

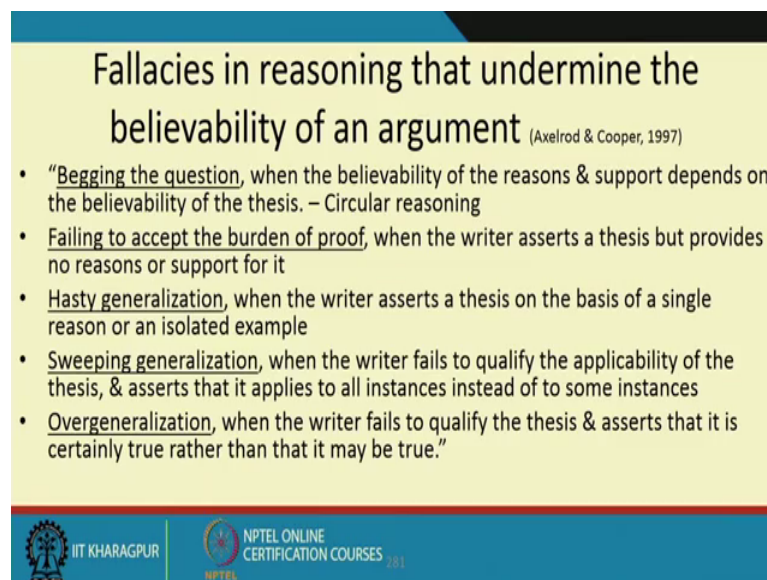
Research Writing
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Lecture - 27
Mistakes and Fallacies

Welcome back to the MOOC course on Research Writing. My name is Aradhna Malik and I am helping you with this course. Now, in the previous class we talked about revising. Now, one more thing that happens in revising is, one more thing that happens you know we need to take care of the mistakes and policies that appear in revisions. So, that is what we will address in this lecture. And some bits of it you will have seen earlier in this in the context of the same class, but they are quite relevant to this lecture. So, they have been put in here also ok.



Some policies and reasoning that undermine the believability of the argument. I told you that when you are revising you must check the argument for believability. So, you must check the believe it to check the believability of the argument. There are some policies that you must be careful of.

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Fallacies in reasoning that undermine the believability of an argument (Axelrod & Cooper, 1997)

- Begging the question, when the believability of the reasons & support depends on the believability of the thesis. – Circular reasoning
- Failing to accept the burden of proof, when the writer asserts a thesis but provides no reasons or support for it
- Hasty generalization, when the writer asserts a thesis on the basis of a single reason or an isolated example
- Sweeping generalization, when the writer fails to qualify the applicability of the thesis, & asserts that it applies to all instances instead of to some instances
- Overgeneralization, when the writer fails to qualify the thesis & asserts that it is certainly true rather than that it may be true."

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Begging the question, when the believability of the reasons and support depends on the believability of the thesis this is also called circular reasoning. This will come again when we are talking about policies in a different context. So, when the believability of

the reasons and support depend on the believability of the thesis and the believability of the thesis depends on the believability of the reasons and support and so they this type of policy is called begging the question.

Then failing to accept the burden of proof, when the writer asserts the thesis, but provides no reason or support for it, so the writer says I believe this to be true, but does not provide very sound reasons or support for it; that means, that the writer is failing to accept the burden of proof.

Hasty generalization, this will also come again. When the writer asserts a thesis on the basis of a single reason or an isolated example, the writer says ok, this is the example and based on this example this argument seems to be true. So, that is a hasty generalization. Please make sure you do not make these mistakes when you are writing. Sweeping generalizations are when the writer fails to qualify the applicability of the thesis and asserts that it applies to all instances instead of to some instances. So, that is a general that you know you falsely or hastily generalized across the board. So, that is called a sweeping generalization. And you generalize across the instances that may not be that that are not generalizable. Over generalization refers to the fact that when the writer fails to qualify the thesis and asserts that it is certainly true rather than it may be true ok.

Now, fallacies in evaluating the consistency and the completeness of the argument.

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Fallacies in evaluating the consistency & completeness of an argument (Axelrod & Cooper, 1997)

- Slippery slope, when the writer argues that taking one step will lead inevitably to a next step, one that is undesirable.
- Equivocation, when a writer uses the same term in two different senses in an argument.
- Oversimplification, when an argument obscures or denies the complexity of the issue.
- Either/or reasoning, when the writer reduces the issue to only two alternatives that are polar opposites.
- Double standard, when two or more comparable things are judged according to different standards. This often involves holding the opposing argument to a higher standard than the one to which the writer holds his or her own argument."

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Some more, so slippery slope is when the writer argues that taking one step will lead inevitably to a next step one that is undesirable. So, you cannot do this. That if you take one step you will automatically go to the next step.

Then equivocation is when a writer uses the same term in two different senses in an argument. So, this the same term is used in two different senses with two different meanings in the same argument and that is equivocation. So, that the reader is led to believe that the writer does not probably know what he or she is talking about that well. Oversimplification is when an argument obscures or denies the complexity of the issue, every issue cannot be simplified, every issue cannot be put in your own words, every issue cannot be applied to day to day situations. So, that is oversimplification.

We try to do it in the interest of clarifying some concepts, but many times in an attempt to do. So, we try and under you know we this leads to the undermining of the authors interest or knowledge in that field, either or reasoning when the writer reduces the issue to only two alternatives that are polar opposites. So, so many times what happens is that the many issues cannot be put in either or categories and that becomes either or reasoning and that can be you know especially in the social sciences you cannot have an either or situation.

Double standards are when two or more comparable things are judged according to different standards. This often hold involves holding the opposing argument to a higher standard than the one to which the writer holds his or her own argument. So, different standards are used to assess two different arguments. So, these are called double standards. Either everything is evaluate everything that you are evaluating should be evaluated you know on the same pedestal. So, you cannot hold one argument in a different light and say this is more you know or you evaluating arguments on different standards leads to a problem.

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Categories of fallacies

(Lunsford, 2001)

- Ethical fallacies
- Logical fallacies
- Emotional fallacies

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Different categories of fallacies you have ethical fallacies, you have logical fallacies and you have emotional fallacies.

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Recognizing ethical fallacies

(Lunsford, 2001)

- Ad hominem: Relates to the Horns Effect – one negative attribute about a situation indicates that everything must be wrong with it.
- Guilt by association: Horns effect – in-group & out-group attributes – e.g. A college lost its accreditation, so all teachers in that college are not credible

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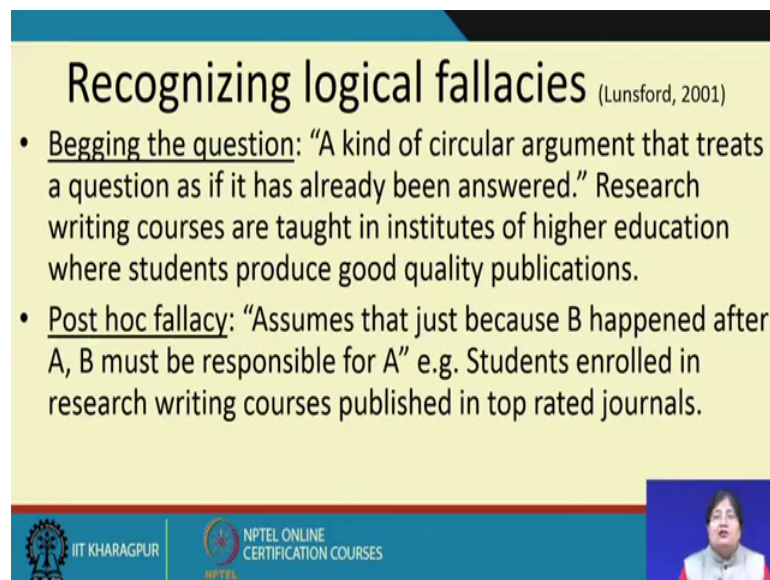
How do you recognize ethical fallacies? Ad hominem fallacy relates to the horns effect one negative attribute about a situation indicates that everything must be wrong with it. So, if one argument is not strong enough you feel that all the arguments made in that context are not strong enough or if one you know set of analyses does not seem to make

sense or if one one result seems to be on weak ground you assume that all the results that have been computed are on weak ground.

Guilt by association horns effect it is an outcome of the horns effect, it refers to in-group and out group attributes for example, a college lost its accreditation. So, all the teachers in that college are not credible. We make such sweeping statements, we make such sweeping analyses of situations that if one attribute is bad or is undesirable everything associated with that whole place must be undesirable right.

Now, recognizing logical fallacies, these were ethical fallacies and then we move on to the logical fallacies and begging the question we talked about this.

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Recognizing logical fallacies (Lunsford, 2001)

- Begging the question: "A kind of circular argument that treats a question as if it has already been answered." Research writing courses are taught in institutes of higher education where students produce good quality publications.
- Post hoc fallacy: "Assumes that just because B happened after A, B must be responsible for A" e.g. Students enrolled in research writing courses published in top rated journals.

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So, an example of begging the question is research writing courses are taught in institutes of higher education where students produce good quality publications. So, this is an example of begging the question ok.

Post hoc fallacy is as it assumes that just because B happened after A, B must be responsible for A. For example, students enrolled in research writing courses published in top rated journals. So, you know just because students are enrolled in a research writing course they must have published in top rated journals.

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Recognizing logical fallacies (Contd.) (Lunsford, 2001)

- Non sequitur: “Attempts to tie together two or more logically unrelated ideas as if they were related.”
- Either-or fallacy: “Asserts that a complex situation can have only two possible outcomes, one of which is necessarily preferable.”
- Hasty generalization: “Bases a conclusion on too little evidence or on bad or misunderstood evidence.”
- Oversimplification



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Another way of recognizing logical fallacy is the non sequitur fallacy it attempts to tie together two or more logically unrelated ideas as if they were related. Either-or fallacy asserts that a complex situation can have only two possible outcomes we just discussed it. So, that is a logical fallacy one of which is necessarily preferable and that is why more weight is being given to it. Hasty generalization bases a conclusion on too little evidence or on bad or misunderstood evidence. Oversimplification we just discussed it.


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Recognizing emotional fallacies (Lunsford, 2001)


- Bandwagon appeal: “Suggests that a great movement is under way & the reader will be a fool or a traitor not to join it.”
 - “Why should you join it? Where is the evidence to support this claim?”
- Flattery (of readers): You are so bright, you must be knowing this ..., etc.
 - “How will it pay off?”
- In-crowd appeal: “Invites readers to identify with an admired & select group.”
 - “Who are these people? And will you become one of them by joining them?”



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Recognizing how do you recognize emotional policies, different types of emotional policies, bandwagon appeal suggests that a great movement is underway and the reader will be a fool or traitor not to join it. And out of in this you know you question yourself and the questions that come up are why should you join it where is the evidence to support the claim.

Flattery of readers you are so bright you must be knowing this. So, the idea is you know then you ask your question how will it pay off. In crowd appeal invites readers to identify with and admired and selected group who are these people and will you become one of them by joining them that is the question one tends to ask.

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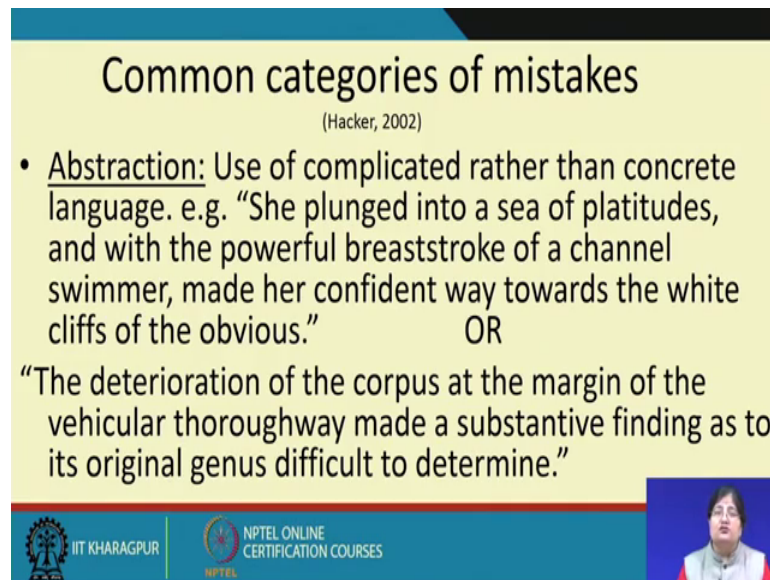
Recognizing emotional fallacies (Contd.)
(Lunsford, 2001)

- Veiled threats: “Try to frighten readers into agreement by hinting that they will suffer adverse consequences if they don’t agree.”
 - “How serious is this possible effect? Is it likely – or even legal?”
- False analogies: “Make comparisons between two situations that are not alike in most or important respects.”
 - Logical connection to original argument & timeliness

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Some more examples here veiled threats try to frighten readers into argument into agreement by hinting that they will suffer adverse consequences if they do not agree. So, you ask yourself how serious is this possible effect is it likely or even legal. False analogies make comparisons between two situations that are not alike in most or important respects and you try and look for a logical connection to the original argument and the timeliness of this connection.

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Common categories of mistakes
(Hacker, 2002)

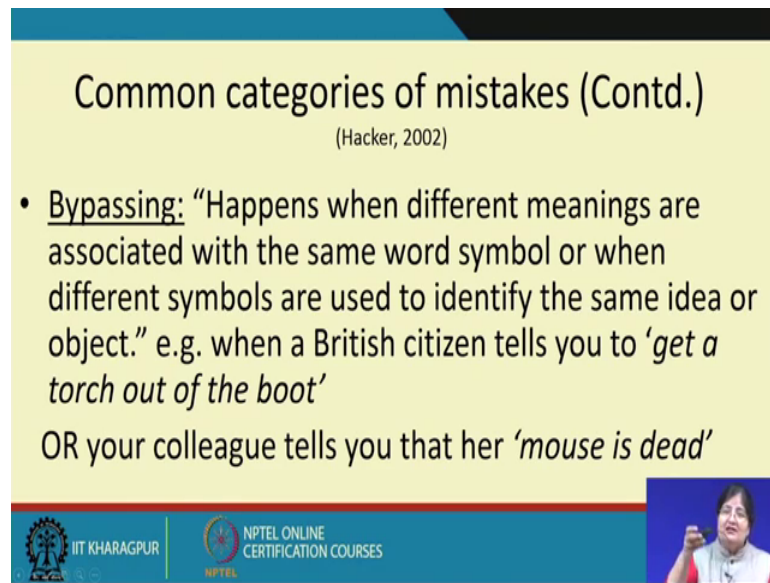
- Abstraction: Use of complicated rather than concrete language. e.g. "She plunged into a sea of platitudes, and with the powerful breaststroke of a channel swimmer, made her confident way towards the white cliffs of the obvious." OR
"The deterioration of the corpus at the margin of the vehicular thoroughway made a substantive finding as to its original genus difficult to determine."

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Some common category of mistakes we have covered some, we might cover some more here. We have talked about this when we have talked about creating meaning. Abstraction uses complicated rather than concrete language. For example, she plunged into a sea of platitudes and with the powerful breast stroke of a channel swimmer made her confident way towards the white cliffs of the obvious.

Now, this is too abstract these kinds of statements look very good in say literature in novels. But when you are talking about research writing this may not carry much value. Again my friends from literature or the humanities may choose to disagree with me in this, but the level of abstraction must be controlled when you are writing your dissertations or academic papers or the deterioration of the corpus at the margin of the vehicular thoroughway made a substance substantive finding as to the original its original genus difficult to determine.

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Common categories of mistakes (Contd.)

(Hacker, 2002)

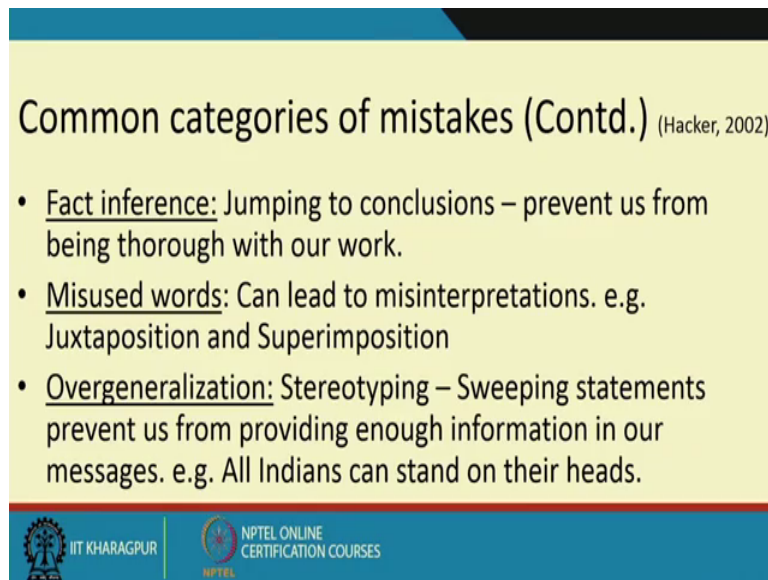
- Bypassing: "Happens when different meanings are associated with the same word symbol or when different symbols are used to identify the same idea or object." e.g. when a British citizen tells you to '*get a torch out of the boot*'
OR your colleague tells you that her '*mouse is dead*'

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Some more by passing we have talked about this also excuse me. It happens when different meanings are associated with the same word symbol or when different symbols are used to identify the same idea or object for example, when a British person tells you to get a torch out of the boot. So, what does this mean or what can this mean? Torch out of the boot means you get a torch out of the trunk. So, again this can be interpreted differently that you take a matchstick and light it by scratching it under your shoe that is another interpretation in a different context or your colleague tells you that her mouse is dead. Now, in some cultures some people like to keep mice as pets, but what do we mean typical technical terminology mouse is dead this plastic device that I am using is no longer working ok. So, that is another category of mistakes.

Now, we tend to use these terms again it depends on the context that you are talking about it depend on contexts that you are working in. Sometimes it becomes inevitable for these mistakes to appear, but to the extent possible when revising please be careful that these mistakes do not confound the meaning that you want to convey through your research ok.

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Common categories of mistakes (Contd.) (Hacker, 2002)

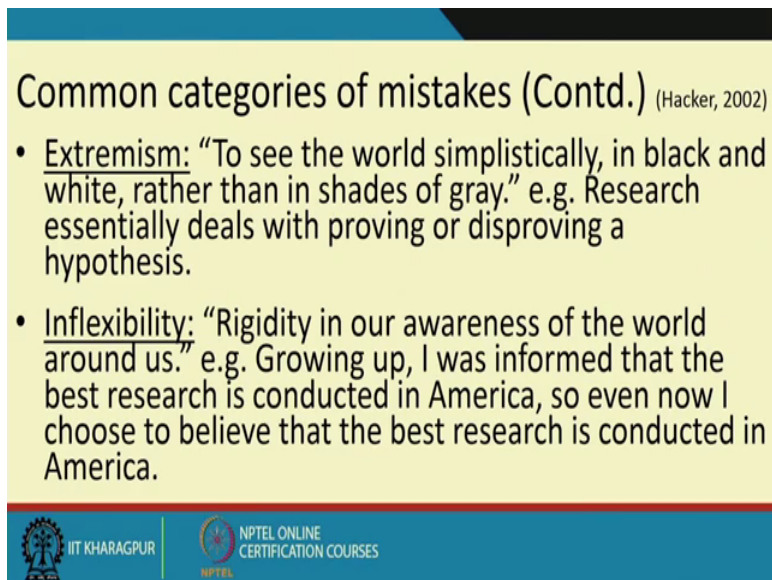
- Fact inference: Jumping to conclusions – prevent us from being thorough with our work.
- Misused words: Can lead to misinterpretations. e.g. Juxtaposition and Superimposition
- Overgeneralization: Stereotyping – Sweeping statements prevent us from providing enough information in our messages. e.g. All Indians can stand on their heads.

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Fact inference refers to jumping to conclusions which prevent us from being thorough with our work. Misused words can lead to misinterpretations for example, juxtaposition and superimposition. Juxtaposition is laying two different ideas side by side. Superimposition is superimposing or merging or putting one main idea over the other. So, that is superimposition. Juxtaposition is you have an idea and you connect another one and lay these two side by side. But we tend to miss use these words occasionally. Overgeneralization refers to see odd you know again we have talked about over generalization. So, stereotyping is a form of over generalization stereotyping is sweeping statements that prevent us from providing info enough information in our messages.

Again this is an example people assume that all Indians you know many times when you go abroad and you meet people from abroad they think that because yoga originated in India, all Indians can do yoga and can do a headstand and that is not really true. So, that is one example of over generalization we make these sweeping statements. We focus on stereotypes we make these standard comments about one specific group of observations.

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Common categories of mistakes (Contd.) (Hacker, 2002)

- **Extremism:** “To see the world simplistically, in black and white, rather than in shades of gray.” e.g. Research essentially deals with proving or disproving a hypothesis.
- **Inflexibility:** “Rigidity in our awareness of the world around us.” e.g. Growing up, I was informed that the best research is conducted in America, so even now I choose to believe that the best research is conducted in America.

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Extremism to see the world, simplistically in black and white rather than in shades of gray. For example, you know, so we talked about the either or fallacy for example, research essentially deals with proving or disproving the hypothesis. Now, this is not true because research can deal with exploring something to find something new also it does not on always have to be talking about essentially proving or disproving a hypothesis.

Then inflexibility rigidity, inflexibility refers to rigidity in our awareness of the world around us. For example, growing up I was informed that the best research is conducted in America. So, even now, I chose to believe that the best research is conducted in America which means that whatever I am doing here is worthless that is not true. Many times you know we choose to believe these things and so that refers to inflexibility we are not open to looking at or we are not open to accepting newer points of view and that becomes very difficult. So, that is not right that is a category common type of mistake we make ok.

So, that is all we have time for in this lecture. We will continue with some more discussion on you know we will talk about editing and proofreading in the next class.

Thank you very much for listening.