is itself not conceptual. That is there is no series of conceptual arguments or accountings which I can give you or anyone to tell you the difference between right and left.</p> <p>It is literally—to use Kant's word—orientations. They are primitive orientations. Our knowledge of them is intuited in that our knowledge of right and left is orientational and our knowledge is immediate and non-conceptual.</p>
12:00	<p>And hence from the foregoing discussion we can know that space is an a priori intuition. That is where we left things last week.</p> <p>In a nut shell, the arguments for the a priori, intuitive character of space are:</p> <ul style="list-style-type: none"> <li>Outsidedness</li> <li>Geometry</li> <li>One Space</li> <li>Infinity</li> <li>(incongruent counterparts)</li> </ul> <p>These are five arguments we ought to know off the top of our heads.</p> <p>Today we will try to draw some inferences or conclusions from them.</p>

13:00	<p>The problem of space being an infinite given magnitude raises a problem of what Kant might mean by "form of intuition". And this is something he comes to recognize himself.</p> <p>And therefore he comes to decide that he wants to distinguish between the "<b>form of intuition</b>" and a "<b>formal intuition</b>".</p> <p>Why does he need this distinction?</p> <p>The idea of an intuition is the representation that is immediate and individual—an immediate representation of an individual.</p> <p>And you may ask what on earth would count as an immediate representation of an <i>infinite</i> given magnitude. It sounds like a bad moment in a Borges story.</p>
15:00	<p>The idea of representing space as a one, but we can't represent to ourselves immediately an infinity.</p> <p>So we have to nuance this because roughly this notion which is part of his argument for space being an intuition simply is incompatible with the idea of its givenness—infinity and givenness don't go together.</p>
16:00	<p>So Kant will say later that in truth space can only be represented by means of "successive syntheses"—that is successive acts of representation in which I articulate and put together one representation with another representation.</p> <p>I can successively represent this space here, and the next space as outside it, and the next as outside that, etc. But those are successive acts of synthesis.</p>
17:00	<p>So Kant states that at A291:</p> <p>"...pure space and pure time...are indeed something, as forms of intuition, but are not themselves objects which are intuited."</p> <p>...if that doesn't drive you crazy.</p> <p>This is what is driving this distinction between form of intuition and formal intuition.</p>
18:00	<p>Kant writes in a letter to Schultz, quoted in Allison p. 113, that this notion of form of intuition is not an object itself but the possibility of an object. Space as a form of intuition is not itself an object but the possibility of an object, therefore it is a pre-conceptual, or "pre-intuitive" framework that both guides and limits conceptual activity.</p> <p>That space as a form of intuition is not itself an object but a preintuited framework that both guides and limits conceptual activity.</p>



24:00	<p>So we might say that while "forms of intuition" is indeterminate "formal intuitions" is determinate—maybe that is just what geometrical activity is: making indeterminate possibilities of space determinate.</p> <p>Kant makes this distinction explicitly in a footnote at B 160—and we will return to this footnote when we do the second edition deduction—but we will look at it here.</p> <p><i>"Space, represented as an object (as we are required to do in geometry), [1] contains more than mere form of intuition; it also contains combination of the manifold, [2] given according to the form of sensibility, in an intuitive representation, so that the form of intuition gives only a manifold, [3] the formal intuition gives unity of representation. [4] In the Aesthetic I have treated this unity as belonging merely to sensibility, simply in order to emphasize that it precedes any concept, although, as a matter of fact, it presupposes a synthesis which does not belong to the senses but through which all concepts of space and time first become possible. For since by its means (in that the understanding determines the sensibility) space and time are first given as intuitions, the unity of this a priori intuition belongs to space and time, and not to the concept of the understanding (cf. § 24)."</i></p> <p>[1]—that's what geometry is, the conception of space as an object. Why? because it has determinate properties and only objects have determinate properties, although in this case they are formal.</p> <p>[2]—connectedness, point A and point B. So I have articulated the indeterminate manifold of space. Take two points, that is already a many, I've said the shortest distance between them is a straight line, therefore I have given them a determinate character—and it turns out that is a necessary truth.</p> <p>The manifold is the two points, A and B, and the line, and their connection would be, once we've constructed the object, the proof that shows that the shortest distance between two points is a straight line.</p> <p>[3] which we are calling the indeterminate potentiality for different geometrical figures, different possible spatial objects.</p> <p>[4] that is I give space a determinate character.</p>
28:00	Question:
	<p>Formal intuition is conceptual in part.</p> <p>The conceptual determinations of space are dependent—and this is what we are going to look at now—on the pre-intuitive of the form of intuition, that is on indeterminate spatiality as a condition of possibility.</p>

29:30	<p>Having got that far, the next move Kant makes is in §3—the Transcendental Exposition of Space where he says:</p> <p><i>"I understand by a transcendental exposition the explanation of a concept, as a principle from which the possibility of other a priori synthetic knowledge can be understood."</i></p> <p>So roughly we have the idea so far of space as an a priori intuition—but can that help us explain any other bits of knowledge we have?</p>
31:00	<p>And the Transcendental Exposition is going to give such a further extension in that it explains the possibility of geometry. Where he takes it as given that geometry is a body of a priori synthetic truths. What he has to show is from what we have already learned about space itself as an a priori intuition explains the possibility of geometrical knowledge.</p>



32:00	<p>First of all, why doesn't Kant think that geometry is a body of synthetic a priori truths-we talked about arithmetic a couple of weeks ago.</p> <p>Here we are looking at the following handout:</p> <p><u>Geometric Proofs (following Euclid)</u></p> <ol style="list-style-type: none"> <li>1. the Protasis = the proposition to be proved</li> <li>2. the Ecthesis, e.g., Let ABC be a triangle...</li> <li>3. the Preparation, e.g., extend line AB...</li> <li>4. the Apodeixis = using axioms, etc., and properties of the drawn figure, a series of inference are made concerning the figure drawn in steps 2 &amp; 3 in order to reach the desired conclusion.</li> <li>5. Restatement of the Protasis</li> </ol> <p>Kant's notion of construction conforms to steps 2 &amp; 3 of Euclid's method. Proof requires construction in intuition.</p> <p>The reason he thinks geometry is a body of synthetic a priori truths is roughly because he just thinks it follows Euclid's method. It is really textbook stuff, following the proof structure of standard geometrical proofs given by Euclid and his successors.</p> <p>And the crux of the matter is that there is a relationship in geometrical proofs between the discursive elements and the intuitive elements.</p> <p>So the first step, the Protasis, is something we are going to prove.</p> <p>But how do you do that? In standard Euclidean geometry, steps 2 and 3 set out the intuitive element. He says, let ABC be a triangle. And then you might say, extend line AB the same distance again, and then...</p> <p>But the point is that the proof works through the construction.</p> <p>The proof character is not a series of merely discursive propositions but rather a series of things we do with ideal figures. And this is the constructed element, the intuitive element, that then using our constructions we then make a series of claims.</p>
-------	--

35:30	<p>Here is the thought, Kant took it that you can't do geometry with concepts alone. You can't do it without drawing those pictures.</p> <p>It is not merely deriving some concepts from other concepts. You can't pump out all of geometry just by a few axioms.</p> <p>Otherwise it would be purely analytic.</p> <p>He thinks it extends our knowledge because it is bound up with these things (proofs?).</p> <p>Just as <math>7 + 5 = 12</math>, there are varieties of ways in which he thinks that mathematics is not analytic.</p>
37:00	Question:
	<p>Non-constructability is exactly the kind of constraint he wants. That is his absolute point. To show that, what is the demonstration that two lines cannot enclose a space? The point is that it is non-constructable.</p> <p>The claim that any shape must contain a minimum of three sides is a principle of constructability and not derivable from any axioms, from something we prove via what can and cannot be constructed.</p> <p>And that is meant by constraint. What can and cannot be constructed is the demonstration of the constraint that the pre-intuition, gives us what we can't construct.</p>
39:00	<p>Now the question is that if you are convinced that geometry... the puzzle about geometry is why is it so beautiful? Why does it come out like it does?</p> <p>How come we have this body of what seems like utterly compelling proofs about the nature of space? Well, the Transcendental Exposition is going to argue, that because space is an a priori intuition, it makes possible synthetic a priori truths of geometry.</p> <p>That is the argument of §3.</p>

40:00	<p>And a version of that argument is given by Van Cleve.</p> <p>A handout reads:</p> <p><b>The Argument from Geometry following Van Cleve (p. 35)</b></p> <ol style="list-style-type: none"> <li>1. We cannot construct any cubes with more than eight corners (or any polygons without at least three sides, etc.)</li> <li>2. Therefore, there cannot be any cubes with more than eight corners.</li> <li>3. The inference from 1 to 2 must be legitimate—otherwise, there would be no accounting for our knowledge of geometrical truths such as 2.             <ol style="list-style-type: none"> <li>4. But the inference from 1 to 2 would not be legitimate if cubes were things in themselves.</li> </ol> </li> <li>5. Therefore, cubes are not things in themselves, but only appearances.</li> </ol> <p>We begin with exactly the issue we just were discussing—constructability.</p> <p>We begin with the idea of a necessity. Step one steps a necessity, since the opposite of an impossibility is a necessity.</p> <p>From 1, if we can't do it, then there cannot be. That is we think that if we cannot construct any cube with more than 8 corners, then there cannot be any cubes with more than 8 corners.</p> <p>If our idea here [step 3] is that step one reveals a necessity, then that necessity must rule out contrary states of affairs.</p> <p>Step 4 is about the move from 'we cannot' to 'there cannot be', and this must be legitimate otherwise there would be no account for our knowledge of geometrical truths.</p> <p>In a sense the construction is meant to take us to an account of what is necessarily the case. In a sense, what is going on in step three, especially after the hyphen, is a kind of compressed transcendental argument. It runs from the existence of some body of knowledge to its condition of its possibility.</p> <p>How do I know there cannot be? Because I cannot construct.</p> <p>This is our first foretaste of a transcendental argument. The thought here is from the existence of some knowledge to its condition of its possibility. I know that there cannot be because I cannot construct.</p> <p>But the inference from 1 → 2 would be illegitimate if cubes were things in themselves, meaning that they have their properties wholly independently of my powers of construction or conception.</p> <p>How do you find out how many corners a cube has? If there are</p>
-------	---

46:30	Well, lets see if we can refute the argument.
	Question:
	<p>Briefly, what we are going to say about multiple geometries is that space as a form of intuition is indeterminate, that it becomes determinate but it can be multiply determinate—i.e. it doesn't determine which one or more geometries is the case, we can construct a variety of geometries, one of which turns out to be the geometry of space.</p> <p>The principle of constructability will still hold. Only it turns out that the indeterminacy is stronger than Kant thought. Actually it is not even clear that we should say stronger than Kant thought because there were non-Euclidean geometries in Kant's day. It was during Kant's lifetime that the first non-Euclidean proofs were emerging.</p> <p>So Kant knew about that and was unconcerned.</p> <p>Another issue is to say that whatever Kant was getting at here, there are good article by Jim Hopkins and Onora O'Neill, it is equally true that perceptual space—space as we perceive it—is blatantly non-Euclidean. Like standing on a railroad track parallel lines seem to meet. We live in non-Euclidean space.</p> <p>Space as we perceive it is non-Euclidean. So whatever Kant means it cannot be the perceptual space that he is talking about. Rather it is the condition of the possibility of perceptual space is space, and that would be the space of physics.</p>
49:30	Question:
	<p>Kant is obviously capable of saying that any space can be divided to infinity—that is the notion of a point—that for him is one side of the entailment that every element in space is a space. So he just needs infinite magnitude to be extendable and divisible, he just needs those two.</p>
51:30	<p>The person who hated Kant the most was Russell. Russell's whole life was spent trying to reduce mathematics and geometry to logic. And if there was anything that disturbed Russell it was mathematical constructivism.</p> <p>We will forgo the history of mathematical constructivism after Kant but to say that it is still a live option and it is part of the kind of Wittgensteinian views about mathematics—that is, something is mathematically true if and only if it is constructable and provable, which is an anti-logisticist program.</p>

52:30	<p>We'll get at Russell's complaint following an argument by Van Cleve who seems to be confused on just this point.</p> <p>Reading from a handout:  <i>Apart from minor grounds on which Kant's philosophy may be criticized, there is one main objection which seems fatal to any attempt to deal with the problem of a priori knowledge [necessary truth] by his method. The thing to be accounted for is our certainty [the necessity] that the facts must always conform to logic [geometry] and arithmetic. To say that logic [geometry] and arithmetic are contributed by us does not account for this. Our nature is as much a fact of the existing world as anything, and there can be no certainty [necessity] that it will remain constant. It might happen, if Kant is right, that to-morrow our nature would so change as to make two and two become five [cubes have nine corners]. This possibility seems never to have occurred to him.</i></p> <p>What is Russell worried about here?          Synthetic a priori truths are necessary truths—but to avoid a long discussion about modal logic—they are not necessary, necessary truths.</p>
55:00	<p>Kant seems aware of this thought. The point is that I can show that space is a necessary condition for the possibility... and I can also show that the synthetic a priori character, the necessary character of geometrical truths is dependent upon our powers of constructability and space being an appearance only, but I can't explain any of that [?]</p> <p>So that this is true is contingent.</p>
56:00	<p>Kant says just before A72/B43:</p> <p><i>"It is, therefore, solely from the human standpoint that we can speak of space, of extended things, etc. If we depart from the subjective condition [1] under which alone we can have outer intuition, namely, liability to be affected by objects, the representation of space stands for nothing whatsoever. This predicate can be ascribed to things only in so far as they appear to us, that is, only to objects of sensibility. The constant form of receptivity, which we term sensibility, is a necessary condition of all the relations in which objects can be intuited as outside us..."</i></p> <p>[1] A subjective condition is indeed a contingent condition. Kant is acknowledging Russell's complaint here. He is not arguing against it.</p>

57:30	<p>And again, at B145-, just to be clear about what Kant thinks:</p> <p><i>"But in the above proof there is one feature from which I could not abstract, the feature, namely, that the manifold to be intuited must be given prior to the synthesis of understanding, and independently of it. How this takes place, remains here undetermined. For were I to think an understanding which is itself intuitive (as, for example...), the categories would have no meaning whatsoever in respect of such a mode of knowledge. They are merely rules for an understanding whose whole power consists in thought, consists, that is, in the act whereby it brings the synthesis of a manifold, given to it from elsewhere in intuition, to the unity of apperception—a faculty, therefore, which by itself knows nothing whatsoever, but merely combines and arranges the material of knowledge, that is, the intuition, which must be given to it by the object. This peculiarity of our understanding, that it can produce a priori unity of apperception solely by means of the categories, and only by such and so many, <u>is as little capable of further explanation as why we have just these and no other functions of judgment, or why space and time are the only forms of our possible intuition.</u>"</i></p>
60:00	<p>Why just these categories and why just space and time cannot be further explained. The point here is that for Kant the Russellian objection is exactly a form of bad transcendent realism.</p> <p>It wants an explanation of everything—including an explanation of the human standpoint—from outside the human standpoint.</p> <p>It refuses the contingency of the starting point which is the idea of the human perspective, standpoint.</p> <p>When Kant suggests that we can only see or understand the world from within our own perspective, he is not suggesting this from some standpoint outside of us, he is trying—and this is why we say that the Copernican Turn is a process—he is trying to tease us out of asking questions in which we attempt to step outside our own skin and observe ourselves from some standpoint that is not human.</p>

1:01:30	<p>So of course everything that is necessary here is only contingently necessary, and that is given by Kant's leading question.</p> <p>And Kant's leading question, this is the Copernican Turn, is what are the necessary conditions for the possibility of experience?</p> <p>The only notion of necessity is 'functional necessity'—necessity for the possibility of experience but nothing outside of that.</p> <p>So he begins with the constraint of experience and simply said that the best we can do—and a lot of people think we can't even do that, an argument we will return to...this is also one of the arguments against Husserl's epoche, Heidegger's critique of Husserl is that even that is too much—but at least Kant thinks that the question, what are the necessary conditions for the possibility of experience, the notion that necessity is already connected to a contingency that we have the experience that we do...so we look at the necessary conditions of a contingent experience.</p>
1:03:00	<p>So of course, and now to say why Van Cleve is confused, it does not follow from something that is necessary in Kant that it is necessarily necessary.</p> <p>That is, it fails one of the principles of a kind of modal logic known as S5.</p> <p>But we should not be the least bit concerned about that because modal logics are precisely logics of possible worlds independently of any constraint about what is knowable.</p> <p>So even talking about questions of Kantian necessity by using the tools of modal logic is a mistake. You cannot comprehend the character of Kant's modal vocabulary through modal logic.</p> <p>Not to ruin Kripke's career but as far as JMB is concerned, all of modal logic simply rests on a mistake.</p>
1:04:30	<p>Question:</p> <p>How do I know that all of this won't change tomorrow is actually a question that abstracts from possible knowledge.</p> <p>The whole idea of the Copernican Turn is that it is meant to give us a framework of what it means to think immanently and not transcendently—what it means to think within a human framework.</p> <p>So to ask how do I know that these necessary truths will be true tomorrow if cashed out can only the question of how do I know these necessary truths are necessary?</p>

1:06:30	<p>But that is denying the opening gambit. Which is why a great deal that Kant has to say in the whole second half of the book, the "Dialectic" is a <i>therapy</i>.</p> <p>See <a href="#">#outline</a> above for placement of Dialectic.</p>
	<p>Kant thinks that it is inevitable, necessary given who we are, that we are going to ask transcendent questions. And he is going to ask, it is necessary that we ask, bad questions.</p> <p>And that we go wrong philosophically—and Kant seems to be the first philosopher to argue this—part of the whole strategy of the CPR is to show that not only has everyone before him has been wrong—every philosopher thinks that—but he wants to grounds their activities as intrinsic temptations of human reason.</p> <p>Kant thinks that the temptation to try to think in a non-finite way, to try to have an infinite perspective, is both inevitable and wrong. And we are going to have to therapeutically...</p> <p>Which is why we keep saying that the Copernican turn is a movement, something that you learn or undergo by a series of steps, by seeing that we have been tempted...</p>
1:08:30	<p>And this is what seems to go wrong with G.E. Moore's question:</p> <p>From handout:  <i>"[I]t never seems to have occurred to [Kant] to ask how we can know that all men's minds are so constituted as always to act in a certain way."</i></p> <p>Roughly is what Moore's question, like Russell's question, does is that both blame Kant for not ontologically or metaphysically explaining the possibility of synthetic a priori knowledge, rather than saying that it merely functions as a condition of possibility for experience.</p>
1:09:30	<p>The question here is another version of ignoring the finitude of knowledge. All of these objections ignore the finitude of knowledge and ignore the idea that there is an ultimate frame, that this is always <i>for us</i>.</p> <p>They are the necessary conditions for the possibility...<i>for us</i>.</p> <p>But we are constantly tempted to ask, but is it really true?</p> <p>Even Kantians like Van Cleve and Guyer can't resist asking the wrong question. Because being finite about knowledge is really hard.</p>
1:10:30	<p>Question:</p>



	<p>The word that give Kant all his leverage is "possible"—the necessary conditions for the <i>possibility</i> of experience—</p> <p>He is not trying to explain actual experience. He is looking or something much weaker than actual experience, namely, the necessary conditions for the possible experience, on the assumption that the notion of possibility... there has to be a way of getting some non trivial character to the demonstration.</p> <p>So of course the conditions for the possibility of my seeing this blue bottle cap turn out to be there being a bottle cap, and then you are going to get viciously circular.</p> <p>But he thinks that something interesting might be found by going up to the notion of possibility. And he thinks this because we have got to have some leverage toward, if we are conceptual creatures, toward our modal categories, we had better have a leverage toward necessity, which is going to be gotten through the impossible.</p> <p>So by asking about the necessary conditions for the possibility of experience, as we will see these conditions are way to weak for actual experience—which in a way is what the third critique is all about.</p> <p>Possible experience turns out to be a wild under-determination...so it is not circular because it is thinking about the possibility of experience in a horizon. That the notion of the possible here, so possible here is logically possible, so Kant substitutes possible experience for logical possibility—which is the constraint [on] logic.</p> <p>So what he asks is is there a form of rational constraint that will allow us to argue that is more contraining than logical possibility. And he argues that the next weakest form of constraint is epistemic possibility.</p> <p>Which is blatantly weaker than causal possibility, for example.</p>
	<p>There are many more things that are logically possible than are possible to know.</p> <p>The possible experience is a mere small subset of logically possible worlds. That is why we are saying that if that is right, and modal operators [impossible, necessary, possible] operate here then modal logic is not going to help us, therefore the axiom that <math>\Box P</math> entails <math>\Box \Box P</math> is going to fail for possible experience.</p>

	Part 2 of 2
--	-------------

	<p>To wrap up what we have just said.</p> <p>First of all, the difference of Kant's modal vocabulary—where modal is language of necessary, possible, (actual?), these are the so called modalities and we distinguish between logical possibilities and epistemic possibilities.</p> <p>We distinguish between epistemic necessity and logical necessity.</p> <p>We can even make a further use of the term, we can distinguish between causal possibilities and causal necessities.</p>
1:30	<p>We were suggesting before that logical possibility is too weak.</p> <p>And the simplest example of that is that it is logically possible that there be 2,3,4,5 spaces. There is nothing contradictory there. There is nothing in the laws of logic that says there has to be only one space.</p> <p>However, the argument of the transcendental aesthetic is that we can only represent to ourselves one space. We could never know more than one space because a condition of knowing something as outside something else is that it be spatially related to it, and therefore has to be spatially trackable.</p>
2:30	<p>So this shows that the world of logical possibility is much broader than the world of epistemic possibility. And Kant's way of making that distinction is to say that we can think many things that we cannot know.</p> <p>We must distinguish between thinking, in which we can say that the rules of thinking are governed by the rules of logic, the law of non-contradiction, while the laws of what can be known are to be unearthed through transcendental reflection, through the activity that we are now exposing ourselves to.</p>
3:30	<p>Turning to A26 where we see Kant trying to draw some conclusions to all of this because the question now is given everything else we have just said, what is the upshot?</p> <p>Well the upshot is going to be space is nothing but a form of intuition, which is to say that it is transcendently ideal.</p> <p>That is space is a condition for the possibility of appearances and not a thing in itself. And therefore it follows that for anything to appear to us it must appear in space and we know appearances and not things in themselves.</p>

5:00	<p>A 26:</p> <p style="text-align: center;"><i>"Conclusions from the above Concepts"</i></p> <p><i>"(a) Space does not represent any property of things in themselves, nor does it represent them in their relation to one another. That is to say, space does not represent any determination that attaches to the objects themselves, and which remains even when abstraction has been made of all the subjective conditions of intuition. For no determinations, whether absolute or relative, can be intuited priori to the existence of the things to which they belong, and none, therefore, can be intuited a priori."</i></p>												
6:00	<p>First look at the handout to think about what the possibilities are for different kinds of spaces.</p> <table><tr><td></td><td colspan="2" style="text-align: center;">Our knowledge of space is...</td></tr><tr><td></td><td style="text-align: center;">A Priori</td><td style="text-align: center;">A Posteriori</td></tr><tr><td>Our representation of space is individual of space is exists a Concept</td><td>Leibniz's view of space is our way of seeing the world, but does not mirror reality</td><td>Space is not an (= there are many) and apart from all knowers.</td></tr><tr><td>Our representation of space is an Intuition apart</td><td>Kant's view Space is an individual but not something in itself</td><td>Newton's view (Absolute Space) An individual existing from all knowers</td></tr></table>		Our knowledge of space is...			A Priori	A Posteriori	Our representation of space is individual of space is exists a Concept	Leibniz's view of space is our way of seeing the world, but does not mirror reality	Space is not an (= there are many) and apart from all knowers.	Our representation of space is an Intuition apart	Kant's view Space is an individual but not something in itself	Newton's view (Absolute Space) An individual existing from all knowers
	Our knowledge of space is...												
	A Priori	A Posteriori											
Our representation of space is individual of space is exists a Concept	Leibniz's view of space is our way of seeing the world, but does not mirror reality	Space is not an (= there are many) and apart from all knowers.											
Our representation of space is an Intuition apart	Kant's view Space is an individual but not something in itself	Newton's view (Absolute Space) An individual existing from all knowers											
7:00	<p>We have already shown that our representation of space must be a priori. And in that we are in agreement with Leibniz.</p> <p>But we equally now think that space is an intuition.</p> <p>The competitor here is not Leibniz but Newton. It was Newton who thought that space was absolute, that is an individual thing, but he thought it was a thing in itself, he just thought it was there.</p> <p>But even he was sort of puzzled by the fact that space is empty. It is not a physical thing. It is something like a possibility of physical things.</p> <p>Therefore, in his <i>Principia</i> he thinks of space in an extraordinary way.</p> <p>Newton, the great physicist actually has a theological conception of space.</p>												

9:30	<p>He says:</p> <p>"He [God] is eternal and infinite, his presence from infinity to infinity. He governs all things and knows all things that are and can be done. He is not eternity and infinity, but eternal and infinite. He is not duration or space but he endures and is present. He endures forever, and is everywhere present. And by existing always and everywhere he constitutes duration and space. Since every particle of space is always and every indivisible moment of duration is everywhere, certain the maker and knower of all things cannot be never and nowhere...God is the same God always and everywhere. He is omnipresent, not virtually only but also substantially."</p>
11:00	<p>What would it mean for God to be present virtually but not substantially? That would be the case if he made the world but left it. He would be part of the world virtually in that he made it but not substantially in that he is no longer there.</p> <p>But Newton thinks "For virtue cannot exist without substance. In Him all things are contained and moved, but neither affects the other. God suffers neither from the motion of bodies, bodies find their resistance from the omnipresence of God. It is allowed from all this that God exist necessarily and that he exists always and everywhere."</p>
12:00	<p>What are space and time for Newton? They are sensorium dei. They are God's sensory apparatus. Or, space and time are God's forms of intuition. That is Newton's view. They are how he is aware of everything everywhere and always.</p> <p>It is not reducible to him, because then they would be competitors, but they are his sensorium</p> <p>Kant thought that this thought of sensorium dei was a version of Spinoza—all things are in God is the Newtonian view.</p> <p>Kant says about this view in the Critique of Practical reason, p 102 [in my Gregor translation]:  <i>"Hence, if this ideality of time and space is not adopted, nothing remains but Spinozism, in which space and time are essential determinations of the original being itself, which the things depend upon it (ourselves, therefore included) are not substances but merely accidents inhering in it..."</i></p> <p>That is, if space and time are not forms of intuition, then Kant assumes they have to be properties of God, and therefore we would not be substances, that is independently thinking, but mere accidents of God, and therefore he says, when we take ourselves to be thinking, we would not be thinking, but God would be thinking through us.</p> <p>In short, everything would be determinate.</p>
15:00	<p>So for Kant the converse of believing that space and time are intuition is some form of theological determinism.</p>

	<p>This discussion of Newton tells us something about Kant's inspiration.</p> <p>He does seem to have thought that the most plausible alternative metaphysical account to his is that space and time are God's modes of intuition.</p> <p>And now we can think of what he is doing as literally an anthropocentric turn.</p> <p>Of course if Newton's account is true we could never know anything about anything. It would all be determined.</p> <p>What Kant thinks he is doing is literally changing the God's eye-view to the human-eye view so that space and time are not attributes of God but of human beings.</p>
16:30	<p>But even apart from that as he says at B56, a short swipe at Newton,</p> <p><i>"For if they decide for the former alternative (which is generally the view taken by mathematical students of nature), they have to admit two eternal and infinite self-subsistent non-entities (space and time), which are there (yet without there being anything real) only in order to contain in themselves all that is real."</i></p>
17:30	<p>So what Kant is getting to is that when we think of the question of space, both Leibniz and Newton were asking metaphysical questions—is space real or is it merely the relation between things?</p> <p>Kant says that the question of space is fundamentally about the role it plays in human knowledge.</p> <p>So when I say space is a priori in relationship to Leibniz, I am not interested whether or not it is an innate idea, I mean it is a necessary condition for the possibility of thinking objects outside me. That is I cannot represent anything outside me except as in space.</p>
19:00	<p>So the very notion of outside and spatiality and representation are being hooked up and becoming locked together.</p> <p>When I say that space is an individual I think that in order for me to represent anything I have to represent it as somewhere and in order to do so I have to track it as different than somewhere else.</p> <p>And therefore the idea that it is an intuition is again given by the way it informs the possibility of knowledge.</p>

	<p>So what Kant is doing is acknowledging that there are these great metaphysical questions about space—whether it is one, whether it is a substance, a thing or not—but he says he is going to negotiate these issues indirectly, back-door, sideways, because he doesn't think we can answer these questions head-on.</p> <p>They are unanswerable. The only thing we can know is to what extent space is a condition of knowledge.</p>
20:30	<p>The claim is that space therefore must be, we cannot make clear to ourselves the nature of space independently of the making clear to ourselves the role it plays as a condition for the possibility of knowledge.</p> <p>If that is true, we cannot detach our understanding of space from the role it plays in the condition for the possibility of knowledge. Therefore it follows that space is Transcendentally Ideal.</p> <p>It is a condition for the possibility of appearances and not things in themselves.</p>
21:30	<p>Things in themselves are <i>by inference</i> non-spatial and non-temporal.</p>
	<p>The inference is what drives everyone crazy.</p>
22:00	<p>After all, the argument would go, OK, space is a condition of possibility, it is a form of intuition, it gives us outsidedness and all of that, and one would want to add, because we are all in our heart of hearts naturalists, but why can't it also be a property of things in themselves.</p> <p>This is called the "neglected alternative".</p> <p>It came up in a debate between Kant and Eberhard, who said to Kant that he claims that space is something that has to be either transcendently real or something transcendently idea. Eberhard asks why it can't it be both?</p> <p>Why can't it be true that space does all the things that transcendental idealism says it does and it just so happens that it also a property of things in themselves.</p>
23:00	<p>This is an interesting thought—and JMB claims to have based his entire PhD on it and he has since decided that he was wrong.</p>
	<p>We are going to get at this by rehearsing the debate between Allison and Guyer on this issue—who have squared off exactly over this issue of the neglected alternative.</p> <p>All this appears in Guyer p 335f.</p>

24:3 0	<p>Roughly here we are going to take Allison's side and try to make it convincing.</p> <p>Guyer begins by reconstructing Allison's argument, which he does in 4 steps [following another handout passed around in class]:</p> <p><u>1. Guyer's reconstruction of Allison's fundamental argument</u></p> <ol style="list-style-type: none"> <li>(1) By showing that external objects can be represented only by means of the representation of space, the 'Transcendental Aesthetic' shows space to be an epistemic condition, a necessary condition for the representation of objects.</li> <li>(2) [For Allison] The concept of a thing in itself is, however, precisely a <i>conception</i> of a thing which excludes any epistemic condition necessary for the representation of objects. [i]</li> <li>(3) Therefore, things in themselves are conceived without reference to space.</li> <li>(4) Things in themselves cannot be spatial.</li> </ol> <p>[i] So what Allison thinks is that what Kant means by the thought we know appearances only and not things in themselves, is that we know things only in light of or in virtue of the necessary conditions for the possibility of experience and what they are outside of those conditions, is unknown. Therefore what we mean by thing-in-itself here is things conceived as independent from the necessary conditions for the possibility of experience.</p> <p>For Allison the distinction between appearances and things in themselves are two ways of considering the same thing.</p> <p>You can consider things from the perspective of the necessary conditions of the possibility of experience and that means to consider this pen is to consider it as something that is in space, in time, as a substance, as causally interacting with other objects.</p> <p>To consider it as a thing in itself, since we impute those conditions of possibility, they are merely our subject take on it, if we abstract from them, then of course this pen would be a non-spatial, non-temporal, that is Allison's thought.</p>
28:3 0	<p>Guyer is a self-acclaimed common-sense man who wants to square Kant with good naturalist intuitions thinks that Allison's line is just confused. It confuses a claim about a concept with claims about things.</p>

	<p>And that this is just the absence of the predicate spatial from a certain concept—of the thing in itself—to the absence of that predicate for the things in themselves.</p> <p>Surely, and the voice of common sense always says 'surely', the epistemologically interesting but metaphysically neutral—Jay wants to ask why it is metaphysical at all. He claims that Guyer wants to make it metaphysically neutral because he wants to pretend that it is non-metaphysical.</p> <p>Taking the following off the handout:  <u>2. Guyer's objection</u></p> <p>Allison confuses claims about a <i>concept</i> with claims about <i>things</i>. That is, the key inference (the step from 3 to 4) is just an inference from the absence of the <i>predicate</i> "spatiality" in a certain <i>concept</i> of things to the absence of the <i>property</i> of spatiality from those things themselves... Surely, the epistemologically interesting but metaphysically neutral fact that we can know objects only if they conform to certain conditions does not imply that those objects or any other objects do <i>not</i> in themselves conform to those conditions, even if for some reason the fact of their conformity can or even should be omitted from certain <i>conceptions</i> of those objects.</p>
30:3 0	<p>Hence the "Neglected Alternative"</p> <p><u>3. Guyer's conclusions: the neglected alternative</u></p> <p>The contrary of the principle that Allison is imputing to Kant is that something which is a necessary condition of knowledge may reflect the structure of <i>both</i> the epistemic subject and the object of knowledge, rather than the former <i>instead</i> of the latter.  [Guyer 337–340]</p> <p>So what Guyer wants to say is that Kantian idealism, any idealism is too hard to swallow. Yet, Guyer acknowledges that the CPR has a few arguments worth considering—but he's so fascinated with squaring Kant with naturalistic intuitions—and he says, let's say that Kant is right, the Metaphysical Exposition, the Transcendental Exposition, and the Conclusion, let's say that they are all correct.</p> <p>In some sense then we must consider space as a form of intuition for all of the reasons we have seen, that are epistemic in character.</p> <p>But why shouldn't that allow that if human beings disappeared from the earth, that our presence in the universe is not ultimate but contingent, surely things would still be there and wouldn't they be in space and time.</p>



33:3 0	<p>This seems like a harmless thought, so what could be wrong with it?</p> <p>Well for one, what kind of hypothesis is this? It seems to be a hypothesis that abstracts utterly from knowledge. So one point here is that the very question seems to be odd and peculiar because...</p> <p>[we are] trying to understand what Kant means by transcendent as opposed to empirical. And what Guyer goes wrong in doing is that he looks at space and time as forms of intuition empirically rather than transcendently.</p>
35:0 0	<p>And indeed this is one of the greatest temptations of all when reading Kant.</p> <p>When you are talking about Kant it is almost impossible not to think about the forms of intuition or categories as spectacles that we put, that there are these spectacles that distort or impose what Kant says are "forms"—forms of intuition—so it is tempting to think of these as like a cookie-cutter.</p> <p>So stuff from out there comes in and my forms of intuition grabs it and turns it into a spatial representation. But then it is tempting to think why can't something that I am representing in this way turn out to be something that is really spatial?</p> <p>Thinking of Kant like that is irresistible, yet it is not what Kant is up to. It is thinking about the transcendental as if they were empirical. It is thinking about the forms of intuition as a mechanism or a series of mechanisms that we impose or use to carve up the world to impose ourselves on it and therefore there is no reason why the forms we impose might not actually be imposing themselves on things that already have those characters.</p> <p>So we would be imposing time on things that are already temporal, and we impose space on things already spatial—that just sounds like an acceptable reading of Kant and way of thinking.</p>

37:3 0	<p>Kant is trying to suggest, however, that that way of thinking is still operating at the wrong level. It is still operating in a pre-Copernican way.</p> <p>What Kant is attempting to do is to say that the horizon of the intelligibility about the nature of the world is framed—we have to here distinguish between an <u>epistemic turn</u> and a <u>transcendental turn</u>.</p> <p>An epistemic turn, which is what Descartes, Hume, Locke, all did—here the question is not “What is there?” but “How can I know what is there?” For them it also turns out to be the question, ‘how can I know that my representations of the world correspond to what is out there in the world?’</p> <p>Kant is not asking that question. He is asking a more remote question, namely, and now the peculiarity of Kant’s questions comes to the fore, ‘what are the necessary conditions for even the very possibility of experience?’ because he thinks that even the epistemic turn is itself naturalistic.</p> <p>Because after all, as we saw in the first lecture, to even ask the question ‘how do we know that the world is even there?’ assume that I am here, the world is there, I’ve got representations, and now the questions is how can I hook up my representations to what is there?</p>
40:0 0	<p>So the question of epistemology is not anthropocentric.</p> <p>The question of epistemology is theocentric. Every epistemology is a hidden theology.</p> <p>If the question of epistemology is how can I be sure that my representations hook up to “the world” then the presumption is that the notion of the world, independent of everything, is an intelligible idea.</p> <p>Kant is saying that the notion of the world independent of everything is not an intelligible idea. It is to not take seriously the fact that you are a finite human knower, a conditioned human knower.</p> <p>Therefore when we ask a transcendental question, we are trying to step back from the idea how we can make intelligible to ourselves how things are independently of everything that conditions our access to them, and do the opposite—to think about the meaning of what it is to be a world, as Heidegger would ask, ‘what is the <i>worldhood</i> of the world?’ only in light of those features of our encountering the world that condition it necessarily.</p> <p>It is just those features that make it possible, that constitute the human standpoint.</p>

42:0 0	<p>Which is why the idea of transcendental inquiry is a form of self-knowledge. It is trying to figure out who I am as knower of things.</p> <p>And I can ask other questions about myself—who am I as agent who interacts with other agents? And this is the second critique—that will give us the moral law.</p> <p>Who am I as a receiver of natural representations, that will give you the third critique.</p> <p>The suggestion here is that the reason that Kant thinks that we know appearances only and not things in themselves is to try to ensure this standpoint.</p> <p>So that there is a contrast between appearances and things in themselves. It is trying to establish the contingency of our necessity of our modes of access to the world, and so to speak, live with that fact.</p> <p>To find of inhabit...</p>
43:3 0	<p>So what Guyer thinks of as the common sense thought—that the conditions of knowledge reflect both the structures of the epistemic subject and the object of knowledge is a statement that ignores the Copernican Turn itself.</p> <p>We don't want to say that it is not logically possible, indeed it is logically possible. Kant says that it is coherent to say that. It is also he thinks empty.</p> <p>His thought that we have knowledge of appearances only and not things in themselves, that things have certain properties, is not a complaint against the thought...it is not that it is logically incoherent but that it is empty.</p>
45:0 0	<p>One of the things that Wittgenstein is always getting at is asking when do you have concepts that are spinning without touching anything?</p> <p>That is exactly the right image here for talking about the neglected alternative.</p> <p>It is not that the neglected alternative is logically incoherent or conceptually incoherent—it is that it is empty.</p> <p>And the emptiness is of a particular kind—it is an emptiness of trying to repudiate your own finitude. It is an act of a strange sort of self-hatred of the human.</p> <p>It wants to repudiate the human as a standpoint that is the one that constitutes the meaning and intelligibility of practices that we actually have.</p>

46:00	<p>So Kant will even say at various points of things in themselves that they are the unknown, non-sensible ground of appearances.</p> <p>When he says things like that, he says it in a lovely way, he says how can there be appearances if they are not the appearances of something?</p> <p>So appearances are of course appearances of things in themselves.</p> <p>Which is to say that at some level he is willing even to say that things in themselves exist. We can <i>think</i> their existence. However, in thinking their existence, we are not doing anything more than underlining or acknowledging the finiteness of our own categorial claims.</p>
48:00	<p>That is, Kant wants to say that the thought of whether or not things in themselves are spatial or temporal is a question for which we cannot get an intelligible grip.</p> <p>Everything that would make the question a good question falls away as you ask it.</p> <p>Ergo we know appearances only and not things in themselves.</p> <p>And space and time and everything in them are just transcendently ideal.</p>
	End of Lecture

The following sections of the “Debate Between Guyer and Allison of Transcendental Idealism” has not yet been covered in class:

#### 4. The epistemic and transcendental: conformity and access

Guyer takes Kant's point to be one about objects having to conform to certain conditions. The issue of conformity is compatible with evolutionary naturalism: we have evolved in a spatial world, so of course we are constituted such that, for us, an object not in space and time could not be known. The idea of the Copernican Turn, going transcendental, appears strong than this, it intends a constraint on the intelligibility of posing and answering questions about that there is: Whatever is necessary for the representation of experience of something as an object, that is, whatever is required for the recognition or picking out of what is "objective" in our experience must reflect the cognitive structure of the mind (its manner of representing) rather than the nature of the object as it is in itself. To claim otherwise is to assume that the mind can somehow have *access* to an object... independently of the very elements that have been stipulated to be the conditions of the possibility of doing this in the first place. This involves an obvious contradiction.

[Allison, p. 27]

#### 5. The neglected alternative hypothesis presupposes conceptual scheme-world dualism

Kant taught us that the whole idea of comparing our conceptual scheme with a world of things in themselves to see if the conceptual scheme "copies" the unconceptualized reality is incoherent. [H. Putnam, in Realism and Reason]. The Copernican Turn, by stipulating the certain items previously regarded as objects are first given to us in terms of the *role* they play in providing *access* to the world in general, us having a world, forecloses the intelligibility of wanting to compare our conceptual scheme with the world in itself since *world* now just means what is opened up and disclosed by those necessary structures.