Reading skills and the discourse of the research article

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Today’s class

- Reading Paragraphs intensively
- The methods section
- In-class practice session analyzing the methods sections texts

Brief Conclusions in Research Articles

Reading for an overview of the main RA message

Using paragraph organization for intensive reading

Reading for detailed understanding

Reading top-down paragraphs from two perspectives

- General topic in the TS
- Details about the topic in the Supps

Reading top-down paragraphs from two perspectives

- Think about what you already know about the topic in the top-down TS (known information)
- Predict what (kind of) details in the Sus:
  - you expect to find (expected information)
  - you would like to find (sought information)
- Check your predictions as you read or scan the supps
  Scan = skip through looking for details
Reading top-down paragraphs from two perspectives

- Use top-down TSs:
  - to understand more precisely the intended topic
  - to discover what aspects of the topic the author considers relevant/important

Organization A: All direct supports for the TS

- Topic sentence
  - major support 1 directly explains TS
  - major support 2 directly explains TS
  - major support 3 directly explains TS
  - major support 4 directly explains TS

Organization B: Direct + indirect supports for the TS

- TS
  - major supp 1 directly explains TS
    - minor supp explains major support 1
    - minor supp explains minor support
  - major supp 2 directly explains TS
    - minor supp explains major support 2
    - minor supp explains minor support

Common ways of organizing Supps

MAJOR AND MINOR SUPPORTS

Organization B1: one TS with two or more graphic paragraphs

- TS
  - major supp 1 directly explains TS
    - minor supp
    - minor supp
  - major supp (2) explaining TS of previous graphic paragraph
    - minor supp
    - minor supp
Organization B/B1: direct + indirect supports

Reading strategy:
Watch for indicator of new major support(s):
“A second point…”
“The next feature…”
“Another issue…”
“It is also true that…”

Organization C: chaining supports

Reading strategy:
Watch for indicators of interconnections between the supports:
“As a result, ”
“A further problem…”
“This result demonstrates”
“Such behaviour is…”
“Although this concept…”

Organization B1: one TS—two or more graphic paragraphs

Think about writer PURPOSE:
Why use a subtopic paragraph:
Shorten a paragraph?
Highlight the subtopic?

Organization E: Bottom-up (specific to general)

- statement about main paragraph topic
- statement about main paragraph topic
- statement about main paragraph topic
- Generalizing / concluding statement about the main paragraph topic

Organization C: chaining supports for the TS

- TS
  - major supp 1 directly explains TS
  - minor supp explains major support 1
  - minor supp explains previous minor supp
  - minor supp explains previous minor supp

Organization E: bottom-up (specific to general)

- Bottom-up paragraphs are rare in most RAs
  - especially those written by native-speakers of English
- Top-down-Bottom up paragraphs may be found in RAs, however.
Organization F: top-down-bottom-up paragraphs

- **TS** (topic established)
  - □ major supp 1
  - □ Minor supp 2
- □ major support 2
- □ major support 3
- **Concluding / summarizing statement about the main topic**

**In-class Analysis of paragraph organization**

The text for paragraph analysis is the introduction to an RA:

“Architectural Glazings: Design Standards and Failure Models”

**Glazing** = Building term: glass fitted, or to be fitted, in a door, frame, etc.

The authors’ paragraph divisions have been removed.

Topic sentence + concluding sentence: an example

**Top-down TS:**

Although most of the risk-ranking projects have incorporated public participation at some level, the mechanism for doing so have varied widely across these projects.

**Supps:** Discussion of these projects

**Bottom-up conclusion with stance:**

Despite such efforts, researchers in these projects have not formally evaluated the validity of these methods for involving the public in risk-ranking exercises.

**Instructions for in-class analysis**

1. Read the text “Architectural Glazings: Design Standards and Failure Models” (Its paragraph divisions have been deleted.)
2. Look for the main topics in groups of 3 or 4.
3. Decide on the probable paragraph divisions.
4. Underline any sentences that you think are top-down TSs.
5. Check the sentences after these TSs to make sure they create all refer to that the TS topic.
6. Decide what sort of sequence of topics is used.

**In-class practice:**

analyzing paragraphs

**Common uses of combined Top-Down / Bottom-up paragraphs**

- Paragraphs with detailed explanations and/or logical argumentation
  - □ Top-down TS establishes topic
  - □ Bottom-up sentence then draws a conclusion about the topic
Topic sentences with concluding sentences

Conclusion after detailed theoretical expansion:
- **Top-down TS establishes topic:**
  - Shapes with cubic and hexagonal profiles have plasmon bands with maxima at 540 nm; however, the observed light scattering from these two particles is quite different.
- **Description of the findings**
- **Bottom-up conclusion about the meaning of the findings:**
  - These two reports support our observation of redshifted light scattering for gold cubes, relative to hexagons, despite their similar sizes and extinction spectra.

Reading strategies for Combined Top-Down / Bottom-up

- **Read paragraphs to the end (or jump to the end)**
  - When logical conclusions or stance appear to be indicated / possible / probable from the TS and would be interesting to you
  - When the conclusion of interest to you is not in the TS of the next paragraph
  - If you are particularly interested in the topic, especially in the stance of the author on a (controversial) issue
  - If you are unfamiliar with the topic announced in the TS

Common uses of combined Top-Down / Bottom-up paragraphs

- **Paragraphs with a stance* or with a critical, evaluative or controversial statement**
  - Top-down TS establishes topic
  - Concluding statements indicates stance or criticism or makes an evaluative or controversial statement
    - Useful for maintaining an objective tone in the TS sequence
    - Useful for avoiding mention of controversy and personal attitudes in highlighted statements (i.e., TS)
* Stance = personal attitude or opinion

Common uses of combined Top-Down / Bottom-up paragraphs

- **Paragraphs for non-specialist audience**
  - Top-down TS establishes topic
  - Concluding statements summarize paragraph idea
    - for those less familiar with the topic
      - Those familiar with the topic do not need to read this statement