Logical Fallacies

Introduction

What is a logical fallacy?

- A fallacy is an error of reasoning. These are flawed statements that often sound true

- Logical fallacies are often used to strengthen an argument, but if the reader detects them the argument can backfire, and damage the writer's credibility

Origins

The word "fallacy" derives from the Latin word *fallere* meaning, "to deceive, to trip, to lead into error or to trick." The word also derives from the Greek *phelos,* meaning "deceitful."

www.sun-design.com/talitha/fallacies.htm

Why study logical fallacies?

- It is important to develop logical fallacy detection skills in your own writing, as well as others'.

Think of this as "intellectual kung-fu: the art of intellectual self defense." (Logical Fallacies Handlist)

Types of Logical Fallacies

The following slides will *briefly explain* 15 fallacious arguments.

Types of Logical Fallacies

1. "**Bandwagon Approach**"

    "It must be cool because everyone is doing it…

    "90 percent of computer users choose Macs"

    (sometimes called Appeal to Popularity)

Types of Logical Fallacies

2."**Slippery Slope**" - a fallacious argument built on the supposition that a small step will lead to a larger chain of events

"If you don't stop smoking, then you are going to start shooting heroin."

"Marijuana is the gateway drug."

1998   2002

Slippery Slope, cont.

3) **Appeals to Authority**

- Using a celebrity or authority figure's name to support an issue which if not really his or her expertise.

- "Katie Perry thinks the killer should be pardoned." **FALSE AUTHORITY** .

- Often called.. . Using a suspicious, incredible source to defend a conclusion

Types of Logical Fallacies

- 4.) **Card Stacking**
- Considered a fallacy of omission

- Material is simply left out or taken out of context, ignoring evidence that doesn't support your opinion

5) **Hasty Generalizations**

- This is the chief error in reasoning! – a type of inductive reasoning – conclusions made through insufficient evidence

Ex: The last two mass murderers were from Michigan. Obviously, people from Michigan are dangerous.

Fallacies, continued . . .

6) **Begging the question**: A is true because A is true . . . "chocolate is healthy because it is good for you"

7) **Straw Man**: a fallacy of distraction – an irrelevant conclusion (Ex: How could he possibly cheat on his taxes? He's such a great father!)

Straw Man, con.

More Fallacies

- 8) **Appeals to Pity**: appealing to someone's emotions in order to distract them from the truth.
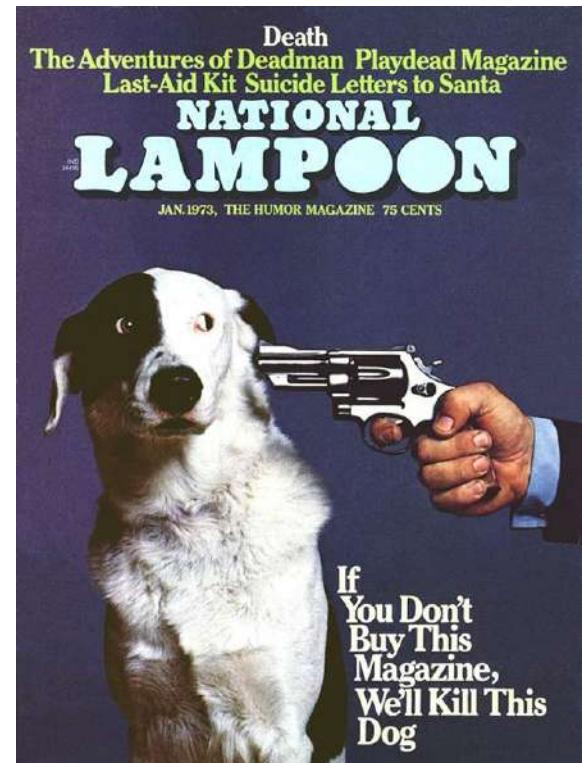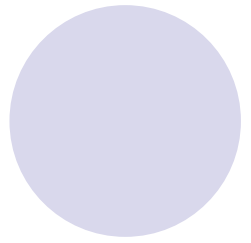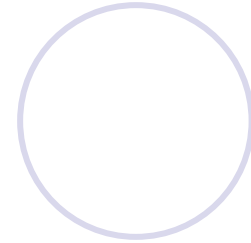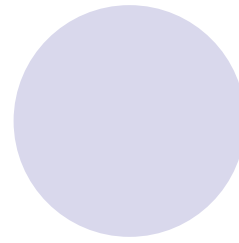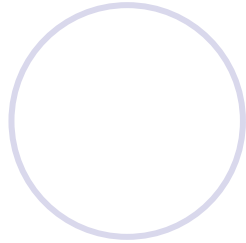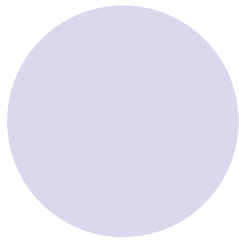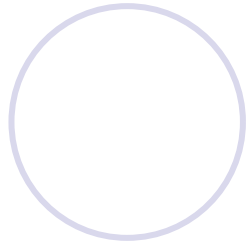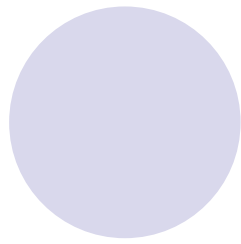
9) **Ad Hominem**: Latin for "To the man" – pointing out a negative characteristic to support one's argument (ex: how could Mary know anything about cars? She's a woman!)

10) **Non sequitur**: conclusion doesn't logically follow the premise (Men are human. Mary is human. Therefore, Mary is a man.)

All cats have four legs.
I have four legs.
Therefore, I am a cat.
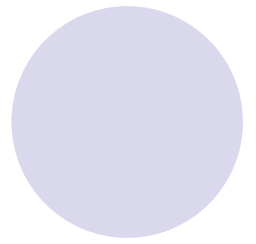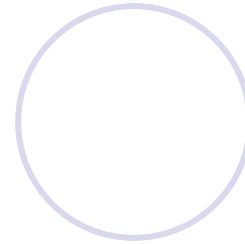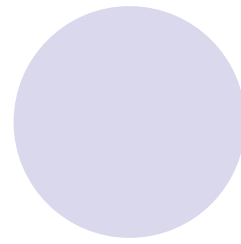
- 11) **Guilt by association**: a false correlation between two events (9/11-Sandy Hook shooting)
- 12) **Faulty Cause/effect**: Ex: "we've been in business 50 years – That makes us the best!
- 13) **False needs**: "If parents want intelligent children, they must buy Baby Mozart!"
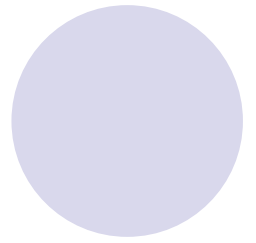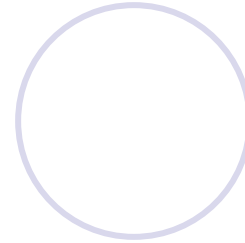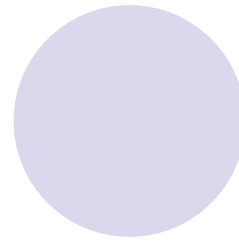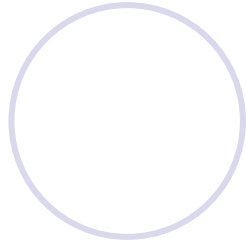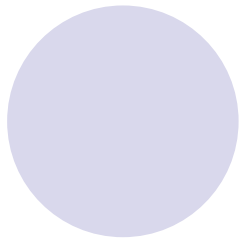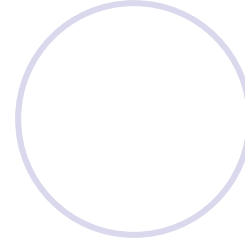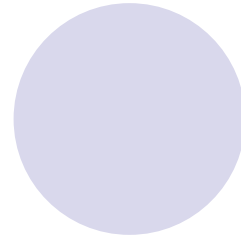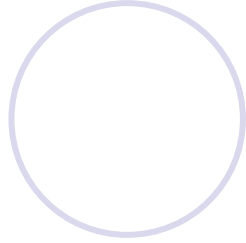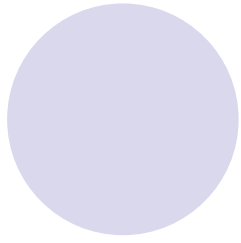
- 14) **Either/Or fallacy** – aka False Dilemma . . . "You're either part of the solution or part of the problem"

15.) Post Hoc
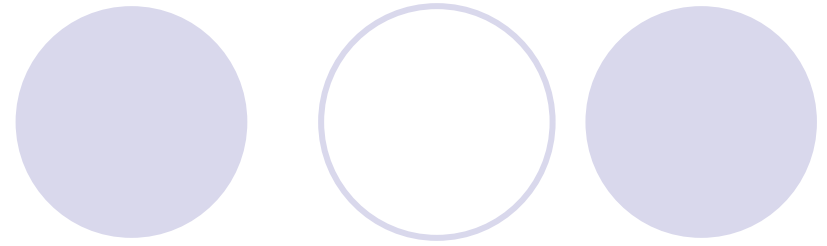
- The arguer infers that because one event follows another, the first event must be the cause of the second event.

- Causation without correlation

- Ex: The rooster crowed, the sun came up. Therefore, the rooster made the sun come up.
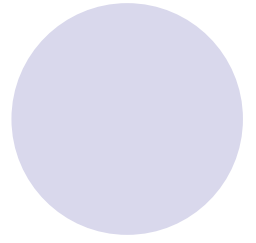
- Quiz on these fallacies on Friday!!!!!

Logical Fallacy Roundup

- In groups of 2-4, search websites, newspapers, advertisements, etc. to find arguments that may contain logical fallacies.

- Find two logical fallacies to share with the class on Thursday or Friday.

In conclusion, always be on the lookout for faulty reasoning!

If you took notes and completed the activity, you are a genius!

Congratulations!