

American Teens' Knowledge of Climate Change
better understanding on a few important measures:



- 57% of teens understand that global warming is caused mostly by human activities, compared to 50% of adults;
- 77% of teens understand that the greenhouse effect refers to gases in the atmosphere that trap heat, compared to 66% of adults;
- 52% of teens understand that carbon dioxide traps heat from the Earth's surface, compared to 45% of adults;
- 71% of teens understand that carbon dioxide is produced by the burning of fossil₂ fuels, compared to 67% of adults.

The Policy Process: Undue Influence?



McCright & Dunlap (2000, 2003)

Examined media coverage of 5 'contrarians' and 5 prominent climate scientists:

- S. Fred Singer, Robert Balling, Sallie Baliunas, Richard Lindzen, & Patrick Michaels
- Stephen Schneider, F. Sherwood Rowland, Bert Bolin, James Hansen, and Benjamin Santer



Found 1) contrarian counterclaims gained salience, and 2) they successfully reframed climate change science and policy issues with greater uncertainty → greater public confusion

Top 10 Rival Assertions in Climate Contrarian Community



10. humans' role in warming is negligible
9. global warming will be a benefit
8. satellite measurements are poor
7. sunspots are the real culprit
6. models give unrealistic prognoses
5. Sulfur Dioxide is the savior
4. inequality in commitments to reductions ruin all actions
3. there is actually global cooling
2. proposed global warming actions are draconian and bad for the economy
1. action in the face of uncertainty is unwise

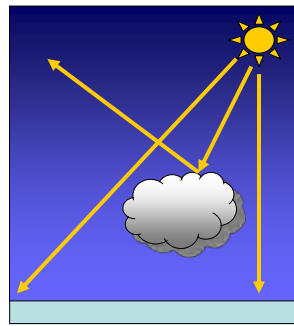


the 'Carbon Club': 'sceptics', 'contrarians'  

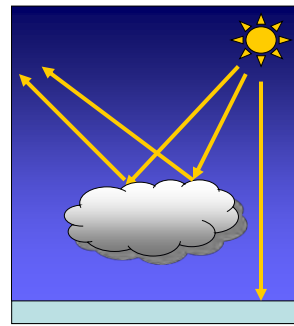


The Iris Effect  

- Lindzen argues that the earth self-regulates via tropical cloud mechanisms to limit the insolation, and hence keep temperatures down



1x CO₂



2 x CO₂

The Iris Effect

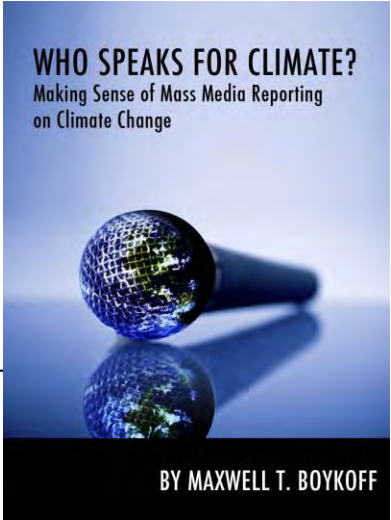


- Theoretically possible but lacks evidence
- Based on mechanisms that models find hard to simulate (and will always find hard to simulate)
- God-of-the-gaps move:
- Because standard theory cannot explain or test everything, it cannot explain anything
- Ignores or downplays the successes of standard theory
- Is evidentially empty

ongoing & formidable challenges/opportunities



- power of new/social media (e.g. democratizing content production; 'noise') – net neutrality
- working within a mix of news & entertainment approaches to influence awareness & engagement via 'expertise' and 'authority'
- mobilizing metaphors & analogies (e.g. hockey stick; bathtub); effective/appropriate 'hooks'
- fostering consistent, inclusive & open engagement with science/public/policy actor communities
- navigating through AND valuing varying ways of knowing: observational/experiential



“All the world’s a stage, and all the men and women merely players. They have their exits and their entrances...”

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