

College Writing Seminar (INTD100): Week 6 Notes

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Summary

Week 6: *The Laboratory Report II:* The thread

1. Exercises: Identify breaks in the thread of logic.
2. Exercises: Write passages that preserve the thread, transitions and mini-outlines.
3. Homework/Asynchronous: Rearrange a passage to patch the thread together
4. Work on final essay

Exploration topic: climate science and climate skepticism.

Writing about a DIY Experiment

Writing about a DIY Experiment

You are in your house anyways, so why not experiment? Write down the process for completing an experiment in your house. Examples are listed below. Research how to accomplish your chosen project. Write down a cohesive set of instructions in passive voice with technically accurate language. **Exchange documents with a partner and attempt to perform the procedure they outline.**

1. Create a compass with a needle, magnetizing magnet, cork, and bowl of water
2. Measure the acceleration of gravity from the period of a pendulum
3. Create a “homopolar” motor with a copper wire and a magnet
4. Create a lemon battery
5. Measure the acceleration of gravity by timing the fall of an object

The Thread of Logic

The Thread of Logic

Consider the following two outlines:

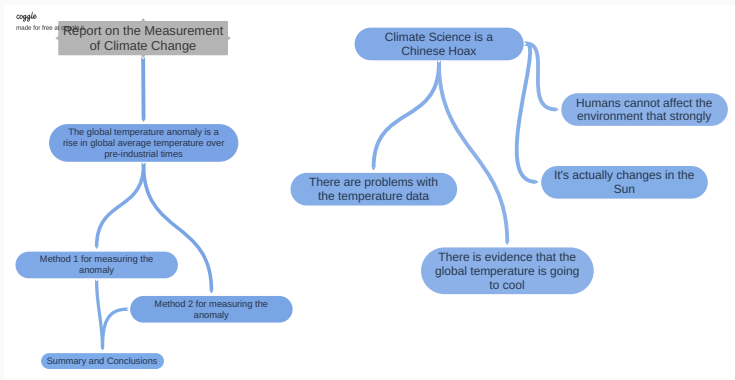


Figure 1: Two examples of mind maps that have different threads. (Left) a linear thread. (Right) a more amorphous thread.

The Thread of Logic

Several protips for preserving the thread of logic:

1. Provide a *mini-outline*. (next slide).
2. Remember that your reader likely thinks *linearly*. Topic A, *then*, topic B, *then* topic C ...
3. Use transition sentences.

Mini-outlines are useful for establishing the thread.

1. Go to Moodle and download the PDF file
“AntennaSimulationPaper”
2. Read the first two pages, including the abstract
3. Where is the mini-outline?

The Thread of Logic

1. Numerical simulation applied to electromagnetic scattering problems represents a very broad and multifaceted field.
2. In this fast-growing background, the use and the development of numerical software for electromagnetic simulation follow two main directions.
3. However, in both situations, the knowledge of the existing open-source possibilities is often scarce.
4. Moreover, it is very rare that more than one academic institution work together for the practical development of open-source simulation packages ...
5. We only believe that a proper knowledge of the existing open-source alternatives can be very useful for researchers working in this field.

The Thread of Logic

1. We only believe that a proper knowledge of the existing open-source alternatives can be very useful for researchers working in this field.
2. The goal of the present paper is to review open-source software in electromagnetic scattering simulation, and in particular to identify possible open-source programs that can be fruitfully used in the design of antennas and its workflow.

Review of Asynchronous Activity

Review of Asynchronous Activity

In breakout sessions, answer the following questions together:

1. (True or false): The conclusion of the literature review regarding climate science is that 97.1 percent of peer-reviewed scientific results agree that anthropogenic climate change is real. *How would you modify or clarify this statement?*
2. Describe how the authors collected all the papers they analyzed. How many papers made it in to the study?
3. Any scientific study or analysis is subject to potential statistical errors or biases. How was this literature review constructed so as to mitigate potential biases or errors?

Topic Sentences, Transitions

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This week's asynchronous activity involved topic sentences. Hopefully, reading the topic sentences gave you a clue as to the thread of the article.

1. Take turns sharing your map of the climate science literature review in breakout discussions (4 people)
2. Having seen the maps of others, how can you modify yours to be more *linear*?
3. Recall: linear in this context means that the next idea follows from the current one.

The Thread of Logic

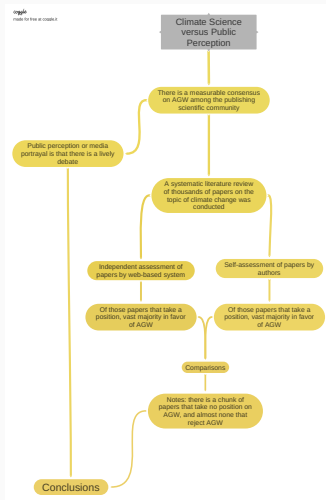


Figure 2: An example of a linear map of the thread from the climate science literature review.

Conclusion

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Thank You

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Figure 3: We are grateful to you and Whittier College. Thank you for your hard work this Module, and hang tough. We will get through this together.

Course Summary

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1. Week 1: Concise Writing 1

- Shorten and strengthen writing
- Starting from an organized point of view, being alone with an idea

2. Week 2: Concise Writing 2

- Summarizing for a general audience
- Collaborative writing

3. Week 3: Technical Description 1

- Spatial and temporal perspective (remember: recipes)

4. Week 4: Technical Description 2

- Selecting tense and person
- Passive voice

1. Week 5: The Lab Report 1

- Abstracts
- Figures and Tables
- Citations
- Captions

2. Week 6: The Lab Report 2

- The thread
- Mini-outlines, topic sentences

Use the Eraser

Use the Eraser

[Edit this paragraph to be shorter.](#) We went on an expedition to measure the thickness of Antarctic ice to test if has been melting due to climate change faster than expected relative to the prior year. We mounted a radar transmitter and receiver on the wings of a small turbo-prop aircraft nd flew from the Antarctic Peninsula out over the Ronne Ice Shelf while activating the radar many times per second. The radio would travel from the plane, down through the ice, reflecting from either the ground or the ocean, and back up to the plane. From things like the time of the echo and the signal power of the echo we received on the plane, the thickness and temperature of the ice we deduced. It turns out that the ice thickness had decreased on average over the peninsula, but increased across the shelf relative to what we found last year.

Hierarchy of Detail

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Rearrange the sentences to reflect a proper hierarchy of detail. The byproducts of the reactor were stored at the bottom of a tank of water 10 meters deep. The nuclear reactor produces radioactive byproducts that must be stored safely. High-energy beta radiation (for example) can escape from radioactive nuclear material and pass into the water surrounding it. An effect known as *Cherenkov radiation* can be observed shining from the tanks holding the byproducts. The water protects human beings near the byproducts from the radiation. The beta particles (really electrons) decelerate in the water and radiate light, known as Cherenkov light.

Using Analogies

Using Analogies

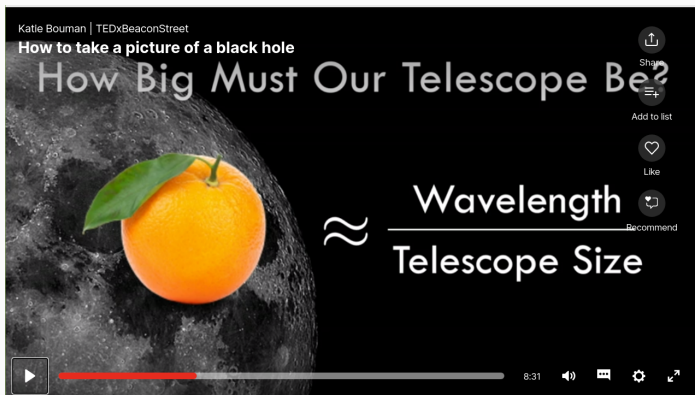


Figure 4: We saw this analogy in the unit based on taking a picture of a black hole.