Logic and argumentation techniques

Rhetoric
What happens during a dispute?
Logical analysis
Dialectical analysis
Rhetorical analysis
<table>
<thead>
<tr>
<th>Focus</th>
<th>Concepts</th>
<th>Evaluative criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dialectics</strong></td>
<td>Dialogue types, roles, speech acts</td>
<td>Cooperation</td>
</tr>
<tr>
<td><strong>Logic</strong></td>
<td>Syntactic relations, argument schemes</td>
<td>Validity, strength</td>
</tr>
<tr>
<td><strong>Rhetoric</strong></td>
<td>Ethos, pathos, topics</td>
<td>Persuasiveness, effectiveness</td>
</tr>
</tbody>
</table>
Imagine that the U.S. is preparing for the outbreak of an unusual Asian disease, which is expected to kill 600 people. Two alternative programs to combat the disease have been proposed. Assume the exact scientific estimate of the consequences of the programs are as follows:

- Program A: "200 people will be saved"
- Program B: "There is a 1/3 probability that 600 people will be saved, and a 2/3 probability that no people will be saved"

Which would you chose? 72% of participants preferred program A (the remainder, 28%, opting for program B).
Framing - Kahneman

- Program C: "400 people will die"
- Program D: „There is a 1/3 probability that nobody will die, and a 2/3 probability that 600 people will die"

Now, which would you chose? 78% preferred program D, with the remaining 22% opting for program C.

Programs A and C are identical, as are programs B and D. The change in the decision frame between the two groups of participants produced a preference reversal: when the programs were presented in terms of lives saved, the participants preferred the secure program, A (= C). When the programs were presented in terms of expected deaths, participants chose the gamble D (= B).
Can the language used in eyewitness testimony alter memory?

“About how fast were the cars going when they (smashed / collided / bumped / hit / contacted) each other?”
The estimated speed was affected by the verb used. The verb implied information about the speed, which systematically affected the participants’ memory of the accident.
What are the causes of poverty?

Thematic vs. episodic framing
Rhetoric, the art of persuasion

Appeals are the first classification of rhetorical strategy.

**Logos**: arguments

*Make sure speech is well organized!*

**Ethos**: ethics and credibility

*Make sure that you are a credible speaker!*

**Pathos**: emotions

*Make the audience feel what you are talking about!*
Rhetorical analysis

• **Who?**
  • How does the speaker establish his credibility (ethos)? Do they seem informed / competent / objective / confident / just etc.?

• **When and where?**
  • In what circumstances does the speaker perform? What happened before the speech?

• **What is the aim of the speaker?**
  • Is he attacking a standpoint or defending one? Is he praising or criticizing? Educating, entertaining etc.?
Rhetorical analysis

- Who is the audience?
  - Is it a small group of people who share the same interests? Or is it composed of different people? What kind of values of the audience does the speaker refer to in the speech?

- What does the speaker say?
  - What are the speaker’s most important arguments? Does the speaker appeal to reason or rather to emotions?
Rhetorical analysis

- What devices are the speaker employing?
  - What figures of speech does the speaker use? Does the speaker repeat himself/herself? What are the turns of expression?

- How does the speaker perform the speech?
  - What is the tone of the speech?

- What is the result?
  - Did the speaker manage to persuade the audience?