5 Reading: How to Stay on Top of It

> Reading involves a fair measure of push and shove. You make your mark on a book and it makes its mark on you. Reading is not simply a matter of hanging back and waiting for a piece, or its author, to tell you what the writing has to say. In fact, one of the difficult things about reading is that the pages before you will begin to speak only when the authors are silent and you begin to speak in their place, sometimes for them, doing their work, continuing their projects, and sometimes for yourself, following your own agenda.
>
> – David Bartholomae and Anthony Petrosky, *Ways of Reading*

Amanda's Question

A couple of years ago Amanda, a freshman in my fall-term writing class, announced a piece of advice she had picked up from a junior she had met:

"She told me the most important thing you need to learn here is what *not* to read!"

I thought about this for a moment and said, hesitantly, "Well, that's sort of true." But Amanda looked more distressed than enlight-ened. "What's the matter?" I asked.

"She didn't tell me *how you know* what not to read," Amanda replied.

Amanda was in the School of Industrial and Labor Relations (ILR), which students say means "I Love Reading." Her teachers in labor history, economics, human resources, and organizational behavior assigned whole books, articles, and chapters of textbooks

each week, in preparation for writing assignments and essay exams. Just getting through all of this reading was difficult. Understanding and remembering what she had read, figuring out what was important and unimportant, seemed impossible. And this challenge is not confined to students in ILR, to English majors, or to this university. Science teachers assign dense chapters of textbooks and lab manuals, and freshmen in these courses are also completing distribution requirements in the social sciences and humanities, along with writing courses that often require extensive reading. Performance on examinations, problem sets, labs, research projects, and writing assignments depends heavily on knowledge acquired from texts of many kinds. As a consequence, effective reading probably represents the most crucial set of skills you can develop in college, where reading everything thoroughly, from beginning to end, might be impossible.

This was what troubled Amanda and the other freshmen in my class. They sensed that there was something wrong with their approaches to the great volume of reading in their courses. They had begun to realize that more advanced students often spent less time on assigned readings with better results on exams and papers. Perhaps these juniors and seniors had figured out "what *not* to read," as Amanda's friend suggested, and could focus more attention on important material. Given a particular assignment, however, the question is not simply *Should I read this?* If the answer is "yes," there are some further, related questions you need to ask:

- What am I reading?
- Why am I reading it?
- How can I read it most efficiently?
- How can I remember what I will need to know about it?

These questions acknowledge that reading is not a single kind of activity. There are diverse styles of reading, different approaches and strategies, used for specific purposes and for particular kinds of texts. And when I refer to "texts" I mean written documents of all kinds - not only textbooks, but other books, essays, articles, or reports. *Reading for pleasure, for general understanding, to prepare for exams, to write papers on the subject, or to find specific information* -these reasons for reading require different kinds of attention and engage different kinds of cognition and memory.

Texts are also structured in ways that facilitate certain kinds of reading. Some are meant to be read from beginning to end; others, including most textbooks, present information schematically, with many potential points of entry and direction. If you fall into the task of reading without pausing to consider *what, why,* and how you are going to read, you might be wasting almost all of the time you spend.

Becoming a Predatory Reader

In my freshman classes I often call this strategic approach *predatory reading* or *reading from the top ofthe food chain.*

A colleague once objected to this language because it sounds so aggressive, even violent, She wanted her students to feel that reading was a peaceful, pleasurable activity that transports them to other times and places, other ways of viewing the world. My colleague was describing a wonderful kind of reading experience that I hope all of you have had and will continue to have: letting yourself become absorbed in a good book, drawn into the lives of characters, the chain of events, or the flow of information in the world the author creates.

But this is only one way of reading- for pleasure - and, for reasons I'll explain, it will have very limited uses in your academic work. To describe alternatives, I use aggressive terms such as *preda-tory reading* to counteract the passive approaches you might bring with you to college or fall into once you arrive. In most academic work, you can't afford to become absorbed, consumed, by the great volume of reading you must do. Nor can you afford to let your reasons for reading become secondary to the author's reasons for writing. If you do, you won't stay on top of your work; you will just fall into it and become lost. More specifically, just falling into as-signed reading in a passive, linear fashion will have several unfor-tunate results:

- You probably won't finish all of the reading assigned.
- You won't remember most of what you read.
- You will have no coherent record to remind you of what you once understood, while you were reading.
- If writing assignments then ask you to respond to this material -witharguments, interpretations, or new questions of your own -you will have no immediate response.

The alternative is to read always with some conscious *intention,* a deliberate strategy. Staying on top of your reading requires awareness that texts are not just linear streams of words but constructed objects. Like other constructed objects - such as a table or a car engine - they are composed of parts, assembled in a particular order for particular purposes. Understanding them is in large part a matter of knowing how they are constructed. If you know how they are constructed, you can also take them apart, rearrange the pieces in ways that are most useful to you, or pull out the parts you want to consume. Predatory reading simply acknowledges that books are, as people say, "food for thought."

For survival, every entering student must learn these strategies for staying on top of assigned reading; every scholar has already learned them. After visits to faculty offices, undergraduates sometimes express wonder at the vast amounts of knowledge these scholars have consumed. They have seen walls lined floor to ceiling with shelves of books and periodicals. "I can't believe they've read. all those books!" students tell me, and I reply, "Well, you're right not to believe it."

The truth, of course, is more complex than a question of having read or not read something. Having a "mastery" of books and articles does not necessarily mean you have read them from cover to cover. Sometimes it means much more, sometimes much less, and almost always something different. More accurately, "mastery" of published material means knowing

what it is,
why it was written,
how to find information within it,
and how to use this material for your own purposes.

Scholars use some books entirely as references, for looking up specific information when they need it. They selectively read certain portions of books or articles and ignore others. In some cases they have only glanced through a work, looking for the main idea or for specific kinds of information. And they have read some of the books, articles, selected passages, or poems on their shelves many times with intense care, underlining sentences and making extensive notes.

When teachers assign reading in their courses, therefore, they do not expect you to read everything once from beginning to end. They assume

that you will develop a range of reading strategies similar to their own and choose the methods most appropriate for particular assignments. To understand the functions of these methods, you should first consider how your mind and memory work.

Reading and Memory

Why are you reading?

While you are reading something for one of your courses, your first goal is to understand what the writer is saying. Although this immediate goal of "reading comprehension" is a necessary part of learning, this does not, in itself, constitute learning or *working knowledge* of the material, of the sort that you can use in the future to pass exams, write papers, or participate in discussions. Your understanding does not become useful unless you can remember the material and the way you made sense of it, including critical responses, questions, or points of confusion you need to clarify later.

Not remembering is actually the norm, and forgetting occurs1 very rapidly unless you take some active measures to retain information. Psychological studies indicate that after reading or listening people typically forget more than half of what they learned within one houL TheiI memory then continues to deteriorate more gradually, to about 30 percent after nine hours and about 20 percent after a week. And these are proportions of what you once knew. If you are tired or distracted, not "taking in" what you read or hear, your retention will be much lower. Without some strategy for controlling memory, what you remember will also be unpredictable. The 20 percent that you recall after a week might not be the information you need most to remember.

This massive loss of memory is normal because we don't want or need to recall most of what occurs to us for more than a few seconds. Some crucial kinds of learning, such as motor skills, are very tenacious. If you learned to ice-skate one winter, you did not forget how to do this over the next summer; the same kind of memory applies to riding a bicycle, typing, or throwing a ball. In general, however, we register a very small proportion of the sensory information available to us, and we retain most of this registered information only momentarily - just long enough to steer ourselves through immediate experience.

While you are reading, therefore, you will normally recall what you previously read just long enough to maintain a sense of

connection with the sentences you are currently reading. This brief storage period is called *short-term memory.* Unless you take deliberate measures to shift important information into *long-term memory* - measures comparable to using the Save command on your computer - the bulk of what you read will simply evaporate. Even if the material seemed perfectly clear to you at the time, an hour, day, or week later you won't be able to retrieve most of it, and what you do recall probably will have meshed with some prior framework or association you brought to the reading. You might remember an example involving cats simply because you love animals or miss your pet at home, not because this example was central to the text. Otherwise you will be left with very general, long-term *impressions* of reading: a vague recollection that the subject was interesting or uninteresting, that you disagreed with the author but not why, or that it made you sleepy.

Continuous streams of information will not end up in long-term memory unless you actively construct a framework for remembering and retrieving what is important: some kind of *mnemonic,* or aid to memory. In other words, you need to break up the stream and repackage it somehow. On average, for example, people can't store memory of more than seven random numbers, which explains the standard length of telephone numbers, why we can remember them, and why most of us can't remember the numbers on our credit cards. But we can recall longer sequences of numbers if we cluster them into logical units or create some other mnemonic. We "package" the long-distance area code separately and attach it to local numbers, or we locate logical sequences, repetitions, multiples, and sound patterns. For example, the number 321-1428 is easier to remember than an unpatterned string (such as 738-4192) if you register the fact that 321 is an inverted sequence and that *one four* times *two* equals *eight.* What we initially remember, then, is not the whole but the mnemonic: *the framework for remembering.*

This is why you take notes in lectures. You know you won't remember much of the stream of spoken words unless you make a record of what the teacher said. And because you can't record everything, you need to identify important information and write it down in some kind of logical framework that will later remind you of the whole. You will remember the lecture initially by referring to your notes, the mnemonic you constructed for the purpose of remembering. Good lecture notes repackage the material more efficiently than the lecture itself, by clustering the information into memorable categories, subcategories, and lists. For the purpose of

studying or writing a paper on the topic, reading effective notes can be *more* useful and efficient than listening to the entire lecture again, because the notes have already digested the material in ways you can understand and therefore reconstitute your own comprehension. For the purpose of taking exams or writing papers, *your* comprehension, not your teacher's, is most essential.

The streams of words you read are equally unmemorable, but students are much less likely to repackage what they read, with outlines or notes. The main reason, I suppose, is that a text is objectively *there* when you finish reading it. You can always go back to it, as to a transcript of a lecture, and read it over. But rereading a text is no more efficient than passively listening to a lecture again. You are still left with no record, no mnemonic, to shift your short-term comprehension into lasting memory: into real learning and working knowledge.

To accomplish this transfer, for specific purposes, you need a repertoire of reading strategies.

Passive Linear Reading

You are in a linear mode of reading when you begin with the first word of a text and continue to the last word, letting the linear sequence of words dictate the order in which you encounter information. This way of reading is entirely passive if you don't bring any goals or strategies to the task - if you simply follow the linear flow of the sentences, with your eyes and mind, and let the writing act upon you, happen to you.

What actually happens to you, in this passive mode of reading, will depend on many variables over which you have little control, such as your level of alertness, the qualities of the writing, and your interest in the subject. How much you understand and remember a week later will also depend on these variables. If you are tired, if the writing is abstract and tedious, and if the subject doesn't engage your interest, the drone of words might become a sedative or you might get to the end of a chapter and have no recollection of what you just read. Even if you are alert and interested, your memory of the text a week later might be very sketchy, because passive reading stimulates long-term memory more or less at random, if at all. In this mode, which I call *falling into the text,* readers are vulnerable to the writing and to other factors that surround the act of reading, such as preoccupations, distractions, and patterns of association (or disassociation) with the content.

This is the way you *want* to read a really good novel, simply for pleasure. Just open it to the first page, start reading, and let the flow of language carry you off on a literary journey. If it's a compelling book, you will become absorbed in it, and that's where the pleasure lies. The events and characters might become so real in your imagination that you forget you are reading - forget that they are inventions, constructed out of language on the page. The effect is essentially like watching a wonderful movie and forgetting that you are in a theater watching actors performing a script under direction and on constructed sets, all on film projected on a flat screen.

But this kind of intense absorption, this surrender to the medium, does not necessarily create memory. The most immediately gripping novels, such as thrillers and mysteries, often leave very little lasting recollection beyond a vague memory of fear or suspense. Becoming passively engrossed in a book doesn't leave you in a very good position to take an examination on it a week later or to write a summary or critical review. [**Exercise 1**]

This is why passive, linear reading isn't very useful in academic work. Apart from the fact that this way of reading doesn't reliably engage long-term memory, most of the reading you do in college won't capture and hold your attention like a good novel. If you surrender to it, allow yourself to become absorbed, it will probably put you to sleep.

Unfortunately, passive, linear reading is for most people the default mode, when they haven't decided to read in some other way or aren't aware that there are options. More than half of the freshmen in my classes initially try to read their textbooks and other assignments in this fashion: starting with the first word of a chapter and continuing to the end, trying to stay alert and receptive, hoping they will remember what they have read. Unless they deliberately read in a different way, however, they won't remember very much.

Highlighting

Those of you who have tried to study textbooks by reading them passively, hoping that you will absorb what you need to know, have probably realized that you need to be *doing something* to make important material soak in. This activity on your part is what dis-tinguishes reading from *studying* - *examining* something in the effort to understand it. But to *study* a text, what exactly should you be doing?

When they reach the end of a textbook chapter and can't remember what they read at the beginning, students typically resort to highlighting passages that seem important. This use of transparent markers has largely replaced its older counterpart, underlining. If you buy used textbooks you might find that someone has already performed this task, sometimes in two or three colors to distinguish categories or levels of importance. I've seen used textbooks that were almost completely highlighted. Apparently everything turned out to be important.

As a learning tool, highlighting has some values and limitations that you should consider before you fall into the practice. I'll start with the advantages:

- Because you are doing something with and to the text, highlighting keeps you more alert and allows you to read longer without becoming distracted and fatigued.
- Figuring out what you should highlight helps you understand what you are reading and determine whether you understand it. If you don't know what is important enough to highlight, you probably don't yet understand the material or why it was assigned.
- Highlighting creates the beginning of an analytical understanding of texts, of the way they are structured. When pulled out of the text, highlighted passages should resemble an outline or summary of the work.
- Perhaps the main advantage of highlighting is the reduction of study time later, when you need to read through the material again in preparation for an exam or a writing assignment and remember almost nothing. If you have left a textbook chapter unmarked, you will have to spend almost as much time read-ing it again as you did the first time. If you have effectively marked the most important parts, you can sometimes review only those highlighted portions and reduce your study time by more than half.

For some purposes, however, highlighting is a waste of time or an insufficient aid to learning. Here are some of the limitations:

- Highlighting (or underlining) alone simply emphasizes the authority of the text- what its author says, believes, or knows. The practice therefore leads you toward memorization and rep-

etition, not toward interpretation, inquiry, or criticism. As a consequence, highlighting works best as a preparation for "objective" examinations of your knowledge or for writing summaries. It is *not* sufficient preparation for raising questions, for participating in discussions, or for writing arguments, analyses, and interpretations based on readings.

- While it can lead you toward a systematic understanding of the text, highlighting does not effectively *represent* systematic understanding of the material as a structure of information and ideas, even if you use several colors. Highlighting usually emphasizes a linear series of important points, not the connections among them.
- If you need only to grasp and retain the general idea or a few specifics, highlighting while you read is an inefficient, sometimes pointless activity. For these purposes there are much better strategies, which I'll describe later.
- Highlighting doesn't create long-term memory. When the practice becomes routine, as a way of marking in passing what you need to study later, it can even reduce your memory.
- While thoughtful, effective highlighting can make studying more efficient, inaccurate highlighting can get you into trouble. If you highlight in a linear fashion while you read, you might not recognize important passages the first time through. If you miss them and study only the highlighted portions later, this practice can actually lower your performance on exams.

The most effective highlighting does not simply flag all of the passages you should read again when exams approach; it also creates a framework for understanding and remembering what you have read. That framework is usually built into the text, as a logical structure of ideas and information. Highlighting should help to make that structure visible, and observing the ways in which texts are structured can also help you write more effectively. As a consequence, highlighting works best when paired with a nonlinear reading strategy such as *analytical scanning* (see p. 146).

At every level of organization, from the structure of a paragraph to the design of an entire book, there is usually a *main idea* followed by *supporting points,* often leading to *conclusions.* In a book this structure consists of several layers. There is a main idea or topic for the entire volume. Subtopics of this general theme are also the main topics of individual chapters, which are often subdivided into sec-

tions, each with its own theme. A paragraph, the smallest unit of organization, will also have a topic, supporting points, and sometimes a conclusion.

As a rule (though one with many exceptions) *main ideas appear at beginnings, conclusions at ends, and supporting points in between.* Authors usually present the central theme of a book in the introduction - usually toward the beginning of the introduction - and present their conclusions at the end. The theme of a chapter also tends to appear at the beginning, as does the topic sentence of a paragraph. Textbooks (and sometimes other books and articles) usually provide summaries at the ends of chapters.

If you are aware of this conventional structure, you can locate main points more easily and recognize the supporting points that follow. For this purpose, two colors of highlighter are useful: one to mark the main ideas and the other to indicate supporting points within a section. Double and single underlining can serve the same purpose.

For example, consider this passage from Edward O. Wilson's book *The Diversity of Life* (1992):

> *Evolution is blinkered still* more *by the fact that the frequency of genes and chromosomes can be shifted by pure chance. The process, an alternative to natural selection called genetic drift, occurs* most *rapidly in very small populations. It proceeds faster when the genes are neutral, having little or no effect on survival and reproduction. Genetic drift is a game* of *chance. Suppose that a population of organisms contained 50 percent A genes and 50 percent B genes at a particular chromosome site, and that in each generation it reproduced itself by passing on A and B genes at random. Imagine that the population comprises only five individuals and hence 10 genes on the chromosome site. Draw out 10 genes to make the next generation. They can all come from one pair* of *adults* or *from as many as five pairs* of *adults. The new population could end up with exatly 5 A and 5 B genes, duplicating the parental population, but there is a high probability that in such a tiny sample the result instead will be 6 A and 4 B, or 3 A and 7 B, or something else again. Thus in very small populations the percentages of alleles can change significantly in one generation by the workings of chance alone. That in a nutshell is genetic drift, about which mathematicians have published volumes of sophisticated and usually incomprehensible calculations.*

> *But let us go on. Population size is critical in genetic drift. If the population were 500,000 individuals with 500,000 A genes and 500,000 B genes respectively, the picture would be entirely different. At this large number, and given that even a small percentage of the adults reproduced - say 1 percent reproduced - the sample of genes drawn would remain very close to 50 percent A and 50 percent B in each generation. In such large populations genetic drift is therefore a relatively minor factor in evolution, meaning that it is weak if opposed by natural selection. The stronger the selection, the more quickly the perturbation caused by drift will be corrected. If drift leads to a high percentage of B genes but A genes are superior in nature to B genes, the selection will tend to return the B genes to a lower frequency. (81)*

This is a clear, concise explanation of genetic drift as a factor in evolution, and while you were reading it you probably felt that you understood what Wilson was saying. If I ask you to write a brief explanation of genetic drift two weeks from now, however, your memory of the passage will have faded considerably, perhaps to oblivion. If *The Diversity of Life* is assigned reading in a biology or environmental studies course (and it often is), your immediate understanding will be of little value unless you take measures to recall this knowledge and study efficiently when you face an exam or writing assignment.

Highlighting can serve this purpose if you imagine what would most efficiently stimulate understanding after short-term memory has faded. If you highlight the main structure of the explanation, this process will also strengthen your immediate understanding and enhance memory when you look at the passage again.

What should you highlight? As in most explanations and arguments, Wilson introduces central topics toward the beginnings of paragraphs, devotes the middle portions to examples, and ends paragraphs with conclusions. Highlighting should underscore this structure; *highlighted material should read, ideally, as a brief summary or outline of the entire passage.* Here is one way to highlight the structure of Wilson's explanation:

> *Evolution is blinkered still more by the fact that the frequency of genes and chromosomes can be shifted by pure chance. The process, an alternative to natural selection called genetic drift, occurs most rapidly in very small populations. It proceeds faster when thee genes are*

neutral, having little or no effect on survival and reproduction. Genetic drift is a game of chance. Suppose that a population of organisms contained 50 percent A genes and 50 percent B genes at a particular chromosome site, and that in each generation it reproduced itself by passing on A and B genes at random. Imagine that the population comprises only five individuals and hence 10 genes on the chromosome site. Draw out 10 genes to make the next generation. They can all come from one pair of adults or from as many as five pairs of adults. The new population could end up with exactly 5 A and 5 B genes, duplicating the parental population, but there is a high probability that in such a tiny sample the result instead will be 6 A and 4 B, or 3 A and 7 B, or something else again. Thus in very small populations the percentages of alleles can change significantly in one generation by the workings of chance alone. That in a nutshell is genetic drift, about which mathematicians have published volumes of sophisticated and usually incomprehensible calculations.

But let us go on. Population size is critical in genetic drift. If the population were 500,000 individuals with 500,000 A genes and 500,000 B genes respectively, the picture would be entirely different. At this large number, and given that even a small percentage of the adults reproduced - say 1 percent reproduced - the sample of genes drawn would remain very close to 50 percent A and 50 percent B in each generation. In such large populations genetic drift is therefore a relatively minor factor in evolution, meaning that it is weak if opposed by natural selection. The stronger the selection, the more quickly the perturbation caused by drift will be corrected. If drift leads to a high percentage of B genes but A genes are superior in nature to B genes, the selection will tend to return the B genes to a lower frequency.

Here I've used a single underline to highlight the most central points and double underlining to indicate supporting points. A quick glance at the examples between would be sufficient to remind you of the details used to illustrate these central statements.

Note that although you can look for important statements *toward* the beginning and end of paragraphs (or sections or chapters), those statements are not necessarily the first or last sentences. To

highlight effectively you need to read analytically and locate structural features. [**Exercise 2**]

Again, highlighting is most effective as an aid to studying the text later, if you need only to understand and remember important information. If you want to avoid reading the text again or if you are supposed to read and respond to it critically, other approaches to reading will be more effective.

Notes, Outlines, and Summaries

Students are often surprised that weeks or months later I can still remember papers they wrote for my class, sometimes more vividly than they can. They say, "You must have a really good memory." But I don't. The reason, instead, is that I don't just read those papers; I also write extensive comments, both at the margins and at the end. In those comments I try to explain what I got out of the paper and what I thought the writer was trying to do, along with evaluations of the work. *I remember their writing as the object of my own active attention and response.*

You will notice the same kind of enhanced recollection if you discuss a book with a friend shortly after you read it, describe it to someone in a letter, or write a book report. These active responses will stimulate lasting memory of the book much more effectively than just reading or highlighting. Much later you will remember what *you* said - the way you described the book and what you liked or disliked about it - more vividly than the aspects you did not describe. Writing and speaking are in themselves *mnemonics:* they help to create long-term memory.

A sense of urgency, a desire to get the reading done, might convince you that pausing to make notes, construct outlines, or write summaries would be a waste of your time, since the author has already written what you need to know. Why rewrite it or write about it? Most textbook chapters are already outlined, in a sense. The material is usually broken down into sections, with headings and subheadings, often with numbered lists of points and boldface indications of important terms. Textbooks often include chapter summaries that digest the material for you, along with study questions to help you make sure you understand it.

Until you make this structure meaningful in your own terms, however, it will remain the structure of the text and will represent the author's knowledge, not yours. If you can explain the material to someone else, summarize it in your own words, or outline the structure, the knowledge is yours in two ways:

1. This linguistic processing will engage long-term memory.
2. In a summary or outline you will have a record of your own understanding- something you can read quickly later to refresh your memory.

The framework of a good outline will also stimulate recollection of details, examples, or supporting arguments. Even if you can't recall these specifics without reading the material again, the structure of your outline will allow you to scan the text quickly, filling in the pieces you have forgotten. If it is sufficiently clear, a brief outline or diagram can even *eliminate* the need to read the text again. Without rereading, the follmving outline would recall the substance of Wilson's explanation of genetic drift, including the examples:

Genetic drift

alt. to nat. selection

- *rapid in small pop.*
- *if not working against nat. selection*
- *"game of chance"*

ex: 5 A & 5 B = 6 A & 4 B or 3 A & 7 B

500,000 A & 500,000 B ""about 50/50%

[Exercise 3]

Like highlighting, however, an outline reaffirms the structure and substance of the text, not your own position in relation to the text. For this reason, notes - either in the margins or in a separate notebook - are especially important if writing assignments or essay exams ask you to respond to readings. If you make notes while you read, you will have a record of your responses to the text: points of agreement or disagreement, alternative interpretations, correspondence or contrast with other readings, or unanswered questions. These notes on your thoughts about the text will put you in a stronger position to develop arguments, interpretations, or comparisons than you would be if you had only read the work passively, without paying attention to the way it struck you. Passive reading reaffirms the authority of the text and can actually put you at a disadvantage if you need to take a position, to establish your own authority.

All of these active strategies become essential if assigned readings are badly written or otherwise difficult to understand. If a text does not make sense, you must *make sense of it* somehow, and what

you need to remember is what you understand, not literally what the author said. When readings do not directly communicate what you need to know, you want to avoid getting "trapped in the text." Your own notes, outlines, and paraphrases can help you escape writing that you hope never to read again.

Here is an example of reading you would not want to get trapped in - one you would want to escape at all costs. It is a passage on contractual relations from *The Structure of Sodal Action* (1949), by the sociologist Talcott Parsons. Try just reading it passively, from beginning to end, to see what happens to you.

> *Spencer's contractual relation is the type case of a social relationship in which only the elements formulated in "utilitarian" theory are involved. Its prototype is the economic exchange relationship where the determinant elements are the demand and supply schedules of the parties concerned. At least implicit in the conception of a system of such relationships is the conception that it is the mutual advantage derived by the parties from the various exchanges which constitutes the principle binding, cohesive force in the system. It is as a direct antithesis to this deeply imbedded conception of a system of "relations of contract" that Durkheim wishes his own "organic solidarity" to be understood.*
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> *The line which Durkheim's criticism takes is that the Spencerian, or more generally utilitarian, formulation fails to exhaust, even for the case of what are the purely "interested" transactions of the market-place, the elements which actually are both to be found in the existing system of such transactions, and which, it can be shown, must exist, if the system is to function at all. What is omitted is the fact that these transactions are actually entered into in accordance with a body of binding rules which are not part of the ad hoc agreement of the parties. The elements included in the utilitarian conception are, on the contrary, all taken account of in the terms of the agreement. What may, however, be called the "institution" of contract - the rules regulating relations of contract - has not been agreed to by the parties but exists prior to and independently of any such agreement.*
>
> *The content of the rules is various. They regulate what contracts are and are not recognized as valid. A man cannot, for instance, sell himself or others into slavery. They regulate the means by which the other party's assent to a contract may be obtained; an agreement*

> *secured by fraud or under duress is void. They regulate various consequences of a contract once made, both to the parties themselves and to third persons. (311)*

I think everyone will agree that this is difficult reading, partly because it is an abstract discussion of social and economic philosophy, with few concrete examples to help us apply the concepts to the real world. Most readers would also agree that this passage is poorly written - much less clear and coherent than it might have been. If you are having trouble understanding academic writing, be sure to consider the possibility that the author is at least partly to blame. Someone described Parsons's writing as "ink of dust on pages of lead," and you can see why if you look at the terribly convoluted third sentence in the first paragraph:

> *At least implicit in the conception of a system of such relationships is the conception that it is the mutual advantage derived by the parties from the various exchanges which constitutes the principle binding, cohesive force in the system.*

Even the shortest sentence in the passage - *The content of the roles is various* - can be condensed more effectively to three words: *The rules vary.* I can't imagine anyone reading *The Structure of Social Action* for pleasure.

Still, this is an important book in the field of sociology, by a well-known sociologist, and a teacher might assign it or something equally impenetrable in one of your courses. What will you do if you have to read this passage and are expected to understand it to take an exam or vvrite a paper?

Passive readers would read the passage over and over, beginning to end, in the hope that they would eventually understand it. Trying to highlight the "important parts" wouldn't help much. Even if you did understand what Parsons was trying to say, which of these obscure sentences or phrases would you highlight? [**Exercise 4**] None of them captures the essential distinction the passage is about.

You can understand and remember this distinction only by building your own framework, using your own language. And this is possible if you examine the passage analytically and record what you figure out, even if you have very little background knowledge of the subject. Even this dense, murky passage has some obvious structure:

1. A paragraph on Spencer, with a transition to Durkheim in the last sentence of that paragraph
2. A general explanation of Durkheim's theory
3. Illustrations of the "rules" Durkheim had in mind, introduced by the transition sentence *The content of the rules is various.*

Analysis of this structure offers your only hope of understanding writing that, when read as a continuous stream of words, makes little sense at all. Because this is a very abstract text, about "contractual relations," it might make sense to imagine a more concrete example, such as the sale of a car: The central question is *How do we reach agreement on the sale of this car?* And then *What holds this deal together?* How would Spencer and Durkheim answer these ques-tions?

To construct an understanding I can later remember, I could write a brief summary in my own words:

> *Parsons distinguishes the views of Spencer and Durkheim concerning the bases for "contractual relations": economic transactions and other kinds of agreements. Spencer's "utilitarian" position limits these factors to the individual interests, or "demand and supply schedules," of the parties involved in the agreement. Durkheim argues that all sorts of other "rules," such as laws and customs, govern the terms of contractual relations. Durkheim calls this "organic solidarity."*

If you were about to write a paper or take an essay exam on this material, which would you prefer to have before you: this voiced summary or Parsons's original passage? [**Exercise 5**]

For a similar purpose, I could also create a "mnemonic diagram" of the passage (Figure 3):

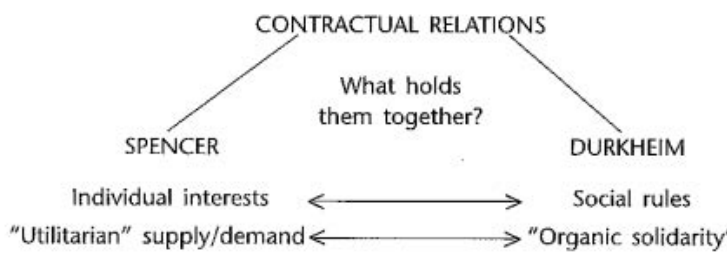

FIGURE 3

Some Other Ways of Reading

When using the methods of reading described in the previous sections, you will probably need to go through the text at least once, pausing to highlight material, take notes, or construct outlines. But there are other ways of moving through a text and getting what you need to get out of it - ways that are more or less linear, much faster or much slower, depending on your reasons for reading.

Reference

We think of "reference books" as volumes such as dictionaries or encyclopedias, but almost any book can be used primarily as a reference: a source of specific pieces of information you can look up when you need them, without reading anything else. When you pull such a book off the shelf, you probably tum straight to the index or table of contents. In a volume on the premodern history of China, for example, you might be interested only in the Shang dynasty or only in the art or religion of this period because you are investigating these narrow topics. Every book with an index is potentially an "encyclopedia" on its own subject.

Supplementary readings on a course syllabus are often intended for use as references, and you will also use books and articles as references when you write research papers, as I will explain in the next chapter. The list of works cited in a bibliography does not necessarily mean that the writer has read all of this material from beginning to end.

Selective Reading

In some cases only certain portions of a book or particular articles in a journal are immediately important. Scholars therefore might have read these sections very closely while ignoring or only glancing at everything else. Scientists and social scientists selectively read many research articles, looking only at the abstract or introduction, perhaps, to see what an article is about or at the methods, figures, specific results, or conclusions, depending on their interest. We also read selectively while looking through magazines: reading only the first paragraph or the sidebars or just looking at the pictures and captions.

Analytical Scanning

You might imagine that this kind of reading is the same as "skimming," but in some respects it is the opposite. Skimming is cruising quickly over the surface, to get a general sense for the content. The effect resembles the view you get through the window of an airplane or high-speed train: a stream of blurred, general impressions. Analytical scanning is more like examining a topographical map or aerial photograph of a whole area: studying the structure of the landscape and noting high points or centers of importance. Not bound to any linear path, your vision can move in any direction, focus closely, or widen to encompass the whole.

When scanning a book, you might begin by examining the table of contents, to see how the work is organized and, in a very general way, what it contains. Then, to figure out what the author is trying to do - the purpose of the book - you might scan the introduction, focusing especially on the beginning and end, where authors are most likely to state their intentions. Then you might skip to the last chapter, where you are likely to find conclusions or summaries of the entire work. With this knowledge of what the author was setting out to do and then claimed to have done, you can turn back to the beginnings of particular chapters to determine how this goal was accomplished. In these chapters, as in the entire volume, you will usually find the most central points at the beginning and end. This method is especially useful for studying textbook chapters, which are often designed for nonlinear, analytical reading.

If you become adept at scanning in this way, you can "read" an entire book in twenty or thirty minutes. If you take notes in the process, you will end up with a more useful understanding of its content than you would have if you had spent several hours reading it from cover to cover in a passive, linear fashion. [Exercise 6]

Close Reading

While selective reading and analytical scanning are much faster than reading through a text from beginning to end, word by word, some assignments will require much more time and attention. Extremely difficult texts, extremely important ones, an essay you will discuss in class, or a poem you must interpret in a writing assignment might require several readings and careful analysis.

As a consequence, the length of a reading assignment bears little relation to the time you might spend on it. While it is possible to pick

up the central themes of an entire book in thirty minutes, you might need to spend an hour reading two pages of an important essay or one short poem. Students often tell me fatalistically that they *have* to spend a certain amount of time reading a certain number of pages, as though this pace was unalterable. From my perspective, this simply means they are stuck in a certain way of reading.

In some respects, close reading and analytical scanning are related strategies, not opposites. In both cases you are analyzing the structure of the text, moving back and forth through it, not bound to follow its linear order. [**Exercise 7**]

Overcoming Resistance to Strategic Reading

If the reading strategies I've described are so effective, why are the majority of the students you will observe in study lounges still reading their textbooks from beginning to end, a highlighter poised over the page, waiting for the chance to mark something worth remembering?

As I noted previously, a passive, linear approach to reading is the default mode - the easiest way of reading to fall into *without thinking.* And that, of course, is the problem. If you aren't actively thinking about *what* you are reading, *why* you are reading it, and *how* you are reading it, you aren't going to get much of lasting value out of the time you spend.

But there are some other reasons students cling to reading methods that don't actually work very well in undergraduate studies. Students have told me that if they don't read every word in the order in which it appears they are afraid they "will miss something." What if something really important lies in one of those parts you skipped over? It seems illogical that you could learn more by reading less or that you could understand something better by spending less time reading it.

The flaw in this reasoning lies in the assumption that you will learn and remember written material simply because your eyes happened to pass over it, following the linear trail of words from beginning to end, or because you covered it with transparent marker. Having read something in this way offers no reliable assurance that you have learned and will remember what you read. In your effort not to miss anything, you might, in the long run, miss

almost everything. By the next day you might be left with nothing but a warm sense of virtue for having completed your homework. [**Exercise 8**]

I've also known people who have a kind of aesthetic objection to reading something "out of order" or selectively- an attitude akin to the moral outrage some people feel toward readers who skip to the end of a novel to find out what happens. From this perspective, the linearity of a book or essay represents its integrity, and reading in a linear fashion demonstrates respect for that integrity. Analytical or selective reading, out of order, therefore violates the integrity of the text, much as dissecting a frog does violence to the living creature.

While analytical reading bears some resemblance to dissection, texts are not like living creatures. You can read them in any order you like, dismantle them, examine their structural elements, take what you want from them in notes, and still be left with an undamaged whole. Then you can return to them, if you like, and read them over in a different way. The same can't be said for highlighting, which really does alter (even damage) the text. By contrast, the Grand Masters of Strategic Reading would be so skillful and efficient that they could buy all of their textbooks for the term, extract everything they needed from them before the bookstore's full refund deadline expired, and return them unmarked, like new.

Answering Amanda

To summarize what I've said in this chapter, I'll return to Amanda's lingering question: How do you know what *not* to read?

To answer this question I had to invert it: How do you know *what* to read? And knowing *what* to read means knowing *how* to read a particular text for a particular purpose.

A number of Web sites provide detailed guidance on reading and study skills in college. Here are two that give you links to other sites and materials:

- Gray, Greg. *Leaming to Learn.* Centre for Academif and Adaptive Technology, University of Toronto. http://snow.utoronto.ca/Learn2/tools.html
- Learning Assistance Center, South Mountain Community College. http://www.smc.maricopa.edu/subl/lac/r_rdg.html

EXERCISES

Exercise 1. Think of the last novel you read for pleasure or the last movie you saw. Try to write a review of this book or movie, including a summary of the plot, with the names of main characters and places, and evaluate its literary or cinematic qualities.

If this is difficult (as I suspect it is), how would you need to read the book or watch the movie differently to prepare to write such a review later?

Exercise 2. Choose a section of about two pages or a bief essay from your course readings and practice highlighting analytically, to emphasize the structure of the text. If you then read only the highlighted portions, do they constitute a brief, coherent, unvoiced summary of the whole? If you are highlighting effectively, they should.

Exercise 3. Now make an outline or diagram to represent the structure of the same reading you chose for Exercise 2. Set this material aside for two or three days and return only to your outline. Using this outline, could you explain the content of the reading in a two-paragraph essay exam?

Exercise 4. To experience the limitations of highlighting, try to highlight the important parts of the Talcott Parsons passage (pp. 142-43)- the sentences or phrases that would remind you of its meaning in a week or two.

Exercise *5.* Here is another difficult text - not because it is badly written but because it was written so long ago, in the seventeenth century, in language very different from the English we now use. This is the beginning of ***Leviathan,*** by the political philosopher Thomas Hobbes, a book frequently assigned in philosophy, political science, and other fields.

Read this passage two or three times, and while you are reading try to "translate" what Hobbes said into language that is easier for you to understand and remember. Now write a one-paragraph, voiced summary of the passage in your own language, quoting Hobbes when it would be useful to remember his terms. The question your paragraph should answer is ***How does Hobbes describe the "State" or "Commonwealth"?***

From *Leviathan*

Thomas Hobbes

The Introduction

Nature (the Art whereby God hath made and governes the World) is by the *Art* of man, as in many other things, so in this also imitated, that it can make an Artificial Animal. For seeing life is but a motion of Limbs, the beginning whereof is in some principall

part within; why may we not say, that all *Automata* (Engines that move themselves by spring and wheeles as doth a watch) have an artificiall life? For what is the *Heart,* but a *Spring;* and the *Nerves,* but so many *Strings;* and the *Joynts,* but so many *Wheeles,* giving motion to the whole Body, such as was intended by the Artificer? *Art* goes yet further, imitating that Rationall and most excellent worke of Nature, *Man.* For by Art is created that great LEVIATHAN called a COMMON-WEALTH, or STATE, (in latine C!vnAs) which is but an Artificiall Man; though of greater stature and strength than the Natural!, for whose protection and defence it was intended; and in which, the *Soveraignty* is an Artificiall *soul,* as giving life and mo-tion to the whole body; The *Magistrates,* and other *Officers* of Judi-cature and Execution, artificiall *Joynts; Reward* and *Punishment* (by which fastned to the seate of the Soveraignty, every joynt and member is moved to performe, his duty) are the *Nerves,* that do the same in the Body Naturall; The *Wealth* and *Riches* of all the particu-lar members, are the *Strength; Salus Populi* (the *peoples safety)* its *Businesse; Counsellors,* by whom all things needfull for it to know, are suggested unto it, are the *Memory; Equity* and *Lawes,* an artificiall *Reason* and *Will; Concord, Health; Sedition, Sicknesse;* and *Civill war, Death.* Lastly, the *Pacts* and *Covenants,* by which the parts of this Body Politique were at first made, set together, and united, resemble that *Fiat,* or the *Let us make man,* pronounced by God in the Creation. (81-82)

Exercise 6. The best way to teach yourself effective analytical scanning is to give yourself far too little time to figure out what a book or chapter says a time so brief that linear, continuous reading is impossible.

Choose an article of about ten pages or an entire book. For the article, give yourself only ten minutes to figure out what the author is saying and to write a one-paragraph summary. For a book, give yourself only thirty minutes to grasp its main ideas and organization and write a one-page summary.

Exercise 7. Try using analytical scanning and dose reading on the same text. Give yourself only fifteen minutes to scan a whole chapter of one of your textbooks, to figure out the overall structure and content. Then spend fifteen minutes closely studying a specific section of less than one page, examining the way this information is presented, and outlining or summarizing the content.

Neither strategy is always the "right" way to read a textbook. Instead, they allow you to cover different amounts of material in the same time, with different qualities of understanding. The strategy you use therefore depends on the amount of time you have and the kind of understanding you need.

Exercise 8. You can test the arguments I've made by reading two different chapters of the same textbook in two different ways, and then find out how

muchyou remember later. Scan one chapter analytically and outline its content in a few minutes, deliberately searching *for* important points and structural elements. Spend at least twice as much time reading another chapter from beginning to end, trying simply to absorb the material, without taking notes.

Wait at least one day and then try to summarize both chapters from memory, each in a paragraph or two, without looking at the chapters or at the notes you kept on the first. Which one do you remember best?