Effective arguments require *clarity*.

"Don't be profound. Be clear."

What happens to the persuasive power of our arguments when we don't pay attention to the clarity of our statements?

"Natural gas is hemispheric. I like to call it hemispheric in nature because it is a product that we can find in our neighborhoods." --George W. Bush, Washington, D.C., Dec. 20, 2000

"Families is where our nation finds hope, where wings take dream." —Presidential candidate George W. Bush, LaCrosse, Wis., Oct. 18, 2000

????

Vagueness and Generality

"The less detail a claim provides, the more **general** it is." (p. 82)

"A word or phrase is **vague** if the group o things to which it applies has borderline cases." P. 73

- Ex: What's in my flask officer? Some liquid.
- Ex: Make sure you don't put too much salt in my soup!

Notice that vagueness and generality aren't *always* problems, and that we use vague/general language very often.

Ex: For dessert tonight, we're having cake.

We could be more specific about what *kind* of cake we're going to have. The context of our conversation, however, might not require it.

IN GROUPS (think/pair):

Exercise 3-1: #s 1-2

HW: Exercise 3-1: all Exercise 3-3: #s 3-5 Exercise 3-4

Vague Words

Consider the following set of claims:

- 1) If Toño grows 0 hairs on his head, Toño is bald.
- 2) For any number N, if a person with N hairs on his head is bald, then a person with N+1 hairs on his head is bald.
- 3) If Toño grows 10,000 hairs on his head, Toño is not bald.

What's the problem with this set of claims?

The set appears to be *inconsistent*. If (1) and (2) are true, then a person with 2 hairs is bald, but so is a person with 3, and 4, and 5, and so on...all the way to 10,000!

Philosophers call this an instance of the **Sorites Paradox**. It's puzzling precisely because each of the claims seems perfectly true. Which one should we throw out?

Vague words can generate these kinds of problems: "tall", "strong", "heap", "bald" etc.

In groups: Come up with five potentially vague words see if you can find one or two that other groups don't get.

Vague and Excessively General Comparisons

Vagueness and generality aren't restricted to words like "bald". They can also arise in certain kinds of comparisons.



How do we protect ourselves from misleading comparisons?

How troubling/impressive are the following statistics?

90 percent of heroin addicts once smoked marijuana!!!!

IMPLICATION: People who smoke marijuana are more likely to become heroin addicts. Are we convinced?

We need more information! How does this figure compare with the prevalence of marijuana smoking in non-addicts?

Terrorist activity is ten times as prevalent in the U.S. as it was in 1995!!!! IMPLICATION: We are less safe now than we were 12 years ago. Are we convinced? Is "terrorist activity" measured the same now as it was in 1995, or has the definition been expanded?

How troubling/impressive are the following statistics?

Each year, more men than women are involved in serious car crashes.

IMPLICATION: You're more likely to get in a car crash if you're a man. Are we convinced?

Are we really comparing equal categories here? What if it turns out that, on average, men drive many more miles than women each year. Isn't it *that* fact, rather than sex or gender, that accounts for the increased rate of car accidents?

How troubling/impressive are the following statistics?

There are 15 houses on the market in your area, and the average price is \$775,000.

IMPLICATION: If you have \$775,000, you should have no problem finding a house in your area.

Averages are often tricky, because there are multiple ways of calculating them.

| MEDIAN AVERAGE: | The halfway point for all house prices (half are more expensive, half are less) |
|------------------------|---|
| MEAN AVERAGE: | Total of all prices divided by number of houses. |
| MODE AVERAGE: | The most common sales price. |

If the statistic above indicates *mean* average, then this means you can find at least half the houses in your area for \$750,000 or less. However, if it refers to the *median* average, there might be 9 houses at \$1,000,000 and 3 at \$100,000.

When evaluating comparisons, ask yourself the following questions (p. 160-163):

- 1)Is important information missing?
- 2)Is the same standard of comparison being used?
- 3)Are the compared items really compatible?
- 4)Is the comparison expressed as an average?
- HW: Exercise 5-18; #s 1-6 Exercise 5-20; #s 1-5

READ pgs 160-163 (Misleading Comparisons)