

Indian Philosophy
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Module No. # 05
Lecture No. # 20
The Nyaya Philosophy

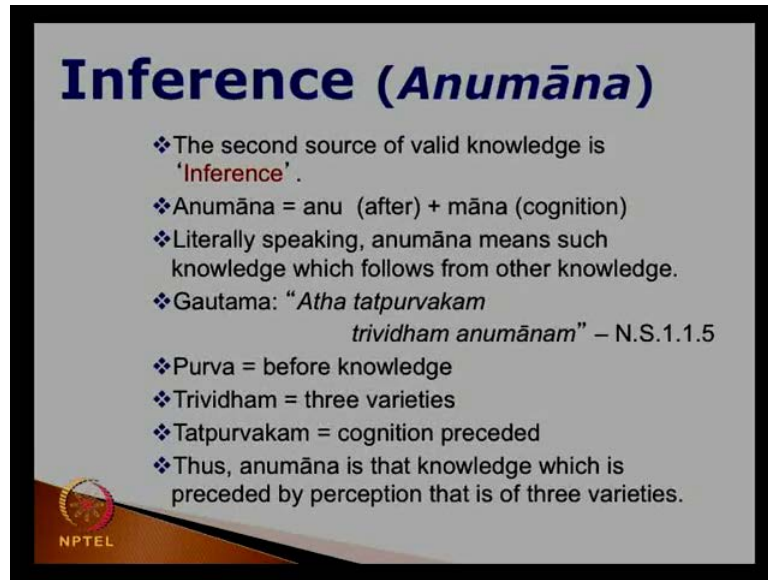
Hi, today we will be discussing the Nyaya philosophy, the second Pramana knowledge inference or Anumana. As you know that Naiyayikas believe four Pramanas; that means, four sources of valid knowledge. One is perception or Pratigya. The second Pramanas or the valid Pramana is known as inference or Anumana. The third Pramanas is known as comparison or Upamana and the last one the valid testimony or sabda.

Today, we will discuss only inference. What are the constituent of inference? Why at all Naiyayikas believe that inference is a valid Pramana and if at all they are believing, under what grounds they prove that that inference can be a valid pramana?

All these things today are topic for the discussion. Last class, we have completed perception by saying that ordinary perception are of three types. Ordinary perception is known as Laukika perception and the three types of Laukika perception are known as Nirvikalpaka, Savikalpaka and Prathabhignana and respectively the English translation are as indeterminate perception, determinate perception and recognition.

Further, also if you remember the last class we have discussed that extraordinary perception is known as Alaukika perception which is of three kinds. The first one is [fl] the second one is [fl] and the last one is recognition or [fl]. So, therefore, the last class ends with the perception is a valid Pramana. So, today we will start inference as the second valid Pramana according to Nyaya system.

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Inference (Anumāna)

- ❖ The second source of valid knowledge is 'Inference'.
- ❖ Anumāna = anu (after) + māna (cognition)
- ❖ Literally speaking, anumāna means such knowledge which follows from other knowledge.
- ❖ Gautama: “*Atha tatpurvakam trividham anumānam*” – N.S.1.1.5
- ❖ Purva = before knowledge
- ❖ Trividham = three varieties
- ❖ Tatpurvakam = cognition preceded
- ❖ Thus, anumāna is that knowledge which is preceded by perception that is of three varieties.

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Now, what they explain that Anumana can be divided into two words or split into two words. One is Anu the other is Mana because Anumana is a Sanskrit term. Anu means after and Mana means cognition. That means, anything we cognized after some Pramana that will be known as Anumana. That means I will give an example, please keep in mind that example till we complete inference is a valid Pramana. So, whenever there is a situation demands I will just give some kind of hint in reference to the example that I am going to tell you.

Basically, what inference it is? Now, you as a cogniser, you are seeing that there is smog in a distinct place on a hill which is the distance from you and as a cogniser you are seeing that there is smog.

Now, by seeing the smog you infer the situation that there may be a fire over there. Now, you are inferring the fire on the hill by seeing the smog and how you can do so. You can do so only when you know the universalness or indeterminateness or inseparable character of fire and smog in some of the instances.

In your kitchen you may have seen that wherever there is a fire there is smog. In the candle light you have seen wherever there is a fire and smog you have seen even in case of a lamp and many more other occasions.

Therefore, you have knowledge that wherever there is smog, there is a fire. That means, fire and smog are invariably and inseparably, unconditionally related with each other and henceforth, by seeing smog in a distance hill also you can infer that there may be a fire on the hill.

So, this is an example of inference. So, first you have seen something smog. So, here seeing or your perceptual knowledge leads in the continuation to have an inferential knowledge. That means, to have an inferential knowledge we must need a perceptual knowledge prior to that.

In other words, perceptual knowledge or perception precedes inferences. Once you see the smog, then the anxiety arises within you to find out whether the smog exists there independently without fire or something else. So, once you confirm that there is smog in the distance place, you can claim that there will also fire exist in relation to smog?

So, here if you can see that the Pramana is a perception proceeds to the inferential knowledge. Therefore we said that Anumana, Anu means after Mana means cognition you cognize smoke and after that whatever you have knowledge, it is known as inferential knowledge.

So, first we have a perception, then based on our perception we infer a particular situation or an object on a particular place. So, in this way you have to understand. Anumana. Further, they said literally speaking Anumana means such knowledge which follows from other knowledge. Other knowledge means perceptual knowledge.

Gautama as a Nyaya scholars written a Nyaya Sutra or consider as the founder of Prachina nyaya or the old Nyaya he written a Sloka for explaining inference as a valid Pramana. Atha Tatpurvakam Trividham Anumana is the sloka which explains the inference as a valid pramana or inference as a Pramana for having a particular knowledge or a valid knowledge Pramana.

What they mean here is if you can see my slides, they say that Purva tatpurvakam that means there is a perceptual knowledge prior to inferential knowledge. So, it is a Purva, before knowledge, Trividham this means three varieties. That means to have an

inferential knowledge, we need at least three propositions or the minimum condition to have an inference we need we require at least three propositions.

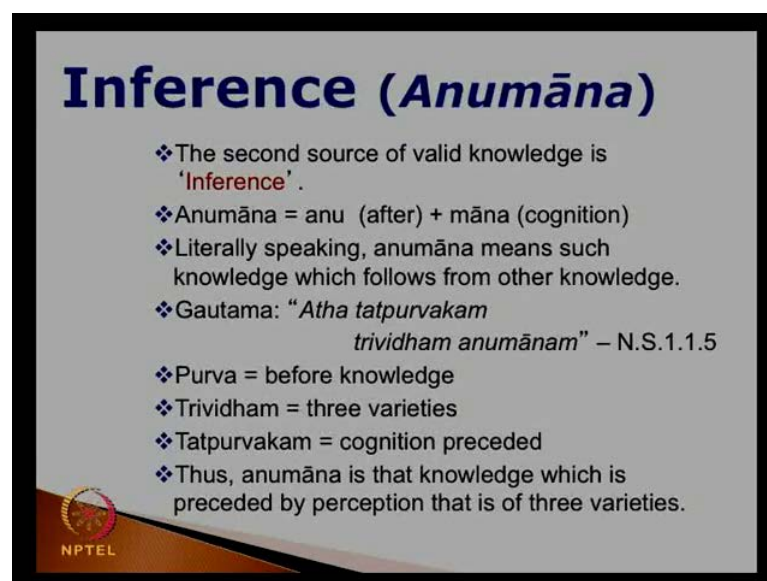
We will discuss what kind of proposition these are and how this propositions really involved or related with each other to have an inferential knowledge on a particular object.

Further, they said that Tatpurvakam that means cognition which is precedent perceptual knowledge on our perception is a valid Pramana precedent. The inferential knowledge and the knowledge we gain through the inference will be a valid knowledge and to have an inference we need at least three propositions.

The minimum requirement to have an inference is at least three propositions. The first and the foremost proposition may be major premise, the second one may be minor premise, the third one would be the conclusion and the conclusion will be drawn from the premises taken together jointly. Hence, further they said that we require three propositions. The first proposition was a major premise, second proposition is known as minor premise and the third proposition is known as conclusion.


In the same way Aristotle explains deductive argument said that we need three propositions. According to Aristotle there are four figures in a syllogism, the first figure, second figure, third figure and fourth figure.

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In the first figure, you find in the first proposition. The middle term will be subject part and in the second premise or minor premise the middle term will be the predicate part. Therefore, the middle term connect the major term and the minor term respectively which are found in their respective premises and in the conclusion, you never find the middle term rather you find only major term and minor term. So, this is about the first figure said by Aristotle.

In the second figure in the first premise or the first proposition you find middle term is the predicate part even in the minor premise which is a second proposition, there also you find middle term in the predicate part. Henceforth, the middle term connects to the major premise and the minor premises. As a result, we conclude in our conclusion saying that major term and minor term.

In the third figure, what Aristotle said it is like see if you can draw the letter c in the same way they have explained the third figure that means in the major premise you find the middle term is the subject part. In the minor premise, again you find the middle term in the predicate part and henceforth, you find the major term and the minor term respectively in their premises. Therefore, the conclusion you draw without any middle term.

In a fourth figure, they said that it is same as appear as the Z. Z stands for zebra. They said that if you draw a Z you find that the middle term of the major premise or the first proposition will find in the predicate part. In case of minor premise or the second proposition you find the middle term in the subject part. Therefore, the middle term relays the major premise in one hand and minor premise on the other hand. As a result, you can draw the conclusion with that major term and minor term.

So, this is the way Aristotle said about the syllogism. Nyayaka are known as logicians, Indian logicians. They also follow more or less same what Aristotle said on the part of syllogism. However, there are few differences you find between Aristotle's syllogism and Nyayas syllogism

Aristotelian syllogism said that to have an argument we need at least three propositions and the conclusion will be supported to the given premises. In this condition, we can say that the argument will be valid. The argument will be invalid according to Aristotle

proposition only when the conclusion does not support to the given premises or the conclusion cannot be drawn by taking the two premises jointly together.

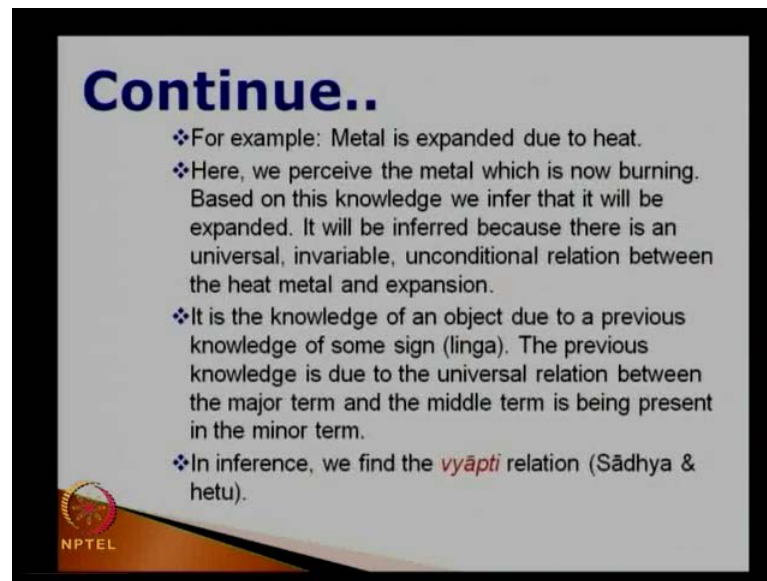
However, here Nyay as a logician said that or Naiyayikas as a **as a** practice of logic said that we need certainly major premise, minor premise and conclusion. We need the three propositions as the basic requirement but they never mentioned that the first proposition should necessarily be the major premise or the second proposition is necessarily to be a minor premise.

What the concern is that an individual should find out the middle term and the conclusion. You find there is a minor term and there is a major term and the explanation they said and what are the how they said will be discussing in the next slide but this is the first ground. They differs, they said that major premise and minor premise not respectively find to have an inferential knowledge.

Second differences, if you find Aristotle said that the first proposition and the second proposition and the third proposition which are respectively major, minor and conclusion they said these three propositions need to have all the three terms. These are the major term, minor term and middle term. Sharing the same view Naiyayikas also said that we need at least three terms known as major term, minor term and middle term but the difference is that Naiyayika said that may be more than three terms we find in an argument, not necessarily we will find three terms.

Naiyayikas further said that a particular term may be hidden in a particular grammatical structure, in a particular word that as a recognizer you have to find out that where that middle term hides and as a result we can have an inferential knowledge. So, we will be discussing in detail when the slides comes. Gautama has given a definition. He is saying that we have an inferential knowledge. The preceding knowledge should be a perceptual knowledge, therefore they said that Anumana is that knowledge which is preceded by perception that is of three varieties and three varieties are known as three propositions.

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- ❖ For example: Metal is expanded due to heat.
- ❖ Here, we perceive the metal which is now burning. Based on this knowledge we infer that it will be expanded. It will be inferred because there is an universal, invariable, unconditional relation between the heat metal and expansion.
- ❖ It is the knowledge of an object due to a previous knowledge of some sign (linga). The previous knowledge is due to the universal relation between the major term and the middle term is being present in the minor term.
- ❖ In inference, we find the *vyāpti* relation (Sādhyā & hetu).

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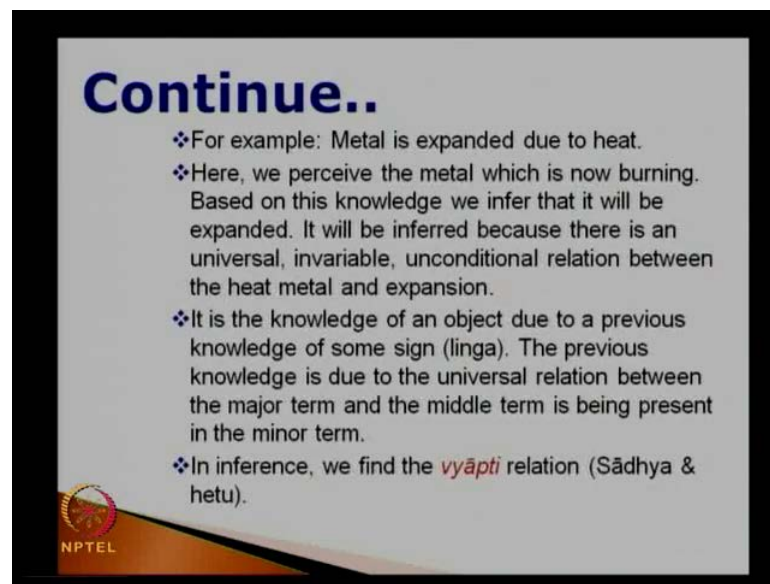
Now, the example I have given here is a different one, so that you would not feel at least bore by listening smoke and fire. The example related to same as smoke and fire. However, this is a new example made for you, the same way I have presented how inference it is. They said that metal is expanded due to heat. If you see that like you are seeing smog in a distance place, if you see that the metal is burning and based on this knowledge that metal is burning.

Now, you can infer a situation that the metal can be expanded and how you can infer the situation because you had earlier experience that when the metal expanded that means it is already burnt. So, therefore you find that the heat metal and its expansion both are universally, invariably, unconditionally related with each other in all the times. Therefore, you have a perception to a particular iron which is burning now and based on the perception you have anxiety to infer what will happen after this burning. Once it will be burnt on particular temperature, what will happen? You are sure that it will expand and how you can infer the situation that it will expand.

You can infer the situation because you had earlier experiences. A few experiences in the past saying that whenever there is a metal is heating, it will be expanded. In this way, metal heat and expanded are related with each other. So, it is a hetu and Sadhya. Therefore, said that there are two terms middle term and major term must have a relation very closely or inter-relatively. They could not be separated in any one of the condition.

If there are any chances that they will get separated that means our inferential knowledge may not be a valid knowledge. That means, if any of the situation we will find that hetu and Sadhya that means smog and fire are not related with each other. Are you find there is some where this smog without fire or you find there is on the other hand you find there is a fire without smog, then all the inferential knowledge that you have may not be a valid knowledge.

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- ❖ In inference, we find the *vyāpti* relation (Sādhya & hetu).

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Therefore, they say it is the knowledge of an object **object** of which is now burning. Now, the iron objects due to a previous knowledge of some sign or Linga. Here, Linga is to be understood as a middle term.

The previous knowledge is due to the universal relation between the major term and the middle term is being present in the minor term. In inference, we find the Vyapti relation that is the relation between Sadhya and hetu. Please note here, I said that in case of a burning metal, burning iron rod once it will be burnt for a certain degree of temperature it will expand. In the same way, you see smog and since you know that smoke and fire are related, therefore you are inferring that there will be fire. So, in all the case you find that the two terms here in one case the example of fire and smoke. You find that smoke and fire both are related in a Vyapti relation.

What is a Vyapti relation? A relation will be known as Vyapti relation when there is a universal invariable unconditional relation you find between the two terms. One is middle term, another is major **major** term.

In case of the example, say the **the** iron rod now is burning and it will for a particular heat to be observed, then it will expand. Here, the heat metal and expansion will be closely related with these are the features one is universally they will be related invariably and unconditionally. So, henceforth I submit the view that in Naiyayikas to have an inferential knowledge, they need indispensable the Vyapti relation which is relation between hetu and Sadhya.

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- ❖ *Trividham (Three varieties)*
- ❖ Relation between hetu & paksa
- ❖ Invariable relation between hetu and sādhya
- ❖ Establishing Sādhya in Paksa.

Example:
The hill is **smoky**.
wherever there is smoke there is **fire**.
Therefore, the **hill** is fiery.

Labels in the diagram:
- **Hetu/Middle term** (green box) points to "smoky".
- **Paksa/ Minor term** (purple box) points to "hill".
- **Sādhya/ Major term** (orange box) points to "fire".

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Now, we will move to the next slide. In this slide, I have explained that how Naiyayikas really taking the view of Aristotle and syllogism and also deferring in which points. I said that Nyaya as a logician said the same concept which Aristotle syllogism describe. However, Naiyayika said that not necessarily the first premise in an argument should be a major premise or the second premise not necessarily a minor premise. May be the first premise situation demands may be a minor premise, the second proposition may be a major premise.

However, the common point that in conclusion you never find the middle term because middle term helps to relate the major premise and minor premise and it even helps to

establish the conclusion which is validity. Same thing I have written. You can see that the relation between hetu and Paksa, the three features indispensably. We require to have an inferential knowledge, the relation between hetu and Paksa. Paksa here as a minor term that you can see, I have put an arrow here.

I said that Paksa to be understood as a minor term in Sanskrit. In English, it is a minor term, in Sanskrit or in Nyaya philosophy said in their own word Paksa. Sadhya will be known as major term in English and hetu or linga may be said in English is the middle term.

People said that Linga, hetu in case of middle term but anything you like you can speak. If you want to speak only English, you speak only middle term, minor term and major term. If you want to speak only in Sanskrit, then you speak Paksa, Sadhya and hetu.

Here, if you see that the three conditions they made it very categorically. The first one they said there should be a relation between hetu and Paksa. Here, hetu is smoke and Paksa is hill. That means, you are perceiving something on a hill that means, on a hill it is smoky.

Now, invariable relation between hetu and Sadhya to have an inference we need a Vyapti relation between hetu and Sadhya invariable, unconditional, universal etcetera. So, these are the features to be satisfied for having a Vyapti relation.

Here, hetu is known as smoke and Sadhya is known as fire. He is saying that in all the cases wherever there is a smoke, there is a fire or wherever there is a fire, there is a smoke. So, because of their Vyapti relation and your experience in the past, immediately after seeing the smoke in a distance hill, you infer the situation directly without any dilemma and the last I said that the last feature would be establishing sadhya in Paksa.

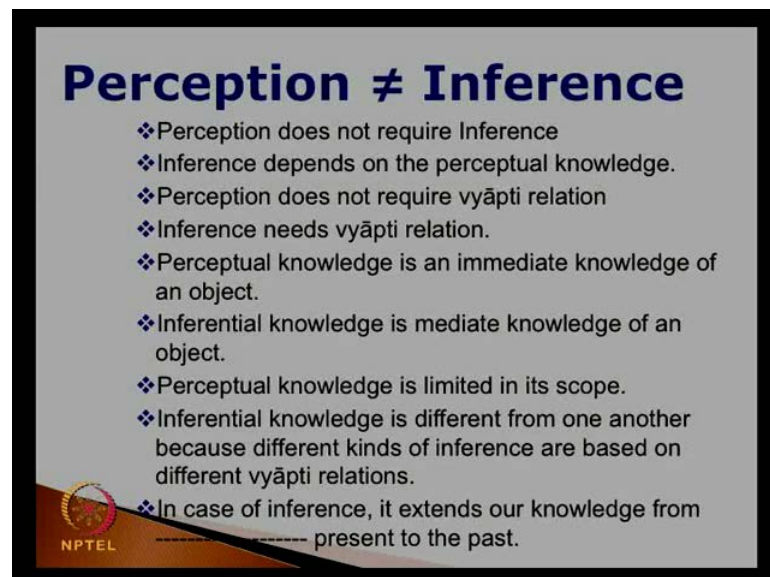
That means the major term should be established in the minor term and here, the minor term is hill and the major term will be fire. That means, the fire has to be established in the hill saying that since you are perceiving a smoke and you have engaged to infer a situation and you infer the situation there is a fire. Therefore, here fire is a major term will be existing or the fire will exist in the hill.

So, this is the way Naiyayikas explained an inference and how inference should be. Here, you find at least we need three premises and the first, second, three premises and at least, we need three terms the major term, middle term and minor term. The only difference here you find that they never said that first one should be the major premise or the second proposition would be minor premise and the third proposition will be conclusion. They said that either of the two premises in first and second cases, it may be in a reverse way.

So, this is the way Nyaya the logician differs from Aristotle syllogism. Please remember this example, so that whenever is require I will just give reference to this example, so that it will help you to understand the spirit the way Naiyayikas explain that inference as a valid Pramana.

Now, while explaining the inferences, they said that we need a perceptual knowledge which precise to the inferential knowledge. Now, we will see the differences between perception as a valid Pramana and inference as another valid Pramana.

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Perception ≠ Inference

- ❖ Perception does not require Inference
- ❖ Inference depends on the perceptual knowledge.
- ❖ Perception does not require vyāpti relation
- ❖ Inference needs vyāpti relation.
- ❖ Perceptual knowledge is an immediate knowledge of an object.
- ❖ Inferential knowledge is mediate knowledge of an object.
- ❖ Perceptual knowledge is limited in its scope.
- ❖ Inferential knowledge is different from one another because different kinds of inference are based on different vyāpti relations.
- ❖ In case of inference, it extends our knowledge from present to the past.

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In case of perception, we need not require any kind of Vyapti relation because there is only one proposition is enough for us because the object is directly contacting to our sense organs, so that we will have knowledge but in case of inferences, the object is not

directly contacted to our sense organ. We are inferring to a situation based on our previous experiences.

Therefore, in inference we need perception. However, in perception we do not require any kind of inferences. In inferences, we need a valid relation, however in perception we do not require any kind of valid relation and what other differences now we will be seeing here.

Perception does not require inference. I said to you also I said inference depends on the perceptual knowledge and you know that how really inference need a perceptual knowledge perception does not require Vyapti relation and inversely inference needs Vyapti relation. Perceptual knowledge is an immediate knowledge of an object because the sense organs are presented before the cogniser. As a result, the cogniser sensors are contacted into the object directly. Henceforth, having the knowledge about that object immediately but in case of inferential knowledge, it is a mediate knowledge because through a perception and through your previous experience you are inferring a situation. Therefore, it is mediate knowledge. Perceptual knowledge is limited in its scope because whatever presented before you, you can see that you can have knowledge about that object.

In case of inferential knowledge, it is different from one to another which is based on the different kind of inferences or what are they having different Vyapti relation. He is saying that inferences are of different type because if the Vyapti relation is a different type, then the inference is also different type. Henceforth, your knowledge on the inference can also be different type .

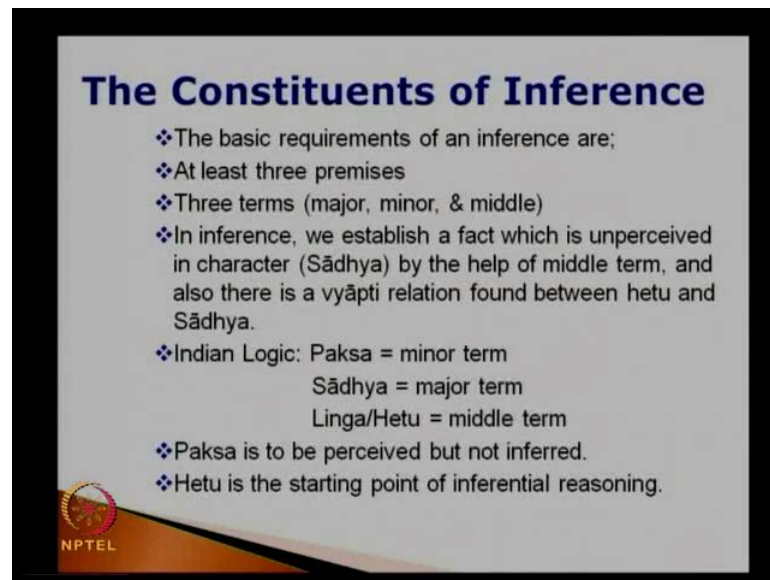
In case of perception, it is always direct perception and you accumulate the knowledge directly. In case of a inference, it is a mediate knowledge. You infer the same situation through some means, through some media and lastly, I pointed out that in case of inference, it extends our knowledge from present to the past. That means, the object is presented before you which you are perceiving is smoke.

Now, you are going back to the past because of your previous experience. Now, you are retrieving all the experiences and saying that since smoke and fire are related, therefore you can see a fire on the hill where you have seen the smoke. Therefore, in case of

inference there is a past and present knowledge as a relation. Now, you are going back to the past because of your previous experience. In case of perception, it is not, so always or it is not so often.

In case of perception, the object is presented before you and you cognize that object which such and such quality. Here, you first have a perceptual knowledge, then based on the perceptual knowledge you go back to your previous experiences which is universal in character and based on that you infer a situation on a particular object or on a particular thing. Now, hope this distinction you should remember and how Naiyayikas make the clear distinction it is very elucidately they presented in Nyaya Suthra.

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The Constituents of Inference

- ❖ The basic requirements of an inference are;
- ❖ At least three premises
- ❖ Three terms (major, minor, & middle)
- ❖ In inference, we establish a fact which is unperceived in character (Sādhya) by the help of middle term, and also there is a vyāpti relation found between hetu and Sādhya.
- ❖ Indian Logic: Paksa = minor term
Sādhya = major term
Linga/Hetu = middle term
- ❖ Paksa is to be perceived but not inferred.
- ❖ Hetu is the starting point of inferential reasoning.

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Now, there are few constituent of inference. As I said to have an inference, we need a few constituents or basic ingredients. These are at least three premises. Now, I am talking about the Nyaya logician or Nyaya theory of inference. They said that we need at least three premises and these three premises should not necessarily have the order, major minor and conclusion. Major premise, minor premise and conclusion, it should not have the order.

However, they said that we need also at least three terms. The major term we should find in the case of major premise. The minor term that should find in case of a minor premise

and the middle term which will be commonly you find both in case of major premise and minor premise.

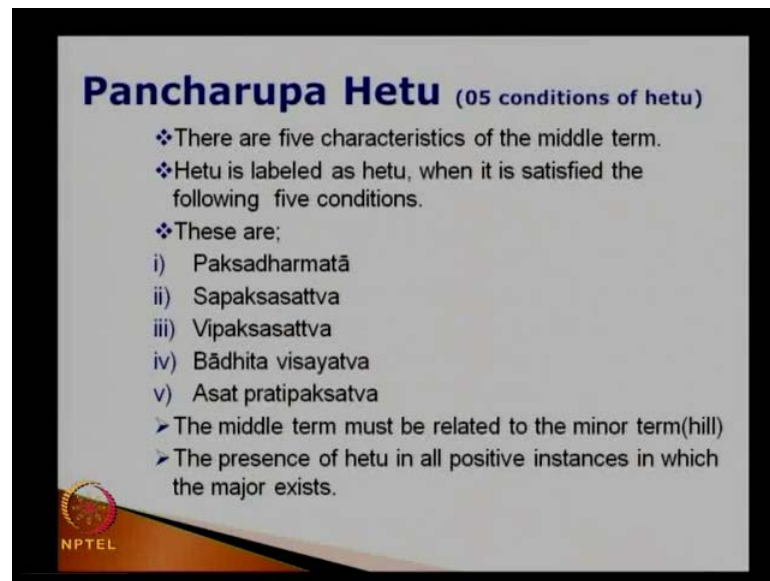
As a result, the middle term brings a relation between major **major** premise and minor premise. Henceforth in the conclusion you never find any kind of middle term rather you find only major term and minor term. So, there are three constituent, three premise and three terms. These are the basic constituent we require for having an inferential knowledge. Further said that in an inference, we establish the fact which is unperceived in character because by seeing a smoke you are inferring that there may be fire, but **however you have** you cannot perceive that there is a fire exist on the hill.

Therefore, they said that in inference we establish a fact which is unperceived in character by the help of middle term. By the help of middle term means by the help of smoke and also there is Vyapti relation found between hetu and Sadhya.

Here, hetu is a smoke and Sadhya is a fire. Now, as I said just an English translation of three terms Paksa, Sadhya, hetu or Linga. It is respectively translated as minor term, major term and middle term. Further, they said that Paksa is to be perceived but not infer. That means, Paksa here is a hill. Hill is to be perceived but not infer but hetu here is the starting point of inferential reasoning. Hetu here is a smoke, once you see a smoke over there and then you started having an inferential knowledge.

So, Paksa is a hill. Hill is to be perceived and perceived you perceived hetu on a Paksa and after that you started having inferential knowledge. Whatever you have inferential knowledge, it is based on the Vyapti relation that Naiyayikas explained that a Vyapti relation should have between major term and middle term and it should be having invariable unconditional universal relation between these two terms.

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Pancharupa Hetu (05 conditions of hetu)

- ❖ There are five characteristics of the middle term.
- ❖ Hetu is labeled as hetu, when it is satisfied the following five conditions.
- ❖ These are:
 - i) Paksadharmatā
 - ii) Sapaksasattva
 - iii) Vipaksasattva
 - iv) Bādhita visayatva
 - v) Asat pratipaksatva
- The middle term must be related to the minor term(hill)
- The presence of hetu in all positive instances in which the major exists.

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If these constituents are not available in case of inferential knowledge that any knowledge that we have may not be considered as valid knowledge. Now, the last point is very crucial for all of us to know that Pancharupa Hetu that means, to have an hetu we need five conditions or in other words, a middle term has five conditions for establishing on a valid argument. What are 5 rupa and how the rupa will be and what are functions of that rupa, now we will be discussing.

You should remember that there are five conditions to be fulfilled to have a valid argument. To have a valid argument, we need a middle term or hetu. In case of Aristotle logic, they never said that hetu are of different kinds. What they said that hetu always should be found commonly both in case of major premise and minor premise but in case of Nyaya logician, they clearly pointed out that hetu has to have five conditions to have an inferential knowledge.

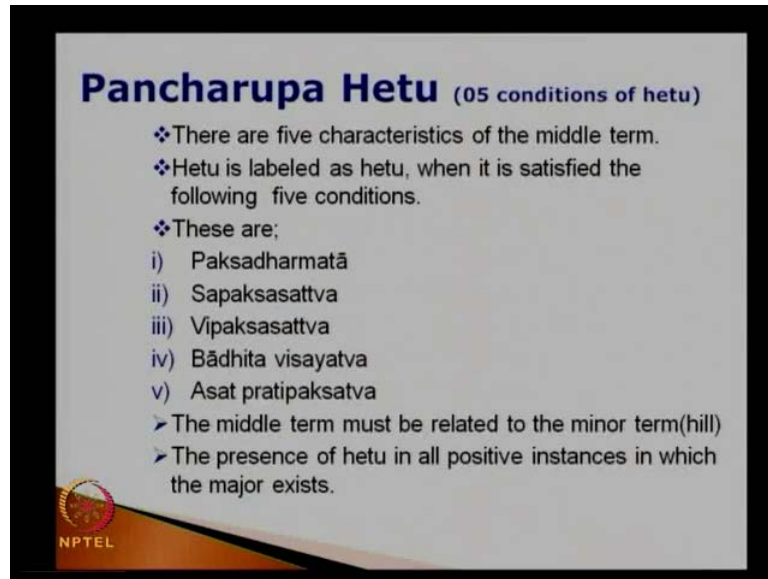
Now, let us discuss how they explained hetu and how they explained the conditions of hetu. There are five characteristics of middle term or hetu. Hetu is labeled as hetu when it is satisfied the following five conditions. These are Paksadharmata, Sapaksasattva, Vipaksasattva, Badhita, Visayatva, the last one is Asat Pratipaksatva.

All the Sanskrit term has particular meaning and each meaning will be explaining here. The first is Paksadharmata that means, Paksa. You know Paksa means there is a particular term stands for Paksa and Dharmata there is a dharma or duty.

Here, Paksa is the hill or you say the minor term. The major term will be the fire and smoke is the middle term. He is saying that the middle term must be related to the minor term that is hill, Paksa stands for minor term. If the smoke is not found in case of a hill, you may not be worry for having an inferential knowledge whether fire is there or not. You may not be any worry to know that whether there is a fire on the distance hill or not.

You become worry only when you see that there is a hill which is the distance from you and there is a smoke arises. Therefore, you saying that hill and smoke should be closely related, therefore my point here is middle term must be related to the minor term that is explain about Paksadharmata.

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- The presence of hetu in all positive instances in which the major exists.

NPTEL

The second point is known as Sapaksasattva sapaksa means support. If I say that he is my good friend and he supported me. I can say that he Sapaksa to me that means supported always supported. According to Naiyayikas, he explained that the presence of hetu in all positive instances in which the major exists. Hetu and major term invariably find in all the places. There should not be any such cases in past, present and future

having an exceptional situation saying that there is Hetu but there is no major term or there is a major term, there will no Hetu.

That means in one hand we cannot even claim that there is a fire without smoke, on the other hand even we cannot claim that there is a smoke without fire. That means in all the positive situation that we have come across, so far we have seen that wherever there is a smoke, there is a fire.

Because of their invariable, unconditional and universal relation in all the times, whatever experience we had, we are able to infer the situation by seeing the smoke that there will be fire on the hill. So, therefore here also hetu plays the vital role. The association between hetu and major term should invariably find in all the cases.

The third one the point I said Viapksasattva that means Naiyayikas here negatively defining how really hetu plays a role for having an inferential knowledge. What they mean here is that to explain something negatively, it is a Naiyayikas who does this.

Nyaya philosophy tries to explain something in a negative way, so that the things can be explained or illustrated much better way. For example, if I see that look this is a table, you may not agree with this. To have a concrete knowledge of that object say table Naiyayika said that table is not a chair, the table is not a say bicycle, the table is not a computer, the table is not your dot pen, the table is not a bottle of water, the table is not a glass.

So, here the elimination process starts what table should be and how table is different from others. So, if you can discriminate other object and saying that other objects are not same as that object that means you have concrete knowledge about that object. Therefore, you give a name to that object which is known as valid knowledge.

Therefore, they are saying that to have knowledge about what is happening in this on the hill whether fire exists or not, you should find that the smoke is always related to the smokiness and smokiness is different from other kind of knowledge. Smokiness is always available in case of fire. Negatively what they speak about that what they expresses that if you find smokiness without fire, then and this cannot be a valid hetu for having an inferential knowledge.

There are many situations where if you see that only smoke without fire, then this hetu cannot be related with the Sadhya. As a result, we cannot have a valid inference. So, negatively also they define that how smoke and fire related with each other and there would not be any kind of circumstances where fire and smokes are separated with each other or they are not invariably related with each other. This is one of the conditions of hetu and hetu should satisfy this condition to having an inferential knowledge.

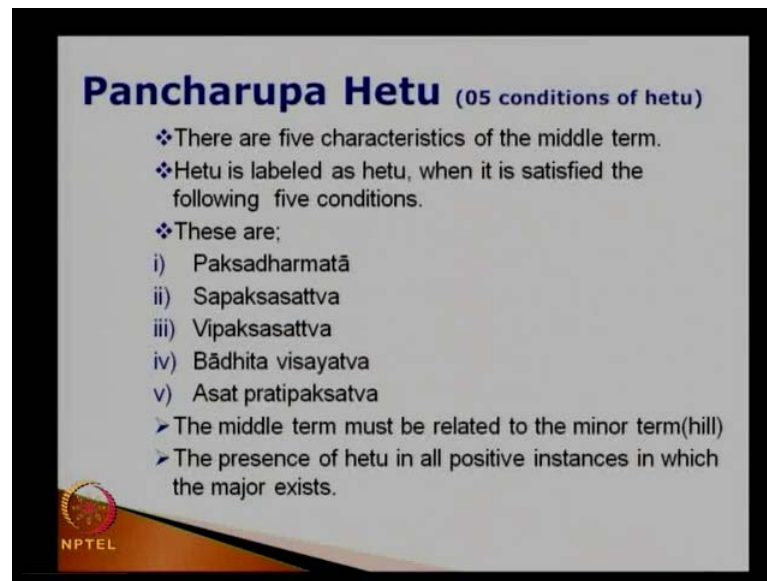
Further, they said this Badhita visayatva what they mean it is a counter balance. A hetu should not have any kind of counter balance. What they mean if you say that the squareness of circle, squareness and circle these two are different concept. If you say squareness of a circle, it is a vague concept. It does not make any sense of it and square and circle cannot be invariable, unconditional and universally related with each other because squareness is different from the circle. He is saying that if you choose a hetu which will have a counter balance like squareness and circle, then there will be a real issue. In that case also we cannot able to infer the situation or we cannot infer any kind of object on the Paksa.

If the hetu will not satisfy this feature, then the inferential knowledge may not be valid knowledge. That means, a hetu should not be or might not be the counter balanced. It should not give this kind of impression saying that square circle or heatness of an ice. You say that how heat is the ice. You say that non-coolness of an ice or a piece of ice. In this case, in all this cases you find it is a counter balance. What they are saying is the first and what they are saying is second, these two are different. So, therefore they cannot be associated with each other and therefore, this feature is a rudimentary feature to have an inferential knowledge.

The last point they said that the hetu and the middle term will find without any absent. If you make an absence in case of hetu and Sadhya, in any of the situation, then the hetu may not be fit for having an inferential knowledge.

Now, we will see how they explain because what we have explained so far, the two conditions, first one is Paksadharmata that means the term middle term must be related to the minor term in all the situation, all the condition.

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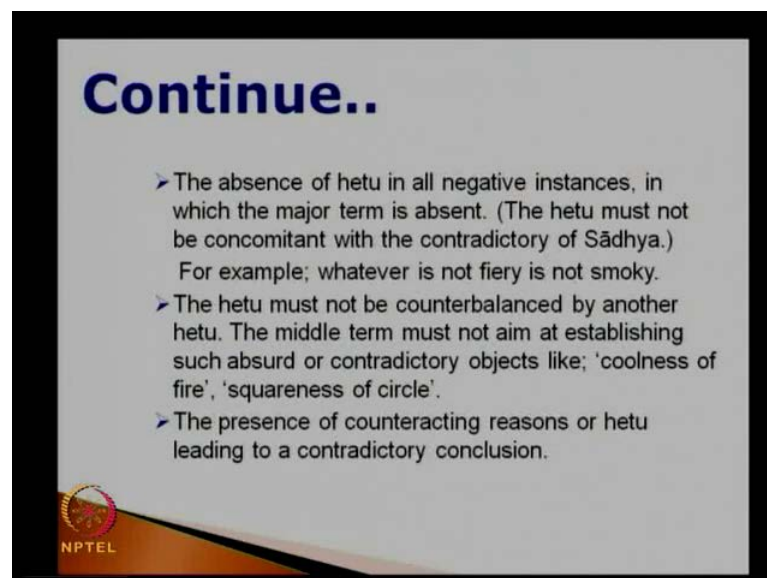
Pancharupa Hetu (05 conditions of hetu)

- ❖ There are five characteristics of the middle term.
- ❖ Hetu is labeled as hetu, when it is satisfied the following five conditions.
- ❖ These are:
 - i) Paksadharmatā
 - ii) Sapaksasattva
 - iii) Vipaksasattva
 - iv) Bādhita visayatva
 - v) Asat pratipaksatva
- The middle term must be related to the minor term(hill)
- The presence of hetu in all positive instances in which the major exists.

NPTEL

The second point, Sapaksasattva sapaksa means support. There we have said presence of hetu in all positive instances in which the major term exists. Now, we will see the last three points, how naiyayikas explain it. I have already explained to you, now you will read the slides and if anything remains to explain, I will be explaining you **ok**.

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- The absence of hetu in all negative instances, in which the major term is absent. (The hetu must not be concomitant with the contradictory of Sādhya.)
For example; whatever is not fiery is not smoky.
- The hetu must not be counterbalanced by another hetu. The middle term must not aim at establishing such absurd or contradictory objects like; 'coolness of fire', 'squareness of circle'.
- The presence of counteracting reasons or hetu leading to a contradictory conclusion.

NPTEL

These are the points they mention it. The three points which is found in case of an error, the third point they said the absence of hetu in all negative instances in which the major

term is absent. What they mean here is that I read further, the absence of hetu, absence of middle term in all negative instances in which the major term is absent.

The hetu must not be concomitant with the contradictory of Sadhya that means there should not be any such of cases where the fire will find and no smoke will find fire. Smoke should positively find in all the cases and in negatively speaking, there would not any such conditions where smoke find. However, you do not find fire over there.

In other words, I will repeat by saying that negatively speaking there would not be any such conditions where you find smoke without fire or you find fire without smoke. This is the third conditions of hetu.

The fourth condition of hetu, they clearly said the hetu must not be counter balanced by another hetu. Counter balance means it should not contradict with each other.

If I say that table is not table, it is a contradiction in terms. In the same way, if I say that squareness of a circle, it is a contradiction in term. If I say again say that coolness of fire, it is a contradiction in term because the fire cannot have a coolness because the fire generates heats but if any of the situation you find that the fire generates coolness, then the hetu does not satisfy the condition to be fit to have an inferential knowledge which will be known as a valid knowledge.

To have an inference as a valid Pramana which will be resulting as a Pramana or a valid knowledge, hetu should satisfy the fourth condition as well he saying that the hetu must not be counter balanced by another hetu. The middle term must not aim at establishing such absurd or contradictory objects like coolness of fire and squareness of circle.

So, this point is a very rudimentary point. They said that for example inference will happen in this situation also. For example, in our family suppose you ate a ripe mango and you have seen the color of mango which is a mixture of yellow and red color and having a good shape, neat and clean and whenever you just take the slice of that mango, you find that the taste of that mango slice will be very sweet.

Now, continuously you had the same kind of experiences because your parents brought the mango fruit for the family and you have eaten this slice of the mango and have the taste of it and you have seen how the mango looks like.

In a situation when your parents ask you to go and purchase mango, you go to a shop and you see that the mango looks like a good mango and having the mixture of color yellow and red. Without knowing taste you can infer the situation that the mango will taste sweet because of your previous experience.

Here, he is saying that in this case it fails because there are many such situations where the mango will appear with the same color, same size. However, the taste of the mango is different. In this case, whatever you have a previous knowledge because of that knowledge you try to infer the same situation which is not correct.

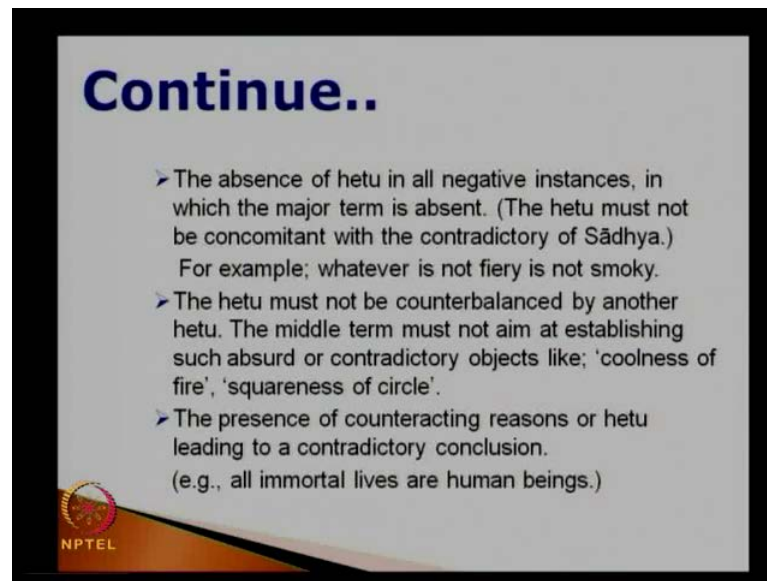
Therefore, your argument or the inferential knowledge may not be valid because you need to experience at least more than one variety of mangoes of that size, that color or that shape, then only your inferential knowledge will be true. What I mean here is that the sweetness of a mango and the color and the appearance of the mango are not necessarily or involved in a kind of Vyapti relation.

Further, to explain the sweetness, the taste, the sweetness of mango and the appearance of the mango cannot be related unconditionally, universally and invariably in all the cases, in all the situations. Therefore, whatever you infer just by having two three mangoes in your life or you have eaten the same sort of mango which is purchased by your parents; you can infer the situation will be an invalid inferential knowledge.

Therefore, they are saying that you must have a previous condition whichever is satisfying the vyapti relation. The fourth point indirectly explains the same thing. He is saying that if any of the two hetu will bring to the existence to have an inferential knowledge, make sure that these two hetu are not contradicting with each other. If they are contradicting with each other, then any inferential knowledge you have that may not be treated as a valid knowledge.

Therefore, like coolness in fire and softness in table and say squareness of circle, all these are truly an issue for having an inferential knowledge. Therefore, they submit to have an inferential knowledge. This condition hetu should maintain it, then only any knowledge we have must have an inferential knowledge and the knowledge will be a valid knowledge.

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- The absence of hetu in all negative instances, in which the major term is absent. (The hetu must not be concomitant with the contradictory of Sādhya.)
For example; whatever is not fiery is not smoky.
- The hetu must not be counterbalanced by another hetu. The middle term must not aim at establishing such absurd or contradictory objects like; 'coolness of fire', 'squareness of circle'.
- The presence of counteracting reasons or hetu leading to a contradictory conclusion.
(e.g., all immortal lives are human beings.)

NPTEL

The last point they said the presence of counter acting reasons or hetu leading to a contradictory conclusion. An example we have given here, all immortal lives are human beings. What I mean here if I read it, you can also explain it because it is a self explanatory. The presence of counter acting reasons or hetu leading to a contradictory conclusion but they clearly said that you should not make such a statement where the hetu will be contradict. If I say that all immortal lives are human being, this cannot be the case because there will no such situation which permits us to claim that there is a human being and he or she is immortal. He or she will die in any of the situation.

Therefore, they said that this hetu should satisfy all the conditions to have labeled as hetu and to be fixed in an inferential knowledge and the inference will be a valid Pramana for having or resulting a valid Pramana.

Therefore, they are saying that like perception, inferential knowledge is also equal valid because inferences certain rudimentary components and all the components should be necessarily find in case of a inferential knowledge.

In addition to that, we find the Vyapti relation and the Vyapti relation is nothing but the universal, invariable and unconditional relation between hetu and Sadhya. It is between the middle term and the major term and if these features are you do not find in case of a

inferential knowledge, then any knowledge that you gain through the inference cannot be treated or judged as a valid knowledge.

So, this is the way Naiyayikas explains the inferential knowledge and now it will be convinced to you how the inference really plays a role in many of the occasions in our life to have a valid knowledge.

Just a brief recap what we have said. So far we said what is the inference and what are basic components of the inference. In addition to that we have stated also the difference between perception and inference.

We also said that perception precedes inferences. Further, we said that how this components or the constituent of an inference really useful to have a valid inferential knowledge. Further, we said that there are five conditions a hetu should satisfy to fit in an argument and for supporting an inferential knowledge to be a valid knowledge.

Now, I hope it will be understood to you how really Naiyayikas explains the inferential knowledge. In the next class, we will be discussing the logical and psychological aspects of inference.

Thank you.