1.5: Assumptions

“In begin challenging your own assumptions… Your assumptions are your windows on the world. Scrub them off every once in awhile, or the light won't come in.” — Alan Alda

Main points

If a reason is not the result of an argument, then it is an assumption (= taken for granted)

Reasons (set of beliefs) can be grouped in different ways:

- Reasons = Common Elements (Presuppositions + Logic) + Evidence
  - Common elements — not differential in regards to conclusions
    - **presuppositions** help define the framework
  - Reasons = General (inference rules) + Specific (facts)
    - General laws – not tied to single time or place
      - independent of content - rules of logic
      - dependent on content (e.g., all humans are warm-blooded)
        - basis of scientific research
  - Reasons = Explicit (stated reasons) + Implicit (unstated reasons)
    - check to see if stated reasons necessarily lead to conclusion
      - if not, then unstated reasons are being used
  - Reasons = Supported (result of arg) + Unsupported (assumptions)
    - assumptions are generally unstated as well
      - Assumptions are generally unstated. These can be dangerous, since they often influence someone without their knowing about it. May involve:
        - specifics that are unreliable (facts)
        - linkage assumptions that are not true (generalities)
        - definitional assumptions that affect the argument

All kinds of assumptions are possible. Only need to examine those that materially affect the argument. (cf meaning of terms; cf. archive).

- leave the obvious ones alone (unless you’re a philosopher) – strategize

**REAL-WORLD SEGMENT: Writing III – Structure**

1. The paragraph is the basic unit of composition.

A paragraph corresponds to a unit of thought.

- Could be an argument, a reason, an introduction, a conclusion, …
- Usually about 7-14 lines. (Range is typically 4-20 lines.)

Each paragraph should make one point. No more.

Each paragraph should make a complete point. No less.

When a reason is complex (common in science), paragraph = reason

- when a reason is very complex, paragraph = one component of the reason
2. Order your points.
   a. Introduction. Set the stage; get people to care.
      - Make your intentions clear
      - Don’t need to explain all the steps; just enough to give the general idea
        - (sets up the schema)
      - keep it brief
   b. Argument. Give your points one at a time
      - Don’t mix reasons
      - Don’t return to previous points
      - Keep terms consistent
   c. Conclusion. What your reader (listener) should believe.
      - Implications about other aspects

3. More Generally: Tell a Good Story
   As much as possible, write as if telling a story
   i. set up the scene (introduction); get people to care.
   ii. introduce the challenge — e.g. why something is wrong or incomplete
   iii. handle this challenge (using arguments)
   iv. wrap up the situation (resolution)
      - take-home message
      - connections to other areas
   Cf. The Wizard of Oz - basic story structure
   i. Dorothy is living in Kansas with her family (setup)
   ii. tornado disrupts her life; sends her to Oz (challenge is introduced)
   iii. Dorothy tries to get back to Kansas (handle the challenge)
   iv. once back, lives happily ever after (take-home message: "there's no place like home")

      - Ideally, just a very rough outline
      - Don’t worry about content
      - Don’t worry about style
   b. Rewrite: Focus (and evolve) locally - sentence level
      - Could each sentence be improved?
        - Could it better capture your thought?
        - Could terms be improved (less ambiguous, more consistent)?
        - Could the style be improved?
        - Do the words work well together?
          - Should some words be moved to another location?
          - Don’t be afraid to throw out a word if need be
      - Once this is done, examine again
      - Goals: - clarity and conciseness
        - Economy (good signal-to-noise ratio) – how you say it
c. Rewrite: Focus (and evolve) at a higher level - *paragraph* level
   • Could each paragraph be improved?
     o Could it better capture your thought?
     o Could terms be improved (less ambiguous, more consistent)?
     o Could the style be improved?
     o Do the sentences work well together?
       ▪ Should some sentences be moved to a different location?
       ▪ Don’t be afraid to throw out a sentence if need be
   • Once this is done, examine again
   • Goals: - *clarity* and *conciseness*

d. Rewrite: Focus (and evolve) at a higher level - *section* level
   • Could each section (set of related paragraphs) be improved?
     o Could it better capture your thought?
     o Could terms be improved (less ambiguous, more consistent)?
     o Could the style be improved?
     o Do the paragraphs work well together?
       ▪ Should some paragraphs be moved to a different location?
       ▪ Don’t be afraid to throw out a paragraph if need be
   • Once this is done, examine again
   • Goals: - *clarity* and *conciseness*

e. Set aside, and **re-examine later**
   - Gives you better perspective