

The Linear-Hierarchical Model

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For 500 years and more, we have created most of our documents following the “linear-hierarchical model.” Here is a brief explanation of this concept.

If I write a book setting forth a complex argument or explaining a complex idea, the book will very likely demand linear reading (or something close to linear reading). Each new chapter builds upon the previous chapters. I may move backward and forward in time or introduce multiple threads of argument or exposition. But the document is still intended to be read linearly.

An explicit hierarchical structure is very often imposed upon this linear flow of text by means of the book’s hierarchy of headings and subheadings (and perhaps other hierarchical divisions such as chapter divisions). The vast number of non-fiction books that follow and linear-hierarchical model and employ a system of headings can be said to adhere to the “standard expository model.”

In contrast, I may write a manual in which the first chapter contains the foundational information. Once you’ve read this chapter, you can jump confidently to any other chapter in the manual. For such manuals—and for almost every website—the hierarchy represents navigational choices rather than structural markers imposed on text that asks for linear reading.

Between these two extremes lies a large, fuzzy middle ground populated by technical reports, textbooks, some manuals, and a great many other documents. In this middle ground, it’s not clear what you can skip and what you can’t. There are complex and uncertain dependency relationships running all through the document. Sometimes an author will clarify these dependency relationships by suggesting in the preface which are the “core” chapters and which chapters you can skip.

The term linear-hierarchical model, then, encompasses purely linear documents with a hierarchical heading structure and documents in the fuzzy middle ground but excludes documents that are hierarchical structured but which do not call for linear reading.