Writing Workshop

Day 1

Ranking Articles:

1. Losses- easier to read and understand, interesing topic, a lot of new information

2. Ten Rules for Twitter-easy to read and follow, light topic that I already mostly understood, not as interesting

3. Ecological fallacy-wordy and hard to follow at times, very interesting topic with plenty of evidence to back its claims

Identifying Characters in Example Papers:

- Twitter- twitter, active users, researchers, you, this article, we

- Fallacy- epidemiology texts, the flaws, the problems, a logical fallacy, the consequences, Robinson, many papers

- Losses- insurance industry, federal agencies, the US, collection of loss data, US agencies, NWS, FEMA, existing loss data

Identifying Characters in Quotes:

1. "The use of the ecological fallacy to explain the discrepancy between individual and ecological correlations may have unintended consequences." Schwartz, 1994
- characters= implied: researchers, the use of.., the discrepancy?
- "Researchers may face unitended consuequences when they use ecologocial fallacy to distinguish between individual and ecological correlations."

2. "For these reasons, using Twitter appropriately can be more than just a social media activity; it can be a real career incubator in which researchers can develop their professional circles, launch new research projects and get helped by the community at various stages of the projects." Cheplygina et al., 2020
- characters= the use of twitter, researchers
- "For these reasons, researchers can use twitter for more than just social media activity. Researchers can use Twitter as a career incubator to develop their professional circles, launch new research projects and get helped by the community at various stages of the projects."

Identifying Characters in Manuscript and Rewriting:

"Technological advancements within storm recording such as the development of radar and larger networks of monitors have increased our ability to detect extreme weather events as they happen. For example, over

time, forecasters and storm spotters have learned how to recognize key weather patterns and structures that make it more likely for a tornado to form. The development and advancement of doppler radar and dual-polarization radar technology has also increased our ability to collect and use data to detect tornado events [@tornadodetection]. One study states that"the number of tornadoes reported in the United States has doubled from about 600 per year in the 1950s to around 1200 in the 2000s"[@verbout2006evolution]. This may be influenced by factors other than meteorological changes."

- characters= technological advancements, the development, out, forecastors and storm spotters, the development and advancement, the number of.., this

Technological advancements within storm recording such as the development of radar and larger networks of monitors have increased our ability to detect extreme weather events as they happen.

1. Technological advancements within storm recording such as the development of radar and larger networks of monitors have led to an increased ability for the detection of extreme weather events as they happen.
2. Forecasters and storm spotters have developed advanced radar and larger networks of monitors that detect extreme weather events much more effectively.

Problematic sentences:

Technological advancements within storm recording such as the development of radar and larger networks of monitors have increased our ability to detect extreme weather events as they happen.

The development and advancement of doppler radar and dual-polarization radar technology has also increased our ability to collect and use data to detect tornado events [@tornadodetection].

One study states that "the number of tornadoes reported in the United States has doubled from about 600 per year in the 1950s to around 1200 in the 2000s"[@verbout2006evolution].

Identify and replace nominalizations

"We begin with a description of the validity framework and the definition of key terms." Schwartz, 1994

- "First, we describe the validity framework and define key terms."

Manuscript:

All of these different event types occured as a result of one large storm.
* Edited: One large storm resulted in several event types.

There is also limited information on event severity or distinction between events within the database [@luh2015vulnerability].
* Edited: The database lacks information regarding event severity or distinction between events.

Drought hazards are apparently notoriously underreported because there is a lack of physical damage and it is hard to quantify spatial and monetary losses [@gall2009losses].
* Edited: Droughts produce limited physical damage causing databbases to notoriously underreport their spatial and monetary losses.

Editing sentences in a paragraph:

"Natural hazard losses exhibit an upward trend over time. This is a function of increases in wealth and population but is also attributed to better loss accounting in recent years. The escalating pattern of hazard losses is therefore partially an artifact of advances in reporting losses, but how much or how little this effect contributes to the skyrocketing losses in comparison to effects of population growth and increasing wealth in high hazard areas is unclear." Gall et al., 2009

Edited: Natural hazard losses generally exhibit an upward trend over time because of increases in wealth and population. However, in recent years, better loss accounting may also be contributing to this rise. In high hazard areas, it is unclear which factors play a larger role in the skyrocketing rise of losses.

Day 2

Summarize your manuscript

The Storm Events database collects information from the National Weather Service regarding weather events that occur in the United States. Many researchers use this databse to conduct studies on how weather events impact human life, property and crop damage, and commerce. Though the database is quite extensive, several concerns and biases may be present in its data.

It is important to understand these biases so that studies using this dataset can accurately portray trends and changes caused by weather events.

Identify key Introduction components in an example paper

Twitter:
1. What is the larger problem that the paper will be tackling?
    - Arguing for the use of twitter in the science community
2. What is the relevant context for that problem? -The increasing popularity of social media (twitter in particular-320 mil active users) and the potential for the use of twitter to increase collaboration and spread information
3. What are the key characters?
    - Twitter and its users, researchers, the science community in general

4. What background information is given to help the reader understand the specific work in the paper?
    - It describes what twitter is and how it is used in general and in the science community
    - It gives some background on the authors of the paper
5. What is the "challenge" ("the specific hypotheses/questions/goals of the current work")?
    - educating researchers on how to use twitter to their benefit within science

Ecological Fallacy:
1. What is the larger problem that the paper will be tackling?
    - defining and examining ecological fallacy as a general validity probblem
2. What is the relevant context for that problem?
    - epidemiology's wide use of ecological studies
    - current definition of ecological fallacy and the problems that definition causes
3. What are the key characters?
    - epidemiology, epidemiologists, Robinson, the use of ecological fallacy as a concept
4. What background information is given to help the reader understand the specific work in the paper?
    - epidemiology's use of ecological studies
    - previous research and papers that have tried to define ecological fallacy
    - examples of previous consequneces of ecological fallacy
5. What is the "challenge" ("the specific hypotheses/questions/goals of the current work")?
    - redefining ecological fallacy as a general validity issue
    - showing how this new definition will dissect ecological fallacy into three distinct fallacy notions