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Stuart explains that environmental problems/impacts are socially constructed.

What does this mean?

How the problem is perceived, framed, and understood.

What about science? Is science socially constructed and if yes how?

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Does this mean we should be skeptical of scientific findings? If yes, how should we "approach" scientific findings?

YES

Consider the motivation of the scientist, who paid for the research done and who will benefit from the findings

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Diana Stuart  
Environmental Sociology

Chapter 2:

The Social Dimensions of  
Environmental Impacts

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Scientists decide what they want to investigate, the methods to be used, interpretations of the findings, and conclusions to be reached. **Examples?**

Funding sources and vested interests also influence what is studied and how the findings are presented if at all.

Results from environmental studies can have multiple interpretations.

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What are some of the goals of environmental sociologists?"

Using science to identify and understand environmental impacts affecting people

Being a reflexive and observant participant where environmental injustice occurs

To discover contamination sites often found in or near neighborhoods

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What would you guess is meant by "critical Realism?"

Social views (and socialization) shape one's perception of the biophysical (or could we say "real") world.

If the climate change, reported to occur, doesn't appear to be affecting "Jim", maybe Jim decides it mustn't be a serious or "real" issue.

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Another example applying critical realism: How much is too much chemical contamination or global warming, etc?

Stuart (and Hannigan) believe the answer is a social one determined by power, economics, and values.

How might one's values affect one's views of global warming? Which values are likely to come into play—that is, have an effect?

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Individualism?  
Capitalism?  
Materialism?

The findings reported by many climate scientists have been disputed and attacked by fossil fuel companies, others making money from fossil fuels, those dependent on fossil fuels for jobs, and others.

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Those who benefit from fossil fuels deny the findings of the "overzealous" climate scientists declaring the findings unclear

(and besides the scientists are just trying to get an article published, right? so the skeptics say).

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What is public sociology?  
(In the past, referred to as "applied sociology.")

Sociologists conducting research with the specific purpose of helping policy makers to make informed decisions based on facts.

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What is the difference between the terms climate "change" and climate "crisis"?

How are the terms related to the social construction of ideas?

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What is environmental "injustice"  
(which is better known as  
environmental justice)?  
Can you think of an example?

Negative environmental impacts that  
are disproportionately distributed to  
a particular group of people, such as  
those with low-income or a minority  
group.

Placing an asphalt plant near a low-  
income neighborhood.

Why does environmental injustice  
exist? What contributes to it?

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"Path of least resistance" --What  
does this mean?

Racism (e.g., housing)

Economics

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What is  
environmental racism?

When environmental impacts are  
overlooked, accepted, or justified based  
on race.

Can you think of an example?

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The state of Michigan forced the  
residents of Flint Michigan to switch  
their water source to the Flint River  
(which was extremely polluted) in order  
to "help" the City of Flint avoid  
bankruptcy (save \$5 million/yr). Flint was  
predominantly a Black, low-income suburb  
of Detroit.

No attention was provided to California  
migrant workers who were experiencing  
"pesticide drift" and the health problems  
resulting.

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Why are the impacts of global  
warming more harmful to lower-income  
people and people in the Global south?  
Is this environmental injustice?

The infrastructure for these groups is  
not as safe, e.g., buildings are not built  
as well and so offer less resistance to  
hurricanes, tornadoes, etc..

Low-income persons lack the funds to  
repair damage to their ecosystems  
which might affect their livelihood  
such as farming or getting to a job.

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John Hannigan  
Environmental Sociology

Chapter 3:

Social Construction of  
Environmental Issues

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### How to fix the environmental problem:

In order to successfully "undo" the environmental crisis, we need to understand how it can and cannot be considered a crisis by the general population.

We have discussed this to some extent but now will look more closely at how people's opinions get created

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Hannigan notes that:  
"The environmental concern is not constant but fluctuating."

### Why is this?

It varies based on the success of various "claims makers" ranging from scientists to industrialists, journalists, and environmental advocates

In other words, social constructionists shape the importance of the concern.

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Hannigan's general arguments seem to rely on the belief that:

If the general public overwhelmingly believed there is an environmental problem that seriously threatens their safety, then they would support major efforts to fix the environmental problems.

Is it reasonable to make this assumption?

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Assuming the answer is yes, Hannigan believes there are three major focuses that must be considered on the road to convincing the public there is a growing serious problem.

Any guesses what these are (what must people be focused on in order to believe there is a problem)?

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- The claims themselves: complaints about social conditions that are offensive
- The claims-makers: those who construct the claims
- The claims-making process: is it legitimate? what is being addressed, are there other competing ideologies, what style is being used

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Hannigan provides three stages or steps to follow in the process to convince the public of a claim and, in this case, "fix" the environmental problems.

Given what you know so far, what is the first thing that must be done in order to convince the public of a problem?

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1. Assembling the environmental data and clarifying the claim
2. Presenting the information to the public
3. Contesting or spurring debates to gain the attention of the public and make them aware of the environmental problem

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### 1. Assembling the environmental data and clarifying the claim

What needs to be done to make this happen (e.g., trying to convince people of the seriousness of the Pacific ocean garbage patch)?

- Collecting the environmental data that is the basis for the claim and demonstrates it
- Naming the problem/claim
- Clarifying where the data have come from, who collected it, and what their interests are in order to gain credibility

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Who should be involved in providing the environmental data that will be presented as evidence of the problem?

Scientists: geographers, climatologists, biologists

Less formally educated people who discover an environmental issue of concern (e.g., fishermen who noticed that as the acidity of the water went up, more fish were found dead—they reported this to scientists)

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What problems might be found with the environmental data that are assembled?

- Conflicting scientific evidence (including cases where the same scientist collected multiple data and the data conflicted)
- Lack of clarity
- ambiguity

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### 2. Presenting the environmental data to the public

What must be done to get the public to pay attention to and understand the information/claims being presented?

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1. Present data in an understandable way using visual (photos) as well as verbal
2. Legitimize the data for the public, media, government, science (e.g., show why sources are non-biased)
3. Present information to the media
4. recruit effective claims-makers to present the data

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### Who tends to be the claims-makers?

Scientists, political figures, media, public officials (e.g., a city's director of sustainability), educators, representatives of organizations

### What organizations might claims-makers represent?

Examples: scientific associations, other professional organizations, interest groups, public agencies, environmental groups

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How diverse should the claims-makers be (e.g., should they all represent the same group or organization)?

A single claim, such as global warming, may have claims-makers from a variety of organizations ranging from non-profits to the EPA

What can go wrong during this "presentation" stage?

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- Lack of public's understanding
- Attacks from dissenters including attempts to falsify the data presented, question the claims-makers truthfulness
- Low visibility/attention from public
- Declining novelty

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### 3. Contesting the environmental issues, i.e., seeking to draw attention to the issues that have been presented

Once we have developed the claim and we have presented the data, we need to find a way of getting the public to pay attention to the data we have presented.

In other words, once we have presented the data in places like the media, what can we do to get people to start discussing the issues we have presented?

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1. Attempt to command the public's attention; perhaps use dramatic events (e.g., wreck of oil tankers) or polemical books (e.g., "The End of Nature")
2. Emphasize the advantages of solving the environmental issues including profitability (e.g., businesses are attracted to clean/sustainable cities so cities should give this there attention)
3. Highlight moral importance

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4. Use the data to demonstrate the seriousness & importance of the environmental problem
5. Attempt to stimulate media's coverage of problems (maybe even pay to have info displayed).
6. Defend the data being presented
7. Networking, soliciting the support of others, organizations

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8. Use language designed to have a persuasive or impressive effect on its audience (Hannigan refers to this as rhetoric)

What can be done to move from discussing to persuading someone (there are at least three ways)?

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A. To persuade: Present data that supports the claim

How can data be presented in a persuasive way?

1. Definition of the issue
2. Examples people identify with
3. Numeric estimates of the magnitude of the claim (i.e., facts)
4. Understandable and clear

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B. To persuade: Show why the claim warrants immediate action

What might be done or said to achieve this?

1. Describe as emergency (ticking time bomb; will affect many)
2. Link to injustice and innocent victims (a moral issue)
3. Link to the past—show how problem is getting progressively worse

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C. To persuade: Apply an appropriate claims maker "style."

Any idea what this might mean?

- Express the claim in sync with an intended audience (e.g., scientific style, legalistic style, subculture style)
- Link claims to popular issues and causes (e.g., biodiversity)
- Use dramatic verbal and visual imagery

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(ways of contesting)

9. Present draft legislation to policy-makers and encourage them to submit the legislation for approval that will subsequently become law

When preparing draft legislation for the policy-makers, what would you consider?

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- The legislation you are proposing is technically feasible and based on verifiable facts and measurable
- Provide estimated financial impacts of the proposal. What will it cost and what are the financial benefits?

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- Clarify the moral justification but don't get overzealous so that the legislation would alienate some of the policy-makers constituents
- If possible, present the proposed legislation immediately after an attention-getting event (e.g., oil spill); i.e., timing is important
- Draft legislation is written clearly

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What Is the Most Sustainable City in the World?(2020: 7:48)  
[https://www.youtube.com/watch?v=fsWrOLfM\\_uQ](https://www.youtube.com/watch?v=fsWrOLfM_uQ)

5 Most Polluted Cities on Earth  
 (start at 5:00; goes until 11:05—6 minutes total)  
<https://www.youtube.com/watch?v=69jwIw4JeVk>

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What are potential problems when presenting and contesting environmental data?

- Countervailing claims
- Issue fatigue of public
- Cooptation (claims-makers bought out by the other side)

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Innovating to zero | Bill Gates, 2010  
 (18:00/29:32)  
<https://www.youtube.com/watch?v=JaF-fq2Zn7I>

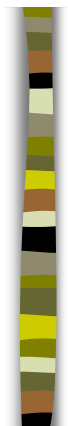
The Future Of Nuclear Power - Holtec SMR 160 (8 min)  
[https://www.youtube.com/results?search\\_query=The+Future+Of+Nuclear+Power+-+Holtec+SMR+160](https://www.youtube.com/results?search_query=The+Future+Of+Nuclear+Power+-+Holtec+SMR+160)

Bill Gates' Terrapower and the Natrium Reactor | Rock Logic | 2022 (start at 1 min - 6 mins)  
<https://www.google.com/search?client=firefox-b-1-e&q=rocklogic+and+terra#fpstate=ive&vid=cid:d6a53627,vid:3mZIPO60zw>

Nuclear micro reactors to hit the market  
<https://www.youtube.com/watch?v=4z8btEIDwBs>

Bill Gates on How we're doing on the path to zero emissions, 2022 (3 min)  
<https://www.youtube.com/watch?v=ipkPcrNsCv8>

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Nuclear micro reactors to hit the market  
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Bill Gates on How we're doing on the path to zero emissions, 2022 (3 min)  
<https://www.youtube.com/watch?v=ipkPcrNsCv8>

Out of Thin Air (Start at 26:30) (13 mins)  
<https://www.youtube.com/watch?v=7ZeJxjvFng>

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The Future Of Nuclear Power - Holtec SMR 160 (8 min)  
[https://www.youtube.com/results?search\\_query=The+Future+Of+Nuclear+Power+-+Holtec+SMR+160](https://www.youtube.com/results?search_query=The+Future+Of+Nuclear+Power+-+Holtec+SMR+160)

Nuclear micro reactors to hit the market (2:40)  
<https://www.youtube.com/watch?v=4z8btEIDwBs>

The tiny reactors carry some of the same challenges as large-scale nuclear, such as how to dispose of radioactive waste and how to make sure they are secure. Supporters say those issues can be managed and the benefits outweigh any risks.

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What Is the Most Sustainable City in the World?(2020: 7:48)

[https://www.youtube.com/watch?v=fsWr0LfM\\_uQ](https://www.youtube.com/watch?v=fsWr0LfM_uQ)

5 Most Polluted Cities on Earth  
(start at 5:00; goes until 11:05—6 minutes total)

<https://www.youtube.com/watch?v=69jwIw4JeVk>

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Why most Americans support the EPA (4:07)  
<https://www.youtube.com/watch?v=G2Nmhcsxf2k>

Sackett v. EPA: How One Couple's Battle Against the Feds Might Protect Your Land (7:38)  
<https://www.youtube.com/watch?v=40iHXAOjJ3U>

The Reasoning and Impact of the Supreme Court's Ruling in Sackett v. EPA (first 3 minutes)  
<https://www.youtube.com/watch?v=UMOSEoUy1pI>

Supreme Court decision weakens EPA authority, scales back scope of Clean Water Act  
<https://www.youtube.com/watch?v=f-ZBkxeCvEO>

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How Obama's EPA Nearly Bankrupted John Duarte's Farm (5:16)  
<https://www.youtube.com/watch?v=qlBX6UoBfx8>

War on the EPA (3:00)  
<https://www.youtube.com/watch?v=JJ1P9TcTGVY>

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"Path of least resistance" --What does this mean?

Racism (e.g., housing)

Economics

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"Risk" is an important concept in environmental sociology. Risk is viewed as being socially constructed.

How would you define "risk" as it is related to the environment? What risks are we taking?

Why is the idea of "risk" important to environmental sociologists?

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"Risk" has been defined as: a situation involving exposure to danger.

People define (socially construct) what is considered high risk. Stuart portrays "risk" as being as much an emotional response as a scientific finding.

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Do you agree that risk is socially constructed? If you think so, how can this be and by whom?

Businesses and interest groups interpret scientific findings and the subsequent risks differently.

Not surprisingly, interpretations have been found to favor the organization doing the interpreting.

Social, political, and economic forces define the level of risk, i.e., how "risky" something is.

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Stuart, and also Ulrich Beck who wrote *Risk Society*, argue that with the advent of emerging new technologies, society is taking more risks than ever.

Do you agree?  
Can you think of an example?

Toxic chemicals found in everyday products (e.g., shampoos, cleaning supplies, electronics) are often not allowed in Europe but are in the U.S. These may be causing birth defects, hormonal disruption, neurological damage, etc.

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What factors cause a person to feel s/he is at risk (i.e., in danger)?

- Factors that we know little about and are difficult to observe are considered more risky
- Activities that are perceived to happen at any time as opposed to far in the future or over a very long time period are considered more risky
- Factors that we have little control over are considered more risky
- Factors that point to danger

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Stuart summarizes Hannigan's steps that must be accomplished for the public to define environmental conditions as highly risky such as a climate "crisis".

What steps are these (We've covered these in Hannigan's book)?

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1. Assembling the scientific evidence
2. Making the evidence understandable
3. Presenting or "framing" evidence to/for the public in an understandable way via media, public figures, etc.
4. "Contesting" or having public debates that gains the public's attention

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