How to Read a Book, v5.0

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How can you learn the most from a book — or any other piece of writing — when you're reading for information, rather than for pleasure?

It's satisfying to start at the beginning and read straight through to the end. Some books, such as novels, *have* to be read this way, since a basic principle of fiction is to hold the reader in suspense. Your whole purpose in reading fiction is to follow the writer's lead, allowing him or her to spin a story bit by bit.

But many of the books, articles, and other documents you'll read during your undergraduate and graduate years, and possibly during the rest of your professional life, won't be novels. Instead, they'll be non-fiction: textbooks, manuals, journal articles, histories, academic studies, and so on.

The purpose of reading things like this is to gain, and retain, information. Here, finding out what happens — as quickly and easily as possible — is your main goal. So unless you're stuck in prison with nothing else to do, NEVER read a non-fiction book or article from beginning to end.

Instead, when you're reading for information, you should ALWAYS jump ahead, skip around, and use every available strategy to **discover**, then to **understand**, and finally to **remember** what the writer has to say. This is how you'll get the most out of a book in the smallest amount of time.

Using the methods described here, you should be able to read a 300-page book in six to eight hours. Of course, the more time you spend, the more you'll learn and the better you'll understand the book. But your time is limited.

Here are some strategies to help you do this effectively. Most of these can be applied not only to books, but also to any other kind of non-fiction reading, from articles to websites. Table 1, on the next page, summarizes the techniques, and the following pages explain them in more detail.

Read the whole thing!

In reading to learn, your goal should always be to get all the way through the assignment. It's much more important to have a general grasp of the arguments or hypotheses, evidence, and conclusions than to understand every detail. In fact, no matter how carefully you read, you won't remember most of the details anyway.

What you can do is remember *and record* the main points. And if you remember those, you know enough to find the material again if you ever do need to recall the details.

Table 1. Summary of reading strategies and techniques

Strategies and techniques	*Rationale*
Read the whole thing	Major arguments and evidence matter more than details. Grasping the structure of the whole is more important than reading every word.
Decide how much time you will spend	Real-world time is limited. If you know exactly how long you can actually spend on reading, you can plan how much time to devote to each item.
Have a purpose and a strategy	You'll enjoy reading more, and remember it better, if you know exactly why you're reading.
Read actively	Never rely on the author's structures alone. Move around in the text, following your own goals.
Read it three times	First time for overview and discovery. Second time for detail and understanding. Third time for note-taking in your own words.
Focus on parts with high information content	Tables of contents, pictures, charts, headings, and other elements contain more information than body text.
Use PTML (personal text markup language)	Mark up your reading with your own notes. This helps you learn and also helps you find important passages later.
Know the author(s) and organizations	Authors are people with backgrounds and biases. They work in organizations that give them context and depth.
Know the intellectual context	Most academic writing is part of an ongoing intellectual conversation, with debates, key figures, and paradigmatic concepts.
Use your unconscious mind	Leave time between reading sessions for your mind to process the material.
Rehearse, and use multiple modes	Talking, visualizing, or writing about what you've read helps you remember it.

Decide how much time you will spend

If you know in advance that you have only six hours to read, it'll be easier to pace yourself. Remember, you're going to read the whole book (or the whole assignment).

In fact, the more directly and realistically you confront your limits, the more effective you will be at practically everything. Setting time limits and keeping to them (while accomplishing your goals) is one of the most important life skills you can learn. So never start to read without planning when to stop.

Have a purpose and a strategy

Before you begin, figure out **why** you are reading this particular book, and **how** you are going to read it. If you don't have reasons and strategies of your own — not just those of your teacher — you won't learn as much.

As soon as you start to read, begin trying to find out four things:

- Who is the author?
- What are the book's arguments?
- What is the evidence that supports these?
- What are the book's conclusions?

Once you've got a grip on these, start trying to determine:

- What are the weaknesses of these arguments, evidence, and conclusions?
- What do you think about the arguments, evidence, and conclusions?
- How does (or how could) the author respond to these weaknesses, and to your own criticisms?

Keep coming back to these questions as you read. By the time you finish, you should be able to answer them all. Three good ways to think about this are:

a) Imagine that you're going to review the book for a magazine.
b) Imagine that you're having a conversation, or a formal debate, with the author.
c) Imagine an examination on the book. What would the questions be, and how would you answer them?

Read actively

Don't wait for the author to hammer you over the head. Instead, from the very beginning, constantly generate hypotheses ("the main point of the book is that...") and questions ("How does the author know that...?") about the book.

Making brief notes about these can help. As you read, try to confirm your hypotheses and answer your questions. Once you finish, review these.

Know the author(s) and organizations

Knowing who wrote a book helps you judge its quality and understand its full significance.

Authors are people. Like anyone else, their views are shaped by their educations, their jobs, their early lives, and the rest of their experiences. Also like anyone else, they have prejudices, blind spots, desperate moments, failings, and desires — as well as insights, brilliance, objectivity, and successes. Notice all of it.

Most authors belong to organizations: universities, corporations, governments, newspapers, magazines. These organizations each have cultures, hierarchies of power, and social norms. Organizations shape both how a work is written and the content of what it says. For example, university professors are expected to write books and/or journal articles in order to get tenure. These pieces of writing must meet certain standards of quality, defined chiefly by other professors; for them, content usually matters more than good writing. Journalists, by contrast, are often driven by deadlines and the need to please large audiences. Because of this, their standards of quality are often directed more toward clear and engaging writing than toward unimpeachable content; their sources are usually oral rather than written.

The more you know about the author and his/her organization and/or discipline, the better you will be able to evaluate what you read. Try to answer questions like these: What shaped the author's intellectual perspective? What is his or her profession? Is the author an academic, a journalist, a professional (doctor, lawyer, industrial scientist, etc.)? Expertise? Other books and articles? Intellectual network(s)? Gender? Race? Class? Political affiliation? Why did the author decide to write this book? When? For what audience(s)? Who paid for the research work (private foundations, government grant agencies, industrial sponsors, etc.)? Who wrote "jacket blurbs" in support of the book?

You can often (though not always) learn about much of this from the acknowledgments, the bibliography, and the author's biographical statement.

Know the intellectual context

Knowing the author and his/her organization also helps you understand the book's intellectual context. This includes the academic discipline(s) from which it draws, schools of thought within that discipline, and others who agree with or oppose the author's viewpoint.

A book is almost always partly a response to other writers, so you'll understand a book much better if you can figure out what, and whom, it is *answering*. Pay special attention to points where the author tells you directly that s/he is disagreeing with others: "Conventional wisdom holds that *x*, but I argue instead that *y*." (Is *x* really conventional wisdom? Among what group of people?) "Famous Jane Scholar says that *x*, but I will show that *y*." (Who's Famous Jane, and why do other people believe her? How plausible are x and y? Is the author straining to find something original to say, or has s/he genuinely convinced you that Famous Jane is wrong?) Equally important are the people and writings the author cites in support of his/her arguments.

Read it three times

This is the key technique. You'll get the most out of the book if you read it three times — each time for a different purpose.

a) **Overview: discovery (5-10 percent of total time)**

Here you read very quickly, following the principle (described below) of reading for high information content. Your goal is to **discover** the book. You want a quick-and-dirty, unsophisticated, general picture of the writer's purpose, methods, and conclusions.

Mark — *without reading carefully* — headings, passages, and phrases that seem important (you'll read these more closely the second time around.) Generate questions to answer on your second reading: what does term or phrase X mean? Why doesn't the author cover subject Y? Who is Z?

b) **Detail: understanding (70-80 percent of total time)**

Within your time constraints, read the book a second time. This time, your goal is understanding: to get a careful, critical, thoughtful grasp of the key points, and to evaluate the author's evidence for his/her points.

Focus especially on the beginnings and ends of chapters and major sections. Pay special attention to the passages you marked on the first round. Try to answer any questions you generated on the first round.

c) **Notes: recall and note-taking (10-20 percent of total time)**

The purpose of your third and final reading is to commit to memory the most important elements of the book. This time, make brief notes about the arguments, evidence, and conclusions. *This is not at all the same thing as text markup;* your goal here is to process the material by translating into your own mental framework, which means using your own words as much as possible. Cutting and pasting segments of text from the book will not do as much for you as summarizing very briefly in your own words. Include the bare minimum of detail to let you remember and re-locate the most important things. 1-3 pages of notes per 100 pages of text is a good goal to shoot for; more than that is often too much. Use some system that lets you easily find places in the book (e.g., start each note with a page number.)

Notebooks, typed pages, or handwritten sheets tucked into the book can all work. However, notes will be useless unless you can easily find them again. A very good system — the one I use — is to type notes directly into bilbiography entries using citation manager software such as Endnote, Zotero, or Bookends. See below for more on citation managers.

On time and timing

First, because human attention fades after about an hour, you'll get more out of three one-hour readings than you could ever get out of one three-hour reading. But be careful: to get one full hour of effective reading, you need to set aside at least one hour and fifteen minutes, since distraction is inevitable at the beginning (settling in) and end (re-arousal for your next task) of any reading period.

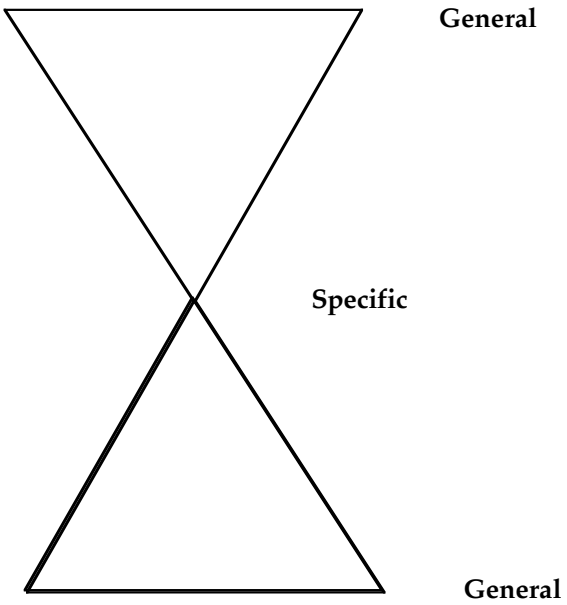
Second, make a realistic plan that includes how much time you will devote to each of the three stages. For a 250-page book, I might spend 15 minutes on overview, 4 hours on detailed reading, and 20-30 minutes making notes — but I'd adjust these periods up or down depending on how difficult the text is, how important it is to me, and how much time I have.

Focus on the parts with high information content

Non-fiction books very often have an "hourglass" structure that is repeated at several levels of organization. More general (broader) information is typically presented at the beginnings and ends of:

- the book or article as a whole (abstract, introduction, conclusion)
- each chapter
- each section within a chapter
- each paragraph

More specific (narrower) information (supporting evidence, details, etc.) then appears in the middle of the hourglass.



The Hourglass Information Structure

You can make the hourglass structure of writing do a lot of work for you. Focus on the following elements, in more or less the following order:

- **Front and back covers, inner jacket flaps**
- **Table of contents**
- **Index:** scan this to see which are the most important terms
- **Bibliography**: tells you about the book's sources and intellectual context
- **Preface** and/or **Introduction** and/or **Abstract**
- **Conclusion**
- **Pictures, graphs, tables, figures**: images contain more information than text
- **Chapter introductions and conclusions**
- **Section headings**
- **Special type or formatting:** boldface, italics, numbered items, lists

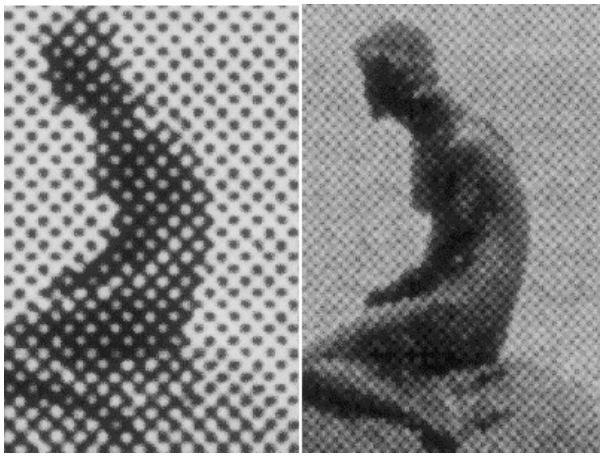
Use PTML (personal text markup language)

Always, always, always mark up your reading. This is a critical part of active reading. Do this from the very beginning — even on your first, overview reading. Why? Because when you come back to the book later, your marks reduce the amount you have to look at and help you see what's most significant.

Don't mark too much. This defeats the purpose of markup; when you consult your markup later, heavy markup will force you to re-read unimportant information. As a rule, you should average no more than two or three short marks per page. Rather than underline whole sentences, underline words or short phrases that capture what you most need to remember. The point of this is to distill, reduce, eliminate the unnecessary. Write words and phrases in the margins that tell you what paragraphs or sections are about. Use your own words.

Page vs. screen

Printed material has far higher resolution (~600 dpi) than even the best computer screens (~100 dpi); see the illustration of 300 vs. 600 dpi, below. For this reason you will read more accurately, and with less fatigue, if you stick with the paper version. Still, we inevitably read much more screen-based material now.



Markup on the screen: It remains difficult to mark up screen-based materials effectively. The extra steps involved are distracting, as is the temptation to check email or websurf. Also, with screen-based markup you often have to click on a note in order to read it, which means you're less likely to do it later. It remains far easier to mark up a printed copy!

However, if you're disciplined, recent versions of Acrobat, Apple Preview, and third-party PDF viewers such as PDFpen, iAnnotate, and Goodreader allow you to add comments, highlighting, and so on to PDFs. Voice recognition can make this a lot easier. Today, I routinely read and annotate PDFs on an iPad, using voice recognition when I want to make a note. Some of these readers, as well as ebook readers such as Kindle, allow you to export only your highlights and notes. This is a great way to make yourself a condensed version of a document. Paste it into the notes field of your citation manager and it'll always be at your fingertips. Hunt around on the web for ways to do this kind of thing on an industrial scale (especially with Kindle books).

When taking notes about something you're reading (as opposed to marking up the text), you'll be tempted to cut and paste the original text in lieu of making your own notes in your own words. Cut-and-paste *can* sometimes work well, especially for things you might want to quote later. **However:** in general it defeats the two main purposes of note-taking: (a) learning and remembering (by rephrasing in your own terms), and (b) condensing into a very short form. The same is true of links: though useful for keeping track of sources, keeping a URL will not *by itself* help you remember or understand what's there, even though it may feel that way.

Use a citation manager

It's hard to overemphasize the huge advantages of citation manager software such as Endnote, Bookends, Zotero, Mendeley, CiteULike, etc. They let you keep track of your growing library, easily enter and format citations in your word processor (saving you the incredible irritation of doing it yourself). Most of them can pull in citations directly from the web, record web links, find DOI's, and so on. Some have their own web search tools built in. Some, such as Bookends (Mac only), will automatically rename documents with Author-Date-Title, a huge help with the extremely annoying problem of uninformative filenames.

None of these packages are perfect. All have both advantages and disadvantages, and the more sophisticated ones have steep learning curves. Look for one that can handle all major document formats, including books, journal articles, newspaper articles, online sources, interviews, and so on. Be wary of managers that only handle PDFs, since so many other formats are still important.

If you use the notes field of your citation manager in a disciplined way, your notes will always be easy to find. When your library starts reaching into the thousands of items, this is a godsend.

Use your unconscious mind

An awful lot of thinking and mental processing goes on when you're not aware of it. Just as with writing or any other creative thought process, full understanding of a book takes time to develop.

Like the body, the mind suffers from fatigure when doing just one thing for many hours. Your ability to comprehend and retain what you read drops off dramatically after an hour or so. *Therefore, you should read a book in several short sessions of one to two hours apiece, rather than one long marathon.*

In between, your unconscious mind will process some of what you've read. When you come back for the next session, start by asking yourself what you remember from your previous reading, what you think of it so far, and what you still need to learn.

Rehearse, and use multiple modes

Reading is exactly like martial arts, baseball, or cooking in the sense that **learning and memory depend crucially on rehearsal.**

So — after you've read the book, rehearse what you've learned. Quiz yourself on its contents. Argue with the author. Imagine how you would defend the author's position in your own writing.

Reading, writing, speaking, listening, and visualizing all engage different parts of the brain. For this reason, the best forms of rehearsal use **multiple modes** of thinking and action. Don't just contemplate privately. Instead, talk about the book with others. Bring it up in classes. Write about it. Visualize anything that can be visualized about its contents. All of this helps fix your memory and integrate your new learning into the rest of your knowledge.

Hang in there!

When I give presentations on these ideas, students often tell me a few weeks later that they "tried it a few times and just couldn't do it," so they stopped.

You will have to practice these techniques for a considerable length of time — at least a few months — before they come to seem natural, and they will never be easier than the comfortable, passive way we've all been reading for many years.

Hang in there. The rewards of these techniques are great, or so say the hundreds of students who've told me so years later. Learning to read like this can be a critical key to a successful career as a student, scholar, or professional in almost any field.