LOGICAL FALLACIES
AND RHETORICAL TECHNIQUE

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AICE General Paper AS
RHETORICAL APPEALS

Know and Understand: Ethos, Logos, and Pathos
Who is Aristotle?

Aristotle (384-322 BCE)

- Student of Plato, who studied under Socrates
- Radically transformed areas of logic, math, politics, medicine, theatre, among others
- Known as "The Philosopher"
- First to develop formalized system of reasoning
- Observed that validity of an argument can be determined by its structure rather than its content

“All men are mortal; Socrates is a man; therefore, Socrates is mortal.”

As long as premises are true, then the conclusion is also guaranteed to be true
What is rhetoric?

rhe-tor-ic | ˈretərik|

noun

the art of effective or persuasive speaking or writing, esp. the use of figures of speech and other compositional techniques.

Aristotle’s three rhetorical appeals are Logos, Ethos, and Pathos.
“It is absurd to hold that a man ought to be ashamed of being unable to defend himself with his limbs, but not of being unable to defend himself with speech and reason, when the use of rational speech is more distinctive of a human being than the use of his limbs.” - Aristotle
What is Ethos?

- Ethics/Image
- Ethos is an argument based on character.
- Ethos appeals to the audience’s sense of ethical behavior.
- “I am an expert, so believe what I say.”
What is Pathos?

- Emotions: “Suffering”
- Pathos appeals to audience’s emotions, interests and values
- Pathos uses empathy to persuade
What is Logos?

- Logos = Logic
- Logos is an argument based on facts, evidence, and reason.
- Logos uses facts and reasoning to appeal to the audience
LOGICAL FALLACIES

Definition: The defects that weaken arguments; they can sound very persuasive
List of Common Logical Fallacies

1. Hasty Generalization
2. Missing the Point
3. Post Hoc
4. Slippery Slope
5. Weak Analogy
6. Appeal to Authority
7. Ad Populum
8. Ad Hominem / Tu Quoque
9. Appeal to Pity
10. Appeal to Ignorance
11. Straw Man
12. Red Herring
13. False Dichotomy
14. Genetic Fallacy
15. Equivocation
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Hasty Generalization

- Definition: making assumptions about a whole group or a range of cases based on a sample that is inadequate; scope of evidence is too small to support the conclusion.
- Often considered as a stereotype
- Example: My roommate said her philosophy class was hard, and the one I’m in is hard too. All philosophy classes must be hard!
Missing the Point

• Definition: The premises of an argument do support a particular conclusion – but not the conclusion that the arguer actually draws.

• Example: The seriousness of a punishment should match the seriousness of the crime. The punishment for drunk driving may simply be a fine. But drunk driving is a crime that can kill innocent people. So the Death penalty should be the punishment for drunk driving.

• It supports that the punishment should be serious, but it does not support the claim that the death penalty, specifically, is warranted.
Post Hoc

• From: “post hoc, ergo propter hoc,” which is Latin for “after this, therefore because of this.”
• Definition: Assuming that because B comes after A, A caused B.
• Example: The president raised taxes, and then the crime went up. The president is responsible for the rise in crime.
Slippery Slope

• Definition: A chain reaction, usually ending in some dire consequence, will take place, but there’s not enough evidence for that assumption.

• Example: Animal Experimentation reduces our respect for life. If we don’t respect life, we are likely to be more tolerant of violent acts like murder and war. Soon our society will become a battlefield, living in fear. It will be the end of civilization. To prevent this, we should make animal experimentation illegal now.
Weak Analogy

- Definition: The items that are being compared aren’t really alike in their relevant respects.
- Example: Guns are like hammers – they’re both tools with metal parts that could be used to kill someone. And yet it would be ridiculous to restrict the purchase of hammers – so restrictions on guns are equally ridiculous.
Appeal to Authority

• Definition: To support the argument by “impressing” the reader with using a famous name or by appealing to a supposed authority.
• Example: We should abolish the death penalty. Many respected people, such as Guy Handsome, have publicly stated their opposition to it.
• -Guy Handsome may be a great actor, but he is not an authority on matters such as these.
Ad Populum

• Latin for “to the people”; stating, if many believe it is so, then it is so.

• Definition: The arguer takes advantage of the desire most people have to be liked and to fit in with others and uses that desire to try to get the audience to accept his or her argument.

• Example: Millions of people agree with my viewpoint, therefore it must be right.
Ad Hominem / Tu Quoque

- Latin for “against the person” and “you, too!”
- Definition: The reason for not believing the source is because the source is a “bad” person (ad hominem) or a “hypocrite” (tu quoque).
- The arguer attacks the opponent, instead of the opponent’s argument.
- Example: Andrea Dworkin has written several books arguing that television causes laziness, but she’s just fat and bitter, so why should we listen to her?
Appeal to Pity

• Definition: When an arguer tries to get people to accept a conclusion by making them feel sorry for someone/some cause.

• Example: I know the exam is graded based on performance, but you should give me an A. My cat has been sick, my car broke down, and I’ve had a cold, so it was really hard for me to study.
Appeal to Ignorance

- The arguer says “Look, there’s no conclusive evidence on the issue at hand. Therefore, you should accept my conclusion on this issue.”
- No one has proved that $X$ is true, so $X$ must be false.
- Although we have proven that the moon is not made of spare ribs, we have not proven that its core cannot be filled with them; therefore, the moon’s core is filled with spare ribs.
Straw Man

• Definition: when a person simply ignores a person's actual position and substitutes a distorted, exaggerated or misrepresented version of that position.
• Person A has position X. Person B presents position Y (which is a distorted version of X). Person B attacks position Y. Therefore X is false/incorrect/flawed.
• Example: Argument made by opposition: Since cycling is a very viable mode of transportation, bicycle infrastructure should be expanded.
• Straw man argument: If bike lanes are built, cyclists get an opportunity to run red lights and endanger pedestrians. Hence, bike lanes should not be built.
Red Herring

• Definition: Partway through an argument, the arguer goes on a tangent, raising a side issue that distracts the audience from the main conclusion. Topic A is under discussion. Topic B is introduced under the guise of relevance to Topic A. Topic A is abandoned.

• Example: Grading this exam off a curve would be the most fair thing to do. After all, classes go more smoothly when the students and the professor are getting along well.

We can’t worry about the environment, we’re in the middle of a war!

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False Dichotomy (Dilemma)

- Definition: Where the argument is stated with only two options from which to decide, when there are actually more options.
- Example: The hall is in bad shape. Either we tear it down and put a new one up, or continue to risk everyone’s safety. (Other options are to repair it, or not hold classes in specific rooms)
- Sometimes, both options are false as well.
Genetic Fallacy

- Definition: Argument in where a conclusion is suggested based SOLELY on someone or something’s origin.
- This can work both ways - you can discount something despite evidence from other sources OR you can believe something despite lack of evidence from other sources.
- Example: “Yeah, the environmentalists claim that overdevelopment can lead to all kinds of serious problems. But we know all about those granola-eating tree huggers!”
Equivocation

• Definition: changing definitions of a word halfway through the discussion; double meaning of a word.

• Example: Giving money is the right thing to do. So charities have a right to our money. (The first right means good, the second right means a claim to something)