

11.373 Science, Politics, and Environmental Policy

**Day 2: THE POLICY PROCESS AND THE POLITICAL DEBATE OVER
“SOUND SCIENCE”**

I. The Political Debate

The first few pieces we read for this week consisted of commentary on how science is used in politics. What are each of the authors arguing? What is each author's bias, or perspective? How does each author construct his/her argument? And what evidence does he/she bring to bear?

Note that the model of politics on which each of the authors' arguments rests is implicitly a rational one, in which if we just got the science right, our policy decisions would make sense.

II. The Rational Model

What would a rational model of policymaking look like?

What role would we expect science play in policymaking if the rational model *did* provide an accurate depiction of reality?

What are some of the problems with the rational model?

III. The Incremental Model

Kingdon presents a popular alternative to the rational model: The incremental model. What is the incremental model?

What's wrong with this model? What doesn't it explain?

IV. The “Powerful Interests” Or “Material Interest” Model

A model that is popular among political scientists is the “material interests” model, which emphasizes the ability of powerful material interests to achieve their aims in politics.

This is a model you'd have to deduce from Stone and from the rhetoric you hear all the time. What would a model that emphasized the importance of conventional means of exerting political power look like?

What role would science play in a material interests model?

Again, this model clearly captures quite a bit about politics. Can you see any problems with this model?

V. The Garbage Can/Problem Definition Model

By combining the chapters you read in Kingdon and Stone, you can develop an alternative model of policymaking that focuses your attention on aspects of the process that are ignored in the models we've talked about so far.

What are the key elements of a problem definition/garbage can model of policymaking, according to John Kingdon?

How does Deborah Stone's work add detail to the garbage-can model?

How do you get power in the polis?

Our goal over the semester will be to figure out how this alternative model of politics and policymaking, which emphasizes the role of ideas and persuasion as well as the somewhat serendipitous nature of the process, helps us to understand the role of science in environmental policymaking.

VII. FOR NEXT WEEK

You can write the essay for next week in one of two ways:

--You can write a conventional essay that draws out very clearly what you regard as the major points of contention between scientists and sociologists of science with respect to what scientific knowledge is, or you can write a dialogue that achieves the same purpose.

--You should think about what seems to you to be a realistic position on what the practice of science is, what scientists do, and what scientific knowledge consists of.

In addition, I'd like the scientists in the class [identify them] to come prepared to talk during the second part of the class about what they do and how they do it.

--You might want to describe some research you're involved in and what it entails. But also, think about how you know what you know in science and why you trust (or don't trust) that knowledge.

The non-scientists should be prepared to challenge the scientists from the perspective of a sociologist.