

**Aspects of Western Philosophy**  
**Dr. Sreekumar Nellickappilly**  
**Department of Humanities and Social Sciences**  
**Indian Institute of Technology, Madras**

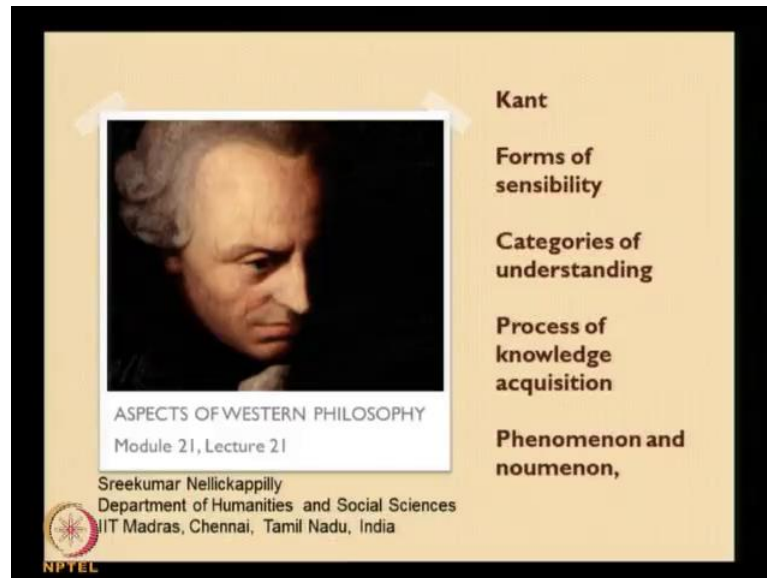
**Module - 21**  
**Lecture - 21**  
**Kant**  
**Forms of sensibility**  
**Categories of understanding**  
**Process of knowledge acquisition**  
**Phenomenon and noumenon**

Welcome to this 21st lecture of this course on Aspects of Western Philosophy, module 21st. In continuation with the previous lecture this is again trying to give an understanding about Immanuel Kant's philosophy. In the previous lecture I have mentioned Kant's philosophy is known as the critical philosophy, because it is basically engaged in a kind of critiquing of human faculties. And for Kant there are fundamentally 3 faculties of the mind, which is related to knowing, willing and feeling roughly, can be divided into pure reason and practical reason and aesthetic judgments.

And the previous lecture and this lecture would be focusing on the first critique the critique of pure reason, which is also the name of Kant's major publication to the first critique. And the previous lecture we have been trying to introduce this whole process of critical philosophy and how Kant has started his examination of pure reason. And this lecture would be actually trying to understand, what is this critique of pure reason all about? What is it trying to achieve?

So, there are 3 basic aspects of the critique, which are known as transcendental aesthetic, transcendental analytic and transcendental dialectic. The transcendental dialectic part we will probably discuss in the next lecture, we will just mention about it but we will discuss it in the next lecture. This lecture we will concentrate on the first two transcendental aesthetic and transcendental analytic, that is what we do when we discuss these two issues the forms of sensibility and categories of understanding.

(Refer Slide Time: 01:59)



**Kant**

**Forms of sensibility**

**Categories of understanding**

**Process of knowledge acquisition**

**Phenomenon and noumenon,**

ASPECTS OF WESTERN PHILOSOPHY  
Module 21, Lecture 21


Sreekumar Nellickappilly  
Department of Humanities and Social Sciences  
IIT Madras, Chennai, Tamil Nadu, India

NPTEL

And by elaborating these two, the transcendental aesthetic and transcendental analytic, we would attempt to explain the process of knowledge acquisition in the sense in which Kant was trying to elaborate it. And then finally we will see the concepts of noumena and phenomena or rather to put it the other way, the reality which is known to us, the reality which is understood by us and the reality those capital R, if at all there is a reality that reality which is unknowable. And for Kant there is no doubt there is there is a domain there is a (Refer Time: 02:41) of things and themselves for Kant, though Kant again was categorical in saying that this is unknowable. So, this is a famous Kantian agnosticism. So, these are the issues which we are going to discuss in this lecture.

(Refer Slide Time: 02:58)

| Synthetic   | A Priori  |
|---|---|
| <ul style="list-style-type: none"><li>• Presupposes experience/percepts from an external source.</li><li>• Our experience of the world must be perceivable</li><li>• About the world.</li></ul> | <ul style="list-style-type: none"><li>• Presupposes certain elements that are not derived from experience.</li><li>• The mental counterpart that is innate.</li><li>• Our experience of the world must be thinkable as well.</li><li>• About ourselves.</li></ul> |



So, we will start with what where we have stop in the previous lecture, the possibility of synthetic a priori propositions, this central problem in Kant's critique of pure reason. So, that is why it keeps on repeating these issues. So, what we have seen yesterday was that synthetic a priori propositions or on the one hand they talk about the world, on the other hand they also talk about us. So, these two aspects of internal and external space, the outer and inner space is brought together to explain the process of knowledge acquisition by Kant.

The synthetic aspect presupposes experience or percepts from an external source. So, this is a very important step when we try to understand Kant's critique of pure reason, particularly the critique transcendental aesthetic part of it. Because of transcendental aesthetic part deals with these percepts or the experience or the sensations that we receive from an external source, then also our experience of the world must be perceivable and it is about the world.

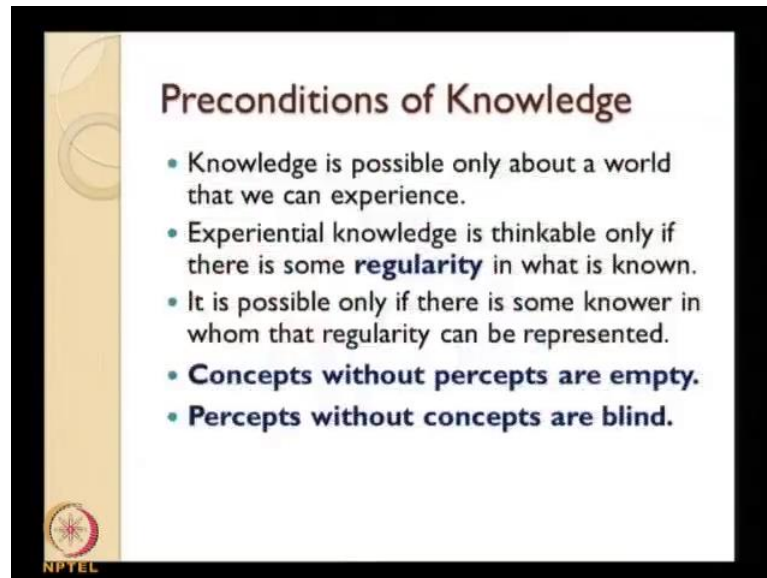
So, that is what the synthetic part of it deals with and a priori part deals with presupposes certain elements that are not derived from experience, that are given a priori not which is a result of experience. The mental counterpart something which is innate what the mind contributes, I mean real knowledge, the scientific knowledge which when we talks about the scientific knowledge, this knowledge is constitutive of synthetic a priori prepositions, not synthetic a posteriori, they are not scientific they are just commonsensical like when

is say it is very hot outside or it is very cold inside, there are all not very scientifically tested statements, this is my feeling. Another person might contradict means by saying that no, no, it is very hot inside this room. So, these are all subjective feelings. But scientific knowledge cannot be subjective feel for example, when I say the temperature in this room is 25 degree centigrade, which is this cannot be your feeling, this is based on certain data which come from outside and also something which we contribute to understand to conceptualize this data in a particular way.

So, there are certain things crude data which comes from outside and this crude data is ordered by the mind, this ordering business by the mind is done by the prior structures, which the mind possesses this is Kant's theory. So, synthetic a priori propositions would explain this, synthetic a priori proposition would if you analyze such propositions, you will get the structure of the mind, you will also get to know how knowledge is possible, you can develop an epistemology for natural sciences, you can overcome the Humean skepticism, you can overcome the kind of dogmatism which was involved among rationalist philosophers, and up with the more comprehensive when balanced theory of knowledge, which Kant was aim into attain.

Now our experience of the world must be thinkable as well. So, on the one hand our knowledge should be about the world, but it is not that we have just a photographer whatever is there just copying no, we contribute to that that is the Kantian point it is about ourselves.

(Refer Slide Time: 06:25)



### Preconditions of Knowledge

- Knowledge is possible only about a world that we can experience.
- Experiential knowledge is thinkable only if there is some **regularity** in what is known.
- It is possible only if there is some knower in whom that regularity can be represented.
- **Concepts without percepts are empty.**
- **Percepts without concepts are blind.**

NPTEL

The way, in which we think about it, the way in which we conceptualize about it. In order to think about it, in order to conceptual of about the world we should possess the instruments by means of which we conceptualize and think, those instruments are a priori they are part of our mental structure. This is why in the previous lecture I mentioned, Kant has introduced something call a Copernican revolution philosophy; this is how Kant has introduce it. Kant made the human mind at the center of the knowledge acquisition process like Copernicus made sun at the center of the universe.

Now preconditions of knowledge; what are these preconditions of knowledge? Knowledge is possible only about a world that we can experience. There you know it is empiricism it is nothing that you know something which we come with, but there should a world and experiential knowledge is thinkable only if there is some regularity in what is known, apparently it looks that Kant is referring to or subscribing to a kind of fundamental empiric principle which asserts that all knowledge is a result of experience, that is true. All knowledge is the result of sense experience sensations and perceptions are important, but this sensations apparently the crude data which we encounter, these sensations in it is first encounter by the mind itself comes to the mind enters the mind in an ordered fashion.

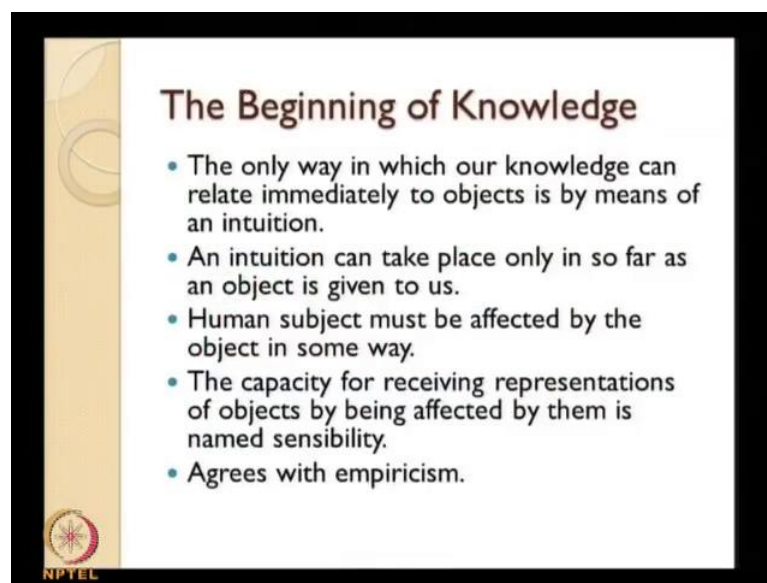
So, before it reaches the mind or rather in the posses of encounter itself, they are ordered in a certain fashion. So, there is a regularity in which it is known. It is possible only if

there is some knower in whom that regularity can be represented. So, what Kant says is that, this regularity cannot be seen there in the world, out there in the world we never know.

This regularity needs to be located within ourselves, with in our mind. Concepts without percepts are empty, and precepts without concepts are blind. This statement is again another very important statement by Kant, concepts without percepts. So, just by having an innate structure of the mind, without having these percepts which come from an outside world, then it is going to be empty. Similarly something which comes from the external world, but there is no conceptual background form which we can order them and regulate them and understand them then it would become blind.

So clear understanding, knowledge is possible only when concepts and perceptions come together, when there is a corporative endeavor activity of both concepts and percepts.

(Refer Slide Time: 09:19)



The slide is titled "The Beginning of Knowledge" and features a list of five bullet points. The slide has a white background with a black border. On the left side, there is a vertical yellow bar with a circular graphic and the NPTEL logo at the bottom.

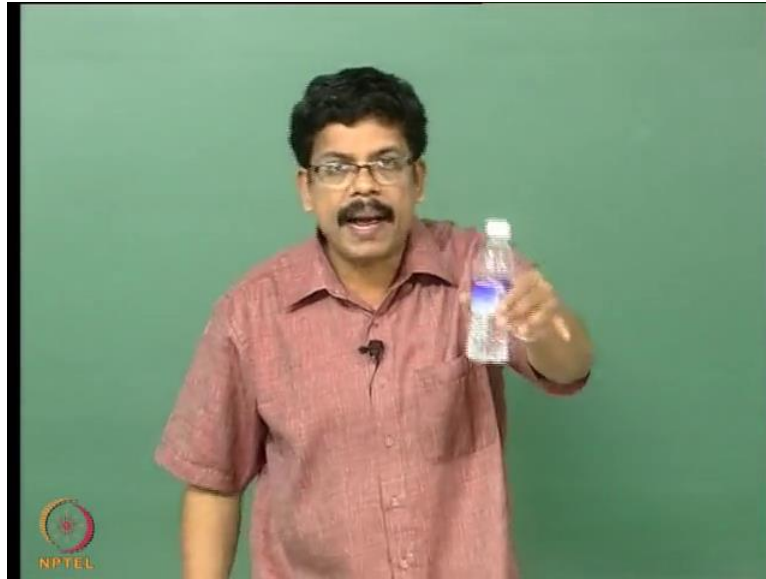
### The Beginning of Knowledge

- The only way in which our knowledge can relate immediately to objects is by means of an intuition.
- An intuition can take place only in so far as an object is given to us.
- Human subject must be affected by the object in some way.
- The capacity for receiving representations of objects by being affected by them is named sensibility.
- Agrees with empiricism.

NPTEL

Now, let us see the beginning of knowledge, what happens? The process step by step, the only way in which our knowledge can be related can relate immediately to objects is by means of an intuition. So, here he talks about an intuition. Intuition is some sort of a sensible sensation, in the sense in which Kant uses it and an intuition can take place only in, far as an object is given to us. So, there should be an object instead of I see for example, I have computer in front of me.

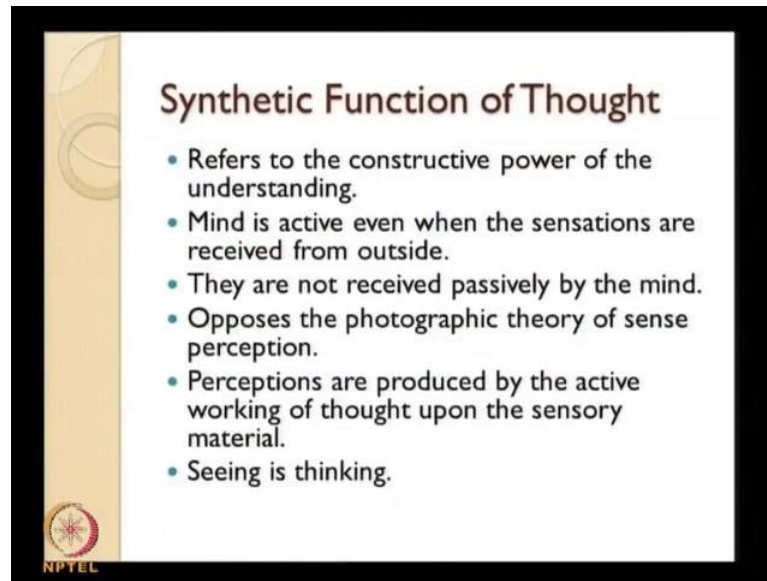
(Refer Slide Time: 09:57)



Or I have this water bottle in front of me, I am holding it in my hand and I can see it this water bottle. So, what is it? There should be something in the outside world; the actual water should be there in the world.

Now, human subject must be affected by the object in some way. So, in some way you know it should affect me, it should have an impact on me, the capacity, but again it is very interesting the capacity for receiving representations of object by being affected by them is named sensibility. So, to get a sensation when I see this bottle water bottle, I get certain sensations some shapes, some color which the empiricist were taking about. So, this is called sensibility.

(Refer Slide Time: 10:42)



**Synthetic Function of Thought**

- Refers to the constructive power of the understanding.
- Mind is active even when the sensations are received from outside.
- They are not received passively by the mind.
- Opposes the photographic theory of sense perception.
- Perceptions are produced by the active working of thought upon the sensory material.
- Seeing is thinking.

NPTEL

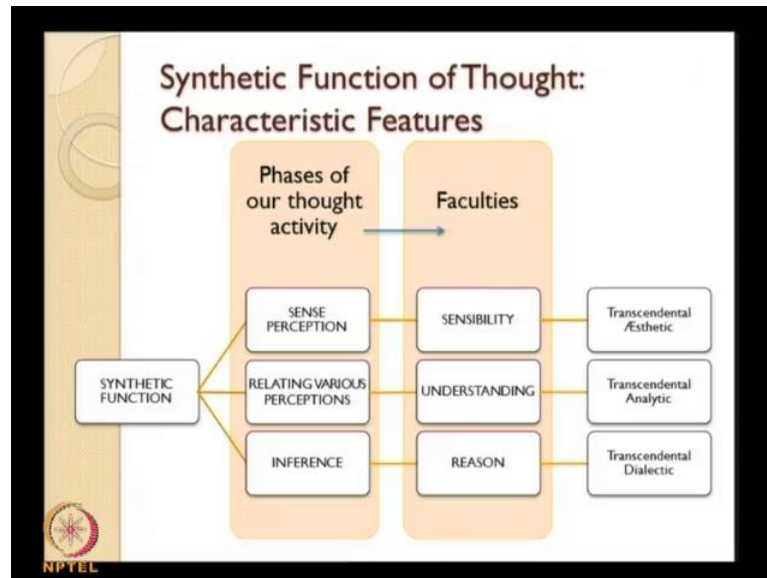
And here we agree with empiricism, but there is a very important aspect of human thinking which is called the synthetic function of thought. I mentioned in the previous lectures that you know typical synoptical mind of Kant, who is try to synthesize reconcile the different tradition.

So, here is says that it is true that something should affect me, there should be an impact from an outside world. But there is a synthetic function of thought which needs to be recognized, that it refers to the constructive power of the understanding. What is that constructive power? Mind is active even when the sensations are received from outside, it is not that mind is a passive receiver or a passive spectator of sensations, mind does not work like a camera with just takes what is out there, but it is an active counterpart in the process, the sensations are not received passively by the mind, opposes the photographic theory of sense perception, which was actually very common among philosophers and perceptions are produced by the active working of thought upon the sensory material.

So, the human thinking process is already in under operation, the mind is already active the moment sensations are receive they are received in an ordered regulated fashion, they are they are not just dump to the mind. So, that the mind would encounter a kind of (Refer Time: 12:16) bundle of thinks and in this sense we can say that every seeing is thinking, every seeing is a process of thinking.



(Refer Slide Time: 12:23)



So, here this figure will give you an understanding about what happens when the synthetic function of thought. And this will also give you a kind of summary of Kant's philosophical program. So, you have the synthetic function on the left hand side of mind, there are 3 phases of our thought activity in the first phase you have sense perception. In the second one is relating various perceptions with each other, and the third one is making inference from that.

So, these are the 3 phases of our thought activities and which will lead to 3 corresponding faculties. Sense perception would lead to sensibility, which we have already explained relating various perceptions lead to understanding and the third one inference is leads to the faculty of reason and again Kant's whole program is concerned about these 3 things, the first one is transcendental aesthetic, second on is transcendental analytic, and the third one is transcendental dialectic.

So, when it deals with sense perception and sensibility it is called "Transcendental aesthetic". And when you deal with the processes of understanding, it deals with "Transcendental analytics". We are going to discuss these two things in detail in this lecture. So, what is transcendental aesthetic? The transcendental approach as I already mentioned in the previous lecture, it is different form empirical and other sorts of approaches because a transcendental approach would focus on precondition, what are the a priori preconditions it is not something which is derivative of or derive from

experience, it something which even think about the preconditions that make experience itself possible. So, here when it deals with transcendental aesthetics sensibility, what makes sensibility possible that is a question?

(Refer Slide Time: 14:17)

The slide is titled "Transcendental Aesthetic" and contains the following text:

- The transcendental approach: focus on preconditions.
- Factors that are indispensable and necessary in the perception of all objects.
- Elements present in the sensory processes, but are not qualities of any particular objects of perception.
- Have an *a priori* and not an empirical origin: hence transcendental.

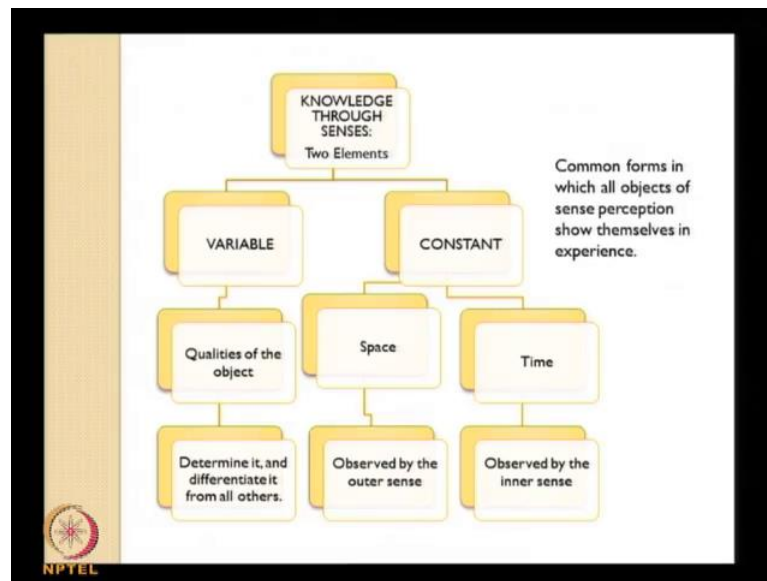
Below the text is a diagram with the words "SPACE" and "TIME" inside yellow arrows pointing towards the center. The center text reads "FORMS OF SENSIBILITY". In the bottom left corner, there is a small circular logo with a star and the text "NPTEL".

Factors that are indispensable and necessary in the perception of all objects, those preconditions without which perception of objects would never take place, not the perception one object a bottle or a chair or any of these particular things, but all the objects, entire range of objects what are those factors that are indispensable for their perception. Element present in the sensory process, but are not qualities of any particular object of perception, as I mention not dealing with one particular thing the part of the sensory process as such have an a priori and not an empirical origin, these factors which enables us to have sensibilities to perceive, they have an a priori origin and not an empirical origins hence they are transcendental.

So, are these two conditions? So, Kant's introduces two such conditions, space and time. And Kant calls some the forms of sensibilities. So, these two are essential conditions for all sensibility, we are called the forms of sensibility, space and time every object, the moment we perceive an object we perceive it, in a particular space and a particular time it is situated in a particular place when I talk about this bottle of water, it is there in my hand the place at this moment now.

So, my understanding is this whole sense of time and place cannot be separated from my understanding, my process of understanding. My sensations or my sensibility cannot be detached from this spatio-temporal organization, which is. So, inherently present in it, you cannot abstract it away and conceive of this bottle existing outside space and time. All my understanding, all my conceptualization all my imagination about everything is necessary and essentially situated in space and time, all sensibilities all perceptions.

(Refer Slide Time: 16:32)



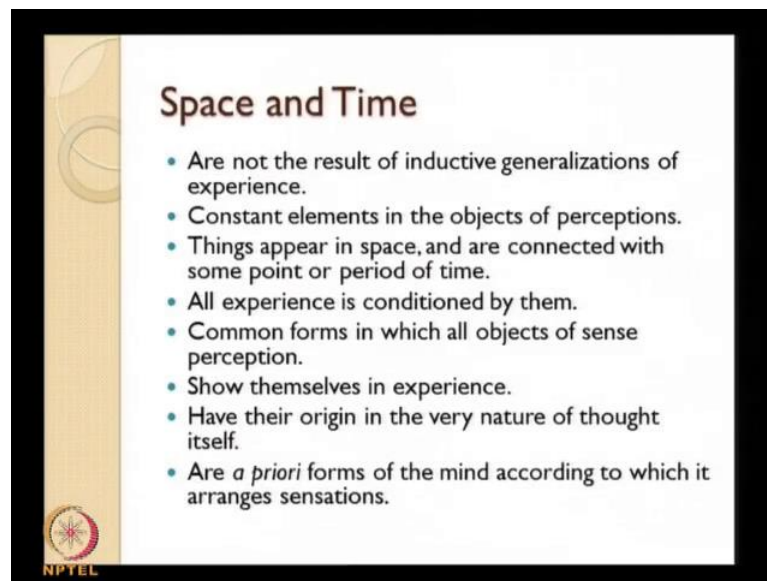
So, they are. So, fundamental there and this figure we give you an understanding about what happens in this process of sensibility. So, knowledge through senses, there are basically two elements he talks about, there is a variable element and there is a constant element. Whenever you encounter an object, there are these two elements the variable elements and the constant element. The variable elements are the qualities of the object, which determine it and differentiate it from all other objects.

See I take once again the example of this water bottle, it has got certain qualities which is variable, which determine it to the shape of it, to the color of it and certain other qualities which determine which definitely it tell us what it is. At the same time and again this is variable this can change, there are certain constant elements what are they? Space and time; and space according to Kant is observed by the outer sense and time is observed by the inner sense. I am not going to the details of this, because that is not in the scope of

this lecture. It basically deals with the common forms in which all objects of sense perceptions show themselves in experience. So, that is what the space and time means.

So, they are not variable, they are constant elements of any sensation about this world. They are there the spatial form of sensibilities observed by the outer sense and the temporal form is observed by the inner sense, this is what Kant says.

(Refer Slide Time: 18:07)



The slide is titled "Space and Time" and contains a list of seven bullet points. The slide has a decorative left margin with a vertical gold bar and a circular graphic. The NPTEL logo is visible in the bottom left corner of the slide.

- Are not the result of inductive generalizations of experience.
- Constant elements in the objects of perceptions.
- Things appear in space, and are connected with some point or period of time.
- All experience is conditioned by them.
- Common forms in which all objects of sense perception.
- Show themselves in experience.
- Have their origin in the very nature of thought itself.
- Are *a priori* forms of the mind according to which it arranges sensations.

And again space and time when you talk about them, they are not the result of inductive generalization of experience, from where do I get this idea I mean it is part of it, it is not something which I derived from my experience, again constant elements in the objects of perception, things appear in space and are connected with some point or period of time. So, space and time are indispensable, all experience is conditioned by space and time all my experiences.

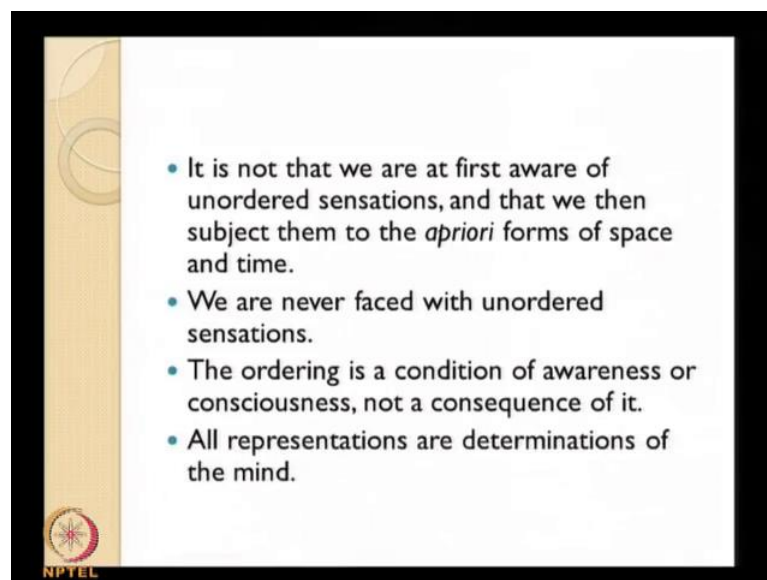
And this is quite obvious in the case of the day to day conversations as well, without the very process called grammar in language is based on space and time. To very great extent on time because we would not make sense, if you do not use space and time categories and assume that the other person or other person would also understand it. We would not make sense at all; we would not be able to communicate with each other if you do not employ. When I say I came to this room 10 minutes back or 20 minutes back to give a lecture, in continuation with the lecture I had given in the last week or whatever, whenever I makes such a statement I involve the spatio-temporal categories a

lot, this room space, yesterday, today, 10 minutes back all these are temporal categories when I came. So, when I say I came it presupposes place, two places from somewhere from somewhere I came from somewhere, and I came reach this place. So, all these are so integral to our understanding and we cannot separate them from our conceptual processing.

Their common forms in which all objects of sense perception appear and show themselves in experience, have their origin in the very nature of thought itself, this is point which Kant is trying to drive us to. They are not the result of experience, they are not being inferred from the process of thinking, but they are the very preconditions of thinking and their sources have to be they have to be found in the mind itself, in the structure of the mind itself or in the nature of thought itself, quite interestingly that is where he calls them forms of sensibility. The sensibility the sensations are possible in an orderly manner because of them.

Now, they are a priori forms of the mind according to which it arranges mind arranges sensations.

(Refer Slide Time: 20:36)

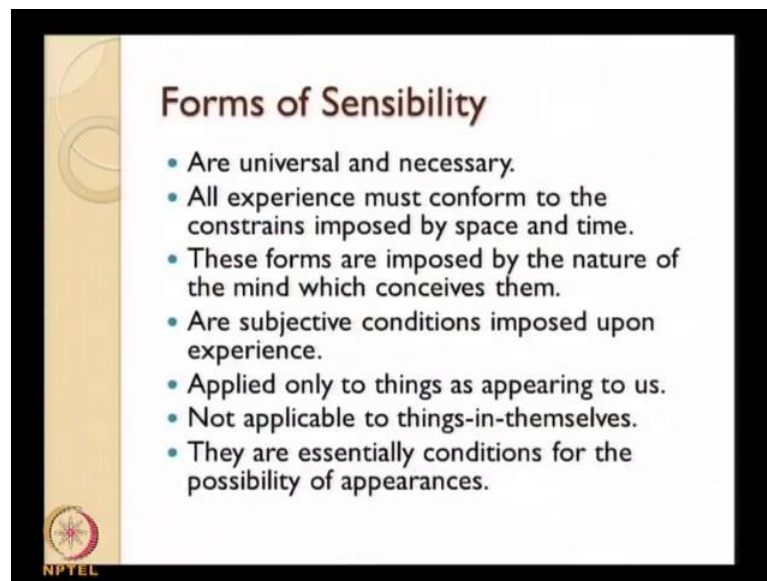


It is not that we are at first aware of unordered sensations and that we then subject them to a priori forms of space and time. No that is not a case, it is not that you know the first encounter with the world is with all these unordered coetic data, we never know that, we are not aware of the fact that whether the data is order or coetic. We can always assume

that it was coetic and the mind imposes, but it is true that you know we cannot conceive this data as already spatially and temporally organized ordered. We are never faced with unordered sensations; all that sensations we encounter are already ordered and regulated in a particular fashion.

So, that is very interesting aspects of Kant, you know he introduces the active cooperation of the mental component, the a priori structures of understanding or under operations at the level of sensibility itself. It is not that at the level of sensibility you do not encounter any a priori structures, but just receive the data and then only when you it goes to the mind, then the mind does all these business which the empiricist where claiming, it was not that kind of a picture which Kant is trying to advocate, for him we never face, we never encounter unordered sensations. The ordering is a condition of awareness or consciousness, not a consequence of it. So, it is already there, it is the precondition and all representations are determinations of the mind.

(Refer Slide Time: 22:17)



And when you talk about the forms of sensibility, they are universal and necessary. That space and time they are universal and necessary and all experience must conform to constrain imposed by space and time that is the reason why they are called a priori, they are called transcendental, they are called preconditions.

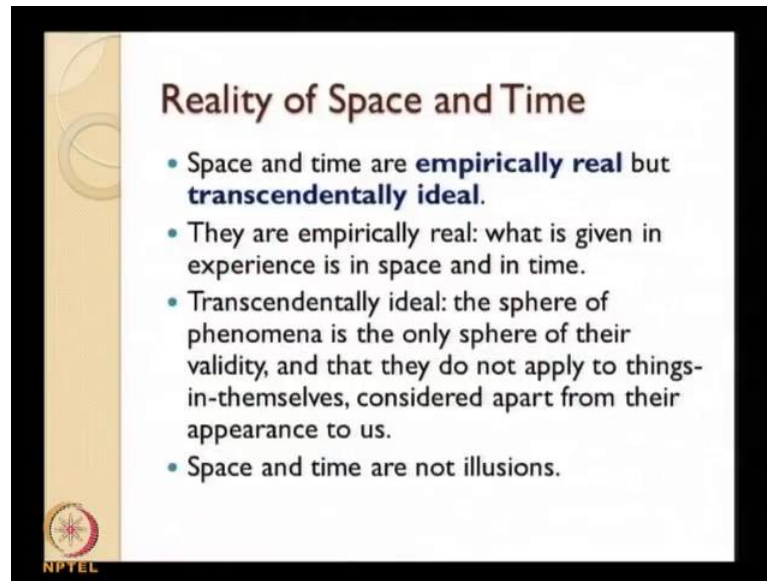
These forms are impose by the nature of the mind which conceives them and they are the subjective conditions imposed upon experience by the mind and applied only to things as

appearing to us. So, this is again from here we can see that Kant is trying to implicate that, there are certain limitations to the application of these forms of sensibility as well. We cannot just apply these forms of sensibility to anything, on the one hand these forms of sensibility are necessary free conditions no doubt about it, without that there is no knowledge, without that there is no experience. On the other hand, these forms of sensibility do not find an application on certain things, like wherever you do not have objects that appear to us, the sensibilities you cannot apply them say for example, God the very concept of God is by definition or by all human imagination, God is conceived as an infinite entity, philosophically as well as religiously God is conceived as an infinite entity who cannot be seen, who cannot be sensed in the sense in which objects can be sensed

So, can we ever talk about having knowledge about such a God that is the question? And if you follow this logic you cannot. You cannot talk about God you cannot talk about any object which is not given to you true sensations, if there is sensibility there cannot be any application of these categories possible. And without the application of these categories you cannot have knowledge. So, it says that these subjective conditions are applicable only to things as they appear to us and not applicable to things in themselves like God like soul or any such metaphysical object which is metaphysica, which is beyond the physical world, they are essentially conditions for the possibility of appearances.

So, that is why they are called forms of sensibility. It is transcendental aesthetic it deals with sensible object, it deals with the world which we perceive and the reality according to Kant they are real. One can really raise an issue whether if that is a case, if they are subjective conditions of knowledge, can you conceive the mass real? It is a very tricky question because it needs to first clarify what do you mean by real? If you mean by real something which is totally independent of the mind, then there are certain reservations in excepting to these a forms of sensibility as real, but for Kant they are real Kant would say that space and time are empirical real but transcendently ideal.

(Refer Slide Time: 25:44)



**Reality of Space and Time**

- Space and time are **empirically real** but **transcendentally ideal**.
- They are empirically real: what is given in experience is in space and in time.
- Transcendentally ideal: the sphere of phenomena is the only sphere of their validity, and that they do not apply to things-in-themselves, considered apart from their appearance to us.
- Space and time are not illusions.

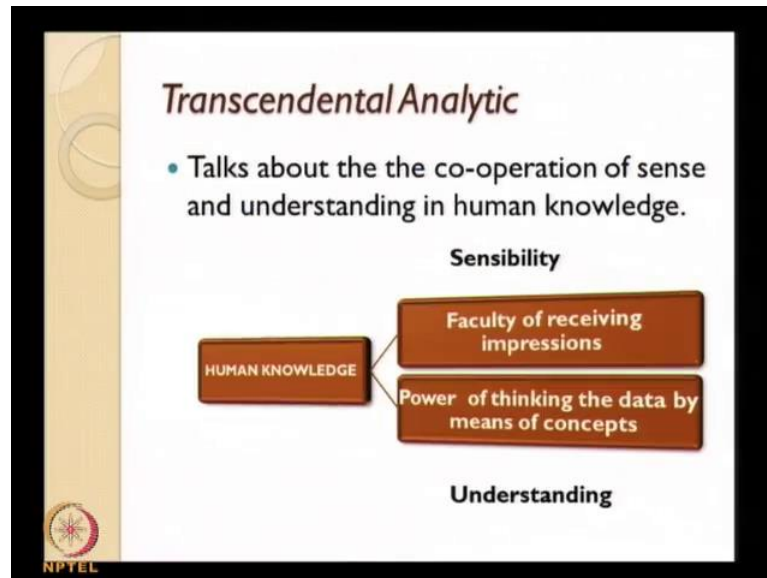
NPTEL

They are empirically real means what is given in experience is in space and in time in that sense they are real and they are transcendently ideal because the sphere of phenomena is the only sphere of their validity and that they do not apply to things in themselves considered apart from their appearance to us.

So, in that sense they are ideal transcendently ideal. Space and time are not illusions for Kant they are real. Something various similar to the kind of I am not saying same, but very similar to the kind of distinguish which the (Refer Time: 26:24) make between the [FL] and [FL] levels of reality and they talk about [FL] the concept of [FL] which is not an illusion, but something which when we talk about the categories, the space and time the subjective categories finding an application on the data, on reality that when the question is whether that can be conceived as ultimately real and Kant's answer would be something like they are not unreal, they are not illusions, but there is a reality which lies behind or which lies beyond them, the noumena the things in themselves which can never be understood, which can never be approach or exist with the help of these space and time categories and another aspect of (Refer Time: 27:10) we human being cannot approach or understand anything, without the application of these two categories. So, for Kant reality would always remain unknowable agnosticism.



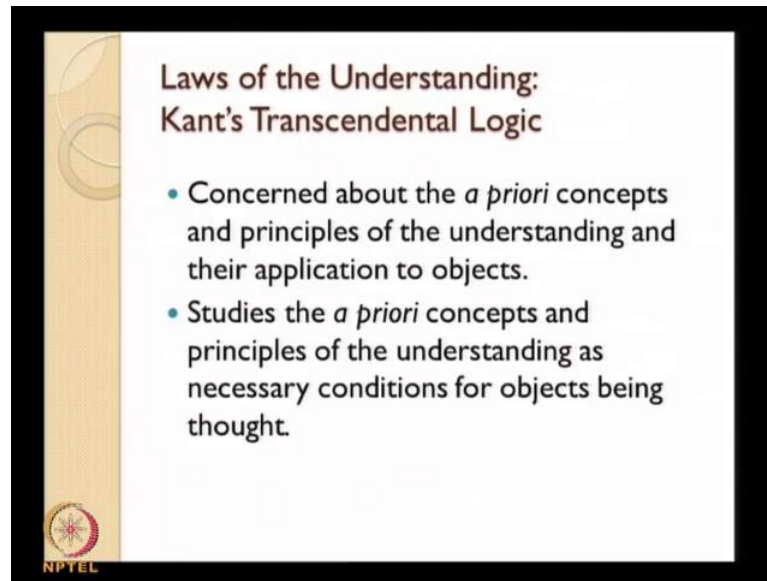
(Refer Slide Time: 27:23)



Now, Transcendental analytic - the second part of his theory is transcendental analytic, here he talks about the cooperation of sense and understanding in human knowledge, as I mentioned percepts and concepts are essential. Without the cooperation of percepts which are senses and concepts which stand for understanding, no knowledge is possible. So, percepts without concepts are blind and concepts without percepts are empty.

So, now what is it? Human knowledge here there is sensibility where the faculty of receiving impressions are highlighted and on the bottom we can see the power of thinking the data by means of concepts which is called understanding and human knowledge is possible with the cooperation of sensibility understanding, where the faculty of receiving impressions cooperates with the power of thinking the data by mean of concepts, percepts and concepts.

(Refer Slide Time: 28:28)



The slide features a title in a dark red font, followed by two bullet points in black. The background is white with a vertical gold bar on the left side containing a circular logo. The NPTEL logo is located in the bottom left corner of the slide.

**Laws of the Understanding:  
Kant's Transcendental Logic**

- Concerned about the *a priori* concepts and principles of the understanding and their application to objects.
- Studies the *a priori* concepts and principles of the understanding as necessary conditions for objects being thought.

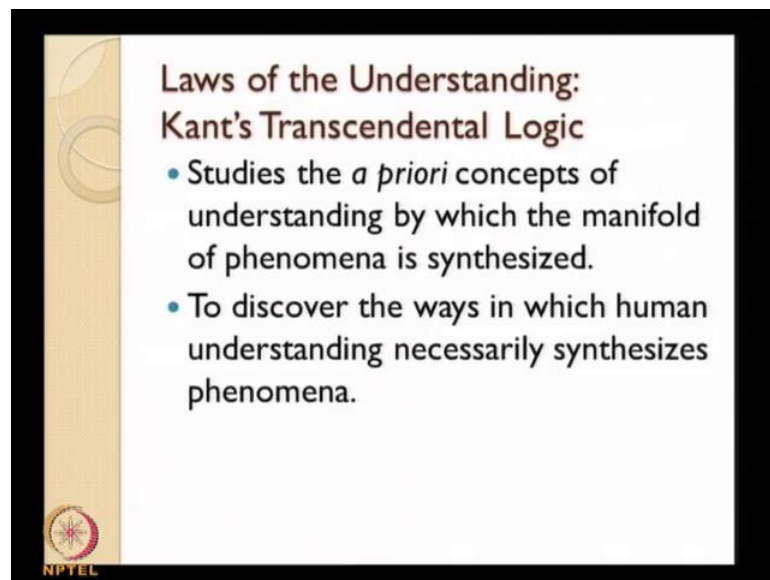
NPTEL

Now, what you mean by concepts? Because you basically what Kant means by concepts are with the term concepts, he refers to a set of laws by means of which human understanding is possible. A set of laws on the basis of which the mind organizes the data it receives from sensations and what is this say how can you legitimately say that there is a set of laws, which deal with human understanding. Form where you discover? What methodology did you adopt to discover it? So, Kant's adopt a kind of logical method, he says that there is a transcendental logic involved because it concerned about the *a priori* concepts and principles of the understanding and their application to objects, again we can see the transcendental approach, which deals with preconditions.

So, Kant's approach is this the following that examine what are the preconditions of our understanding, by examining our understanding of this world? When I understand the world in a particular way say for example, when I am given an apple I understand it is an apple, as a red object round with the test, with smell and several other qualities, how is this understanding possible? And here is says that, it is possible on the one hand because as the previous slide indicates, there is a faculty of receiving impressions present in me. So, that I would receive these qualities of redness, taste, smell etcetera in an ordered fashion and then further the power of the thinking, this data would be thought about by the concepts by understanding. So, the understanding will put it in relation with each other and it attributes a concrete shape to the data received from sensations and understands it as an apple.

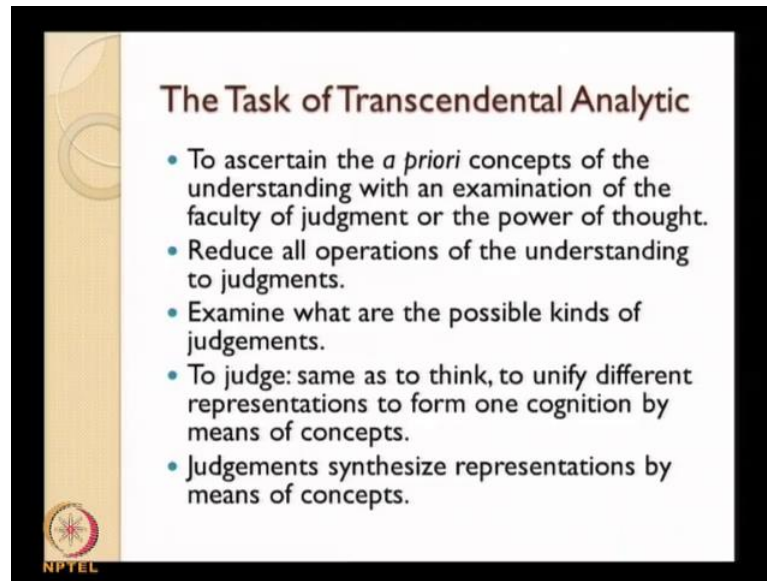
So, this cooperative activity is possible because there is something which is a priori concepts present in the mind and studies the a priori concepts and principles of the understanding as necessary conditions for objects being thought, just sensations would not give you knowledge, you have to think about it you have to conceptualize it, just sensing red color round shape would not give you any knowledge at all, you have to conceptualize this red colour and related with round shape and make finally, a kind of a picture of an apple and understand it is an apple, only then there is knowledge. And this is possible when only there are certain a priori concepts and principles of understanding necessarily present.

(Refer Slide Time: 31:27)



It studies the a priori concepts of understanding by which the manifold of phenomena is synthesized. So, there is a synthesizing process, that the mind performs by relating these ideas putting them together and relating them and finally, forming a concrete shape to discover the ways in which human understanding necessarily synthesizes phenomena. So, these are the processes which Kant tries to explain with transcendental analytic.

(Refer Slide Time: 31:58)



### The Task of Transcendental Analytic

- To ascertain the *a priori* concepts of the understanding with an examination of the faculty of judgment or the power of thought.
- Reduce all operations of the understanding to judgments.
- Examine what are the possible kinds of judgements.
- To judge: same as to think, to unify different representations to form one cognition by means of concepts.
- Judgements synthesize representations by means of concepts.

NPTEL

And the task of transcendental analytic is the following one, to ascertain the a priori concepts of the understanding with an examination of the faculty of judgment or the power of thought. Second one reduces all operations of understanding to judgment.

So, there is the fundamental question, is what do you mean understanding? When you understand something what essentially happens and here it is a logical examination of the process of understanding, what logically what is the process that takes place in the mind when you understand something? Say for example, when I understand that this is a camera in front of me, this is a laptop computer or anything this is a chair all these understanding which I have in my day to day life.

They are necessarily involved in judging something as something, when I understand this as a chair I am making judgment this is the chair or when I understand that there are 20 chairs in this class, I basically make a statement a judgment there are 20 chair in this class or when I say the temperature is 26 degree centigrade, again it is a judgment it is 26 degree centigrade or when I say that the clapping produces the sound again there is a judgment about a causal relationship, the clapping is the cause of sound. So, all these are examples which we can sight where we reduce the all operations of the understanding to judgment and examine what are the possible kinds of judgments.

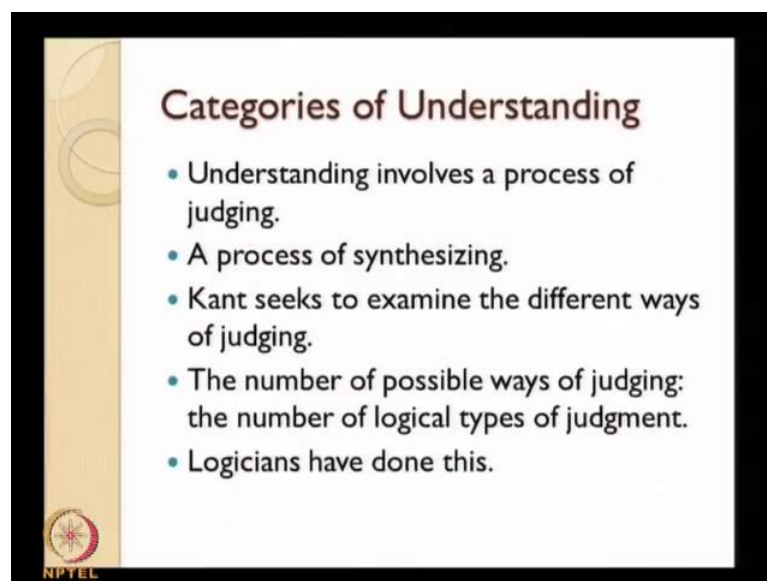
So, this is the logical enquiry which Kant conducts to judge is same as to think, to judge is to think. To unify different representations to form one cognition by means of

concepts, so these are all the things which we do when we essentially make judgment, we are thinking, we are synthesizing; we are uniting. Judgment synthesizes representations by means of concepts. So, we are basically involving concepts to synthesize it to unified it. So, when I say there are 20 chairs in this class, I am using concepts like 20 for example, 20 is a concept it deals with quantity, then chairs when I say chair again it deals with an object with a particular shape. So, these are all qualities and quantities and relationships in this room, these chairs are present in this room. So, I am relating the presents of 20 chairs with this room.

So, a relationship has been established. So, all these processes involve what I would say making judgments, synthesizing and uniting. And here he talks about categories of understanding, these are the categories by means of which we unite, we synthesize, we form concepts. Understanding involves a process of judging, a process of synthesizing, Kant seeks to examine the different ways of judging, the number of possible ways of judging the number of logical type of judgments.

So, logicians have done it, traditionally logicians have already made a list of possible kinds of judgments and Kant just has to take them from the tradition the logical traditions.

(Refer Slide Time: 35:31)



The slide is titled "Categories of Understanding" and contains a bulleted list of five points. The slide has a black border and a light beige background with a decorative vertical bar on the left side. The NIPTEL logo is visible in the bottom left corner.

### Categories of Understanding

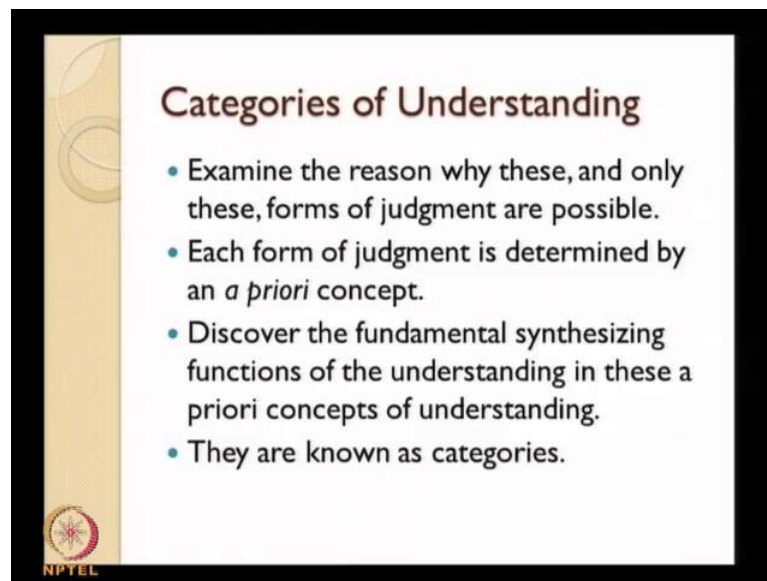
- Understanding involves a process of judging.
- A process of synthesizing.
- Kant seeks to examine the different ways of judging.
- The number of possible ways of judging: the number of logical types of judgment.
- Logicians have done this.

Only thing is that Kant takes it a little further, and tries to identify the a priori structures that are operational behind the very possibility of making such judgments. So, is making

an advancement from the possibility of this judgment to the kind of what you called the kind of structures that enable any one of us to make such a judgment. So, it is from a statement to the logical structure of that statement. Because any statement, any judgment would be exhibiting a kind of logical property, from that logical property Kant infers the logical structure of that judgment. And the logical structure is essentially an a priori structure for him, it is not derived from experience, but it is the very precondition of all experience.

Now this is examining the reason why these and only these forms of judgments are possible, each form of judgment is determined by an a priori concept. So, when I say 20 chairs, 20 is an a priori category of quantity, deals with quantity 20, and it is a priori present in me the quantity is a priori that is the reason why I could learn mathematics. If the category of quantity is not there in me then I would not be able to communicate anything about numbers.

(Refer Slide Time: 36:59)



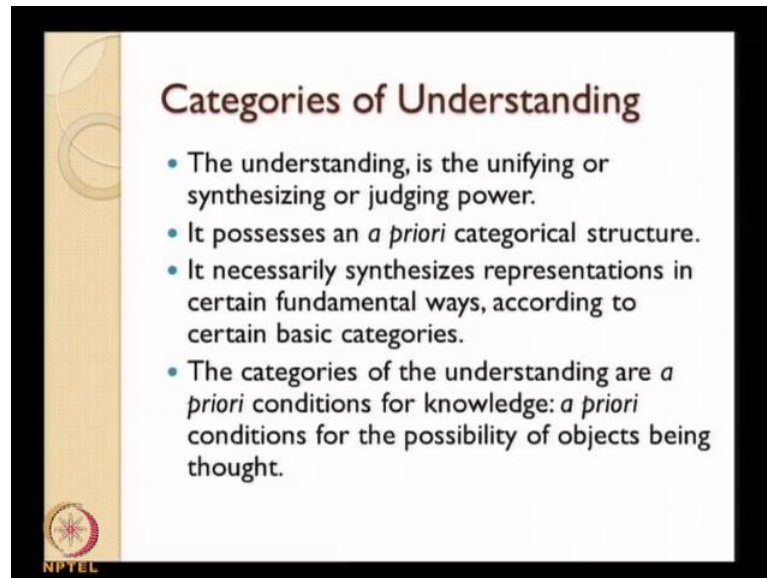
The slide features a title 'Categories of Understanding' in a dark red font. Below the title are four bullet points, each starting with a blue dot. The slide has a decorative left margin with a vertical yellow bar and a circular graphic. The NPTEL logo is visible in the bottom left corner.

### Categories of Understanding

- Examine the reason why these, and only these, forms of judgment are possible.
- Each form of judgment is determined by an *a priori* concept.
- Discover the fundamental synthesizing functions of the understanding in these a priori concepts of understanding.
- They are known as categories.

Discovered the fundamental Synthesizing functions of the understanding in these a priori concepts of understanding; and they are known as categories of understanding.

(Refer Slide Time: 37:10)



**Categories of Understanding**

- The understanding, is the unifying or synthesizing or judging power.
- It possesses an *a priori* categorical structure.
- It necessarily synthesizes representations in certain fundamental ways, according to certain basic categories.
- The categories of the understanding are *a priori* conditions for knowledge: *a priori* conditions for the possibility of objects being thought.

NPTEL

Now categories of understanding, so anyone who had heard about Kant's transcendental analytic, would have heard about these famous expression categories of understanding which is so central in Kantian philosophy. The understanding is the unifying synthesizing or judging power, which I have already mentioned and discussed. It possesses an *a priori* categorical structure, it necessarily synthesizing representations in certain fundamental ways according to certain basic categories. And the categories of understanding on *a priori* conditions for knowledge, their *a priori* conditions for the possibility of objects being thought the very possibility that we can think about object. Without the thinking counterpart there is no knowledge possible.

So, you have to basically think about it and when you think you are synthesizing it, you are relating that different perceptions and synthesizing it and forming a concept. So, here Kant talks about different categories of understanding. According to him there are 4 broad groups of categories, categories of quantity, categories of quality, categories of modality and categories of relations. Out of in under each category, there are 3 types of judgments, corresponding to 3 types of judgments; there are 3 types of categories.

(Refer Slide Time: 38:42)

| <i>Judgments</i> | <i>Categories</i> |
|------------------|-------------------|
| 1. Affirmative.  | 1. Reality.       |
| 2. Negative.     | 2. Negation.      |
| 3. Infinite.     | 3. Limitation.    |

**Category of Quality**




So, there are 3 judgments of quantity corresponding to them there are 3 categories of quantity. They are the judgments of the quantity are universal particular and singular and corresponding to that you have unity, plurality and totality. So, the category of quantity we employ these categories, when we understand anything, when you talk about unity of an object or plurality or totality, generality, basically these categories we employ in our day to day conversation and in our scientific explorations and there actually there in the mind, they are part of the logical structure of the mind according to Kant. And now when we come to categories of quality, they are affirmative, negative and infinite judgments, corresponding to that there is a quality of reality, negation and limitation.



(Refer Slide Time: 39:39)

| <i>Judgments</i>   | <i>Categories</i>   |
|--|---|
| <ol style="list-style-type: none"><li>1. Problematic</li><li>2. Assertoric.</li><li>3. Apodictic</li></ol> | <ul style="list-style-type: none"><li>• Possibility-<br/>impossibility.</li><li>• Existence-non-<br/>existence.</li><li>• Necessity-<br/>contingency.</li></ul> |

**Category of Modality**




And this is categories of modality, where you have the judgments like problematic, assertoric and apodictic. The categories of are possibility or impossibility that is why it is problematic. Existence or nonexistence corresponding to assertoric and corresponding to apodictic there is necessity or contingency.

(Refer Slide Time: 39:58)

| <i>Judgments</i>  | <i>Categories</i>   |
|---|---|
| <ol style="list-style-type: none"><li>1. Categorical</li><li>2. Hypothetical</li><li>3. Disjunctive</li></ol> | <ol style="list-style-type: none"><li>1. Inherence and<br/>subsistence(substance<br/>and accident).</li><li>2. Causality and<br/>dependence (cause<br/>and effect).</li><li>3. Community<br/>(reciprocity between<br/>agent and patient).</li></ol> |

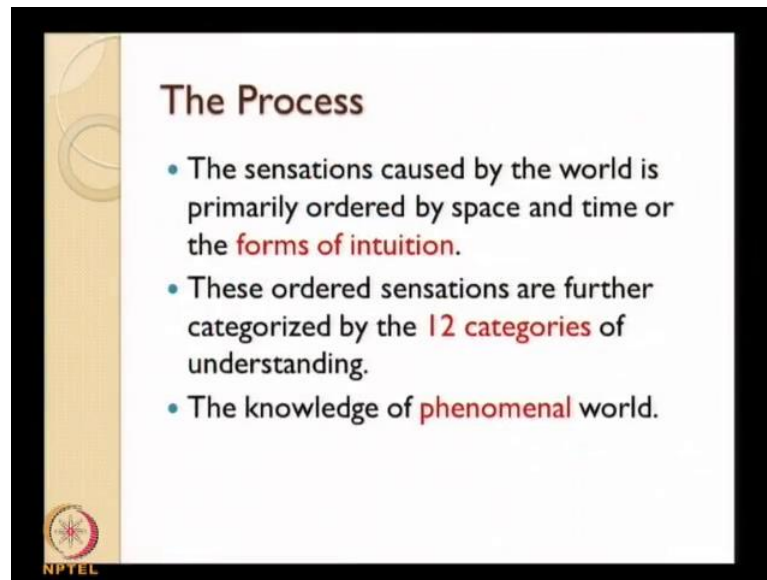
**Category of Relations**



The category of relation is again a very interesting aspect because it is interesting because this is something an aspect which Hume has observations in excepting. So, there are judgments of categorical, hypothetical and disjunctive judgments. And corresponding

to them you have the categories of inherence and subsistence, substance and accident. Then causality and dependence, you have because effect relationship and you have distinctive air community, reciprocity between agent and patient.

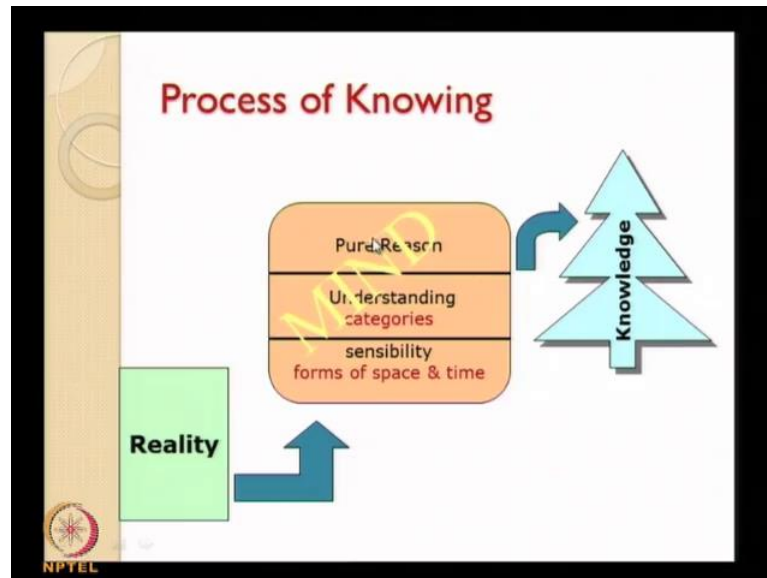
(Refer Slide Time: 40:31)



So, these are the essential 12 categories of understanding. Kant never thought that this 12 is an arbitrary number. Of course, you can always (Refer Time: 40:41) there are criticism about against Kant's transcendental analytic by saying that why Kant we have more than 12? If there are 12, then why not thirteen why not fourteen why not more you can keep on adding to that. But what Kant would say is that, this number 12 is not something which is arrived at in an arbitrary fashion, it has been arrived at as a result of a very detailed kind of logical analysis and examination and basically believe that all other. So, called categories can be ultimately reduced to these 12 fundamental categories, they are could be more then 12, but ultimately all the other categories could be reduce to these 12 categories which are fundamental.

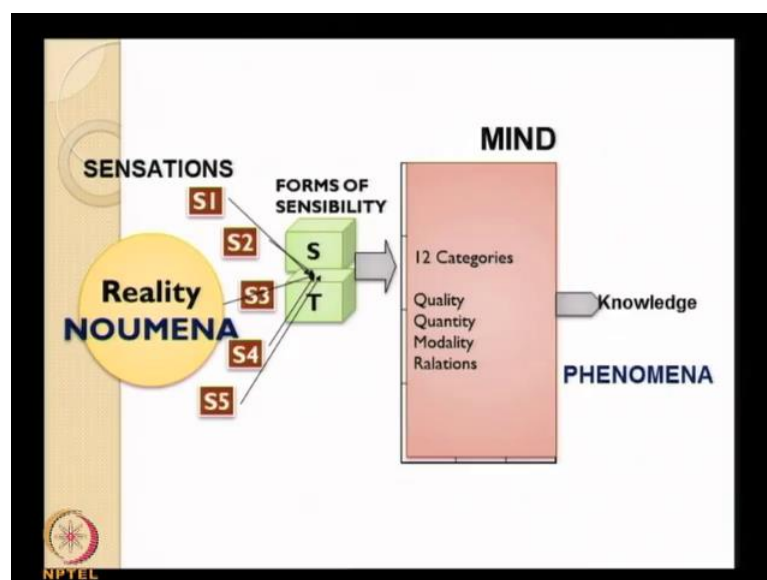
So, let us see the processes involves in this. The sensation caused by the world is primarily ordered by space and time or the forms of intuition, which you have already examined. The forms of intuition come to play and these ordered sensations are further categorized by the 12 categories of understanding, as a result we get knowledge about the phenomenal world.

(Refer Slide Time: 41:49)



So, this figure is an attempt to picturize, what happens when we know the processes of knowledge. So, you have on the left hand side reality which is unknowable according to Kant which is what he calls things in themselves and we encounter this reality though senses. So, you have pure reason understanding the 12 categories and sensibilities of forms of space and then you get knowledge.

(Refer Slide Time: 42:17)



Or more clearly we will see this picture will give you a better understanding of it. Here you have reality which is called technically called phenomena. And this we reality is

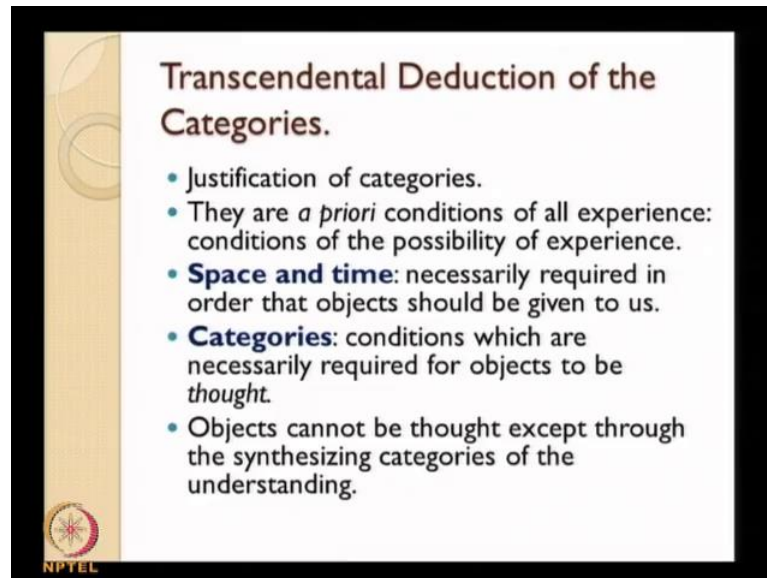
being non through sensations. So, I have just mention sensation 1, 2, 3, 4, 5, because corresponding to our five sense organs. And these sensations are actually given to space and time, which are forms of sensibility.

So, they are already ordered before they enter the mind and the moment it enters the mind the 12 categories will be operating upon them. So, the mind structurally constitutive of these 12 categories, which would operate on these sensations received through the sense organs and are already received in an ordered fashion, because they are ordered through the forms of sensibility of space and time, and the 12 categories will work on it and you will get knowledge which is nothing, but phenomena.

So, there is a definite gap between noumena and phenomena, reality and knowledge about the world. What is the real world we can never know it, there is a gap between noumena and phenomena because in between the noumena and phenomena in between the reality with the capital R, things in themselves and our knowledge about the world, you have all these things the sensations and the forms of sensibility and the 12 categories. So, these are all subjective conditions which the mind imposes and there is no knowledge possible divide of these mental subjective conditions of understanding.

So, that is why Kant is an idealist. That is why there is a Copernican resolution initiated by Kant. Because he plays as the human mind at the center, but the one aspect of Kantians philosophy, I need not say that explicitly because that is quite obvious that Kant would not say that this is a subjective mind, mind of one person, but rather this structure of mind according to Kant is something which is universal. So, that is why it is transcendental a perception it is called. So, as I raise the question how can you talk about these categories of understanding?

(Refer Slide Time: 44:34)



The slide features a title 'Transcendental Deduction of the Categories.' followed by a bulleted list. The list includes: 'Justification of categories.', 'They are a priori conditions of all experience: conditions of the possibility of experience.', 'Space and time: necessarily required in order that objects should be given to us.', 'Categories: conditions which are necessarily required for objects to be thought.', and 'Objects cannot be thought except through the synthesizing categories of the understanding.' The slide also has a decorative vertical bar on the left and an NPTEL logo at the bottom left.

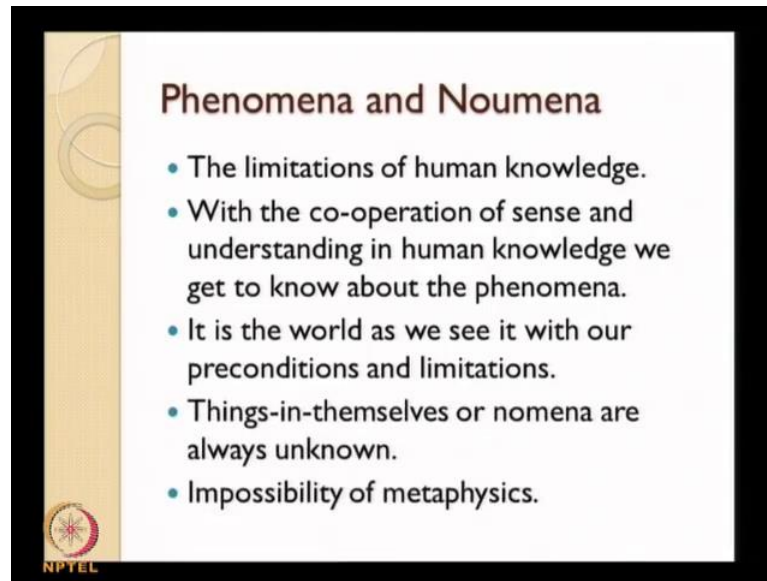
### Transcendental Deduction of the Categories.

- Justification of categories.
- They are *a priori* conditions of all experience: conditions of the possibility of experience.
- **Space and time:** necessarily required in order that objects should be given to us.
- **Categories:** conditions which are necessarily required for objects to be *thought*.
- Objects cannot be thought except through the synthesizing categories of the understanding.

So, Kant says that there is a transcendental deduction is possible about these categories, which would ultimately contain or consist of a justification of categories. You can justify these categories through this transcendental deduction, where they are a priori conditions of all experience; they make all experience possible their conditions of the possibility of experience. So, when we talk about this conditions, as I already mention there are two types of them two categories of them, the first one is space and time the forms of sensibility, but there is a different between them they are necessarily required in order that object should be given to us. So, the forms of sensibility are also preconditions, they are also a priori conditions of understanding, but they are necessarily required in order to that objects should be given to us. Now the categories are conditions which are necessarily required for objects to be thought.

So, the first one is objects to be given to us. The second one is objects to be thought and they have to come together with the objects given. Objects cannot be thought except through the synthesizing categories of understanding.

(Refer Slide Time: 45:49)



### Phenomena and Noumena

- The limitations of human knowledge.
- With the co-operation of sense and understanding in human knowledge we get to know about the phenomena.
- It is the world as we see it with our preconditions and limitations.
- Things-in-themselves or noumena are always unknown.
- Impossibility of metaphysics.

NPTEL

And it is in this context you have a distinction between noumena and phenomena, which have already mentioned and this distinction is going to play a very important role in Kant's philosophy further which we would discuss in our next lecture. The entire analysis presented by Kant in critique of pure reason, aims at drawing the limit of human understanding, it is trying to understanding the limitations of human understanding and Kant would remind that scientific knowledge is possible no doubt.

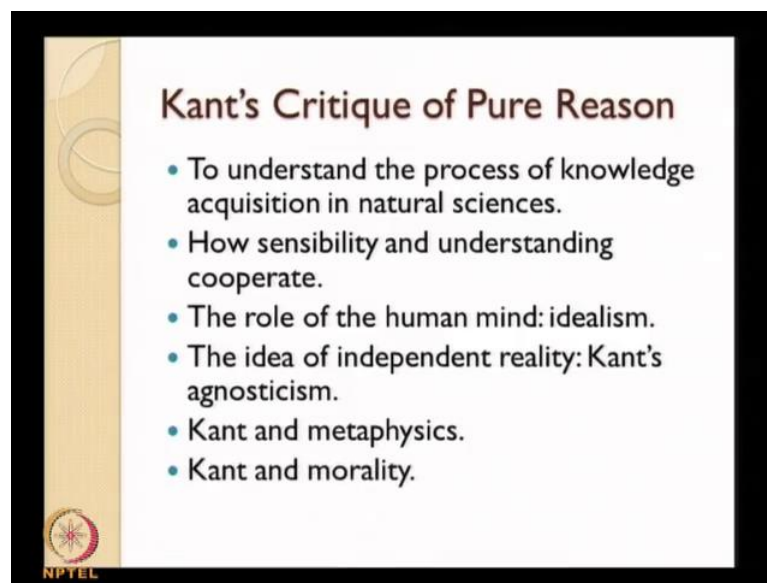
So, he is trying to overcome the Humean skepticism, but at the same time on the one hand it says that human understanding has the ability to gain knowledge, human understanding has the capacity to know there is objective scientific knowledge possible. So, in that sense skepticism is not entertained. But at the same time this knowledge has got certain limitations, this knowledge does not capacity to know does not mean that human mind can know anything or human beings can know anything. No, there are certain limitations, the limitations are imposed by virtue of preconditions; the preconditions are forms of sensibility and categories of understanding. So, without there are 3 things involved, the first none is sensibility the forms of sensibility, the sensations which are spatially temporally ordered and the categories of understandings.

So, only when these two things come together we can have knowledge, but in order to come together there should be two things, one is a mind with 12 categories and another one is a world with objects or sensations should come from outside. So, you need a

cooperative activity of both. With the cooperation of sense and understanding in human knowledge, we get to know about the phenomena, it is the world as we see it without preconditions and limitations, things in themselves or noumena are always unknown and impossibility of metaphysics.

So, Kant is trying to underline the impossibility of metaphysics, impossibility of applying the scope of human understanding to know reality in itself or ultimate realities or metaphysical realities. So, in one sense Kant's work underlines the fact that metaphysics as a science is impossible. Human knowledge is always confined to the phenomenal world. The phenomenal world is a spatio-temporal world, in which we live and we can converse about with each other. So, that is Humean Kantian philosophy in (Refer Time: 48:52). So, in the next lectures we will concentrate on some of the implications of this and also his ethical theory.

(Refer Slide Time: 49:05)



So, Kant's critique of pure reason is to understand the process of knowledge acquisition in natural sciences, how sensibility and understanding cooperate, it is trying to explain. The role of human mind is also explain with this notion of idealism and the idea of independent reality would suggest the Kantian agnosticism and then it will also talk about Kant and metaphysics and also raises a question about morality, which we will discuss in the next lecture.

So, we will wind up this lecture here, this lecture on Kant's critique of pure reason and his notion of human understanding and knowledge.

Thank you.