

# Sociology and the Environment

What can sociology  
(and psychology and neurology)  
can tell us about how likely we  
are to take significant action on  
environmental issues?

Talk given 8/22/10 at Salina UU  
Fellowship, with speaker's notes

# Sociology and the Environment

A photograph of a vast, white glacier flowing through a mountain range. The peaks are rugged and partially covered in snow. The sky is a clear, bright blue. The glacier's surface is textured with various shades of white and light blue, showing signs of erosion and movement.

**This is a glacier.  
Kiss it goodbye!**

# Types of Information in This Presentation

1. Information on the scope of the problem (minimal as you already know quite a bit)
2. What sociology, psychology and neurology have to say about human behavior
3. A few green actions you can take

# Carbon Dioxide Emissions

- Where in the world is all the CO<sub>2</sub> coming from?
- World Average?
- Europe?
- United States?
- Sub-Saharan Africa?

# Carbon Dioxide Emissions

Tons of CO<sub>2</sub> per person per year

- World Average: 4 tons
- Europe: 11 tons
- United States: 22 tons
- Sub-Saharan Africa: less than 0.8

# Just how much CO<sub>2</sub> is that?



- For a large city lot, 65 by 150 feet
- 22 tons of CO<sub>2</sub> would be 33 feet deep per person every year

# Now CO<sub>2</sub> Per Family Per Year

- The CO<sub>2</sub> would be 132 feet deep for a 4 person household
- That's pure CO<sub>2</sub>, not mixed with air.



# Fulfilling Needs

- By 2030 the world will “need” twice as much energy.
- The International Energy Agency predicts that 80% of these “needs” will be met by fossil fuels.
- This means a 52% rise in greenhouse gasses.

# Taking Action

- Can we solve a problem that big?
- What concepts from sociology, psychology and/or neurology apply?

# Diffusion of Responsibility

- The size of a group affects the behavior of the people in the group.
- Experiment: 2 to 6 people in booths where they can hear each other but not see each other.
- No one else is around.

# Design of Experiment

- The people talk about their lives and one of them says it is hard for her to live away from her parents because of epilepsy.
- She is one of the researchers and pretends to have a seizure.
- Does group size affect willingness to help her?





# Diffusion of Responsibility

Results of the experiment by group size:

- With only 1 person to help: 100% did
- 2 people could help: 80% did
- 6 people could help: only 60% did
- How many people will help when the group size is over 6 billion?

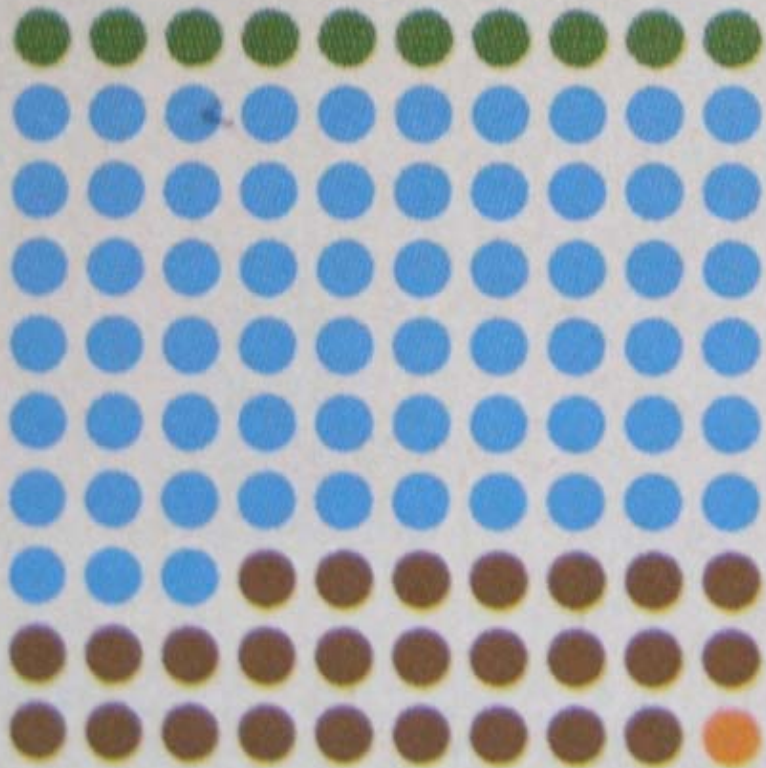
# Good Intentions

Key to the following slides. People who:

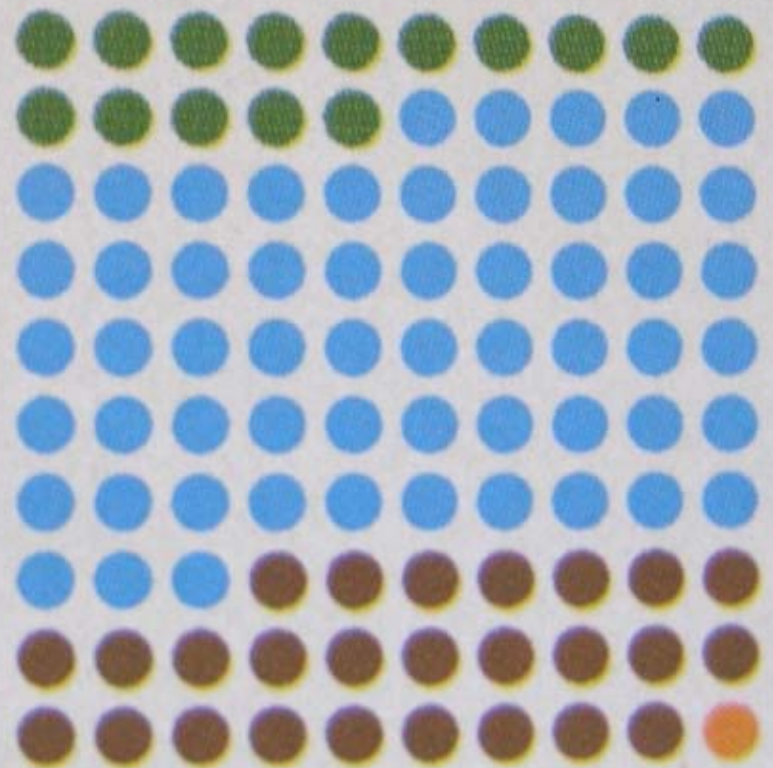
-  Believe the action is important and do it.
-  Believe the action is important, but don't do it.
-  Believe the action is not important and don't do it.
-  Believe the action is not important but do it.

# Good Intentions

USE PUBLIC TRANSIT



WALK OR BIKE  
INSTEAD OF DRIVE

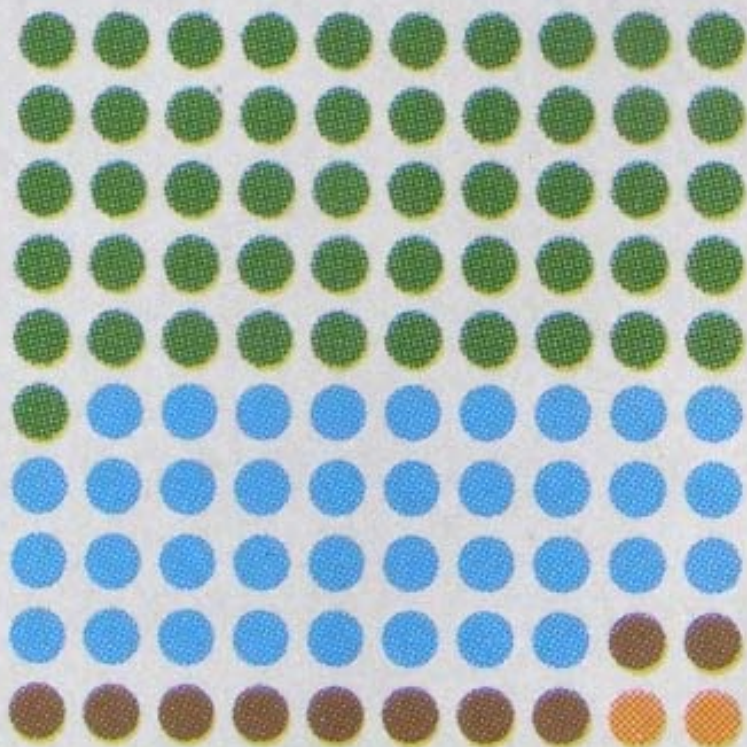


# Good Intentions

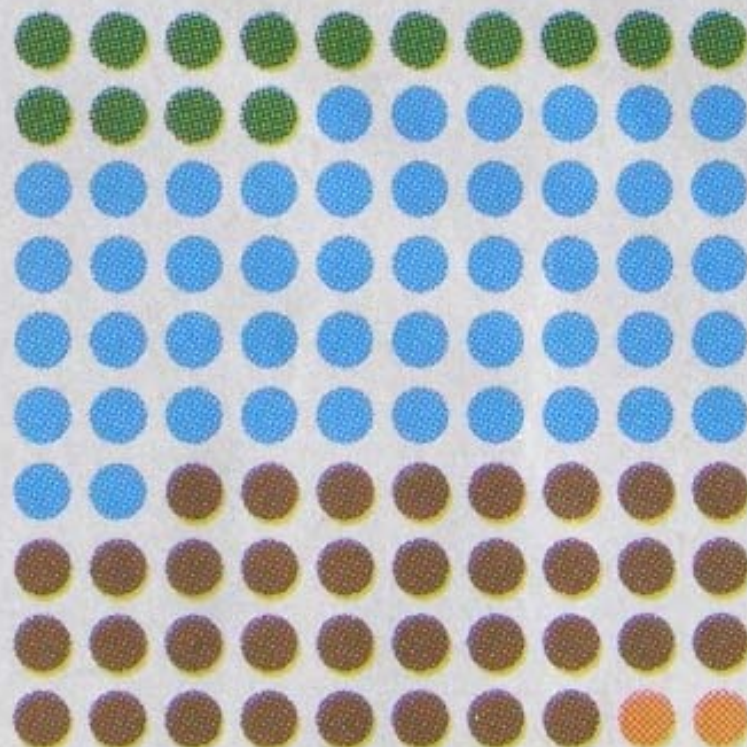


# Good Intentions

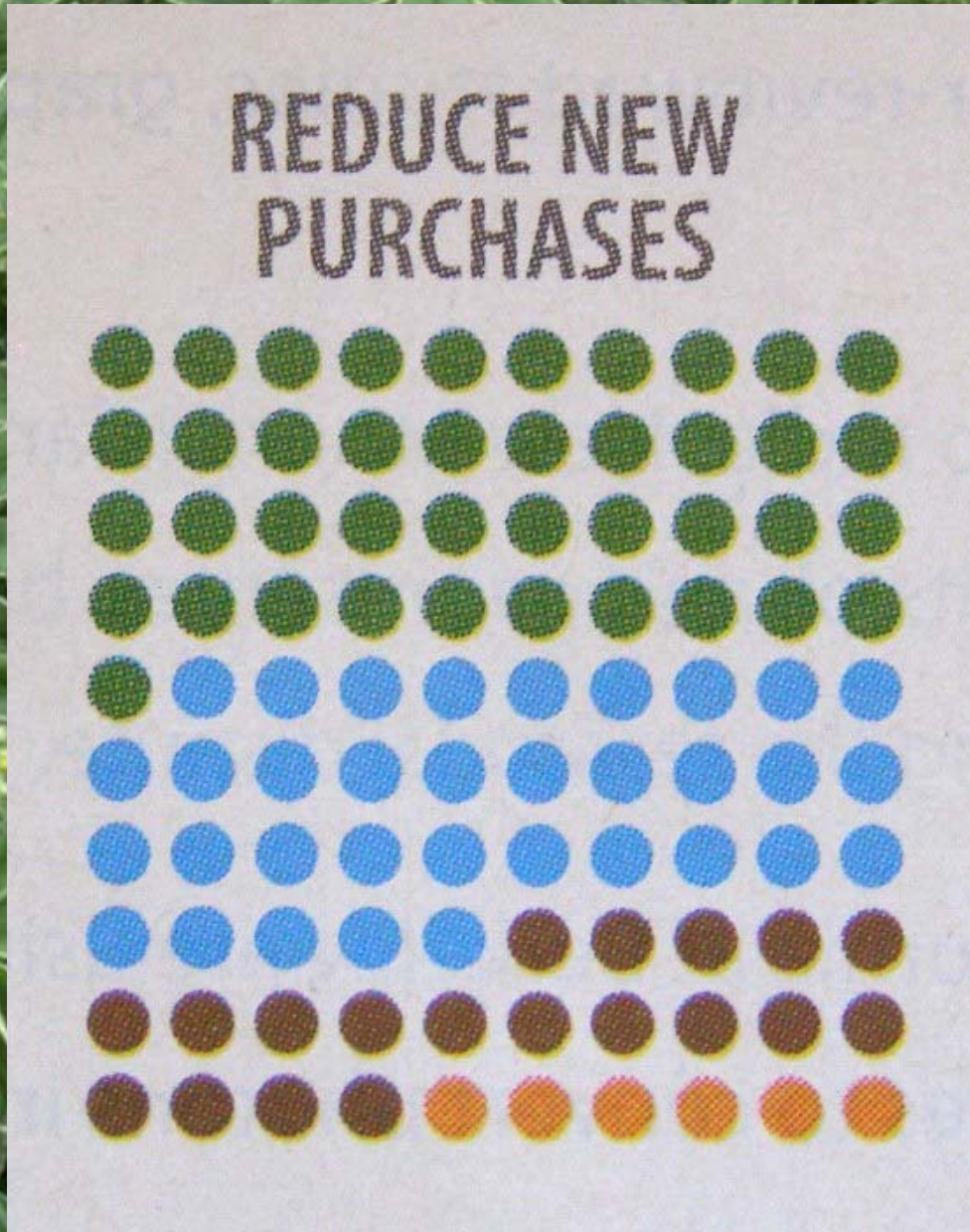
RECYCLE



COMPOST

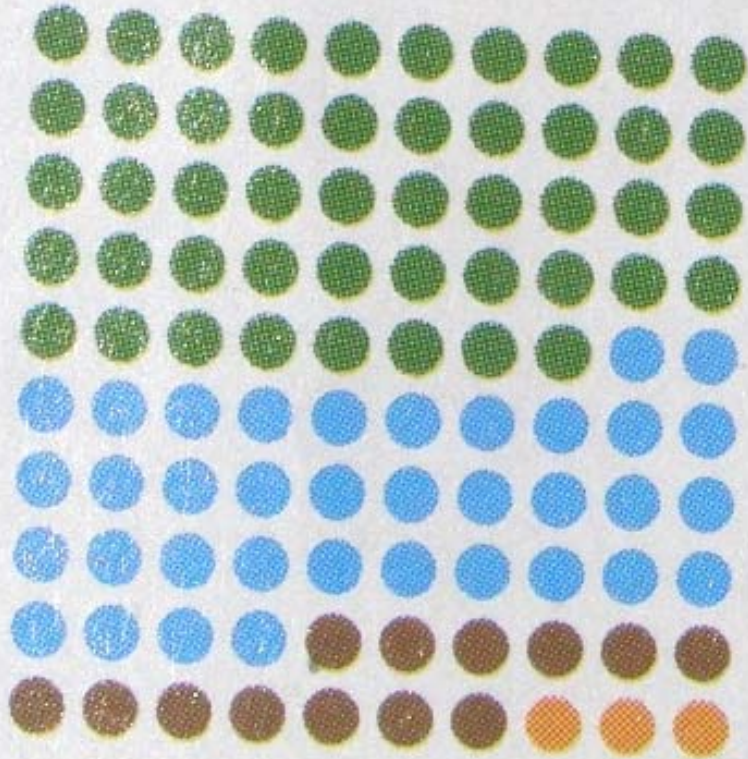


# Good Intentions

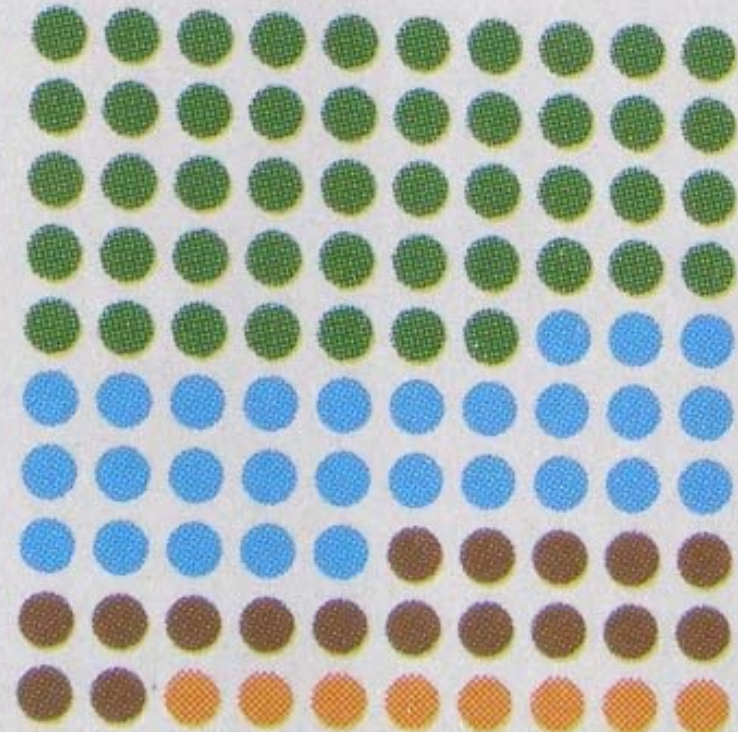


# Good Intentions

CONSERVE WATER

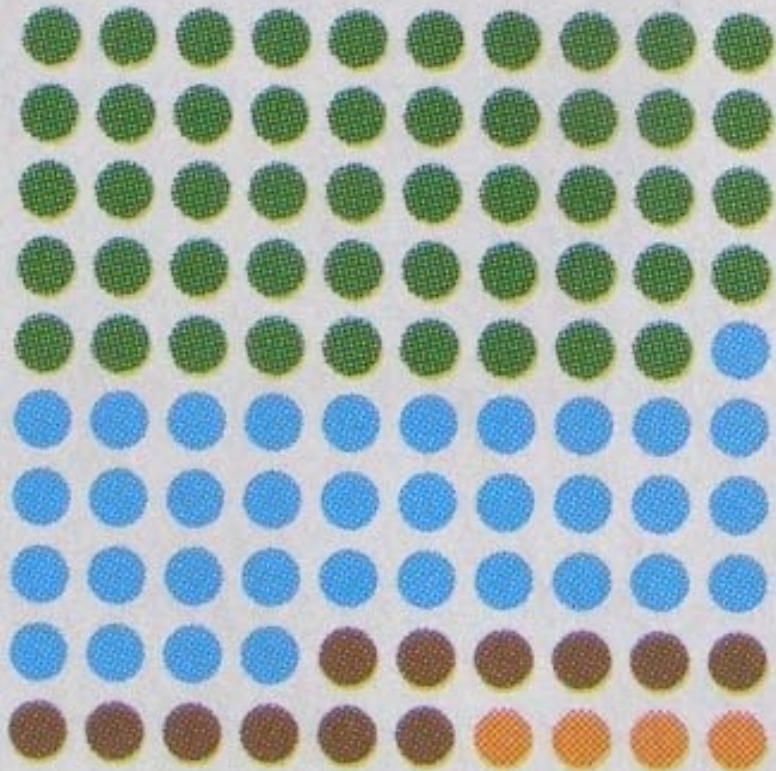


WASH CLOTHES  
IN COLD WATER

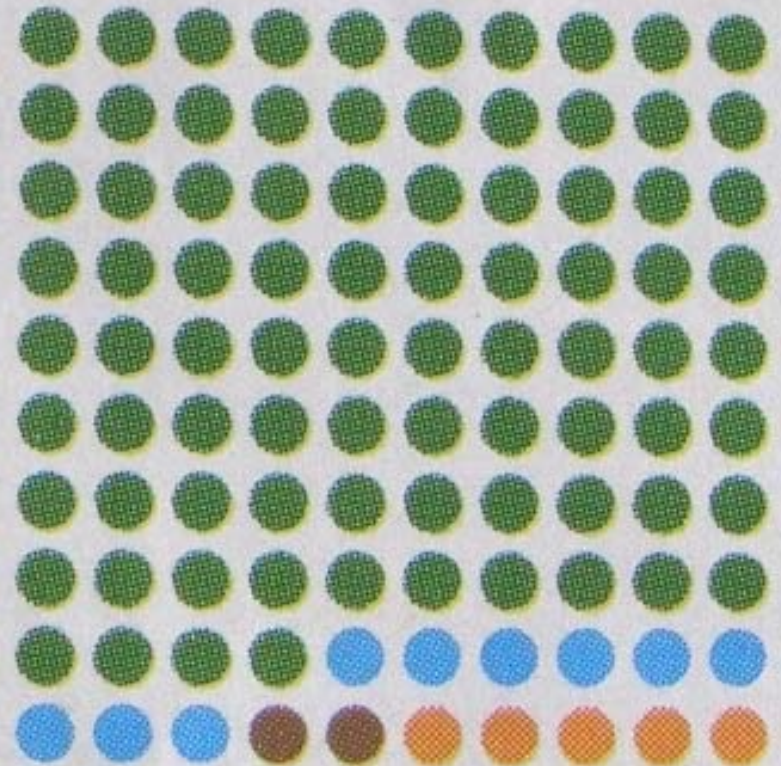


# Good Intentions

RAISE THERMOSTAT  
IN SUMMER



TURN OFF  
UNNEEDED LIGHTS



Isn't it logical/moral to be green?



How capable  
are we of  
thinking things  
out logically ?

# Development of Moral Reasoning

Piaget found 4 stages (ages approx.)

- 0-2 infant
- 2-7 limited understanding of concepts
- 7-12 can understand cause and effect
- 12 + capable of abstract thinking

# Development of Moral Reasoning

- 7-12 can understand concrete ideas only. Example: They can say slavery is bad, but not explain why.
- 12 + capable of problem solving. At this stage, if shown a picture of a slave, they might say, "If our country was founded on equality, how could they allow slavery?"

# Development of Moral Reasoning

Kohlberg and Gilligan did research that suggests that not everyone reaches the 4th stage (where one can use logic to solve abstract problems).

How can those who don't reach this stage understand the complexity of climate change issues?

# What causes global warming?

- All the hundreds of ways we use non-renewable energy?
- Or normal climate cycles?

Why do some people just not see that human activity adds onto the natural climate cycles?

# More Reason and Logic

From a neurologist:

The human brain deals best with "either/or" issues, issues that have two opposite sides.

One has to be trained to understand issues that have either

- Percentages rather than “all or nothing”
- Several causative factors

# Why do we believe ideas?



- We tend to believe the first idea we hear.

# Why do we believe ideas?



Everything's fine!

- We like ideas that come from a good-looking person.

# Why do we believe ideas?



**Meat-free  
Mondays!**

- We like ideas that come from someone we like.

# Why do we believe ideas?



**Trust  
me on  
this!**

- We believe what an authority figure tells us.

# Why do we believe ideas?



• We hear it over and over again: "mere exposure effect".

# Finally: Facts—Bah humbug!



- Science just won't convince most people.
- "I feel that global warming is a hoax."
- Feelings are much more important.

# **What Makes Us Do Things?**

**Four overlapping concepts are going to make the greening of the globe difficult.**

# **Self-Fulfilling Prophecy**

**Defined: a false assumption that becomes true because it was predicted.**

**It becomes true because we subconsciously make it happen.**

# **Definition of the Situation**

If you define a situation as real, it will be real in its consequences.

- “It's too hard!”
- “It will only take 10 minutes.”

# Framing

Similar to an affirmation.

- “It will never work.”
- “I’m smart enough to figure this out.”

# Labeling

Only hippies recycle.

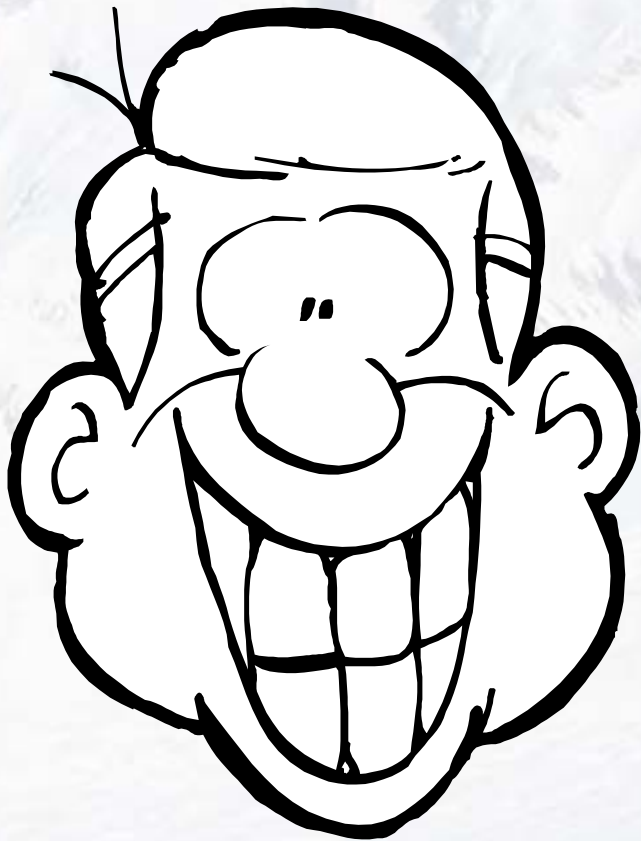
Only liberals recycle.

# Hot Air on Climate Change



- A lot of media personalities are adamantly denying climate change.
- We can't dismiss them as clowns.
- Why do they lie?

# Why do some people lie?



- One person in 25 has no conscience at all.
- They are usually very good actors.
- They pretend to be the nicest people in the world and are usually charismatic.

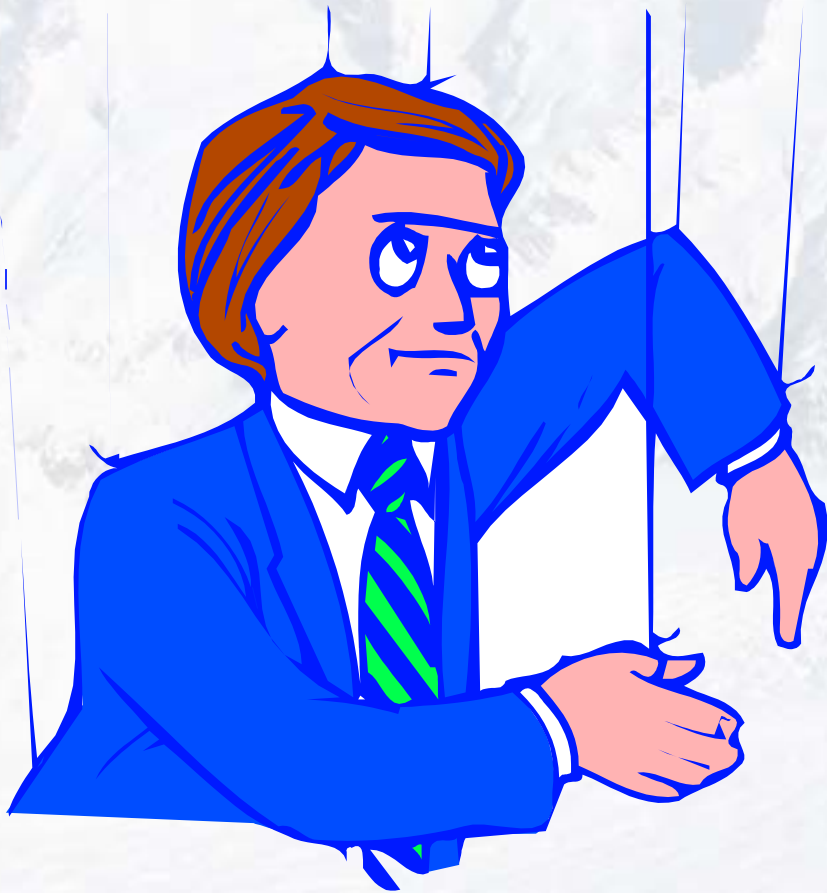
# Why do some people lie?



- They can do or say anything and not care, never feel guilt.
- Enjoy deceiving and controlling people--it makes them feel good.

Source: Dr. Martha Stout, PhD,  
Harvard, Dept. of Psychiatry

# Why do we do things?



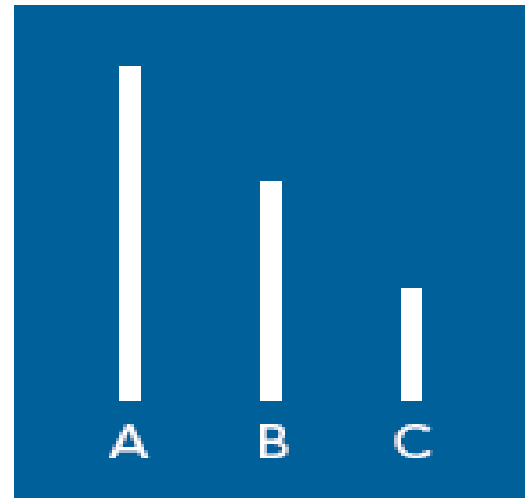
- The myth of the individual or of free will

# Now we are going to play a game!

**FIGURE 5.3** ▶ Asch's Cards



Card 1



Card 2

The cards used by Solomon Asch in his classic experiment on group conformity

Source: Asch 1953:452–453.

- Which line on card 2 is as long on card 1?

# Study design

4 researchers pretending to be subjects

1 real  
subject



**Answers:**

**B**

**B**

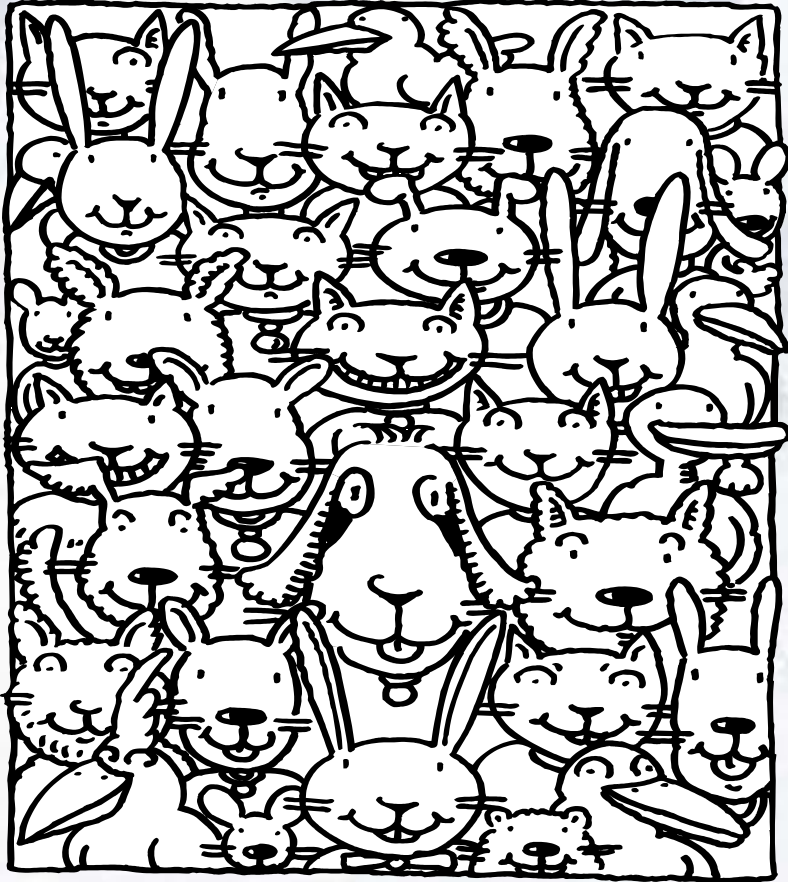
**B**

**B**

**??**

# Conformity and Peer Pressure

## Following the crowd



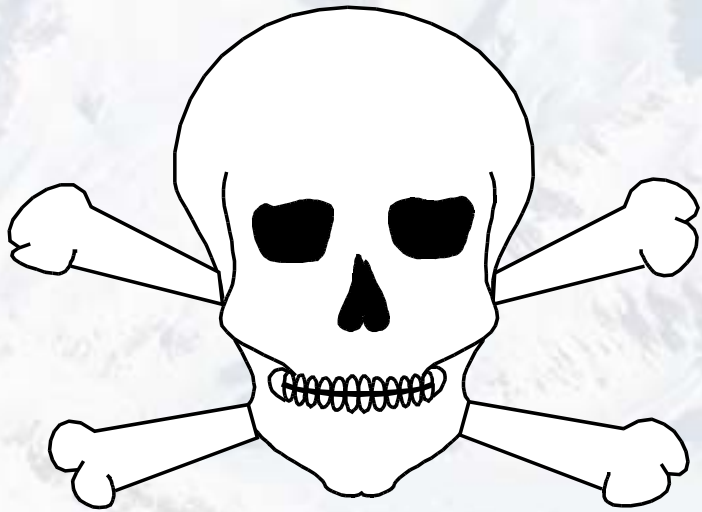
- Asch study results
- 25% always gave the right answer
  - 40% gave in less than 1/2 the time
  - 33% gave in to the group 1/2 the time

# Differential Association



- You become like your friends
- Why not try to influence them towards green?

# Obedience to Authority



**DANGER**

**High Voltage**

Stanley  
Milgram's  
studies

- What would you do?

# Obedience to Authority

Too complex to describe in detail.

Study subjects (about 25-50 years old) were told they were “teachers” who were going to help find out if punishment improved learning. If the “student” (a 45ish man) made a mistake memorizing a list of words, the “teacher” was supposed to give him an electric shock.

# Obedience to Authority

The machine that gave the shocks was labeled 15 to 450 volts with “Danger” written on the highest shock levels.

No real shocks were given. The “learner” would pretend to object at different voltage levels. He might say “ouch” or plead for the experiment to stop or even scream.

# Obedience to Authority

If the “teacher” stopped giving shocks, the researcher (dressed in a gray lab coat so he wouldn't look like a doctor) would calmly say, “The experiment must go on.”

The subject had been paid in advance (\$4.50) and had been told in advance that he could leave at any time.

What did the subjects do?

# Obedience Study Results

- 62% continued to the 450 volts no matter how much the “learner” protested.
- Gender of “teacher” made no difference
- Social class made no difference
- Education made no difference
- Only if there was a second “teacher” who protested, did the percentage go down.

# Obedience Study Results

- The “teachers” were interviewed after the experiment ended and assured that they didn't hurt anyone. The study was explained to them.
- The met with the “learner” again to see that he was alright.
- Later, they were interviewed again and 95% were glad they had participated, because they learned a lot about themselves.

# Obedience Study Results

- How would you act if a media personality or a politician told you that climate change was bunk, greening the world would ruin the economy, etc.?
- Would you bother to recycle, use less gasoline, put on a sweater in the winter instead of turning up the heat?

# Debunking Society's Myths

**Myth:** People in groups are just individuals who make up their own minds about how to think and behave.

**Sociology:** People are profoundly influenced by group pressure, often causing them to make up their minds contrary to objective fact and even to deliberately cause harm to another person.

Source: Andersen and Taylor (no relation), Sociology 101 text book

# Being Green as a Moral Issue

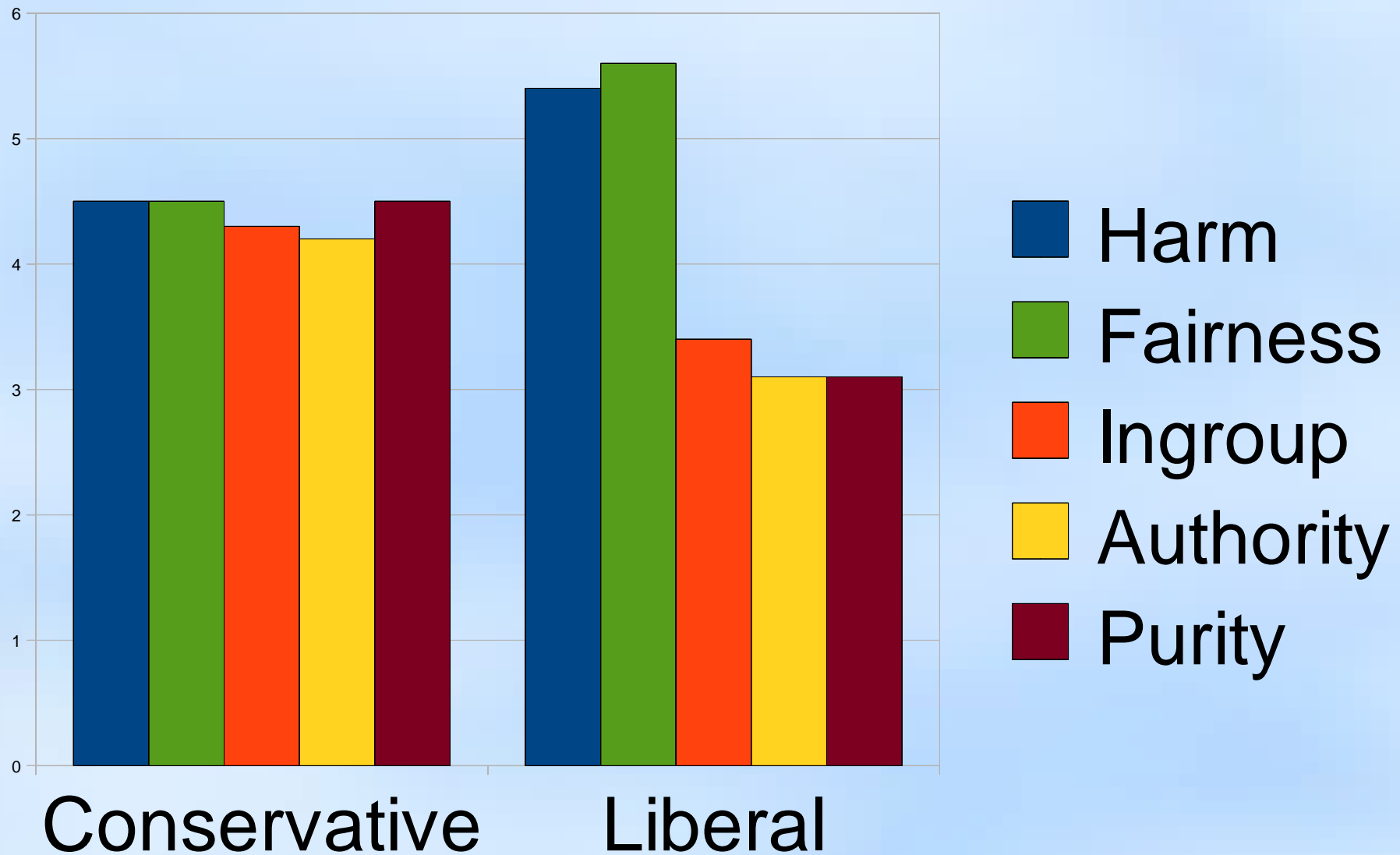
- Researchers in moral psychology and social justice identified 5 foundations for detecting and reacting emotionally to issues
- Why do liberals and conservatives fight? Because they differ in which of the 5 foundations they value.

# Five Foundations of Morality

- harm/welfare/care
- fairness/rights/reciprocity
- ingroup/(unconditional) loyalty
- authority/respect (obedience)
- purity/sanctity

Jonathan Haidt and Jesse Graham: When Morality Opposes Justice.  
*Social Justice Research*, 2007. University of Virginia

# Rating Moral Relevance



# Five Foundations of Morality

The first two foundations have a central axiom that morality is about protecting individuals.

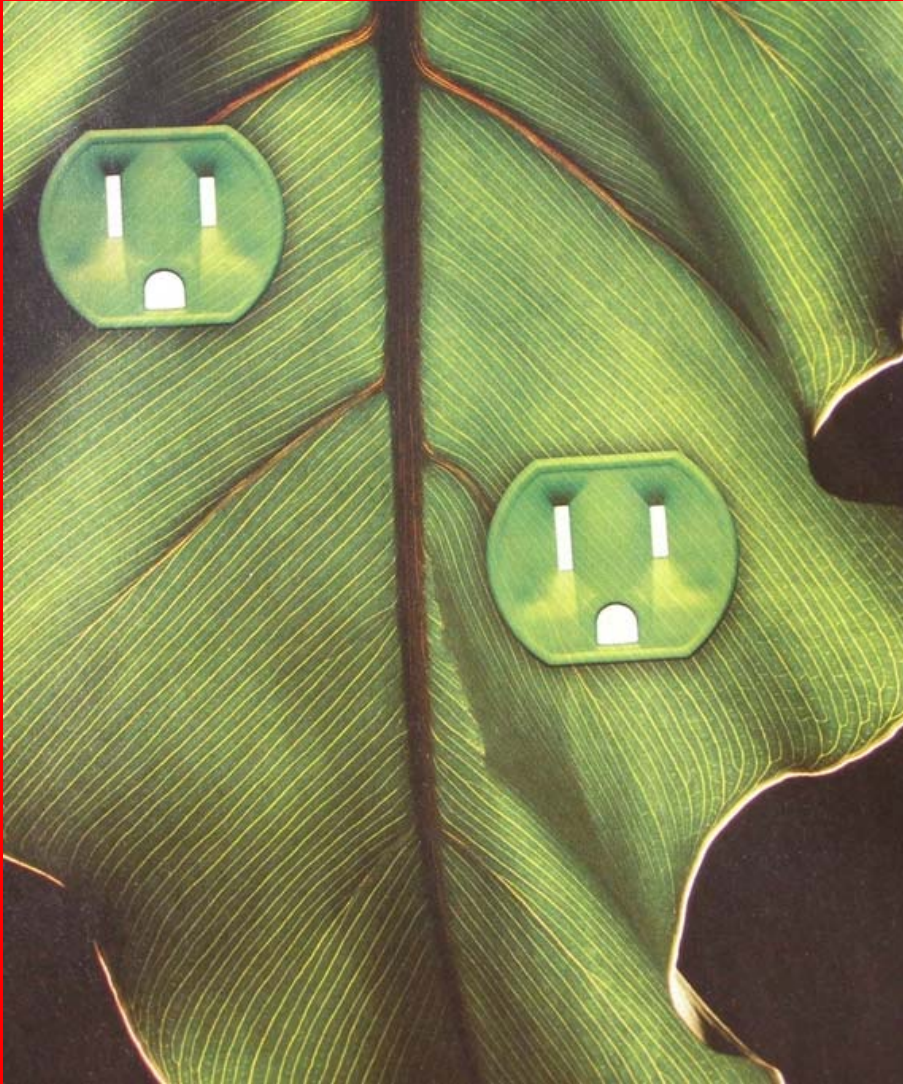
Liberals limit the moral domain to caring and fairness, concluding that conservatives are afraid of change and justifying inequality.

Liberals often don't understand that the last three items on the list are considered moral issues by conservatives. Conservatives consider unconditional loyalty to the group, obedience and avoiding carnal pleasure as virtues that may conflict with individual rights.

What can you do?

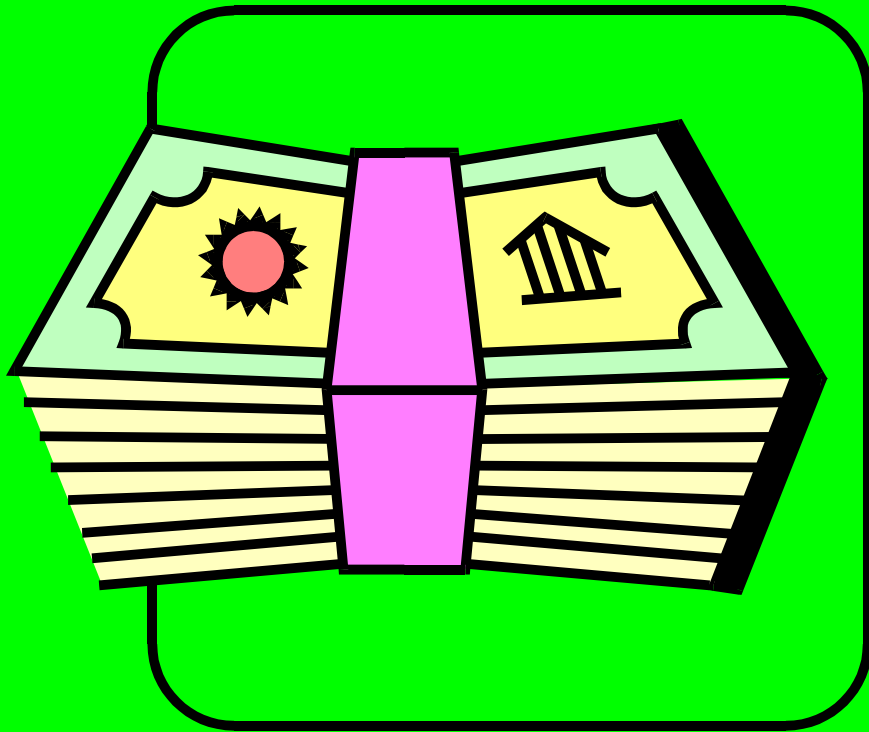
# **Tips for Being Green**

# Get rid of vampires!!!



- The average home has 19 appliances sucking energy even when they are not in use.
- Unplug them!

# Beware of Greenwashing!!!



One study found that 99% of green ads had some false claims or were complete lies

How do I know your company's environmentally friendly?

The wording, the typeface, the pictures of nature in the brochure.



Wilcox

# Strategies

## **Buy used stuff!**

- On Craigslist, ebay, in Goodwill or from garage sales.
- Save energy from manufacturing
- Save money!

# Designing Communities

***Cars are now used for 80 percent of trips less than 1 mile in length.***

*Make it easy for people to walk or ride a bike to places they want to go and provide street lights.*

*It worked in Indian River County, FL.*

# Carbon Offsets

- Planting trees—how many trees would we need to plant to offset the U.S. carbon footprint?
- 1 per person per year?
- 10 per person per year?
- 100 per person per year?
- 1000 per person per year?



# Carbon Offsets

Answer:

- 100 per person per year
- Is your backyard large enough?



# Good at Math--not!

We don't often use the right denominator when we think of the effects our actions have on using up resources.

- The real denominator is your *lifetime*.
- 2 plastic bottles per week add up to 2080 over 20 years.
- 4 plastic bags per week add up to 4160 bags in 20 years.

# The Future



- How long did it take to get from freeing the slaves to the Civil Rights movement?
- And we still are working on that!
- We don't have 140 years to stop climate change.