Introduction to logic
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Lecture - 8
Identification of normal and informal Fallacies

Welcome back, in the last few lectures we talked about some basic concepts in which we started we recognized arguments. And we could recognize arguments only even there are some premise indicators are conclusion indicators. Suppose, if this premise and conclusion indicators are missing then we are looking some kind of factual claim if it is z well and good and then we said that for identifying are recognizing and argument. What is most important is the inferential claim? So, if you can find the inferential claim then we can say that they seems to be some kind of argument present in a given English language passage. And once we identified the arguments then we identified that based on how the conclusion follows from the premises identified.

That we particular kind of arguments is a deductive argument in which conclusion this follows from the premises and there is no new information in the conclusion which is not treated in the premises. And then its not construct to be amplicative etcetera and all and we identified some of the other arguments in which the conclusion only probably follows from the premises. And there is always some kind of new information in the conclusion which is not there in the premises and all.

So, these are what we call it as inductive arguments and then we also said something about non arguments. Such as in our somebody's giving just a piece of advice or suggestion or is just giving some kind of explanation or expository passages etcetera. There all non inferential passages hence we treated them as non arguments. So, then we talked about 1 example with which 1 method we with which we could find out whether a given argument is invalid etcetera and all. That method is called as counter example method.

So, then we spoke about 1 particular model of argumentations which is due to Stephen Toulmin. And with which you could find out what constitutes what is what is what do we mean by an effective argument and all. So, there is a model which we are presented and then there we have seen that there at least few components of an argument are a lay out

of an argument which are important that is data. And a claim and data and a claim are supported by some kind of warrants and warrant needs to be supported by further backed up statements. And then suppose if we come of with any claim each claim is to be having some kind of qualifier and then it will have every argument should have some kind of rebuttal and all. So, this is what we have done. So, far and then now what we will do miss this that at once we identified that they are deductive and inductive argument.

Then both deductive and inductive arguments can be fallacious. So, in this lecture we will be talking about what we mean by fallacy. And what kind of fallacies that we commonly a come across in the this course are when the argue set to be making some kind of mistakes in the argumentation. After all fallacy is nothing, but a mistake or error are defect in the argumentation and all.

So, why the arguer does these mistakes and all because simply because of this that all these fallacies are some kind of pursue assume mechanisms and all. So, we all the time want others to accept our claims, and all in the process some we will be logical some times we may not be logical we make some mistake etcetera and that is what we are going to study in this lecture and all's. So, in this lecture or we will be focusing on 2 kinds of 2 different kinds of fallacies. So, that is formal fallacies.

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Formal and Informal Fallacies

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Then informal fallacies and then I will talk little bit about formal fallacies first. And then we will move on to informal fallacies informal fallacies arises, because of some kind of problem of revelance and then I will talk about fallacies of week induction and apart from this thing there are some kind of fallacies which arises out of ambiguity in the language because English language is weak because for example, simple words such as a predicates like tall can be represented in so many different ways also.

For example, if we say that thing in a next question that comes to as he is how tall he is this is the case that 6.8 is considered to be should be considered to be tall or 5.8 is to be considered to be tall. Or what will happen to those cases in which falls between 5.8 definitely.

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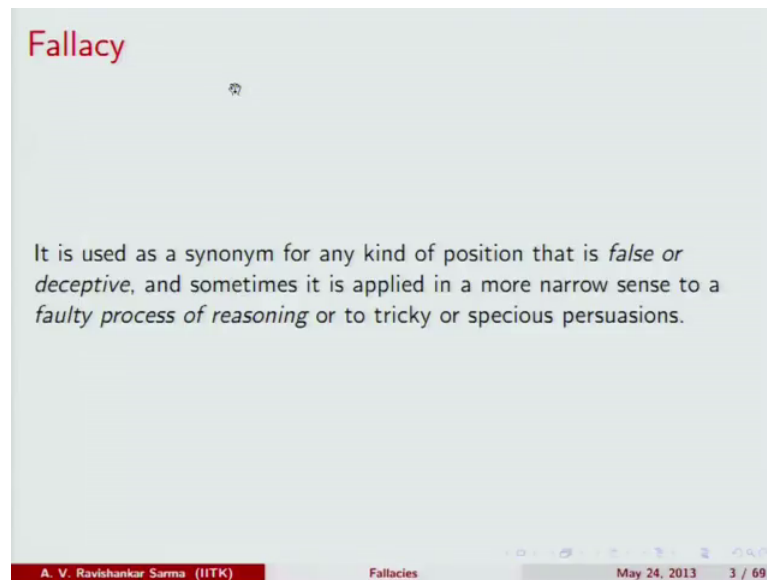
You know we considered that there definitely taller and all and those cases in which know the fall between 5.8 and 6.2 etcetera. So, English language is little bit also we might make some mistakes in the argumentation especially when we shift the meaning of the words such a that we that we that we use in the argumentation then we talk about some kind of fallacies which arrised our of grammatical errors etcetera and all. So, these kinds of fallacies come under a category of falliecies arising out of ambiguity of language.

So, then we will discuss about detecting and avoiding fallacies this is a this is the program this is agenda for under this fallacies. So, in this lecture I will be focusing on formal fallacies and the informal fallacies especially the fallacies of relevance. So, before I continue then let us talk about what we mean by a fallacy. So, it is used as a synonym for any kind of position that is false are some times even deceptive.

Or sometime it is even applied to some kind of narrows sense to some kind of faulty process of reasoning. So, we talked about different kinds of reasoning inductive and deductive reasoning etcetera. So, if both such kind of reasoning is defective then that is considered to be some kind of faulty process of reasoning and all or some times it an arguer might want to trick use some kind of tricks and all especially to persuite the reader or listener are mostly these are all some kind of specious persuasion and all. So, what is these are all persuasive kind of mechanisms and all so but logically speaking

there all considered to be mistakes in the argumentations and all enhance there called as fallacies. So, they might not be considered.

To be fallacies fallacy in a sense of in a psychological sense etcetera and all these fallacies might be have some importance there, but as far as logic is concerned they are all considered to be fallacies and all. So, 1 must not that there are many arguments which are very persuasive and all there all not good arguments and all. So, how to distinguish good argument from a bad argument etcetera this is the question that we will be we have asked in the last few lectures as well as we will be asking this lecture even we will be asking this question even in these lectures as well.

So, mere persuasive mechanisms are will not serve as a good or effective kind of argument. So, they might be some kind of errors are defects are mistakes in the argumentation some times arguer deliberately makes it some times arguer might make it out of inor ignorance or sometimes know you just want to per suite is reader or listen Position that is false are some times even deceptive or accept is claim and all.

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So, fallacies in a sense its nothing but some kind of mistake in the argumentations and all this mistakes might arrise in in many different ways that is what we are trying to look in to in a greater detail and all. So, a fallacy is a defect in argumentation other then nearly false premises. So, just because in argument has a false premise does not mean that it is a considered to be fallacy and all were many arguments which have false premises, but at

these kinds arguments are valid and all example if we say all squares are circulus all circulus are parallelograms all square are parallelograms. So, the conclusion seems to be a; obviously, for as, but the premises are obliviously they doesn't mean there is a mistake in in that argumentation, but at this argument is considered to be valid and all since we do not want these kinds of argument in bit.

So, we do not use these kinds of arguments we in work another kind of property which we have seen in the last few lecture under basic concepts that is the concept of soundness a sound arguments is a deductive argument in which it is valid as well as it has true premises. So, fallacy is a term the term which is used for fallacy is non sequitur means it does not follow otherwise it is invalid kind of argument is another name for fallacy and all mostly it is used in in the context of formal kind of fallacy. So, there are 2 kinds of fallacies that we commonly come across. So, 1 particular kind of fallacy is a little bit straight forward and all just by seeing the form itself we can make out that there is mistake in the argumentations and all. So, once you extract the form and all if it is invalid form; obviously, it is an invalid argument and all enchancity is fallacy automatically

All invalid arguments are automatically considered to be fallacious argument. So, what is a formal fallacy a formal fallacy is an again error in error or mistake in the reasoning that involves the explicit use of an invalid form for example, instead of a plus b a and b follows that is rule which we have seen earlier instead of that we use a plus b and b, it leads to a then that is considered to be mistake in the argumentation and mistake in the way very way you use the forms and all you have not used in the valid you've not used in a correct sense. So, so that is why it is called as a formal fallacy.

So, formal fallacy is can be identified just by seeing the form itself if there if you find invalid form obliviously it is a fallacious are give may and it is a called as a formal fallacy, informal fallacy on the other hand are not that easy to identify. So, they do not have fix form etcetera and all. So, informal fallacy are errors in listing they do not involve the express it use of an invalid form in the day today argumentation it is not it is not easy to extract form all the time and all it is not easy to identify what exactly the arguer is trying to argue or intend to claim etcetera claim is considered be the conclusion. So, those kinds of fallacies in which in you can make out that there is a mistake in the argumentation only by seeing are analyzing content of an argument they are called as

informal fallacies for example, you know lots of examples we've seen already in the last few lectures for example, if you say this room is made up of atoms are invisible. So, this room is invisible and all suppose if you say that particular kind of thing unless and until you analyze the content of the argument that means.

The words that here you have used in you argument there is no way which can identify mistake in the argumentation. So, detecting an informal fallacy requires an examination of arguments content an all unless until you analyze the content of an argument there is no way in which you can identify the mistakes in the argumentation. So, these kinds of fallacies are called as informal fallacies to be simple in simple terms formal fallacies can be identified by somewhat some mistake in the form and informer fallacies can easily be identified by not easily, but it can be identified not easily, but it can be identified by analyzing the content of the argument and all. So, how did we getting to this particular kind of some kind of interesting this fallacies and all we are saying that all fallacies are persuasive kind of mechanism and all at the same time we are saying that not all persuasive kind of arguments are good arguments are efficient or effective kind of arguments and all.

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So, so what are the characteristics of a good argument or effective argument. So, we already said about this thing. So, it has to be deductively valid if you it is deductively valid are at least it should be inductively strong in the case of inductive arguments we

can only talk about strength of the arguments. So, that is why it has to be strong and of course if it has truth premises it is called as in the case of inductive arguments it is called as a argument in the case of deductive argument it is called as a sound argument a sound argument is a valid argument with true premises is that is a case, and it seems to be a good and effective true kind of argument are it has validity and true truth of the premises be evident as per as possible to the parties involved suppose to people are arguing with each other they know that some of the statements the that an arguer has use also happened to be factually true.
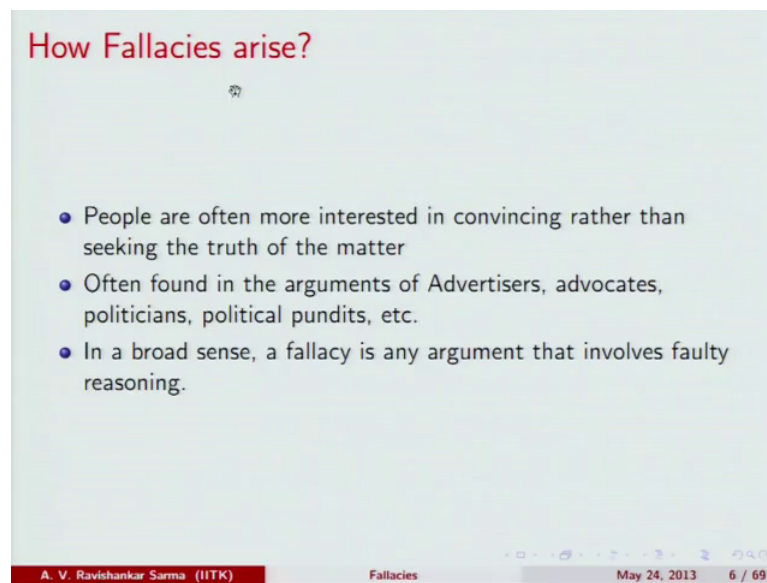
So, that makes this argument sound and all off course validity does not require that the truth of premises to be actually true and all, but if there is an inferential claim that is well in good enough for talking about the validity and all. So, both parties; that means, those who's ever engaged in argumentation should be able to find out that the arguments is a valid as well it as well as it true premises nice well and good. So, that that will a good argument and the premises should be stated clearly using some kind of understandable language and making clear what the premises in the conclusion are etcetera and all is has to nicely; that means, it the argument has to be some kind of well crafted kind of argument and all. So, if that is the case and if we know what premises are what conclusion are then you will automatically know.

What we seems to be supporting what etcetera and is you need to avoid for a good argument you need to I mean avoid circularity ambiguity and sometimes you will using lot of emotional language into the arguments and then basically a our purpose is to to make the reader or listener accept to your our claims and all. So, 1 is to ensured that there is no circularity in the argument 1 simple example could be for example, somebody is arguing that I believe that god exist is true and all suppose if you asking why you believe that god exist true and all. So, then you will say that this is what by will say. So, then the next question that you'll come across is what is the guaranty that what bible say is true what Kuran what Geetha says is true then you'll argue that god is true he talks. So, he talks of only truth's.

And whatever he has written the bible is written Geetha or Kuran return by god only god words only there obliviously true etcetera, then again you ask what is the guaranty that these words are true I mean this statement that you are that are there in the bible is true again you'll say that god exist etcetera and all this leads to it beg some question at each

and every state you're it leads a some kind of circularity in argumentation and all as far as possible should ensure that they there is no circularity in your arguments and it has to be relevant to the issue at hand on all for example, if you say 2 plus 2 is equal to 4 and then and moon is made up of green trees and you will infer 2 plus 2 is equal to 4 this is no relevance between moon made up of green trees and 2 plus 2 is equal to 4 and all although it looks like that from a and you are deriving b.

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But does not make any sense to we do not make such kind of claims in logic in particular, but although it is formally valid and it follows and all, but usually know that is not considered to be a good argument 2 plus 2 is equal to 4 and moon is made up of green trees hence is moon is made up of green trees from a and b b follows. So, the next question that arises in your mind is this that how this fallacies are arises. So, people are often more interested in convincing rather than seeking the truth of the matter. So, we might be impatient or we might be we want other accept or claims and all.

So, somehow we want convince others and all will forget about what whether the conclusion is true or whether conclusion fallows from the premises are either any support of premises to the conclusion in all these things we will set it aside and then we will ah we will mix up with arguments with lot of emotions etcetera and all. So, may be because of that this fallacies masteries or otherwise we often find in the argumentation these are the saw of the argumise that you will often find it in the arguments of advertises in

particular and agency wants is customers to buy particular kind of thing mean people to buy some particular kind of item they use some good solid advertisements and all etcetera and all advocates use it the courts politician try to who the customers who the voters in particular. So, then they might use this fallacies as a persuasive mechanism are political it might use at in the analyzing who is going to I mean political might use at in some sense in a bloat sense fallacies is any argument that involves some kind of faulty listing as per as logic is concern. So, they may be they may follow psychological.

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They might be psychologically relevant and all, but as per as logic is concerned they are there all considered to be mistakes in the arguments. So, now, lets us going to the details of formal fallacies first and then we will move 1 to informal fallacies little bit later. So, 2 's commonly this is the 2 commonly found kind of fallacies in in logic that is when these rules are used in not in a proper way then it leads to formal kind of fallacies and all. So, these fallacies are like this the first 1 is a implies b and then b then at least to a then there is a mistake in the argumentation that I will talk about it little later and the other 1 which you will commonly find is a implies b and not a and not b. So, this is called as fallacy of affirming the consequent affirming the consequent we will talk about some examples related to both this things. So, these are called as formal fallacies and this is called as fallacy which arises, because of denial of consequent denial of antecedent. So, these are all invalid forms obliviously there invalid arguments.

So, we said that all invalid arguments are automatically fallacious and all. So, now, why varies what is the valid form of this 1, a implies b is the case this an hypothetical situation and then if a is indeed true then we can infer that b follows of these 2 things and the other correct usage of this 1 is this a implies b and you deny the consequent and then you need to deny the antecedent. So, first of all, so this is called as antecedent this is the conditional statement and a is called antecedent and b is called as a consequent and then that makes this a implies b some kind of hypothetical statement if it rains the grass is wet. So, if this is assume to be true and then b is also assume to be true then we need to see were a is true or false.

So, the correct forms are is 2 things, but as you see he will clearly. Instead of using is valid form were we are using invalid forms now or invalid forms are automatically invalid arguments. So, that is why they are all fallacious and all it is pretty straight forward and simple to identify these kinds of fallacies. So, formal fallacies is usually grouped into 2 kinds of fallacies; one is fallacy affirming the consequent instead of affirming the antecedent you are affirming the consequent and all off course you might say that in day to day argumentation we will this seems to be some kind of valid argument and all that is a kind of reasoning which we did discuss in the particular kind of we do not discuss in this particular kind of course So, that kind of reasoning is called as adductive reasoning. So, this adductive reasoning. So, in that what we will do is this that this kind of principle a implies b and b and then from that it seems to be the case z a

fallows from this particular kind of thing. So, these kinds of reasoning is the 1 which we are not going to talk about and adductive inferences are also called as inference to the best explanation and all. So, it is like for example, deductive are doctors who are diagnosing some kind of decease they use this kind of reasoning and all in day today this course. So, there of the view I mean off course a detective is trying to find out whether or not murder to place etcetera in a certain place etcetera and all. So, you might find you will just hypothetically state a particular kind of statement a implies b if murder took place then there would be some kind of blood stains etcetera. So, then detective first you will find some kind of blood stains etcetera and all that will make him.

Infer that there was some kind of murder took place in that particular kind of room and all it seems to be little bit sensible in the actual day today situations in all, but this this kind of reasoning a kind of fallacious reasoning term as far as logic is concern since it is not used in valid form and all we can always come up with a counter example in which a implies b is true and b is true, but a can be false and all, but in day today discuss you might find some examples were this seems to be convincing for you a detective might use this particular kind of thing and all he has an hypothetical situation a implies b and then b is indeed the case, and all at least in all that evidence confirms that this is the case and then from this you will explain that probably a might b the best explanation for these 2 things to be true.

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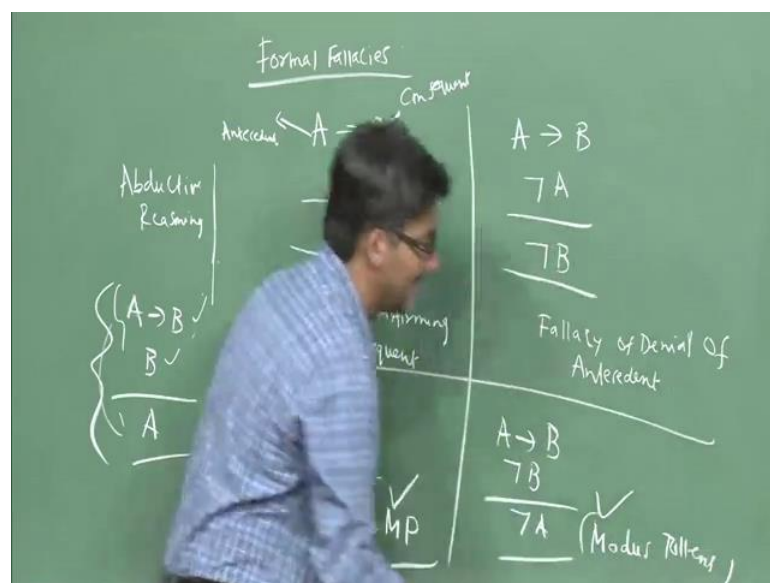
So, this is called as inference to the best explanation. So, this is were not what we are trying to use here and all update you listening is not the 1 which were going to talk about so but here. So, these are the 2 fallacies I which in our logically invalid forms and all. So, that is why there automatically invalid kind of arguments and all, but the correct forms of this 1 is are these things a implies b and a and b follows this is called as modus ponens rule and this is called as modus modus tollens. So, these are somewhat latin names and all, but usually it represented m t and m p modus ponens and modus tollens. So, these are the correct forms these are the incorrect forms such there invalid arguments or automatically fallacious and all. So, now, we can come of it lots of example for these particular kinds of arguments that are there in the top of this thing.

So, one example could be if 2000 500 and 23 is disable by 9 then it has to be divisible by 3 and all. So, that is seems to be little bit acceptable towards and all anything divided by 9 it should be divided by 3 also and then you are saying that 2000 500 and 23 is divisible by 3. So, it also happen that 2000 500 and 23 is divisible right 3. So, then it is also divisible by 9 and all it may not be the case that it may be divisible by 9 and all better example which you can take into consideration. So, this is like fallacy of affirming the consequent of consequent and all. So, this comes under the category 2 sorry first 1.

So, you are affirming the consequent and then you are affirming the antecedent and all here the best example could be like these suppose if you are in Kanpur then you are in utter Pradesh, because Kanpur is in utter Pradesh only you have to be utter Pradesh only. So, if I am in utter Pradesh. So, that is also considered to be the case then it follows that you're in Kanpur and all you might in any part of utter Pradesh and all, but does not mean that you're in Kanpur and all the first 1, I am in Kanpur is represented as a am in utter Pradesh is represented as b and then am in utter Pradesh it represented as uniformed we represented it with help of some symbols, then am in Kanpur is the 1 which is which follows from these 2; one is the hypothetical statement and the other 1 is I mean the statement that I am in Utter Pradesh all you might be Utter Pradesh.

But you might be in agar or you might be in some other part of the city maybe is some other place and all barely some other place and all, but we need not have to be in Kanpur and all. So, that is the single counter example which shows that this argument does not follow and all. So, all the fallacious arguments are obliviously they are all invalid arguments automatically fallacious there formal fallacy and all. So, other example could

be the same example can be represented in different way, if I am in Kanpur then am in Utter Pradesh. So, am not in Kanpur then you are not in utter Pradesh and all. So, that is 1 which follows from this particular kind of thing or we can take another example to establish this thing that fallacy of denial of antecedent fallacies of affirming the consequent leads to mistake in the argumentation.

So, there all Invalid arguments and all if we get it by car when you are sick when you're at 6 then you will die young obliviously 6 and even dies and you will die young only, but you are not it by the car when you are 6 they does not mean that you know you will not die young and all may be the next year or maybe next incidents you might die and all. So, you could be hit by a tracker the age of 7 or maybe some other thing might have happen you might die out decease some incurable decease something like that. So, what is important here this is invalid form means an invalid argument and an invalid argument are automatically fallacious and all. So, when and an argument is invalid it is always be the case that in or you can always come up with premises true and a conclusion false and all. So, it is possible that you know you come up with premises true an a conclusion false that make this argument invalid and all for example, if we say the grass is wet it rains. Grass is wet. So, then you are saying that grass is wet and all.

So, just because grass is wet does not mean that if we infer the it rain and all they seems to be some mistakes in the argumentation grass might be wet in several other ways as well sprinkle might be on or may be somebody some water there etcetera, and all there is some leakage of water from tap some were etcetera all these things might be reasons for grass been wet and all. So, these are some of the formal there some problems in the form usage of the form.

So, that leads to the mistake in the argumentation in there pretty straight forward to identify all the things which mentioned it here are will come under the category of categorical syllogism which am going to talk about quiet little bit later categorical syllogism are special kid of arguments in which it involves only categorical propositions and categorical proposition are just propositions are just there propositions, but they have special feature that all these prepositions begin with the all know some etcetera and all every all these things comes under the category of categorical proposition for example, if we say all some all men are not motel some may not all these things are called as categorical proposition. So, now, the once which have stated here all these things are

invalid arguments because it has invalid it form and all as I said in the counter example method whenever you have any invalid argument, suppose if you start with some set which has which as all the things that you are obliviously know that they are true or false etcetera and all for example. If you say all cats or dog in the statements falls and all anyone would be able to believe that particular kind of thing is false and all cats animals seems to be acceptable to us that is true statement and all.
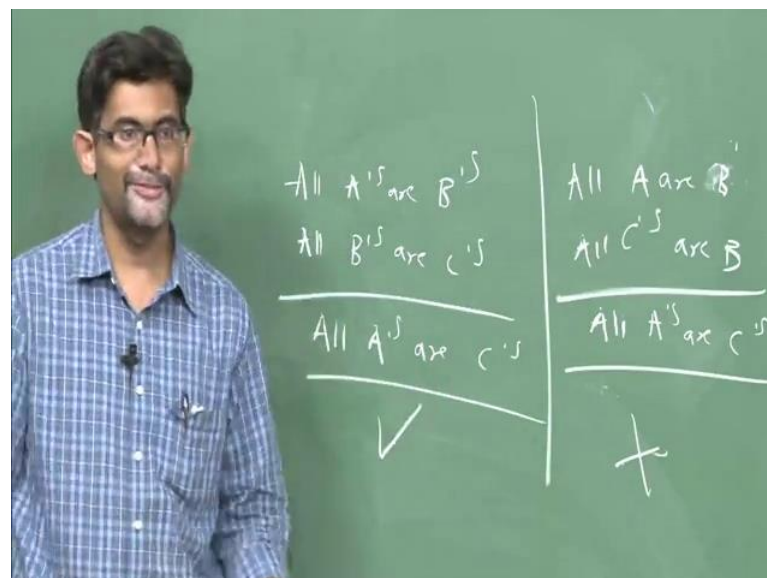
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So, there certain things which are oblivious to as which we nobody could deny and all. So, those things taken to consideration and then substitute it for a b c etcetera and all when c whether you could come of with a any counter example and all counter example in the sense that you have true premises and a false conclusion suppose if you say all a are ball c are b. So, all a are c and all. So, the actual valid form is all a are b all b are c and all a are c, but here it is not used in that particular kind of form. So, that is why this is considered to be an invalid forms that is why this is called as fallacious argument all. So, what seems to be the valid arguments are this thing all a are b is a b can be anything and all we can substitute for a.

We can substitute for b donkey cat it does not matter all b are c. So, then all a are (( )), so this is a kind of valid kind of argument and all, so valid form. So, that is why it is called as a valid kind of argument you might ask how do you know that this valid argument etcetera and all then the definition of validity is this that conclusion follows from the premises and all; that means, you cannot come of the counter example in which the premises are true and the conclusion is false and all how whatever you substitute for a b etcetera, and all b etcetera, and all b c etcetera.

Then if these 2 are assume to be true then the second 1 the whatever follows of from these 2 things should also be true and all. So, deductive arguments truth preserving conclusion necessarily follows from the premises and all. So, the 1 which we have used here are all a it is like all a are b some what like all c are c are what all c are b. So, all that is all a are c. So, if you compare these 2 things this is considered to be valid form and this is not an invalid form and all suppose if we are not convinced with this particular kind of thing that when I say that the this is an invalid form that is why it is invalid argument. So, valid form and it is valid argument then there are certain things which we are which we know that they are obliviously true obliviously false etcetera.

So, instead of in this 1 you substitute a for cat b for animal c for some kind of rat something like that then you will see whether this follows are not. So, the example here is this that for a, we have taken into consideration Dogs that is all dogs are animals which is obliviously a case and all a dog cannot be some other thing and all a flush or something like that. So, that is that is satisfying the first statement and all c are b here c is considered to be cats. So, all cats are also animals. So, from that you infer that all a are c for example, all a is means dongs and all dogs are cats suppose if we say that particular

kind of thing all though the premises the first 2 premises are true that is all dogs are animals are cats are also animals, but at if you infer that all dogs are cats then that a conclusion is falls given the premises are true and all; that means, you could easily come up with some kind of counter example for that particular kind of the counter example is this that you are come up with the 2 premises you come up with the false conclusion all dogs are cats.

So, at least all of us will be easy, it will be easy to say that all cats are dogs are obliviously false and all. So, like this whenever you come across and invalid form you can always come up with the counter instance were you have 2 premises an a false conclusion that makes a argument invalid invalid arguments are automatically fallacious by virtue of the form itself because we used invalid form. So, that is why this arguments are invalid and all. So, like this we can come across the valid form is that 1 this is the valid form and all we are used in different way is an all.

So, that is why it is a invalid form that is why it is invalid and all a are b no c is a and c is b and all. So, whether this particular kind of argument is valid or invalid when again may know the certain things which are quiet obvious to us you substitute a for cat and b for animal and c for dog and all and then what happens here. So, a are b instead of all every there all same and all 1 of the same. So, you say all in every cat is an animal as good as saying the same thing all cats are animals there is the first preposition and the second 1 is no c a; that means, no dog is a cat dog can be different from the cat and all. So, that is satisfies the second preposition in the in this thing and then from that no c b that is no doubt is an animal.

So, you could easily come off with the counter example were the premises every cat is an animal which true no cat no dog is a cat also true, but the conclusion no dog is an animal is false and all. So, like this whenever you have an invalid arguments I do not want go into the details of their arguments and all there all invalid forms and all invalid arguments hence there invalid arguments and all whenever you come across in invalid argument you can substitute this instances etcetera instead of a b c etcetera, and all you substitute cats animals etcetera without disturbing the truth value of the propositions and see whether you could come across with counter example I mean you could come across with the false conclusion true premises should not lead to false conclusion and all a valid deductive argument is a 1 in which it is impossible for the premises to be true and a

conclusion is a false even if you could come up with a single instance where you are premises are true and the conclusion is false then that particular kind of argument is invalid. So, far we have seen that you know arguments are invalid just because of the fact that you know they are having invalid forms and all life is not that simple and all. So, we need to analyze the content of argument to see whether there is any mistake in the argumentation and all.

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So, these kinds of fallacies are called as fallacies of relevance sorry fallacies informal fallacies and 1 particular kind of fallacy which arises very frequently in day today this course specially when 2 arguers are engaged in some kind of debate or when arguer presence some kind of thing to convince the reader or listener you will find these kinds of fallacies which arise out of the problem of relevance and all I will talk about what we mean by relevance etcetera little bit later, but... So, this fallacies fallacies of relevance arises involve the use of premises that are logically irrelevant to their conclusion and all for an argument of basic structure is this that you have premise and then premise should lead to premise should have some provide some kind of adequate support to believe that conclusion to be true and all, but he does not provide any adequate reasons to believe the conclusion to be truth.

And they seems to be is some kind of problem here the problem arises, because the premises are not logically relevant to their conclusions and all there are some other

relevant factors which comes into picture and all. So, these relevant factors may be psychologically relevant factors and all it might be pity it might be anger it may frustration all these things are psychologically relevant factors and all sometimes we do you we do take into consideration all these factors and sometimes argument may be good argument as well sometimes we in work some kind of patriotism then you will infer some kind of thing, but at that argument may be may be convincing for all of us, but it might turn out to be fallacious for us. So, here the most important feature that you need to look for is this that are the logically relevant are psychologically relevant and all am not seeing that psychological reasons are not important or useless etcetera, and all as per as logical reasoning is concerned as per as possible is good argument should be free from all these psychological psychologically relevant factors and all, but in day today discuss we do take into consideration these particular kind of factors etcetera psychological reasons and all.

So, here is a list of fallacies which come under the category of fallacies of relevant you should note that you know there is no way in which you can classify this fallacies into 1 group or another group and all different text book have different classifications and all. So, the book that we are following is consider introduction to logic by practically it seems that you know theses things are classified in a very nice way and all in this book. So, we are referring to that particular book which things are classified in very nice way. So, we believe that this is the very good kind of classification and all. So, we follow this particular kind of thing.

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What are fallacies are relevance there different names and all an mostly you know these kinds of fallacies are already there right from antiquity; that means, right from the greeks period onwards you'll find you might of come across from greek period onwards these fallicies exist and it exist even day today yes even now also. So, the first 1 is appeal to force this alos called as argumentum ad baculum there latin names as the second 1 is instead of arguing the arguers argument you will attack him in personal. So, argument when invoke pity it leads to appeal to pity kind of fallacy the other kind of fallacy which will appeal to people and fallacy of accident missing the point strawman fallacy redherring fallacy and all in all this fallacy what is what is the problem is this that the premises are not logically relevant to the conclusion, but premises may be psychologically relevant to the conclusions and all.

So, let us look into each one of these fallacies in some detail some greater detail and all the first 1 is simple kind of fallacy which called as appeal to force appeal to force are it is called as add fallacy which occurs when a conclusion id defended by some kind of thread to the well being of those who do not accept it. So, this thread can be sometimes express it sometimes it can be even implace it in all. So, this argument has this particular kind of structure. So, you can draw the diagram for the this particular kind of fallacy then you will come to know were like who seems to committed this particular kind of Fallacy.
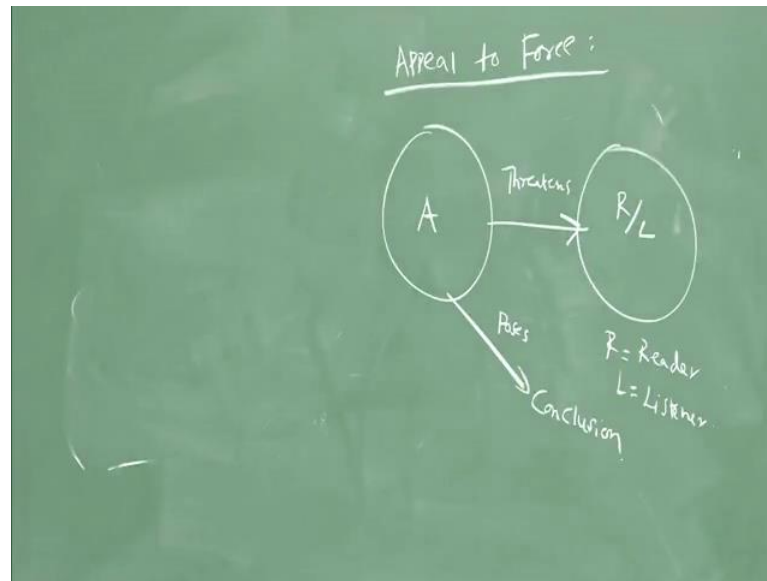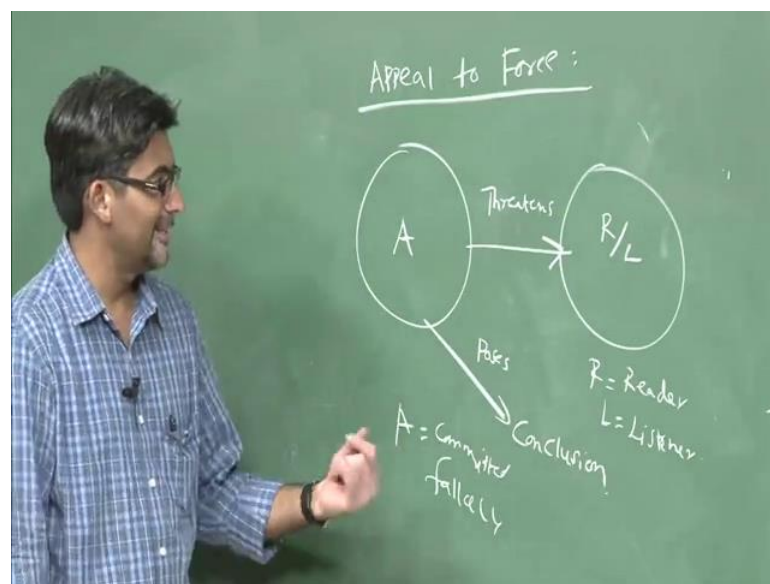
So, now, it is an arguer he is presenting some kind of argument and all. So, this is what is called as appeal to appeal to force. So, what a does is series your leader or listener r stands for reader r some time it can be listener also; that means, you are reading a text are you're listing to some once argument and all. So, now, these arrows are important. So, a threatens a threatens reader or listener and he posses his particular kind of conclusion. So, a threatens reader or listener and all and posses a conclusion ultimately his purpose is this that he wants the reader or listener to accept his claims and all. So, in the process you know he might do it in several ways and all pursuit the reader or listener to accept this claims and all.

So, one way which he does in this case is this that he threatens the reader or listener if we do not accept whatever he says to be true and all then he will say that they there is some kind of consequent which follows and all. So, this particular kind of thing is called as appeal to force kind of fallacy and all. So, basically this threatening can be some kind of physical threat he will directly say that am going to beat you something like that or he might say that some kind pore some kind of mental threaten you will invoke some kind of fearing you he might say that he will leak your information etcetera and all. So, this kind of thing is called as appeal to force and all here what you will see here is this that the premises may not be relevant to the conclusion and all. So, since he has in cooperate threaten threatening in to picture and all.

So, there all may be psychological factors etcetera and all some time he might use for the well being of the reader or listener or a person who is in whom the arguer is trying to pursuite, but in not in all cases it might be used for the well being of reader or listener. So, the structure of this argument is this that of these are premises and conclusion premises could be this you can avoid harm by accepting this particular kind of statement and all. So, that why this statement is true. So, what we says is that he threatens reader or listener why he threatens the reader or listener he says that you going to avoid some kind of harm etcetera and all if you do not do this you will you have to face music and all you have to attract some kind of, fine or it maybe you will be punished etcetera and all.

So, this is the 1 which we commonly come across in day today this course also. So, where what the arguer is trying to do is this that you can avoid harm by accepting this particular kind of statement and all. So, what is the statement that wants is reader or listener to accept and all that is a conclusion is posing some kind of conclusion if we do not accept the conclusion then he says that they some harm is going to happen to particular kind of person. So, out of here the reader or listener might accept is claim and all, but here the premises are nothing to do with the conclusion and all. So, only threat is what is making him to believe the conclusion to be true and all, so some example which taking to consideration.

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And then we will see we will understand this kind of fallacy in greater details now here the arguer is threatening the reader or listener. Ultimately what the intention of an arguer is this that reader or listener accept whatever the conclusion that is making and all he has to accept this particular kind of statement which is there in the conclusion. So, now, who is set to committed the mistake in the argumentation a is set to have committed this fallacy and all is somebody presence this particular kind of argument an all then we should the immediately in a position to say that since a has use threatening and all kinds of things and all not be relevant to believing this particular kind of statement and all. So, some examples which we will see in a greater details. So, this is of scenes in films about etcetera children arguing with the parents or children arguing with each other etcetera not with the parents 1 example is by is like this.

Mr Saleem you helpless import the drugs somebody is arguing like this somebody is threatening Saleem now here for this the boss is obliviously great full and all, but now you say your entitled to 45 percent of the profits and all. So, now, you started claiming is share and all now bos is very angry on this particular kind of thing the boss says your entitled to only 10 percent and all your claiming excessive and all although you helpless in importing some illegal drugs and all that is fine well and good in all, but now you are asking you deserve only 10 percent, but you are asking 45 percent and all. So, your boss is very angry etcetera this is what you see in the organize crime and all. So, the next

statement is unless you see things in boss were; that means, if you do not listen to what the boss is trying to say that is you be happy with only 10 percent of the share etcetera.

So, that is what is unless you see the things and boss way your going to have very nasty kind of accident boss might kill you or you might do something and not that some kind of harm is going to happen to you a middle kind of some broker kind of person is trying to convince the reader or listener that you know they accept you know whatever boss says that is this happy with 10 percent and all know threat is going to happen to him, otherwise he is going to face some kind of nasty accident he will come across some kind of nasty accident and all. So, you are entitled to 10 percent only.

So, ultimately saying you got my point or not we do not get my point you're going to be punished and all. So, so what is happening here is this that there is some kind of arguer here he is arguing with Saleem and all. So, Saleem here he is a reader or listener the arguer is someone arguing in favor of in favor his boss and all big boss or don something like. So, who is sit to committed mistake the arguer whose is arguing for the boss and all who's ever arguing that you deserve only 10 percent etcetera.

So, he seems to be committing this particular kind of fallacy and all why he is committed fallacy because all these things are not relevant for this particular kind of thing that you know whatever is claiming that is forty 5 percent profits etcetera and all. So, instead of here the all the relevant thing are like this that you know the broker who is arguing in favor of the arguer is trying to threaten the threaten Saleem here. So, he saying that you know understand till you accept bosses whatever boss is saying then you are going to invite some kind of problems and all.

So, here the first 1 is that the threaten nasty instant has no logical relevance on the conclusion the Saleem is entitled to only 10 percent and all were nothing to do this particular kind of thing we are only psychologically or relevant to this particular kind of thing, but at this is used as some kind of persuasive mechanism. And all if we are this kind still be used as some kind of persuasive mechanism and all broker who is arguing for some kind of boss and all that in ultimately is trying to negotiate with Saleem that you know he deserves only 10 percent as in 45 percent, and all if we claims forty 5 percent then the broker is saying that you know you will at you will face some kind of problems etcetera and all is trying to negotiate are pursuit the reader or listener by in

working some kind of threat. So, suppose in this case the arguer is set to have committed this particular kind of fallacy is particular kind of fallacy is called as appeal to pores kind of fallacy.

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So, the persuasion is this that we can avoid harm by accepting this this state this statement is that you know you deserve only 10 percent of the thing and also is the statement are based on threat. So, and if you says that statement is true then they seems to be some mistake in the argumentation. So, this is what happens here premises this that

you can avoid harm by accepting this statement the conclusion is that hence that statement is true, and also premises are irrelevant to the conclusion and all and hence leads to fallacies of relevant and this fallacy of relevance can be further classified into the fallacies of relevance which arise due to appeal to force sometimes this thread arguer threaten the reader or listener and poses a conclusion and this particular kind of thread can be even a psychological threat also you can be a mental kind of threat and also, this is what you commonly see in organization in particular were a secretary is arguing with his boss.

So, he is saying this particular kind of thing I deserve promotions with increments etcetera all the time you know he is worried about is increment etcetera and all or he got somehow is claiming with this boss that he should be promoted this particular kind of here and also, he says till here its fine and all, but his claim is based on some other irrelevant factors is he goes and says that after all you know how friendly am with you wife and I am sure you would not want her to find out what kind of affair has been going on between you and that of your some doubt of some kind of religions with this wife and that she does not know and all bosses wife does not know and all does not know. So, now, threatening the boss that you know if you do not promote me in all I am going to expose everything to your wife and all. So, I know you have been lying to your wife about what you're what is were about were you go on Wednesday afternoon etcetera and all these things are irrelevant for the promotion and all unless you want her know were you really go.

It is time for to realize that you have no choice than rising my salary and all you rise my salary are promote me otherwise am going to leak all the information and all. So, this is some kind of psychological threat that secretary is trying to some kind of blackmailing is trying to do.

So, here in this case secretary is seem to have committed fallacy and there is a mistake in his argumentation, because all these factor is whether the boss is having relation with someone else etcetera. All these things are nothing to do promotion and all for promotion what is relevant may be achieved something some other things might play a crucial role in the promotion and all is performance etcetera. Then threat to expose the lie in low way constitute evidence, for once promotion and all it has nothing to do with this particular

kind of thing. So, this is the problem of relevance and then we will continue with the other kinds of fallacy is in the next lecture.