Faulty Logic: Fallacies and Invalid Reasoning

Logicians have identified more than 125 different fallacies. Here, we look at some of the most common.

- A. *Ad Hominem* (personal attack): a fallacy that attacks the person on the other side of an issue rather than addressing the issue itself ("How would you know? You don't even have an A.A. degree." This is an attack on the other's lack of education, not their argument.)
- B. Appeal to Authority (baseless endorsement): a fallacy that relies on an expert who does not have expertise in the issue under discussion ("Eminem thinks university is a waste of time, so I'm not going to college")
- C. Appeal to Popularity or Bandwagon (everyone's doing it!): a fallacy that assumes that because something is popular, it is therefore good, correct, or desirable ("Mom, everyone's got the new i-Pod. I have to have one, too!" OR the classic rebuttal to the Bandwagon fallacy: "If everyone jumped off a cliff, would you do it, too?")
- D. Appeal to Tradition (that's the way we've always done it!): a fallacy in which the speaker resists changes to traditional behavior and opinions; the speaker claims that people should continue a certain course of action because they have always done so in the past or that they should not change course for the same reason ("Why should we regulate pollution? We've been dumping into our rivers and oceans for decades!")
- E. Faulty or Invalid Analogy (comparing apples and oranges): An analogy in which the two cases being compared are not essentially alike. ("Of course I make great sushi because my Italian food is fantastic.")
- F. Hasty Generalization (jumping to conclusions): an error in reasoning in which a speaker uses too few examples or experiences to support her conclusion ("I feel so good after I eat a happy meal; how could they be anything but healthy?" Could there be other reasons a person feels good after eating a happy meal?)
- G. *Non Sequitur* (does not follow): a fallacy that translates to "does not follow"—the conclusion given is unrelated to or does not follow from the prior statements ("I'm a great student, I'm even acing my math class. I'd love to tutor you in English.")