

The Space Scientist as an  
Honest Broker in Space  
Policy



*presentation by Matthew Songer*



# As Scientists how do we...

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- ❖ Present info?
- ❖ Define ourselves?
- ❖ Achieve what is asked of us?
- ❖ Deal with conflict?
- ❖ Remain credible & employed?



# 4 Idealized Roles

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- ❖ Pure Scientist
- ❖ Science Arbiter
- ❖ Issue Advocate
- ❖ Honest Broker of Policy Alternatives



# Pure Scientist

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- ❖ No interest in decision making
- ❖ Provides info he/she views relevant
  - ❖ limiting/subject to bias
- ❖ Takes no responsibility for decision

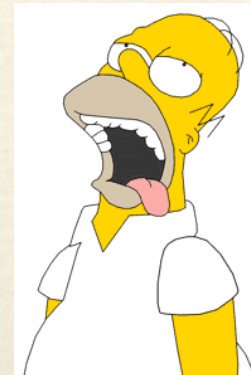


# Science Arbiter

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- ❖ Resource for decision makers
- ❖ Answers factual ?'s that decision makers see relevant
- ❖ Takes neutral stance on decision

- ❖ *Homer sitting next to a "Diet Drug Z-3" jar, with food going past him on a conveyor belt, but he only sits there without touching the food.)*
- ❖ **Male Scientist:** That appetite-suppressant is amazing.
- ❖ **Female Scientist:** Homer, you really have no desire to eat that food?
- ❖ **Homer:** Food? I'm blind!
- ❖ *(He starts running in the room while screaming.)*
- ❖ **Male scientist:** Who's gonna buy a pill that makes you blind?
- ❖ **Female scientist:** We'll let marketing worry about that.





# Issue Advocate

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- ❖ Promotes specific option
- ❖ Emphasizes one choice over another
  - ❖ shows bias
- ❖ Makes assumptions about decision or decision maker
- ❖ Reductive



# Honest Broker of Policy Alternatives

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- ❖ Attempts to provide all information
- ❖ Promotes freedom of choice
- ❖ Lets decision makers choose relevance
- ❖ Expansive
- ❖ “Best achieved through a collection of experts working together with a wide range of views, experiences and knowledge.” p.3



# Stealth Issue Advocate

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- ❖ Knowingly or not being used by politicians, companies, other advocates to support their argument/ larger political debate
- ❖ Calls upon the authority of science
- ❖ Restricts scope of choice



# Views of Democracy & Science

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	Linear Model	Stakeholder Model
Madison	Pure Scientist	Issue Advocate
Schnattschneider	Science Arbiter	Honest Broker



# Defining:

- ❖ Policy- decision/ commitment to particular course of action
- ❖ Politics- bargaining, negotiating, compromise in pursuit of desired ends
- ❖ Science- systematic pursuit of knowledge
- ❖ Decision Making- to reduce uncertainty about the future in a preferred direction
- ❖ Policy Making- the process of managing uncertainty



# Uncertainty

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- ❖ “Fundamental condition of all human life”-  
Keynes
- ❖ The range of possible outcomes associated with  
the policy
- ❖ Complicates and Facilitates achieving consensus
  - ❖ depending on how it is used



# Uncertainty & Science

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- ❖ Science tries to reduce uncertainty
- ❖ Society expects science to eliminate uncertainty
- ❖ “Expectations for science to resolve political conflict almost always fall short because science provides an ‘excess of objectivity’ useful in supporting a broad range of conflicting subjective decisions.” p.62



# Competing Sciences

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- ❖ “Because science is highly valued as a source of reliable information, disputants look to science to help legitimate their interests. In such cases, the scientific experts on each side of the controversy effectively cancel each other out, and the more powerful political or economic interests prevail.”  
p.62

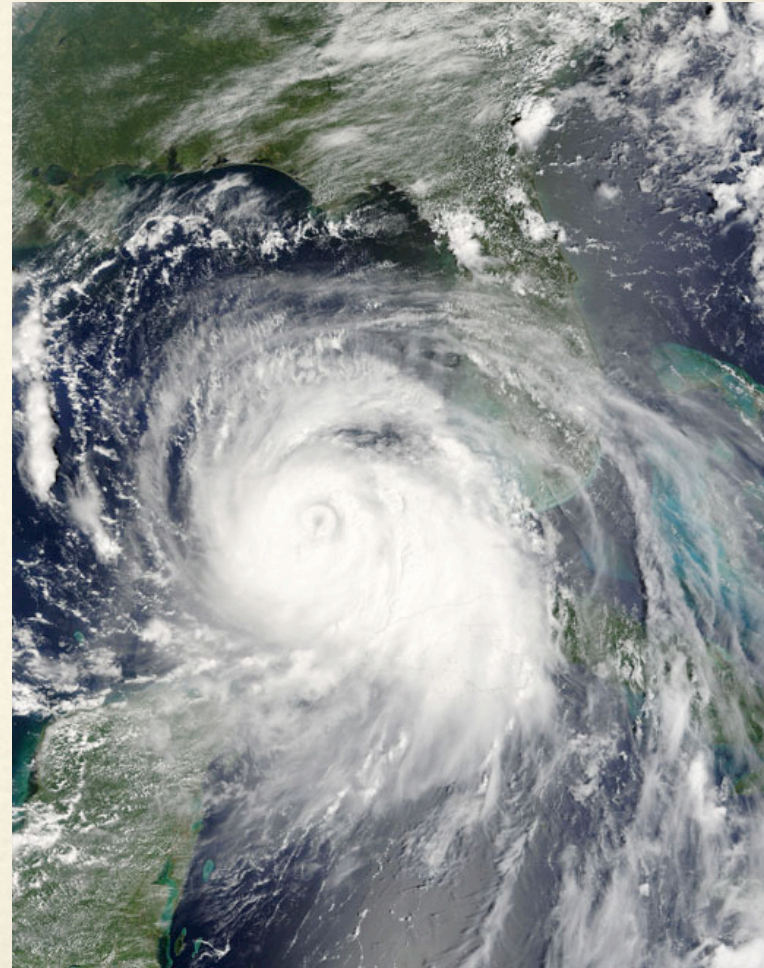




# Can Science Compel Action?

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- ❖ Hurricane Katrina?
- ❖ Global Warming?





# Global Warming

As Professor Dilling mentioned Monday, there is no longer debate whether Global Warming is occurring, the debate now is:

**What to do about it?**





# What to do with Hubble?

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Optimistic vs. Realistic



# Conclusion

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- ❖ Know your role.
- ❖ Pursue knowledge & reduce uncertainty in your future.