Lecture - 10
Fallacies of Weak Induction and Fallacies Arising Out of Ambiguity in Language

In the last lecture, we discussed about fallacies of informal fallacies in particular (()). And then we also discuss something about fallacies arising out of week induction. So, inductive argument can be week when especially, when a conclusion of probably for in the, but premises are not strong enough to provide evidence to believe the conclusion to be through end. So, these all they are all come under the category of fallacies week induction.

So, under fallacies of week induction, we discussed 1 particular kind of fallacies which is some which is consider mistake in the argumentation; especially, when arguer is sighting some kind of un qualified authority and then he poses some kind of conclusion. Then the arguer reset you have committed this particular kind of fallacies, which is called as fallacies by appealing to unqualified authority. So, one some of the examples, which we discussed in the last class sometimes you know. Let us consider some more examples to establish this particular to understand this particular kind of fallacies.

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Example

1. Tom Jones, a respected actor who plays the brilliant cardiologist Dr. John Smith in the film Emergency, recommends Drug X for improving the overall health of the heart. Therefore, it would be wise to take Drug X.

2. Prof. A. Sen, universally respected economist and the author of *argumentative Indian*, has said that the destruction of tropical rain forests is one of the ten most serious worldwide problems. Thus, it must be the case that this is indeed a very serious problem

Example if you say this that all of us knows that professor Amartya. Sen is considered to be well a well known economist noble lariat etcetera. Suppose, if we all of sudden starts talking about some different kind of topic an all. Let us see what is there in this example professor Amartya. Sen universally respected economist and the other of argumentative Indian has said that: destruction of tropical rain forests is 1 of the 10 most serious worldwide problems, in this it must be the cases at that is indeed very serious kind of problem.

So, the arguer here and we know that you know economist, will have expect is in some areas an all probably may be economics partly be in mathematics may be, because the economics requires strong mathematics foundations in mathematics. Or may be some other area which are strictly connected to economics all of sudden, if we start suppose somebody is referring to some 1 who is consider to be economy strengthen is trying to talk about something related to deforestation etcetera an all. He may not be having that particular kind of expertise and all then clearly, we can say that.

So, the argue reset we have committed, this mistake in the argumentation in the sense that is sighting unqualified. So, it same might be having in some other areas, which has: economic, sulfur economics etcetera and all. So, in this case argue committed kind of fallacies which erases due to sighting unqualified authority.

So, there are some kinds of questions, we need to ask ourselves to judge when an authority is reliable unreliable etcetera. Suppose, if you says that: everything the president says is true. And you will also say that the president says that Iraq has weapons of mass destruction etcetera and all. Off course the president has the authority and then in the case of in indian context the prime minister say something then you know you'll definitely, say that the easily will not talk whatever, you wants talk an all but, a well established kind of things usually talks and all.

So, the president of United States for example, says that: Iraq has weapons of mass destruction therefore; Iraq has mass weapons of mass destruction an all. Is most probably that you know, you will usually believe that a conclusion to be true even the premises are true an all. A conclusion probably follows on the premises in the president of United States of America is saying that: Iraq has weapons of mass destruction probably might believe that it is true and all.

So, there are few questions which, we need to ask our self to judge that whether, a person is having qualify whether a person considered to having genuine authority a qualify authority are whether, the argue resighting some kind of unqualified authority. So, these are the critical questions 1 need to ask our self; is the propose person are source a

genuine authority. In the last example, Prof. Sen seems to be talking about some kind of deforestation etcetera and all. Then we said that: you know we does not seem to be having some kind of expectising that particular kind of area.

I did been the case that is spoke about something related to economic something, like definitely that seems to be some kind of genuine authority and all. And the second question which will be asking ourselves is this that did the authority make the attributed claim or not? If the answer is yes again it is disconsidered, to be some kind of qualified authority. If it is not and it is coming and under the category of un qualify authority. The third question is this that or the authority in claim made whatever, is made is relevant to the subject matter or not. If we make some kind of irrelevant claims etcetera and all. Then it is called as it is come under the category of unqualified authority.

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So, this is what is considered to be fallacies by sighting some kind of unqualified authority. So, it is not all the time you know, it is easy to judge whether a person is having authority in that particular area are not, because a person may be expect is may be having expect is in more than 1 particular kind of subject matter branch. So, we will move on the next kind of fallacies. So, this kind of fallacies arises, because of ignorance.

So, it is called appeal to ignorance kind of fallacies. The structure of this argument is like this. This statement whatever, the statement which is trying to prove this statement has not been prove in true enhance the conclusion is this that is statement is falls. So, it is it taken for granted that nobody could proves certain particular kind of thing an all. For example, if you say that nobody has proved the existence of god. So, that is why, I mean; God listen exist and all. Other you may be that a statement may be reasonably believe to be falls.

Or the other hang suppose, if this statement has not been prove in falls and all. Nobody has proved the non existence of God and all nobody, could proved that God does not take this and all. We could not even prove God exist and God does not exist, they could not prove. Now, in this case the conclusion is this that; this statement is; obviously, true. This nobody could prove that you know does not, it is not the case at God exists at all, they probably might exists in all; God actually exists. So, the structure of the argument is like this we can draw the diagram to c was goes on here.

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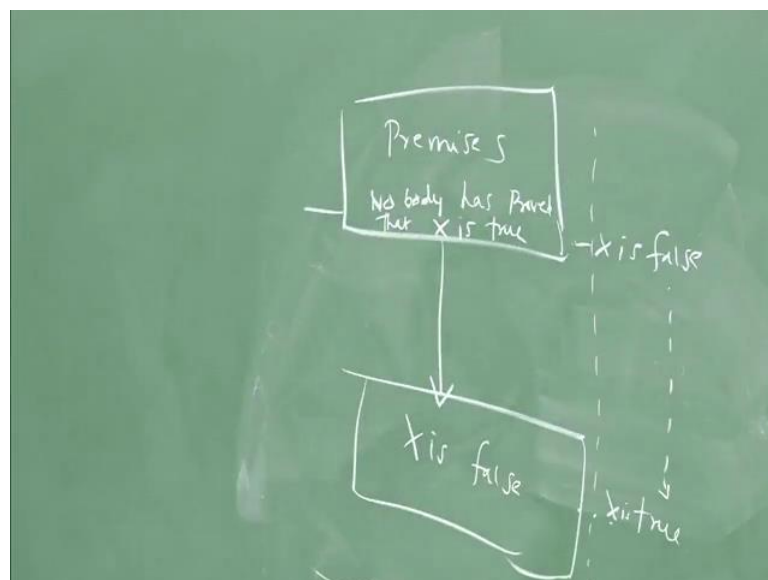
So, this is like this your premises will be like this. So, premises will be this factor nobody has proved nobody has proved that: x is true the other way of state in the same thing is this that, nobody has proved that x is false. So, then from this; so this is what is

we have some ignorance about is particular kind of thing. At this moment the argues are known that, I mean nobody has proved that some x can be anything is can be anything existence of God existence of some electrons are may be any other thing alone.

So, other believes that nobody has proved that x is true and hence x is false. So, for the if you take into consideration this 1 nobody has proved that x is false an all because nobody could proved it x is false may be it by the case it is true that, which is probably the corresponding is that from this you can show that x is true and all. This is another kind of argument which we can used. So, if this is the case then it is called as appeal to ignorance kind of false. So, let us. So, considered simple example to see how this false see arises self.

So, you must note that: in all these fallacious is that we doing discuss so for are may be discussing later also. There all coming under the category of some kind of persuasive mechanism and all; the ultimate the argues intention is to persuade the reader or listener to accepts is claim all on. So, let us consider 1 example for is appeal to ignorance kind of after centuries of trying no 1 has been able to prove that God exists; have a tried measurable in they tried and failed measurably on. Many scientific series of commit existence, but, they could not established that could not prove the God exist is true.

So, the attempt seems to be futile is useless etcetera. So, exists point, I think you can safely conclude that there is no god; nobody as proved that God is true then an hence that that is the reason why, it is false God exists. So, if you concluding this particular kind of sense then; that means, what happen here is cannot prove based on because, there is know prove which is existing along; let does not mean that a particular kind of sentence can be false. It might to be the case some on else might prove it, in future are something like that it may convert to be true false.

So, this is what is called as ignorance in the sense that in exists moment we do not know that is this is the case in all. So, based on that kind of think is jumped a conclusion that x is false in all nobody could, true that x is true; that means, x is false nobody could prove that x is false means; that x as x is true and all. So, nobody could prove that for example, in the case of close example, nobody could prove that crow is white in color. So, then

you in for that crow is black in color, but in might find crow in which in somebody might prove that the next crow that is go to see my be light in color also that makes the conclusion does not follow from the premises.

So, in the same way, in the course also you will find this particular kind of phenomena that unless until your proved guilty then your, you will not be punished in all, will not considered to be guilty and all. So, unless until your just proved in the code that you did this particular kind of mistake, you will not we made guilty an all. We just like in this case we cannot prove you did not steal that car. So, you must be guilty an all. So, in that case in nobody could prove that we us. So, that is way probably in an at be guilty in all.

So, is the some the things which come under the category of for palacy by appeal in to ignorance an all. Something that is not proved might still be prove. Just as something the does not is in does not this prove might also be false an all. So, that may is argument fallacious an all. So, this is what appeal to ignorance kind of fallacious is; there is obviously, certain things which will not be in know in an all. So, that is what we a calling it as ignorance an all.

So, the other interesting kind of fallacy, which arises in all inductive generalization which is poke in the last lecture; where in whether we try to justify when it try to justify inductive generalization then; we are different to principle of uniformity of nature and we are justify principle of uniformity nature then again, we are falling that can induction an hence reach to some kind of circularity an all. So, all inductive generalization if it is not used to properly then it leads to some kind of generalization which is called as Hasty generalization.

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So, Hasty generalization is exactly opposite of fallacy of accident that the 1 which have seen earlier. So, this is like this. So, let us compare fallacy of accident, which is called as fallacy of relevance and the Hasty generalization.

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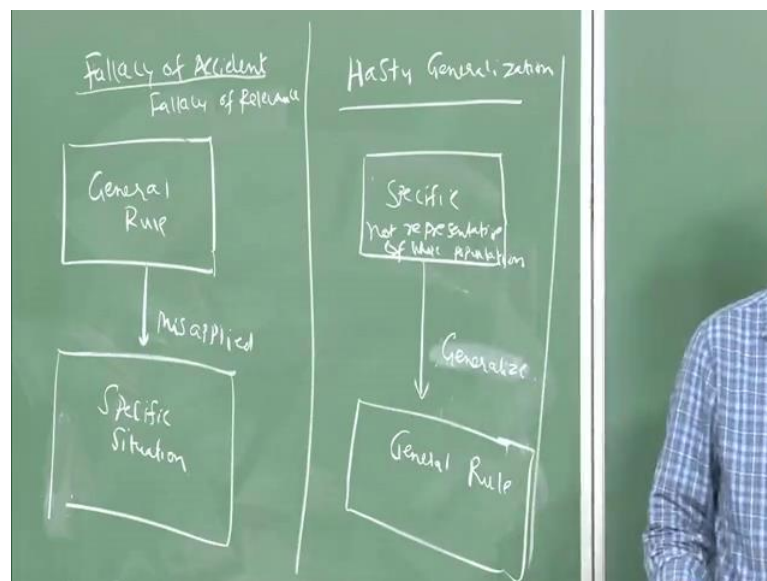
So, this is what we have said fallacy of accident. So, this is fallacy of relevance; this is

what we have discussing greater detail earlier. So, now, this I am trying to compare this thing with Hasty generalization. So, now, we have a general rule; which is a misapplied a general rule which is a misapplied to some kind of specific situation. Then at least to this particular kind of fallacy, which is called as fallacy of accident. And this said in the last lecture last few lecture that: freedom of speech is considered to be constituently guaranty right an all.

If this that is applied properly an all is a there is no problem for example, if that is of applied to a specific situation in which the religious leader speech as a in work some kind of reverse an all. So, then this general rule that is freedom of speech is a constitutionally guaranty try is misapplied to this particular kind of specific situation. And that leads to is fallacy of relevance, why I am talking about this fallacy of relevance, in this in the context of Hasty generalization it is simply because of this that: Hasty generalization is converse of this fallacy of relevance; that means, here it is the other were on that is a specific case is misapplied and then you will in for some kind of generalize general rule.

So, is specific case not representative of whole population whole group are population are class something an then is not misapply misapplied generalize. So, is specific case not representative of whole population, as sample are a group base on that you generalize it an then form some kind of for generalization, that is usually called general rule then that is called as a Hasty generalization in day to day discuss, will be using in this particular kind of generalization all the time usually we call with a different name that is: sweeping generalization is in all.

So, what are the sweeping; sweeping generalization in all some cases, it is the case does not in the works in the all the cases in all. So, what is a Hasty generalization Hasty generalization is inductive argument; obviously, in all will be moving from particulars generals; that means, will be making some kind of inductive generalization say, in which 1 makes fallacious inference from a relatively small number of cases to a generalization about a class of instances an all. You take very small group into consideration an you a start generalizing it an say that, it is representing of the whole group are class an all.

For example, if you say that 1 or 2 students in the enter class; class of 100 students 1 start sitting in all in the examination an all. So, it does not mean that in a entire class is considered to be cheating that particular kind of course, in all. So, from 2 students cheating, in the examination that as a mean that enter class is bad an all; so meaning that particular kind of generalization; what we a try to do is specific case; that means, 1 or 2 students are a creating problem in the course, cheating not represented of the whole population an all 98 percent are honest and there good enough an all.

So, from that you generalization say that, form generalize rule and say that entire batch of PHA 142, there all cheater etcetera an all. Then that the particular kind of personals making this argument is set to a committed this fallacy; which is called as is made sweeping generalizations and it is called as Hasty generalization. So, when it occurs, it occurs when there is a reasonable likelihood that the sample is not representative of the whole group to just 2 students or 1 students are committed this mistake in all. It is not representative of the whole class an all.

So, such likelihood may arise if the sample is either too small, it is 1 or 2 members exceptions are it is an some it is not even randomly selected an all. For example, in a bag of routine bag of tomatoes, just you found 1 dot in tomato an all just by seeing 1 dot in tomato there is a meaning that is entire basket of tomatoes is bad in all; are you do not choose any tomatoes from that particular kind of bag. So, it is not representative of the at least some sample at least in you are to be collected in random at least 10 5 6 at least whatever, you have collected it from the particular kind of bag.

There all general to be routine then you can in for that probably, all the tomatoes in that bag are route in once an all. Here the sample is if the sample is not selected randomly are if it is 2 small then it is; obviously, called as if you kind of weak in that kind of argument an all. Such to make a case that this particular kind of fallacy has been committed what 1 its do is this that the member of instance, the premises do not warrant the inference to the general class of which those instances are a member an all. That what 1 needs to that member of instance, in the premises do not warrant the inference to the general class in which those instances are a member an all.

So, 1 needs to be a able to show that, this kind of generalization does not follow an all. So, 1 particular kind of specific case and then you generalize to general rule then you set your committed this kind of mistake, in the argumentation which is called as Hasty generalization. So, let us considered some examples to establish this point an all where, we are try to make some kind of sweeping generalizations. Suppose, if you say that most of the fords are bad an all.

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So, from that if you inferred that I once. So, owned a ford car and it was at an junk an all. So, supposes, if you infer this particular kind of thing it. So, happened that you God it effective kind of car and from that you cannot infer that all ford cars are bad an all. Here, the conclusion is this that all ford cars are worst bad an all why it is the case is giving this kind of reasoning enough I 1. So, on ford car an all and all time it create problem, when then was some engine starting of engine all can as a problem etcetera an all a leave at the.

So, happen that in out of you bad fortune something like at the God it a defective car which could not the repair etcetera an all then. So, happen it was it under to be worst kind of experience for. So, from that we know cannot generalization say that all ford cars are were west etcetera an all bad I worst an all. In the same way in the second example, if

you if the argues arguing, in this sense divorce is rampant in America Mary some 1 is in saying, I heard that 40 percent is communicating in to Mary in saying in this particular an all. I heard that 40 percent of marriage ends in divorce within 3 years.

So, I have decided not to marry you because the odds are against us you an all after against means; that in might belong to this particular kind of 40 percent of the category, in an there is every chance that in all, will get separate after 3 years enough based on the statistical data that they have. It is does not make in any sense to talk about this particular kind of arguments an all. The person, who is making this argument is making some kind of sweeping generalizations are it is called as Hasty generalization.

Suppose, in the third example, suppose if a concerned citizen says that is: man is an alcoholic. So, then liquor should be banned suppose, we seems for drunker be having a very bad way bad manner etcetera destroying the property all kind some things then; you say that in all liquor should be banned any sometimes might use it, in an a proper sense an all. But, it is because of 1 particular case which as happen in does not mean that should completely, band the liquor an all.

So, like this a frustrated ford owner might says that: my car broke today fords are in a wanted to reach a particular place, but, equivalent reach because us car broke down today. So ultimately, out of frustrating is saying that fords are worthless pieces of garbage etcetera an all. An goes on so and so we says them; the arguer reset you have committed is particular kind of mistake in are; which is called as we set to be making sweeping generalization an all. Is just because of 1 specific case, we cannot move and say that for all the other things is which, represent some particular kind of sample is particular kind of thing for those an all.

So, these are some of the examples of sweeping generalization, which is called as Hasty generalizations an all. So, again you are note that premises are sufficient enough to provide evidence to believe, the conclusion to be true probably true in that particular kind of case. And hence them it makes that argument a weak argument. So, the next kind of fallacy which, we commonly see in at a discuss also easy is that it is a false cause fallacy.

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So, what is a false cause fallacy; is other kind of for fallacies of weak induction. So, what happens here is these that 1, will be illegitimately assuming that 1 possible cause of a phenomenon is a cause although reasons are lacking, for excluding the other possible causes an all there will be several causes etcetera an all for the same event an all. So, aim phenomenon; if you do not conceded the other possible causes, which are very important when you must be ignoring some of the things along.

So, work false cause fallacy might arise in different race especially, when we confuse temporal succession with causal consequence that is when we take 1 event to be cause of another simply because the 1 event happened before the other. If that is the case then this false cause fallacy arises it is. So, happened that in of example every time you came out of you how and we could witness cat passing true and then something happened, you fell down from your cycle bicycle are some body as in shouted at you in the office; a something some back thing might a happened.

So, there is it happened every time cat passes through an all. It does not mean; that call catch passing through is a cause for your miseries etcetera. It is nothing do with the particular kind of thing an all. A sometimes, when we mistakenly take 1 event to be the cause of another that is when we assert that the 1 event is the cause of the other and we

multi simply wrong about that particular kind of thing an all. That may not because of that particular thing at all they may be some other important causes at that particular kind of thing.

So, we are said that arguments from cause to effect are inductive arguments. They can become weak in the sense that; when we confuse temporal succession with causal sequence there least to problem. And the same way 1 event with cause of other 1 when we assert that 1 event is the cause of the other hand but, we might simply wrong an all. So, false cause fallacy might also occurs, when many causes are operative, but, 1 of them is illegitimately assumed to be the sole cause an all. It may be very important causes are which make be existing for the expending the fact an all.

But, you rule out the most you take in to consideration, you particular kind of for calls which may not be directly, relevant to the effect an all that case, also is false cause find out fallacy arises. So, let us consider some examples to establish thing is a particular kind of thing an all.

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Examples

1. Since I came into office 2 years ago, the rate of violent crime has decreased significantly. So, it is clear that the longer prison sentences we recommended are working.

2. The best professional cricketers receive big salaries. Therefore, in order to guarantee that Ravi will become one of the best professional cricketer, we should give him a big salary.

3. The scores on standardized tests have been dropping for several decades. What accounts for this? Well, during these last few years, the average time a student spends watching TV, playing games in the computer (per day) has increased. So, the cause is obvious: Students are watching too much TV and DC++ when they need to be reading instead.
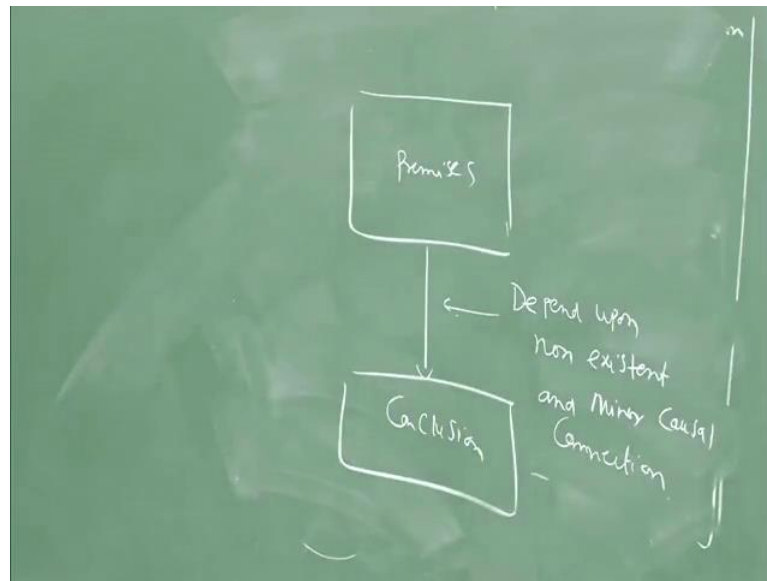
So, before that let me, draw diagram for this false cause fallacy. So, this is like this a false cause fallacy simply arises the make allow this you have premises mainly arguments from cause to effect will come under this particular kind of arguments. There all inductive argument, there weak arguments in sense that here all premises an off course, we have the conclusion usually, it will be some kind of causes and this will be an effective all sometimes you move from effects to causes also these also another kind of inductive kind of argument.

So, now it depends upon the movement from premises to conclusion depends upon nonexistent and minor causal sometimes, may not existent an all any relation of causal relationship, between the cause an effect that your trying to say minor causal connection say, depends upon either: it is an not existence causal kind of relation are it may be some kind of minor causal connection an all; say that is a case then this false cause end of fallacy arises an all. So, let us construct some examples to establish are point.

Since, I came in to office 2 years ago, we joined a new job 2 years ago the rate of violent crime has decreased significantly. So, that is what 1 police officer is trying to say. Let us say, so it is clear that longer presents longer presents sentences, we recommended since to be we working an all. So, say some over recommended that person who is committed

to some kind of crime in all they were sentences long time an all bit and all; 15 years extra an all. So, they were under the impression that, it started working an all longer prison sentences that; they can all of at the prisons it is to worked an all.

So, that mean are be the sole cause for this particular kind of reduction in the violent crimes an all; it my term to be reduce my some other cause might be there an all. It is not slowly due to the long terms sentences an all. So, this is not the only cause in all. So, it happens because, that it depends upon nonexistent and may be some kinds the minor causal connection etcetera. This may this might be imposing long term sentences, may be some kind of non existing cause are may be a minor causal connection to the fact that in rate of violent crime has thickly significantly.

In another incident for example; example 2: the best professional cricketers receive big salaries is this in we when know, there is we big salaries So, therefore, in order to guarantee that Ravi will become one of the best professional cricketer, we should give him a big salary an all. Suppose, he was start giving big salary, we might spend it piece fully and then we may not become cricketer all forget about the cricketer in you may not professional cricketer, but, you may not become an even cricketer also, we might become a actor with that particular kind of money; if you paid that much salary.

So, this is the false cause an all. So, that is way it is called as false cause energy an all. So Ravi becoming one of the best professional cricketer as nothing to with, being big salaries an all. So, we should not paid in any big salary, in this particular kind of case. So, if suppose if you say this particular kind of thing the scores of standardize test have been dropping for several dictates; what accounts for this your trying to understand the causal fact particular kind of thing well the in this way.

During these last few years, the average times the student times watching TV playing games, in the computer per day as increase; so the cause is obvious students are destructed to much, I watching too much TV dc plus plus whatever, they down were from that particular kind of thing when the need to be reading instead. Since, be reading a destructed to down loading some other movies etcetera are the distracted from that particular kind of thing. But, they might be some student in own might be down loading

allot from movies and all this things, but at they perform well in the examiner.

But, this is not the only cause for their for dropping of the performance off course, in the standard it does an all. There will be several other cause which, we need to take in to consideration, but, the argue here is time to present some particular kind of causes, a minor a causal connection, between the problem of standardize it us course of standardize, it is falling to the destruction that; they students come in cross in. So, there we several other reasons are causes a for reduction are dropping of performance, in the standardized tests an all. It is arts solely due to watching TV dc plus plus etcetera an all although, the maid be some of the causes, for this particular kind of thing reduction, but, they may be several other things an all which we need to taking to consideration.

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Explanation

1. A1: Many other possible causal factors need to be considered. For example, have economic conditions improved? Are more jobs available? Have the demographics of the area changed so that the population of young men (statistically the group most likely to commit violent crimes) is smaller relative to the population as a whole? Enough Police patroling in the nights?

2. Here the arguer assumes, without sufficient warrant that if big salaries and outstanding cricketing performance are correlated, the former causes the latter.

3. The increase in time spent watching movies, playing computer games is a likely contributor to a drop in scores on such standardized tests as Midsem/Endsem. But insufficient evidence is provided for the conclusion that the time spent watching TV/dc++ is the sole cause.

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In this case, were many other casual factor which needs to be consider. For example in the first example, that we if you a said that long term sentences etcetera an all; will prevent other crime rate etcetera an all. In that particular kind of case, we can ask several other questions like: have economic conditions are improved are more jobs available have the demographics of the area changed. So, that the population of young men statistically the group most likely, to commit violent crimes etcetera. These are responsible, for rate are smaller relative there is enough patrolling in the nights; all the

things are relevant causes for this particular kind of thing.
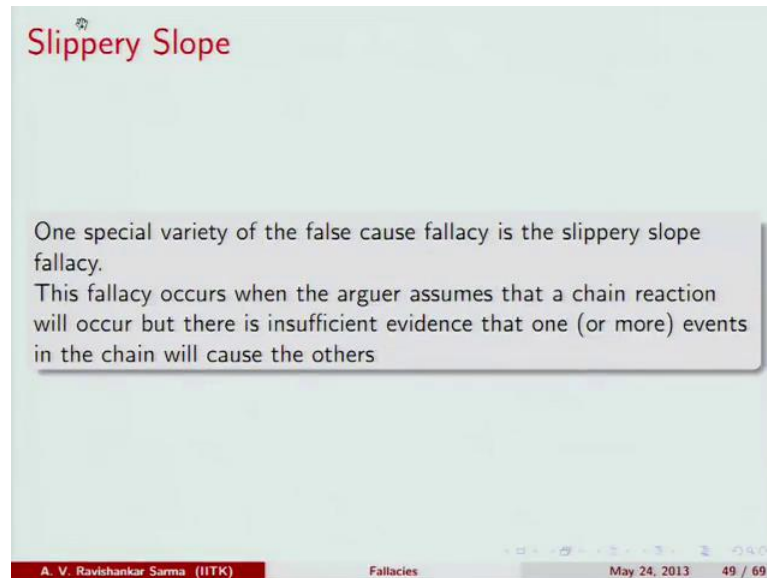
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This is the 1 which we are trying to say yes. Since, I came to the office 2 years ago; the rate of violent crime has decreased significantly. So, it is clear that the longer prison sentences, we recommended are working. So, that may not be the sole cause an all. But, they are might be several other things. There other things like this things police patrolling in the nights, you might be sufficient cause for that particular, thing is have the demography of the area changed.

So, that the population of young men statistically, the group most likely to commit violent crimes all this things are important factors to a causal factor to be considered rather than imposing long term sentences in all. In the same way in the third example, which we are discussed earlier; the increasing time spending in watching movies playing computer game is likely contributor to the drop of scores at no doubt the case, may be the refer standardized tests as mid sem end sem exam.

But, insufficient evidence is provided for the conclusion that the time spent watching TV and dc plus plus is the sole cause an all; does not sufficient evidence to believe a conclusion to be true. So, it is the not the sole cause in all, there may be several other

causes which might be operating.

This is what is false cause kind of fallacy; now, will move on to another kind of fallacy which is very interesting, which is called as slippery slope kind of fallacy all of us might be ever of this slippery slope of is a 1, which be used plain our child wood somebody who is dropping from above ultimately, will each down are without any much effort enough. So, this is 1 special verity of false cause fallacy this also called as slippery slope kind of fallacy.

So, this fallacy occurs, when the arguer assumes that a chain reaction will occur, but, there is insufficient evidence that 1 or more events in the chain will cause the other 1. So, the diagram for this particular kind of argument is like this. So, the diagram, we can explain slippery slope kind of fallacy.
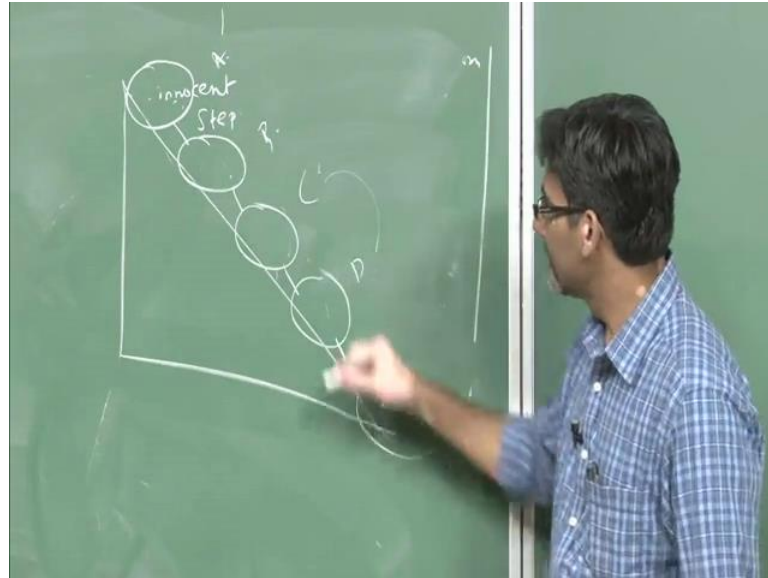
So, usually we say that; this can be treated as an all somebody who is they here without any a; obviously, we will come down like this. Usually which, will be the actual slippery slope will be somewhat like this. So, whatever it is; it is. So, now so this, what is considered to be the first innocent step an all. So, the other the arguer argues that is if you make this first innocent step an.

All then it figures another important the other reaction to this, it leads to this 1 an again; obviously, leads to these etcetera an all ultimately at the end, it is going to be some kind of disaster. So, a single innocent step leads to some comment of complete disaster an all. So, the idea arguer present such a way that, we says that in all suppose if you make this particular kind of step, this leads to the next worst step an all. And this leads to automatically the next worst step there is no way to come up an all. So, will be falling all the way to words disaster an all.

So, big here in this case, 1 is case in another 1, another 1 is causing another 1 this is the causal change an all 1 cause is another etcetera an all; ultimately the end result is some kind of disaster an all. So, if that is the case then it is called as a slippery slope kind of fallacy an all. So, this fallacy occur, when the arguer assume that a chain the reaction will occur; a chain reaction that sense that for example, this is the first step A B C D, this

figures B, B figures C and C figures D, in every case in all there is no way in which you can come up an all.

So, you will be moving to worst the disaster an all. So, this is the next worst step, the next worst step is these next worst 1 is these; ultimately the end result is complete disaster. But, the problem here is that this first innocent step may not leave to this particular kind of disaster an all. The chain reaction my thought actually, takes place an all for the arguer present in such a way that; if you take this 1 is this actually this may not be the case at all. And if you take this 1 this leads to these this all ultimately at least to disaster an all. So, these are some of the examples for this particular case kind of argument.

So, 1 example could be like this: they very interesting an exciting an examples an all, but, actually ion are this disaster may not happen this examples an all at we a talking about. So, some body is arguing in this way: never buy a lottery ticket.

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Examples:

1. Never buy a lottery ticket. People who buy lottery tickets soon find that they want to gamble on horses. Next, they develop a strong urge to go to Las Vegas and bet their life savings in the casinos. The addiction to gambling gradually ruins their family life. Eventually, they die, homeless and lonely.

2. I told a joke at the party. It flopped. So, everyone there thought I was a loser. So, I will never be invited again. In fact, if word gets out, I wont be invited anywhere. And I am sure they are all talking about my stupid joke. So, I have completely ruined my chances for a decent social life. There is nothing left for me now but years of loneliness and misery. How I wish I would never told that joke!

Now, that is the first innocent particular kind of step an all; if you buy that particular lottery ticket an all. So, now the arguer, arguing in this way another 1 people who buy lottery tickets soon find that, they want to gamble on horses. The next they develop a

strong urge to go to some kind of lass Vegas and bet their life saving in the casinos etcetera and all betting the common there, in all this kinds of games etcetera. So, now the addiction to gambling gradually ruins their family life eventually, they die homeless and lonely an all.

So, the first step here is that, buying a lottery ticket in all; that makes that may not have to lead to this particular kind of thing that they want to gambling horses in all. So, just because buying the lottery ticket, the earning imply that in enough they get money in the lottery etcetera an all; does not mean; that in a we will make some horse is etcetera an all an then making bets leads to some other thing like is not happy with that particular kind of money in then we will move go on an move on to loss, because in bet there life savings in the casinos in etcetera.

All these things may not 1 may not lead to the other an all. The first innocent step is that buy a lottery ticket in all that is nothing do with ultimately, the end step is that they die, homeless, lonely an all that may not trigger that particular kind of thing an all. So, this might's stop here itself, this may not trigger the other on itself.

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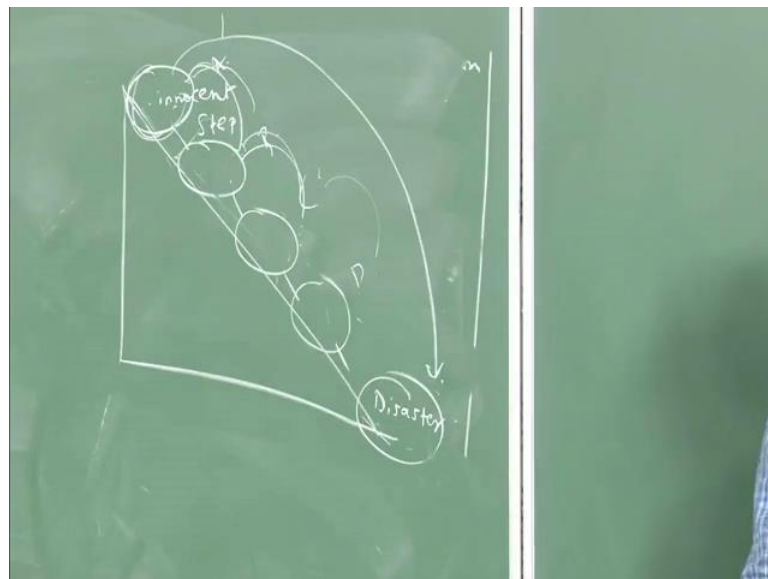
But the argue present in such a way that: as if it is a case that district big as this and as

the chain reaction this leads these and this leads to this. Since this is the slippery slope in the it all slips to words the disaster. There is no way in which, recover an then come up an all because it is slippery see will only fall an all will be falling only; all the way down the claim. Another a simple example, which convinces us is particular kind of example it so happened the it in all particular person, I told a joke in the party an all. So, what of you surprise it flopped in without every 1 laugh, it in laugh it is joke an all, but, it so happen the it flopped an all lonely laughed and then nobody show any reaction an all.

So, that is what happen in all. So, now is started in contemplating in all what went on drawn etcetera an all. Now, is falling in to some kind of slippery slope an all. So, now is say this particular kind of things. So, everyone were everyone thought everyone they thought that I was a loser because you know presented a joke, but nobody laughed team without you is a fool a something like that. So, something; so I will never be invited again. In fact, if words gets out I want be invited any were now, is term some kind of slippery slope an all.

Now, I am sure that they all taking about my stupid joke. So, I have completely my chances by decent social life. And there is nothing left for me now, but, years of lonely less on misery how a wish. So, ultimately under the impression that; I wish never told that particular kind also; it appears that the just telling jokes leads to misery lonely less an all kinds of things an all. It appears as if you that no the argues representing in such a way that 1 triggers another 1 etcetera an all leads to some kind of disaster an all.

This causal connection is questionable doubt full the first innocent step, that is count take that is joke at the party does not should not implies that years of lonely less misery etcetera an all, that is what is to be (( )) as total disaster. So, there is no causal kind of change which is which in to be the case existing in this case. So, this is called as another kind of false cause fallacy, what it comes under the category of slippery slope fallacy.

Another interesting fallacy which we come across in the case of inductive are given is that we said that inductive arguments based on another analogy are inductive arguments an all, with analogy is good enough, then we say that a strong argument its weak analogy then its weak inductive argument. So, we use analogies to end which are language an end

analogy with some kind of understanding in successful becomes appropriate an all.

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Then the analogy made successful in; obviously, the argument will be the appropriate an all. So, when we make comparisons that seems appropriate, but, it is not then; obviously, end of with some kind of weak analogy are false analogy an all. For this is the example, which establishes this particular kind of see the diagram for this particular kind of thing is like this.
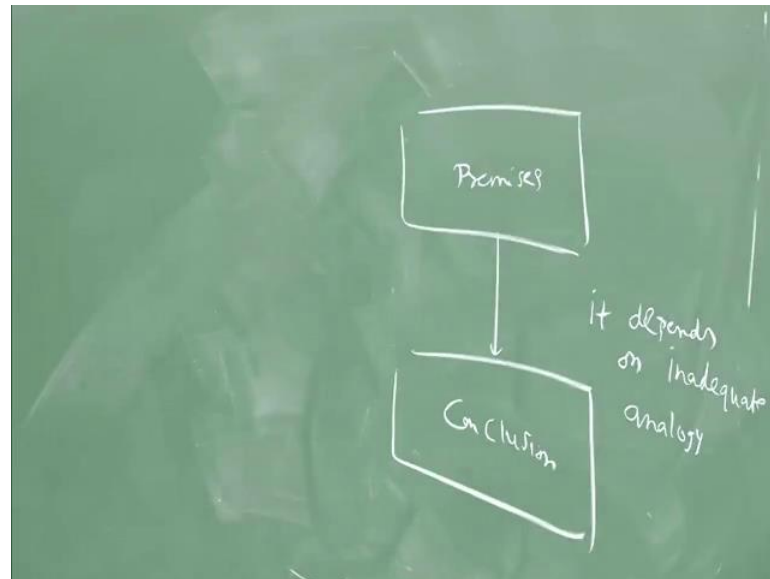
So, in argument based on analogy you have premises that is the structure of any argument in all, you have premises and you have a conclusion. And the arrow says that it depends upon that is conclusion depends upon in adequate analogy, if analogy is appropriate then it is considered to be good argument an all otherwise, it is called as a it comes on the category of weak argument. So, when we make comparison that seen to be appropriate, but, it is not we thing that is the appropriate, but, actually is not then we end of with the weak analogy are a false analogy.

So, 1 example, could be like this if a car break downs on the free way and highway a passing mechanic is not obligated to render emergency road service an all. So, 1 all of a certain you a car breaks down in all length in there is a service center somewhere else. Then is not oblige to offer any kind of offer any emergency road service an all, in come and help you vote an all. But, for the similar reason if you a person suffers from a heart attack are the street a passing physician is not obligated and to render emergency medical assistant.

Here, we are comparing breaking of car with in heart attack person on the street an all. This means in the kind of analogy an all in these kind of things. So, on the 1 hand in a car break down on the passing mechanic need not have to be obligate to render any

emergency road service an all, we can say it not do the anything an all. So, today is already in any come tomorrow an all. But, doctor cannot do this particular kind of thing an all the time 24 by 7 units to offer is service an all.

This field is self is medicine field is self is like this that; us to offer a support his patients 24 by 7 and all whenever is 1 is in need. So, we cannot this analogy is we can of that is way; this is the kind of fallacious argument.

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So, some other examples are this is example, for this particular kind of thing appeal to ignorance an all is some or different from weak analogy. So, in the weak analogy the problem here is that a you force some kind of conclusions, but, the conclusion depends upon some kind of in adequate analogy. If the analogy not strong enough, it is called as a weak inductive kind of argument in all. So, some other examples which, we can considered and so far we are studied different kinds of fallacious of weak induction.

Now, let us considered some more problems and see whether, what kind of fallacy it is. Now, this example says that after centuries of trying no 1 has been able to prove that reincarnation occurs. So, this point I think, we can safely conclude that reincarnation does not occur. So, that is that come under the category of fallacy if ignorance in all

something is not false means, it is true something is not true means; it is false an all. So, this kind of thing will come another category of fallacy of ignorance.

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Examples:

1. Professor Bloggs, the well-known astronomer, has done extensive research on distant galaxies. He points out that human bodies are composed of atoms that were once part of distant stars. According to Bloggs, this gives human life a sense of drama and significance equal to that inherent in the world's great mythologies and theologies. Thus, Bloggs corrects the common error of supposing that materialism reduces the drama or significance of human life.

2. If smoking is not harmful, then it is not wrong. And the tobacco companies say that smoking is not harmful. Therefore, smoking is not wrong.

Some other examples, like this: thing its professor blogs the well known astronomer has done extensive research on distant galaxies he points out points out that human bodies are composed of atoms, which were once part of distant stars. So, to blogs this some scientist is gives human life sense of drama an significance equal to that inherent, in the world is great mythologies and theologies.

Thus blogs corrects the common error of supposing that materialism reduces to the drama or significance of human life, if seems to be some kind of kind of analogy which is present in this 1 same to be some kind of weak analogy kind of argument. There are several examples, in the text book constant deduction in to logic by particularly and 1 we once we solve this exercise an all will make are these all this things will become quite us.

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Examples:

1. Day always follows night. The two are perfectly correlated. Therefore, night causes day.
2. We could get control of the crime problem in the United States if we would just punish criminals harshly. In Saudi Arabia, for example, thieves get their hands chopped off. Murderers are immediately put to death. And the rate of crime in Saudi Arabia is much lower than the rate of crime in the United States. Therefore, harsh punishments would greatly reduce the rate of crime in the United States.

Another example could be day all day always follows night that is: the success in all temporal success in all. And the t1 a t1 days on and t2 see night an all this temporal success in all. Is temporal succession is treated as causal kind of connection then we are said to be making this false cause kind of fallacy. The 2 are perfectly correlated therefore, in all what we a saying is night causes be are that is the case then it is called as a false cause kind of fallacy.

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Suppose, if you say folk dancing is bad because it leads to some other kind of dancing, which is western kind of ballroom dancing an all; which in turn leads to some kind of modern dancing. And then you are arguing that, modern dancing leads to promiscuity which causes a total breakdown in the moral fabric of a country and hence a lapse in to some kind in to primitive savagery an all. It looks like that in a 1 leads to another kind of problem 1 triggers another 1 and another trigger as another 1 etcetera an all.

It mean that be the case at folk dance is the 1, which triggers the last step that is: usually consider some kind of disaster in laps in to primitive savagery an all that in order to take place the first innocent step does not lead to this particular kind of thing an all. It is also, me kind of false cause fallacy which, we studied in greater detail that is slippery slope fallacy.

So, far we a studied in detail about fallacy of relevance an fallacy of weak induction, there are 3 important fallacy which come under the category of presumption fallacies of presumption. So, these are some of the important things which, we commonly seen day to day argumentation here what will happen is: premises presume what they purport to prove an all. So, conclusion is a 1 the 1 which we into establish, but, that is also already presumed an all in the premises.

So, it results when a in arguer makes some kind of unwarranted assumption usually such assumption such assumption is illegitimate or unjustified an all. There are 3 such kind of fallacious, which will be talking about their 1 is begging question fallacy, complex question fallacy and false dilemma fallacy.

We will considered 1 particular kind of fallacy and then we will end this lecture an all. So, this is 1 of the frequently if found kind of fallacy, which could like this an argue an argument that is a question then it a assumes the point to be proved. That is begging the question is also known as argue in some kind of circles in all; 1 example could be like this suppose somebody is arguing like this: God exists because bible will says so on by will are Geetha, Khuran says but, how do I know that God what the Bible says: is true because God it is god's word an all in gods words etcetera an all.

So, now here what is the guaranty that God words is true an all; again you will fall back and say that God exists because the bible says. So, and it the agreement goes on in circles etcetera an all. An each step it begs some kind of question an all premises be suppose that: God already exists an all base on real try to argue then begs the question an all. So, these called as begging question kind of fallacy. So, the conclusion although valued sound at it begs some kind questions an all. So, from the stand front of convincing others and from the stand front of discovering through the argument begs question is duly ford, in all because it begs question each and every stage in all.

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So, let us considered another example, with this will end this lecture God does not exists. Suppose, if you ask why in is giving this reasons an all because natural selection is true. And according to the natural selection all space is commit to being by purely blind natural forces and how do I know natural selection is true well. It is the best scientific theory an all because of it is best scientific theory; obviously, it has to be true an all. So, your falling back come your making arguing in a some kind of circles an your saying that.

Scientific theory off course by definition: exclude any super natural claims in assumptions that say in a God does not exists an all; 1 proof we are saying is God exists and all because by will says but, here proving that God does not exists based on natural selection an all see are falling back an natural selection. And what an what bases you saying you saying: the natural selection is true again or saying that the best scientific theories are true an all. An what basis your best scientific theory are true again, you will say that natural selection is true and etcetera and so on and so an all.

So, in this lecture what we are done is a considered various fallacies of induction fallacies of weak induction and then we are seeing that in all these case as premises are not sufficient enough to provide adequate evidence to believe the conclusion to be true

an at least to weak induction an all arguments, based on weak induction are; obviously, fallacious an all.

There are some other fallacies all this fallacies are, we should note that there all persevere mechanisms every fallacy an argue as some intention that is to persuade the arguer are reasonal an all. So, in all this fallacies are some kind of (( )) mechanism, there to all important in day to day life in somebody makes is commit, this particular kind of fallacy at least as a reader or listener who is are following the arguments from the debates; 1 should be able to be identify the flows in the argumentation an all. So, identifying an detecting the fallacious is another important step, which will which is very important.

So, in all this fallacy in this model in this part, we are first we started with the formal fallacy and then we more on to informal fallacious, there informal fallacious can only by unless in the content. And in that we classified fallacious of relevance an then we talked about fallacious of fallacious of weak induction an then; there are some fallacious which are arises out of in the language are in might arise due to due to some kind of presumption an all. So, begging question complex question fallacy etcetera; these are things which will come in come a comment in day to day discuss, they all comment on the category of fallacious of presumption an all.

So, with this will end this lecture and then we will move on to formal logic from tomorrow an words. In the next lecture, will be talking about some of the important features of is logic. And these are the logic, which are dominated from more than 2 thousand years this definitely something; this most important to study this particular kinds of logics, which helps us understanding some of the important concept are more logic. So, then we will move on to propositional predicate logic.