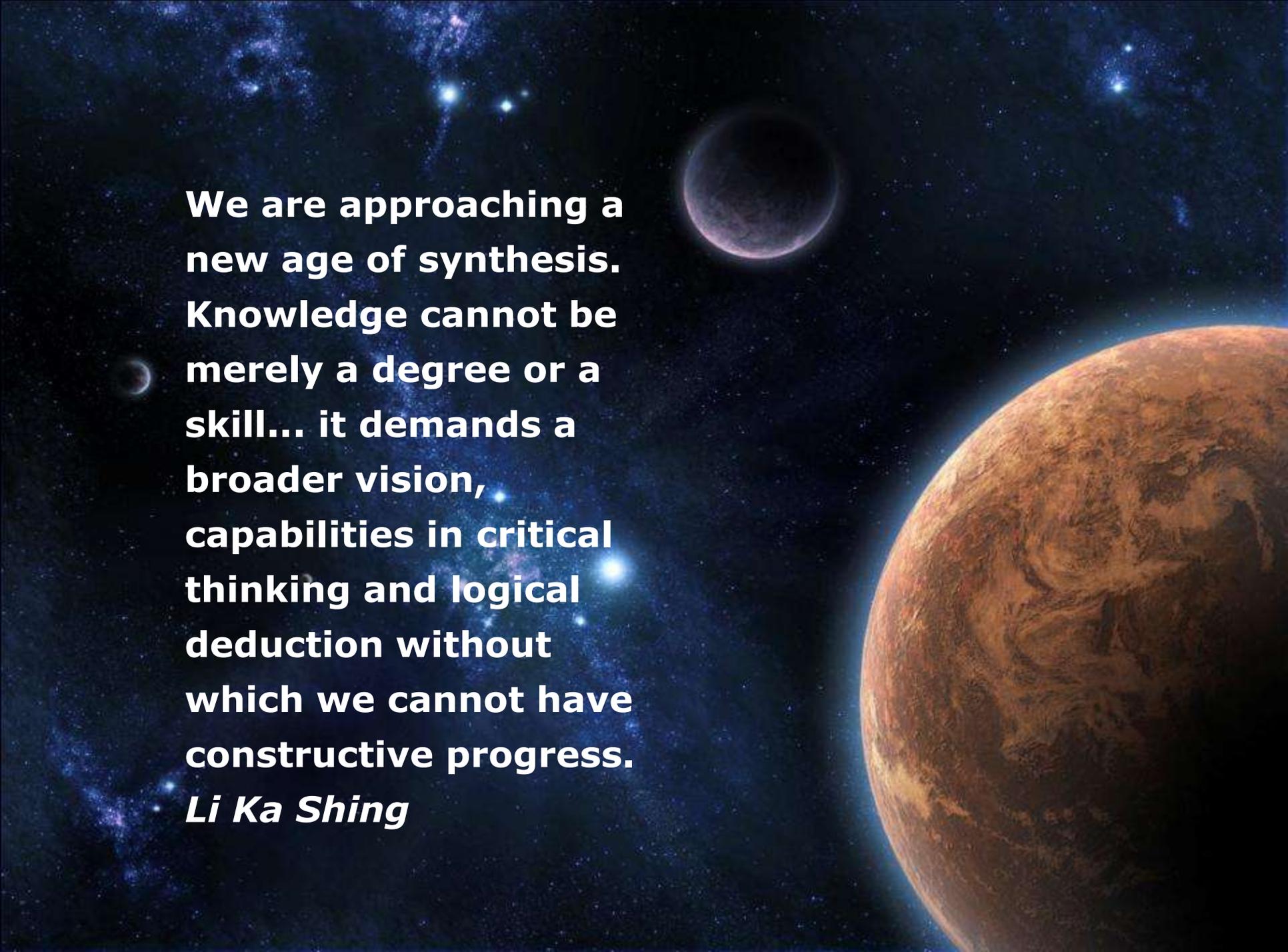


**Using Critical Thinking to
Analyze Arguments
Dr. David P. Byers
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**We are approaching a
new age of synthesis.
Knowledge cannot be
merely a degree or a
skill... it demands a
broader vision,
capabilities in critical
thinking and logical
deduction without
which we cannot have
constructive progress.**

Li Ka Shing

Our brains are full of knowledge, beliefs, and assumptions accumulated through our experiences in life.

According to Brookfield, when we are presented with new information we take one of three actions:

**New
information**

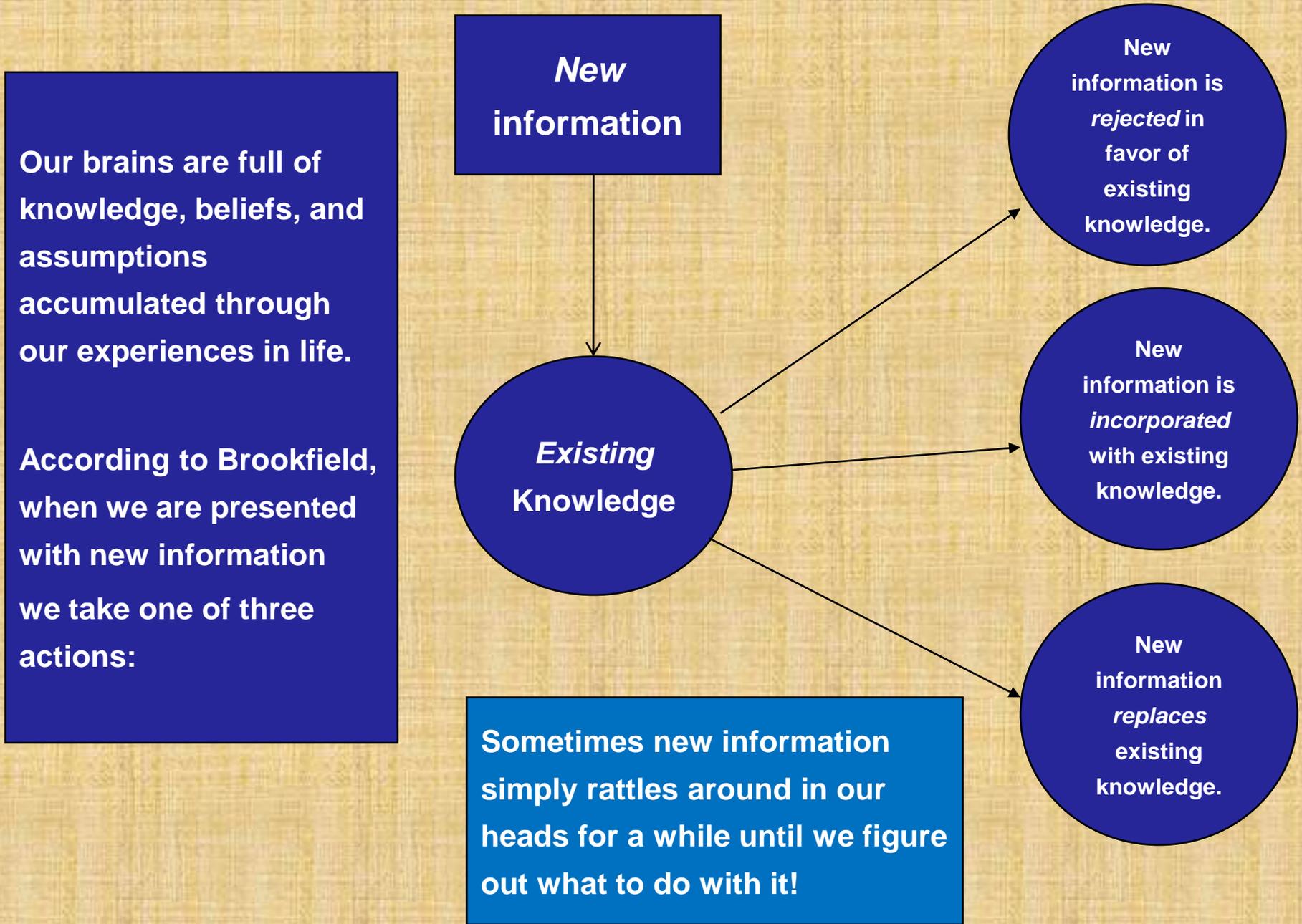
**Existing
Knowledge**

New information is *rejected* in favor of existing knowledge.

New information is *incorporated* with existing knowledge.

New information *replaces* existing knowledge.

Sometimes new information simply rattles around in our heads for a while until we figure out what to do with it!



Plays an important part in social change institutions in any society – courts, governments, schools, businesses - are the products of a certain way of thinking.



Distinguish between fact and opinion; ask questions; make detailed observations; uncover assumptions and define their terms; and make assertions based on sound logic and solid evidence.

Uses of Critical Thinking

Helps us uncover bias and prejudice.

The willingness to change one point of view as we continue to examine and re-examine ideas that may seem obvious. Such thinking takes time and the willingness to say three subversive words: *I don't know.*



Underlies the basic elements of communication—reading, writing, and speaking.

Ellis, D. *Becoming a Master Student*, 1997.



3 Kinds of Critical Thinking

IGNORANT/UNCARING

- Naïve
- Emotional
- Biased
- Judgmental
- Opinionated

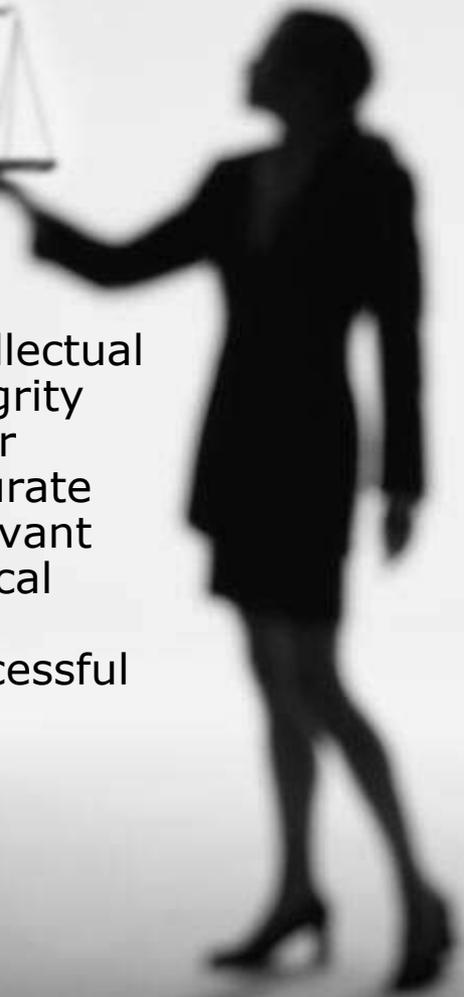
SELFISH

- **Egocentric**
- **Manipulative**
- **Personal agendas are top priority**
- **Successful at the cost of others**

Fair-minded



- Intellectual integrity
- Clear
- Accurate
- Relevant
- Logical
- Fair
- Successful

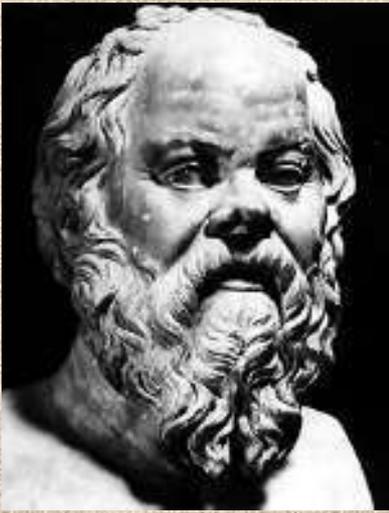


Arguments

“Effective managers are good at both framing their own arguments (or cases) & reacting to the arguments of others.”

“Becoming a Master Manager, pg. 108





Reasoning

Like Socrates, you can categorize much of what you do as a parent into arguments – evaluating them and making them

In this module arguments are **NOT defined as a quarrel or disagreement.**

The are defined as:

Reasoning used to make cases for doing, believing, or recommending something.

Diagramming an Argument

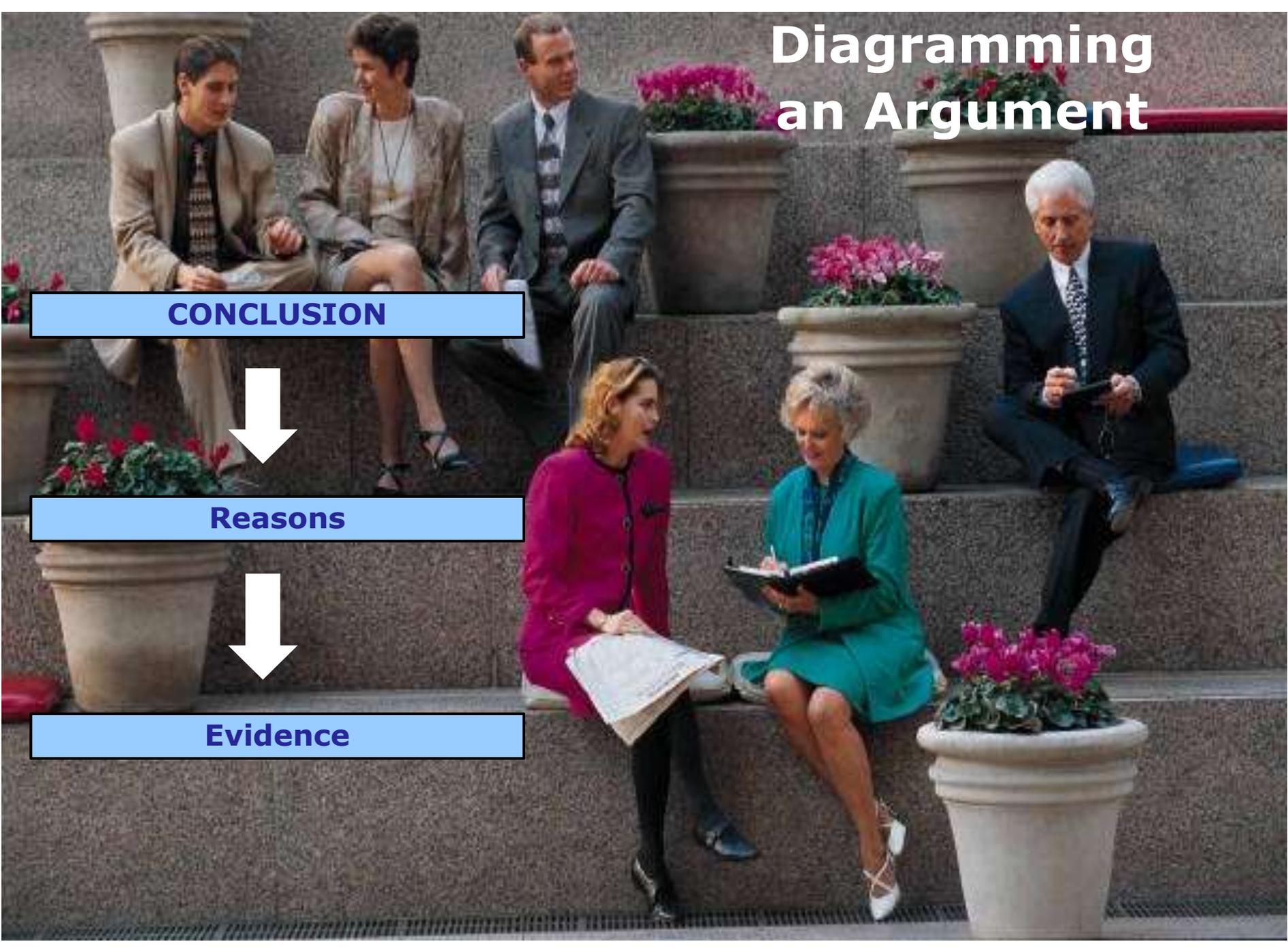
CONCLUSION



Reasons



Evidence



Evaluating Arguments

Poor	Fair	Good
The conclusion is: Unsupported Has no real focus Without purpose	The conclusion is: Vague Unclear Not entirely accurate	The conclusion is: Supported Focused Purposeful
The reasoning is: Unclear Unsound Confusing	The reasoning is: Somewhat flawed Largely assumptions Not completely formulated	The reasoning is: Clear Sound Understandable
The evidence is: Insignificant Irrelevant Biased	The evidence is: Insufficient Incomplete Not strong or very valid	The evidence is: Significant Relevant Unbiased



Fallacies



- The **ad hominem** attack (an error of irrelevance since it shifts attention away from the reasons or evidence for a position and focuses instead on the character, motives or credentials of an opponent)
- The **false disjunction** (an error by omission since it omits some options and presents a lesser number as if they were a complete range of alternatives)
- **Oversimplification** (an error of omission since it describes a complex situation in simplistic terms that neglect the complexity of the situation)
- **Sweeping Generalization** (an error of omission since it assumes that what is true under certain conditions must be true under all conditions)
- Failure to consider **alternative explanations**
- **Appeal to authority** Arguing that a claim is true based on someone's expertise; dogma.
- **Appeal to ignorance.** Claiming that whatever has not been disproved must be true.
- **Appeal to popularity** Claim that something is good or true because it is popular
- **Arbitrariness** Claim that a definition or rule is arbitrary

Conclusion

- Critical thinking skills are tremendous tools to be used in many situations including analyzing arguments!

