Significant Omitted Information
• Incomplete picture due to the omission of significant information that shapes the reasoning
• Incomplete Reasoning
  – Limitation imposed by time and space
  – Limited attention span
  – Incomplete knowledge possessed by the author
  – Attempt to deceive
  – Different values, beliefs, and attitudes
Example

Providing a way to check the integrity of information transmitted over or stored in an unreliable medium is a prime necessity in the world of open computing and communications.

Request for Comments series written by IBM, UCSD personnel
Limitation

• Time and space
Example

"As a nurse, frequent hand washing made my skin extremely dry. ... Lotion has worked better than any other lotion that I have ever used. It is a wonderful product!"
Limitation

- Attention span
- Attempt to deceive
• A recent study conducted by researchers found that memory test scores were significantly improved with a daily intake of 800 mcg of folic acid.
Limitation

• Incomplete knowledge possessed by the author
Why ask?

- Obtain missing information based on what we have learned
- Provide practices
- Prevent from forming an inappropriate opinion
A sufficient supply of clean oil will prevent wearing of the engine. Oil viscosity increases as the temperature drops. Therefore lighter-grade oils allow more rapid cranking by the engine and easier starting by the starter.
Obtain missing information

• It is important to change the oil of the engine periodically
• Use lower-grade oils in winter
Example

• Heart disease is the No. 1 killer of women in this country. It is more than the next six causes of death combined. For those who have got internal fat as well as other risk factors like high blood pressure, unhealthy cholesterol levels, diabetes or high blood sugar, the odds that they will have heart problems are even higher.
Asking the question

• Prevent from forming an opinion too soon
  – Cause the reader to do more research
What questions to ask?

1. Common Counterarguments
2. Missing Definition
3. Missing value preferences or perspective
4. Origins of "facts"
5. Details of procedure used for getting facts
6. Alternate techniques for gathering/organizing the data
7. Missing or incomplete data
8. Omitted effects
9. Context of quotes and testimonials
10. Benefits accruing to the author from convincing others to follow his advice.
Researchers has found that an extract from an exotic type of seaweed could be used to buff up the fiber content of high-fat foods like baked goods and burgers.

The seaweed can be processed in a lab to produce alginate, a tasteless and odorless carbohydrate compound which is then used to replace the fat in the burgers.

The result will be a burger that would not taste any different but it will be much healthier.
• Omitted effects
• Benefits accruing to the author
• After reading about a case study of drug therapy, I decided it was foolish for me to deny myself the medicines that are available. I realized that diet and exercise alone aren't enough. "Regular exercise can prevent muscle atrophy but even with a healthy diet the inflammatory process that destroy the nervous system cannot be stopped. I began taking ...
• Missing or incomplete data

• Omitted effects

• Benefits accruing to the author
Potential Negative View

- Which segments of society do not benefit
- Affect the distribution of power
- Influence the extent of democracy
- Affect how we view the world
- Affects our health
- Influence our relationships with others
- Slow, cumulative impact
• Conservatives tax-allowance will give $1,200 per child, per year directly to families with young children so they can spend the money as they choose

– Which segments of society do not benefit
• Although the attempts to amend the Constitution according to the terms of the Meech Lake and Charlottetown Accords were not successful, there were seven successful amendments to the Constitution since the adoption of the amending formula in 1982.

– Influence of the extent of democracy
– Affect the relationships with one another