

# Structuring Paragraphs

## Cheat Sheet

Graduate Writing Lab  
School of Engineering & Applied Science, University of Virginia

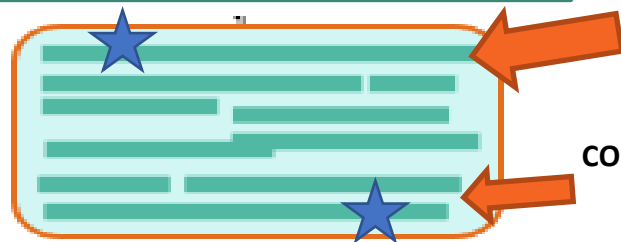
“A paragraph is a group of sentences on a single topic.”

— Angelika Hofmann, *Scientific Writing and Communication*



# one paragraph = one main idea

Use “power positions” ★ in each paragraph to clarify the main idea or key takeaway.



TOPIC  
SENTENCE

CONCLUDING  
SENTENCE

## Topic Sentences

- Provide an overview of the paragraph
- Signal genre, section, audience, purpose
- Each sentence in the paragraph clearly relates to this main idea
- Might be the only sentences your reader focuses on when skimming

## Concluding Sentences

- Use this last sentence of a paragraph to summarize, draw a conclusion, or emphasize an important take-away
- The concluding sentence should wrap up the paragraph, NOT try to transition to a new idea

### TOPIC SENTENCE EXAMPLES:

“The quintuple cybersecurity knowledge base model [2] proposed in this paper contains the following five elements: concept, instance, relation, properties, and rule.” Jia et al. (2018)

“The purpose of type reasoning on knowledge maps is to learn the relationship between instances and concepts in a knowledge map.” Jia et al. (2018)

### EXPERT TIP:

“It is always better to use the first sentence of a paragraph to make transition links than to do it at the end of a paragraph.”

—Robert Irish, *Writing in Engineering: A Brief Guide*

How do I see my own writing with fresh eyes, deconstruct its structure, and evaluate my paragraphs?

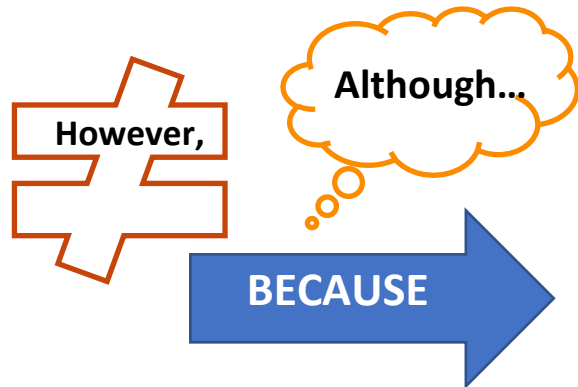
- Read aloud
- Cut It Up: print out and physically rearrange your paragraphs
- Read only first and last sentences of each paragraph
- Do a Post-draft Outline / Reverse Outline
- [Texas A&M's University Writing Center: short video](#)
- [Paragraph re-planning](#)

# The Middle: Choose A Pattern of Organization

Impose a **fitting and logical pattern of organization** on the details and subordinate information you include. Some options:

- Most to least important
- Least to most important
- Cause and effect
- Chronological
- Compare and contrast
- Problem and solution

Add **signposting** and **connectors** to show your reader how these details relate to each other and to the main point.



## TIPS FOR COHESION

### 1. Word location across sentences:

Put similar words and ideas close together to show relationships, indicate the main point, and create “flow” between sentences.

Important pathogens can be found in the genus **Yersinia**. **Yersinia** contains several **species**. One **species**, *Y. pestis*, is the cause of bubonic **plague**. The **plague** bacillus infects lymph nodes near the site of infection...

Hofmann p. 99

### 2. Within and between sentences, put **familiar** information first, then **new** information.

Analysts are able to use more sophisticated shape metrics to describe objects. For instance, the shape proportion and encircled image-histogram (SPEI) algorithm produces two metrics: shape proportion (SP) and encircled image-histogram (EI).

**Familiar X.....new XY.**  
**XY.....new Z. Takeaway about Z.**

To move from known information to new information smoothly, and not jump back and forth, we could rearrange the first two sentences:

To more accurately describe objects, analysts are able to use more sophisticated shape metrics such as shape proportion (SP) and encircled image-histogram (EI). **These** metrics are found using the shape proportion and encircled image-histogram (SPEI) algorithm...

**Sentence 1: shape metrics → specific metrics SP & EI.**

**Sentence 2: These metrics (SP & EI) → SPEI algorithm.**

### 3. Use **parallel structure** to let the reader know what to expect.

- If you're focusing on a topic, **consistently make it the subject of your sentences**, not the object:

1-These findings suggest that **patients returning from tropical countries** who show very itchy linear or serpiginous tracked skin eruptions should be tested for larvae of animal hookworms.

2-Topical **ointments** with an antiparasitic drug such as thiabendazole should be used to treat **patients with this disease**, known as cutaneous larva migrans.

3-**These patients** often also suffer from complications of the disease such as impetigo and allergic reactions (Heukelbach and Feldmeier, 2008).

Hofmann p. 98

**Sentences 1 & 3:** the **subject** of the sentence is the main topic of the paragraph (patients).

**Sentence 2:** changes the subject to “ointments,” which isn't the organizing topic behind the paragraph. Readers wonder where we're going with this—is the ointment more important, or different aspects of patients' experience and care?

**We could revise sentence two to keep “patients” as the focus of the sentence:**

revised sentence 2:

Patients with this disease, known as cutaneous larva migrans, should be treated with an antiparasitic drug such as thiabendazole.

Hofmann p. 98

- If you list things in your topic sentence, **keep the same order** when you discuss them in the middle of the paragraph:

In response to a foreign macromolecule, five different immunoglobulins can be synthesized: **IgG**, **IgM**, **IgA**, **IgE**, or **IgD**. **IgG** is the main immunoglobulin in serum. **IgM** is the first class to appear following exposure to an antigen. **IgA**...

Hofmann p. 97

### 4. Use **key terms** consistently to create **continuity**.

- Repeat them exactly and early
- Don't substitute with another term
- Link related key terms when you shift focus or scale

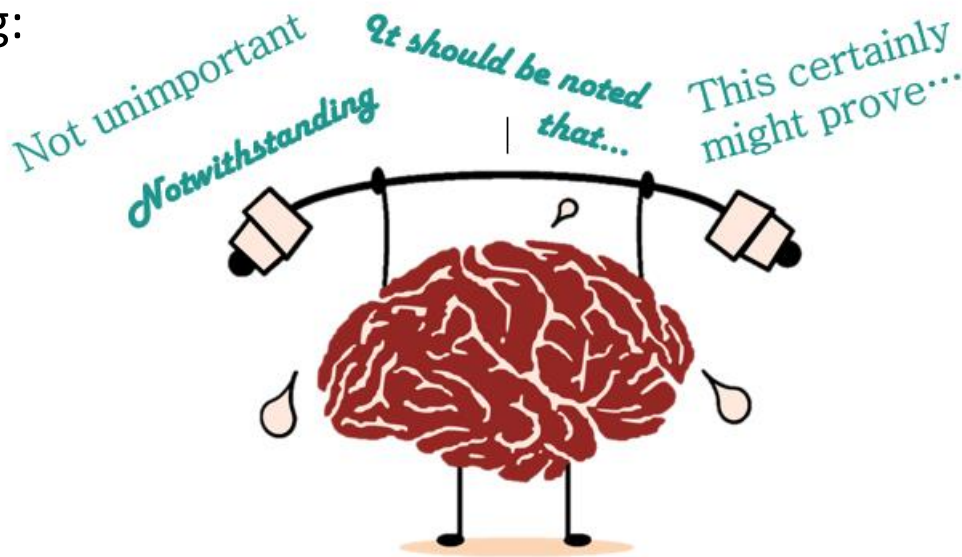
To assess original conditions of crystal nucleation and growth in metamorphic rocks, it is necessary to analyze crystal distribution quantitatively. Density could potentially provide insight into the time scale of mineral growth following the thermal peak of metamorphism.

Hofmann p. 103-4

If crystal distribution is the most accurate term, don't just use a synonym for variety. It misleads your reader!

# Be Concise

When in doubt, be direct and simple. Look for these unnecessary additions when you're trying to cut down your word count or clarify your writing:



- Excessive detail, redundancies or unnecessary repetition, jargon
- Unnecessary “overview” words:
  - Jones et al. reported that intracellular calcium is released when adipocytes are stimulated with insulin. [15 words]
  - Intracellular calcium is released when adipocytes are stimulated with insulin (Jones et al., 1996). [10 words]
- Empty sentences or phrases, especially “it...that” phrases
  - In regard to...
  - As far as X is concerned...
  - The experiment was done by...
  - Figure 6 shows that...
  - It is interesting to note that...
  - In light of the fact that... (replace with “because”)
  - It is possible that... (reword as “may,” “perhaps,” “possibly”)
  - It has been reported that...
- Negative expressions: change to positive
  - “do not overlook,” “not infrequently,” “not unimportant”
- Don’t overuse intensifiers
  - clearly, very, always, crucial, certainly
- Don’t overuse hedges
  - possibly, may/might, often, perhaps, could, indicate, appear

## References

- Hofmann, A. H. (2017). *Scientific Writing and Communication: Papers, Proposals, and Presentations* (Third ed.). New York: Oxford University Press.
- Irish, R. (2015). *Writing in Engineering: A Brief Guide*. New York: Oxford University Press.
- Jia, Y., Qi, Y., Shang, H., Jiang, R., & Li, A. (2018). A practical approach to constructing a knowledge graph for cybersecurity. *Engineering*, 4(1), 53-60.
- Lamberti, Billy F. SPEI example adapted from the work of Billy F. Lamberti, PhD. See <https://www.billyflamberti.com/>