

Topic Analysis and Organizational Structure in Report Writing

Adapted from (McMurrey, 2017)¹

If you have the right information in a report, at least you've got all the "right stuff" available for readers. But without actively planning and revising the organization of all that "stuff", you are likely not presenting information in a way that optimizes reader understanding. To make sure you end up with a well-organized final report, you need to perform a **topic analysis** of the contents and then choose an appropriate **organisational structure** for those topics.

Perform a topic analysis

Topics are the building blocks of your communication. A topic is whatever a segment of text is "about" and identifying all the topics and subtopics in your writing is called a topic analysis. Just about everything in writing and revising relies upon your ability to identify topics and subtopics at all the different levels of writing: paragraph, section, chapter, and whole report.

To perform a topic analysis, you need to label all the main chunks of information in the report. To do this, print a copy of your draft report and write down, in the margin, a word or phrase to identify the topic of each paragraph or string of related paragraphs in the report. Topic analysis is a messy business. If you expect mathematical precision and uniquely right or wrong answers, you're in for frustration and disappointment. The point of topic analysis is not to get the analysis "correct"; instead, the point is to evaluate your ideas to ensure they are presented as clearly and effectively as possible.

You are looking to see if:

- **The sequencing of ideas at both the sentence and paragraph level makes sense** – are ideas presented in a logical order that builds and reinforces understanding?
- **The sequencing of paragraphs within sections makes sense** – does the flow of ideas from paragraph to paragraph move the reader easily through your ideas?
- **The relative proportion of information is appropriate** – is the proportion of information provided on the various topics balanced and appropriate?
- **The material even belongs in a paragraph** – should I illustrate with a figure or diagram instead of just text?

Performing a topic analysis enables you to see potential problems with the content and continuity of your report. If you see a problem, you can probably fix it.

Choose an organizational structure

Once you have identified the topic of each of the chunks of information in your report, then you can decide whether they are in the right sequence. This decision involves knowing about and actively applying a sequencing pattern in your report. Here are some examples:

General → specific: One of the most common ways to organize is to arrange chunks of information from general to specific. For example, an overall discussion of 3D printing is a more general topic than discussing the different types of 3D printers and/or 3D printing technologies. And describing the operation of a specific type of 3D printer is even less general.

Basic → complex: Another way to arrange units of a discussion is to begin with the simple, basic, fundamental ones and then move on to the more complex. For example, in a disc

Thing-at-rest → thing-in-motion: Another organization pattern involves first describing the “thing” (overall topic) as a series of discrete elements or parts/processes and then discussing the all the related and interconnected parts/processes. For example, in a discussion of how the gasoline engine works, you might begin with a diagram showing all the main components, followed by descriptions of what those components do. Once this is established, a discussion of how all these components work together would be much better understood.

Spatial movement: If you are describing the physical details of something, you might want to organize the content according to a relevant pattern of physical movement, for example, top to bottom, left to right, or outside to inside.

Temporal movement: One of the most common patterns is based on movement through time; arrange the discussion of events in relation to the temporal sequence.

Concept → application of the concept, examples: A common organizational pattern is to discuss a concept in general terms then discuss an application of it and examples to illustrate.

Data → conclusions: Another means of organizing information is to present a problem and data (observations, experimental data, survey results) then move on to discuss the conclusions that can be drawn from that data. (This pattern is sometimes reversed: present the problem and conclusions first, then the supporting data).

Problem/question → solution/answer: You can also organize information by first discussing a problem or raising a question then moving on to the solution or answer.

Simplified version → detailed version: A useful way to explain technical matters to non-specialists is to begin by discussing a simplified version of the thing/concept, establish a solid basic understanding of it, then go right back and explain it all again but this time laying on the technical detail thick and heavy!

¹*Power-Revision Techniques: Structure-Level Revision* by David McMurrey is licensed under a Creative Commons 4.0 International License.

Available: <https://www.prismnet.com/~hcexres/textbook/hirev1.html>