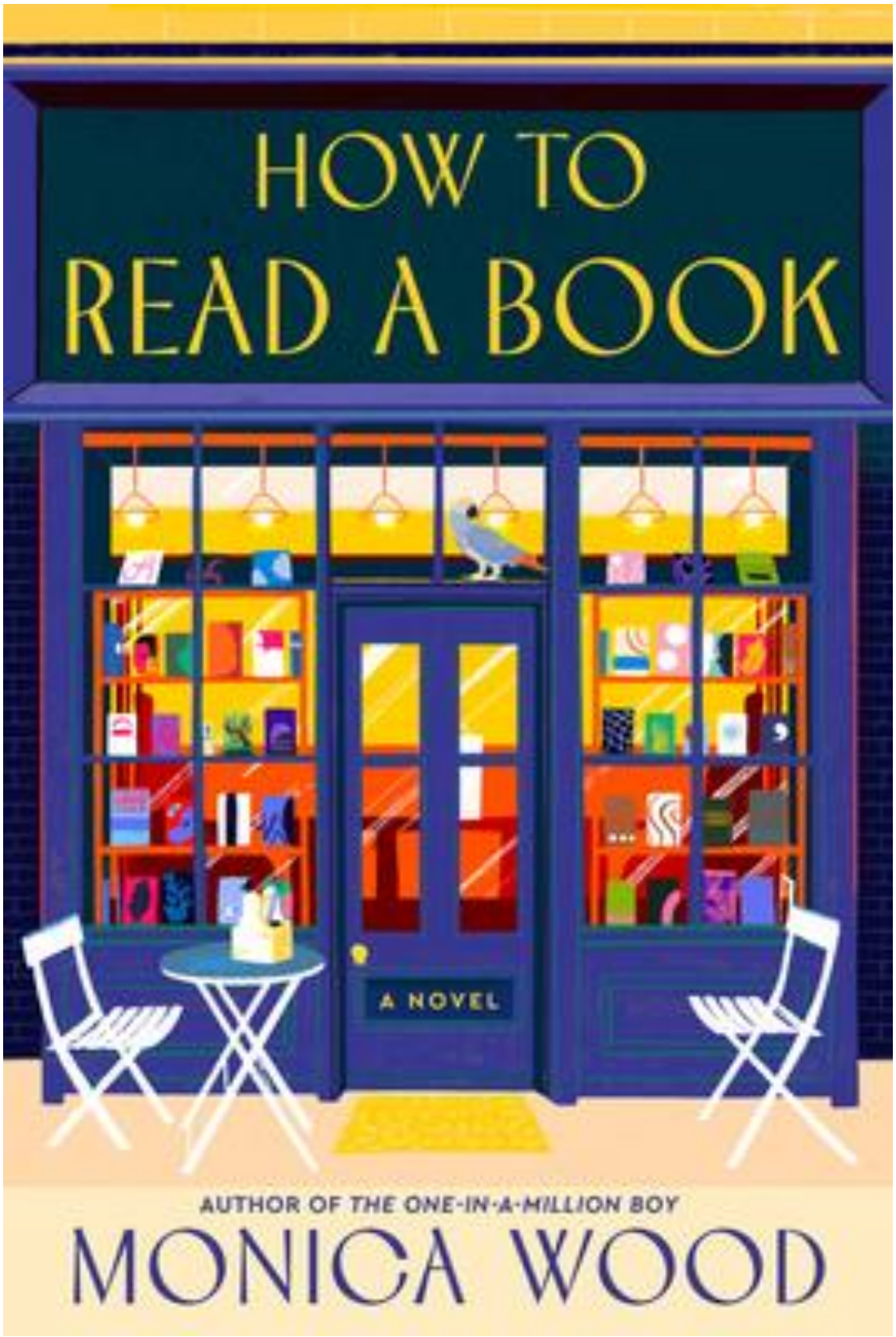
HOW TO
READ A BOOK
A NOVEL
AUTHOR OF THE ONE-IN-A-MILLION BOY
MONICA WOOD

CHAPTER 12

Aids to Reading

Any aid to reading that lies outside the book being read we may speak of as extrinsic. By “intrinsic reading” we mean reading a book in itself, quite apart from all other books. By “extrinsic reading” we mean reading a book in the light of other books. So far we have intentionally avoided mentioning any extrinsic aids to reading. The rules of reading we have set forth are rules of intrinsic reading—they do not include going outside the book to discover what it means. There are good reasons for our having insisted up to now on your primary task as a reader—taking the book into your study and working on it by yourself, with the power of your own mind, and with no other aids. But it would be wrong to continue insisting on this. Extrinsic aids can help. And sometimes they are necessary for full understanding. One reason why we have said nothing about extrinsic reading up to now is that intrinsic and extrinsic reading tend to fuse in the actual process of understanding and criticizing a book. We really cannot help bringing our experience to bear on the tasks of interpretation and criticism and even outlining. We must have read other books before this one; no one starts his reading career by reading analytically. We may not bring to bear our experience both of other books and of life as systematically as we should, but we nevertheless measure the

statements and conclusions of a writer against other things that we know, from many different sources. Thus it is common sense to say that no book should be, because no book can be, read entirely and completely in isolation. But the main reason for avoiding extrinsic aids up to this point is that many readers depend on them too slavishly, and we wanted you to realize that this is unnecessary. Reading a book with a dictionary in the other hand is a bad idea, although this does not mean you should never go to a dictionary for the meanings of words that are strange to you. And seeking the meaning of a book that puzzles you in a commentary is often ill-advised. On the whole, it is best to do all that you can by yourself before seeking outside help; for if you act consistently on this principle, you will find that you need less and less outside help. The extrinsic aids to reading fall into four categories. In the order in which 114 CHAPTER 12. AIDS TO READING 115 we will discuss them in this chapter, they are: first, relevant experiences; second, other books; third, commentaries and abstracts; fourth, reference books. How and when to use any of these types of extrinsic aids cannot be stated for every particular case. Some general suggestions can be made, however. It is a common-sense maxim of reading that outside help should be sought whenever a book remains unintelligible to you, either in whole or part, after you have done your best to read it according to the rules of intrinsic reading. The Role of Relevant Experience There are two types of relevant experience that may be referred to for help in understanding difficult books. We have already

mentioned the distinction involved, when we spoke in Chapter 6 of the difference between common experience and special experience. Common experience is available to all men and women just because they are alive. Special experience must be actively sought and is available only to those who go to the trouble of acquiring it. The best example of special experience is an experiment in a laboratory, but a laboratory is not always required. An anthropologist may acquire special experience by traveling to the Amazon basin, for example, to study the aboriginal inhabitants of a region that has not yet been explored. He thereby gains experience that is not ordinarily available to others, and that will never be available to many; for if large numbers of scientists invade the region, it will cease to be unique. Similarly, the experience of the astronauts on the moon is highly special, although the moon is not a laboratory in the ordinary sense of the term. Most men do not have the opportunity of knowing what it is like to live on an airless planet, and it will be centuries before this becomes a common experience, if it ever does. Jupiter, too, with its enormously greater gravity, will remain a “laboratory” in this sense for a long time to come, and may always be such. Common experience does not have to be shared by everyone in order to be common. Common is not the same as universal. The experience of being a child of parents, for example, is not shared by every human being, for some are orphans from birth. However, family life is nevertheless common experience, because most men and women, in the ordinary course of their

lives, share it. Nor is sexual love a universal experience, although it is common, in the sense we are giving the word common. Some men and women never experience it, but the experience is shared by such a high proportion of humans that it cannot be called special. (This does not mean that sexual activity cannot be studied in the laboratory, as in fact it has been.) The experience of being taught is not universal, either, for some men and women never go to school. But it, too, is common. The two kinds of experience are mainly relevant to different kinds of books. Common experience is most relevant to the reading of fiction, on the one hand, and to the reading of philosophy, on the other. Judgments concerning the verisimilitude of a novel are almost wholly based on common experience; the book, we say, is either true or not true to our experience of life as it is led by CHAPTER 12. AIDS TO READING 116 most people, ourselves included. The philosopher, like the poet, appeals to the common experience of mankind. He does no work in laboratories or research in the field. Hence to understand and test a philosopher's leading principles you do not need the extrinsic aid of special experience. He refers you to your own common sense and your daily observation of the world in which you live. Special experience is mainly relevant to the reading of scientific works. To understand and judge the inductive arguments in a scientific book, you must be able to follow the evidence that the scientist reports as their basis. Sometimes the scientist's description of an experiment is so vivid and clear that you have no trouble. Sometimes

illustrations and diagrams help to acquaint you with the phenomena described. Both common and special experience are relevant to the reading of history books. This is because history partakes both of the fictional and the scientific. On the one hand, a narrative history is a story, having a plot and characters, episodes, complications of action, a climax, an aftermath. The common experience that is relevant to reading novels and plays is relevant here, too. But history is also like science, in the sense that at least some of the experience on which the historian bases his work is quite special. He may have read a document or many documents that the reader could not manage to see without great trouble. He may have done extensive research, either into the remains of past civilizations or in the form of interviews with living persons in faraway places. How do you know whether you are making proper use of your experience to help you understand a book? The surest test is one we have already recommended as a test of understanding: ask yourself whether you can give a concrete example of a point that you feel you understand. We have many times asked students to do this, only to find that they could not. The students appeared to have understood the point, but they were completely at a loss when called upon to supply an example. Obviously, they had not really understood the book. Test yourself in this way when you are not quite sure whether you have grasped a book. Take Aristotle's discussion of virtue in the Ethics, for example. He says over and over that virtue is a mean between the extremes of defect and excess. He

gives some concrete examples; can you supply others? If so, you have understood his general point. If not, you should go back and read his discussion again. Other Books as Extrinsic Aids to Reading We will have more to say later about syntopical reading, where more than one book is read on a single subject. For the moment, we want to say a few things about the desirability of reading other books as extrinsic aids to the reading of a particular work. Our advice applies particularly to the reading of so-called great books. The enthusiasm with which people embark on a course of reading great books often gives way, fairly soon, to a feeling of hopeless inadequacy. One reason, of course, is that many readers do not know how to read a single book very well. But that is CHAPTER 12. AIDS TO READING 117 not all. There is another reason: namely, that they think they should be able to understand the first book they pick up, without having read the others to which it is closely related. They may try to read The Federalist Papers without having first read the Articles of Confederation and the Constitution. Or they may try all these without having read Montesquieu's The Spirit of Laws, Rousseau's The Social Con tract, and Locke's second treatise Of Civil Government. Not only are many of the great books related, but also they were written in a certain order that should not be ignored. A later writer has been influenced by an earlier one. If you read the earlier writer first, he may help you to understand the later one. Reading related books in relation to one another and in an order that renders the later ones more intelligible is a basic common-

sense maxim of extrinsic reading. The utility of this kind of extrinsic reading is simply an extension of the value of context in reading a book by itself. We have seen how the context must be used to interpret words and sentences to find terms and propositions. Just as the whole book is the context for any of its parts, so related books provide an even larger context that helps you interpret the book you are reading. It has often been observed that the great books are involved in a prolonged conversation. The great authors were great readers, and one way to understand them is to read the books they read. As readers, they carried on a conversation with other authors, just as each of us carries on a conversation with the books we read, though we rna y not write other books. To join this conversation, we must read the great books in relation to one another, and in an order that somehow respects chronology. The conversation of the books takes place in time. Time is of the essence here and should not be disregarded. The books can be read from the present into the past or from the past into the present. Though the order from past to present has certain advantages through being more natural, the fact of chronology can be observed in either way. It should be noted, incidentally, that the need to read books in relation to one another applies more to history and philosophy than to science and fiction. It is most important in the case of philosophy, because philosophers are great readers of each other. It is probably least important in the case of novels or plays, which, if they are really good, can be read in isolation, although of course the literary critic will

not want to confine himself to doing so. How to Use Commentaries and Abstracts A third category of extrinsic aids to reading includes commentaries and abstracts. The thing to emphasize here is that such works should be used wisely, which is to say sparingly. There are two reasons for this. The first is that commentators are not always right in their comments on a book. Sometimes, of course, their works are enormously useful, but this is true less often than one could wish. The handbooks and manuals that are widely available in college bookstores and in stores frequented by high school CHAPTER 12. AIDS TO READING 118 students are often particularly misleading. These works purport to tell the student everything he has to know about a book that has been assigned by one of his teachers, but they are sometimes woefully wrong in their interpretations, and besides, as a practical matter, they irritate some teachers and professors. In defense of handbooks, it must be conceded that they are often invaluable for passing examinations. Furthermore, to balance the fact that some teachers are irritated by the errors of handbooks, other teachers use them themselves in their teaching. The second reason for using commentaries sparingly is that, even if they are right, they may not be exhaustive. That is, you may be able to discover important meanings in a book that the author of a commentary about it has not discovered. Reading a commentary, particularly one that seems very selfassured, thus tends to limit your understanding of a book, even if your understanding, as far as it goes, is correct. Hence, there is one piece of advice that

we want to give you about using commentaries. Indeed, this comes close to being a basic maxim of extrinsic reading. Whereas it is one of the rules of intrinsic reading that you should read an author's preface and introduction before reading his book, the rule in the case of extrinsic reading is that you should not read a commentary by someone else until after you have read the book. This applies particularly to scholarly and critical introductions. They are properly used only if you do your best to read the book first, and then and only then apply to them for answers to questions that still puzzle you. If you read them first they are likely to distort your reading of the book. You will tend to see only the points made by the scholar or critic, and fail to see other points that may be just as important. There is considerable pleasure associated with the reading of such introductions when it is done in this way. You have read the book and understood it. The writer of the introduction has also read it, perhaps many times, and has his own understanding of it. You approach him, therefore, on essentially equal terms. If you read his introduction before reading the book, however, you are at his mercy. Heeding this rule, that commentaries should be read after you have read the book that they expound and not before, applies also to handbooks. Such works canr.ot hurt you if you have already read the book and know where the handbook is wrong, if it is. But if you depend wholly on the handbook, and never read the original book, you may be in bad trouble. And there is this further point. If you get into the habit of depending on

commentaries and handbooks, you will be totally lost if you cannot find one. You may be able to understand a particular book with the help of a commentary, but in general you will be a worse reader. The rule of extrinsic reading given here applies also to abstracts and plot digests. They are useful in two connections, but in those two only. First, they can help to jog your memory of a book's contents, if you have already read it. Ideally, you made such an abstract yourself, in reading the book analytically, but if you have not done so, an abstract or digest can be an important aid. Second, abstracts are useful when you are engaged in syntopical reading, and CHAPTER 12. AIDS TO READING 119 wish to know whether a certain work is likely to be germane to your project. An abstract can never replace the reading of a book, but it can sometimes tell you whether you want or need to read the book or not. How to Use Reference Books There are many kinds of reference books. In the following section we will confine ourselves mainly to the two most used kinds, dictionaries and encyclopedias. However, many of the things we will have to say apply to other kinds of reference books as well. It is not always realized, yet it is nevertheless true, that a good deal of knowledge is required before you can use a reference book well. Specifically, four kinds of knowledge are required. Thus a reference book is an antidote to ignorance in only a limited way. It cannot cure total ignorance. It cannot do your thinking for you. To use a reference book well, you must, first, have some idea, however vague it may be, of what you want to know. Your ignorance

must be like a circle of darkness surrounded by light. You want to bring light to the dark circle. You cannot do that unless light surrounds the darkness. Another way to say this is that you must be able to ask a reference book an intelligible question. It will be no help to you if you are wandering, lost, in a fog of ignorance. Second, you must know where to find out what you want to know. You must know what kind of question you are asking, and which kinds of reference books answer that kind of question. There is no reference book that answers all questions; all such works are specialists, as it were. Practically, this comes down to the fact that you must have a fair overall knowledge of all of the major types of reference books before you can use any one type effectively. There is a third, and correlative, kind of knowledge that is required before a reference book can be useful to you. You must know how the particular work is organized. It will do you no good to know what you want to know, and to know the kind of reference book to use, if you do not know how to use the particular work. Thus there is an art of reading reference books, just as there is an art to reading anything else. There is a correlative art to making reference books, by the way. The author or compiler should know what kind of information readers will seek, and arrange his book to fit their needs. He may not always be able to anticipate these, however, which is why the rule that you should read the introduction and preface to a book before reading the book itself applies particularly here. Do not try to use a reference book before getting the editor's advice on how

to use it. Of course, not all kinds of questions can be answered by reference books. You will not find in any reference book the answers to the three questions that God asks the angel in Tolstoy's story, What Men Live By—namely, "What dwells in man?" "What is not given to man?" and "What do men live by?" Nor will you find the answers to another question that is also used as the title of a Tolstoy story: "How much land does a man need?" And there are many CHAPTER 12. AIDS TO READING 120 such questions. Reference books are only useful when you know which kinds of questions can be answered by them, and which cannot. This comes down to knowing the sorts of things that men generally agree on. Only those things about which men generally and conventionally agree are to be found in reference books. Unsupported opinions have no business there, though they sometimes creep in. We agree that it is possible to know when a man was born, when he died, and facts about similar matters. We agree that it is possible to define words and things, and that it is possible to sketch the history of almost anything. We do not agree on moral questions or on questions about the future, and so these sorts of things are not to be found in reference books. We assume in our time that the physical world is orderable, and thus almost everything about it is to be found in reference books. This was not always so; as a result, the history of reference books is interesting in itself, for it can tell us much about changes in men's opinions as to what is knowable. As you can see, we have just been suggesting that there is a fourth requirement for the intelligent

use of reference books. You must know what you want to know; you must know in what reference work to find it; you must know how to find it in the reference work; and you must know that it is considered knowable by the authors or compilers of the book. All this indicates that you must know a good deal before you can use a work of reference. Reference books are useless to people who know nothing. They are not guides to the perplexed. How to Use a Dictionary As a reference book, the dictionary is subject to all the considerations outlined above. But the dictionary also invites a playful reading. It challenges anyone to sit down with it in an idle moment. There are worse ways to kill time. Dictionaries are full of arcane knowledge and witty oddments. Over and above that, of course, they have their more sober employments. To make the most of these, one has to know how to read the special kind of book a dictionary is. Santayana's remark about the Greeks—that they were the only uneducated people in European history—has a double significance. The masses were, of course, uneducated, but even the learned few—the leisure class—were not educated in the sense that they had to sit at the feet of foreign masters. Education, in that sense, begins with the Romans, who went to school to Greek pedagogues, and became cultivated through contact with the Greek culture they had conquered. It is not surprising, therefore, that the first dictionaries were glossaries of Homeric words, intended to help Romans read the Iliad and Odyssey as well as other Greek literature employing the "archaic" Homeric vocabulary. In the

same way, many of us today need a glossary to read Shakespeare, or if not Shakespeare, Chaucer. There were dictionaries in the Middle Ages, but they were usually ency- CHAPTER 12. AIDS TO READING 121 clopedias of worldly knowledge comprised of discussions of the most important technical terms employed in learned discourse. There were foreign-language dictionaries in the Renaissance (both Greek and Latin), made necessary by the fact that the works that dominated the education of the period were in the ancient languages. Even when the socalled vulgar tongues—Italian, French, English—gradually replaced Latin as the language of learning, the pursuit of learning was still the privilege of the few. Under such circumstances, dictionaries were intended for a limited audience, mainly as an aid to reading and writing worthy literature. Thus we see that from the beginning the educational motive dominated the making of dictionaries, although there was also an interest in preserving the purity and order of the language. As contrasted with the latter purpose, the Oxford English Dictionary (known familiarly as the OED), begun in 1857, was a new departure, in that it did not try to dictate usage but instead to present an accurate historical record of every type of usage—the worst as well as the best, taken from popular as well as elegant writing. But this conflict between the lexicographer as self-appointed arbiter and the lexicographer as historian can be regarded as a side-issue, for the dictionary, however constructed, is primarily an educational instrument. This fact is relevant to the rules for using a

dictionary well, as an extrinsic aid to reading. The first rule of reading any book is to know what kind of book it is. That means knowing what the author's intention was and what sort of thing you can expect to find in his work. If you look upon a dictionary merely as a spelling book or guide to pronunciation, you will use it accordingly, which is to say not well. If you realize that it contains a wealth of historical information, crystallized in the growth and development of language, you will pay attention, not merely to the variety of meanings listed under each word, but also to their order and relation. Above all, if you are interested in advancing your own education, you will use a dictionary according to its primary intention—as a help in reading books that might otherwise be too difficult because their vocabulary includes technical words, archaic words, literary allusions, or even familiar words used in obsolete senses. Of course, there are many problems to be solved in reading a book well other than those arising from an author's vocabulary. And we have warned against—particularly on the first reading of a difficult book—sitting with the book in one hand and the dictionary in the other. If you have to look up too many words at the beginning, you will certainly lose track of the book's unity and order. The dictionary's primary service is on those occasions when you are confronted with a technical word or with a word that is wholly new to you. Even then, we would not recommend looking up even these during your first reading of a good book unless they seem to be important to the author's general meaning. This suggests several other negative

injunctions. There is no more irritating fellow than the one who tries to settle an argument about communism, or justice, or freedom, by quoting from the dictionary. Lexicographers may be respected CHAPTER 12. AIDS TO READING 122 as authorities on word usage, but they are not the ultimate founts of wisdom. Another negative rule is: Don't swallow the dictionary. Don't try to get wordrich quick by memorizing a fancy list of words whose meanings are unconnected with any actual experience. In short, do not forget that the dictionary is a book about words, not about things. If we remember this, we can derive from that fact all the rules for using a dictionary intelligently. Words can be looked at in four ways. 1. Words are physical things—Writable words and speakable sounds. There must, therefore, be uniform ways of spelling and pronouncing them, though the uniformity is often spoiled by variations, and in any event is not as eternally important as some of your teachers may have indicated. 2. Words are parts of speech. Each single word plays a grammatical role in the more complicated structure of a phrase or sentence. The same word can vary in different usages, shifting from one part of speech to another, especially in a non-inflected language like English. 3. Words are signs. They have meanings, not one but many. These meanings are related in various ways. Sometimes they shade from one into another; sometimes a word will have two or more sets of totally unrelated meanings. Through their meanings, different words are related to one another—as synonyms sharing in the same meaning even though they differ in shading; or as

antonyms through opposition or contrast of meanings. Furthermore, it is in their capacity as signs that we distinguish words as proper or common names (according as they name just one thing or many that are alike in some respect); and as concrete or abstract names (according as they point to something we can sense, or refer to some aspect of things that we can understand by thought but not observe through our senses). Finally, 4, words are conventional. They are man-made signs. That is why every word has a history, a cultural career in the course of which it goes through certain transformations. The history of words is given by their etymological derivation from original word-roots, prefixes, and suffixes; it includes the account of their physical changes, both in spelling and pronunciation; it tells of the shifting meanings, and which among them are archaic and obsolete, which are current and regular, which are idiomatic, colloquial, or slang. A good dictionary will answer all of these four different kinds of questions about words. The art of using a dictionary consists in knowing what questions to ask about words and how to find the answers. We have suggested the questions. The dictionary itself tells you how to find the answers. As such, it is a perfect self-help book, because it tells you what to pay attention to and how to interpret the various abbreviations and symbols it uses in giving you the four varieties of information about words. Anyone who fails to consult the explanatory notes and the list of abbreviations at the beginning CHAPTER 12. AIDS TO READING 123 of a dictionary has only himself to blame if he is

not able to use it well. How to Use an Encyclopedia Many of the things we have said about dictionaries apply to encyclopedias also. Like the dictionary, the encyclopedia invites a playful reading. It too is diverting, entertaining, and, for some people, soothing. But it is just as vain to try to read an encyclopedia through as a dictionary. The man who knew an encyclopedia by heart would be in grave danger of incurring the title idiot savant—"leamed fool." Many people use a dictionary to find out how to spell and pronounce words. The analogous employment of an encyclopedia is to use it only to look up dates and places and other such simple facts. But this is to under-use, or misuse, an encyclopedia. Like dictionaries, such works are educational as well as informational tools. A glance at their history will confirm this. Though the word "encyclopedia" is Greek, the Greeks had no encyclopedia, and for the same reason that they had no dictionary. The word meant to them not a book about knowledge, a book in which knowledge reposed, but knowledge itself—all the knowledge that an educated man should have. It was again the Romans who first found encyclopedias necessary; the oldest extant example is that of Pliny. Interestingly enough, the first alphabetically-arranged encyclopedia did not appear until about 1700. Most of the great encyclopedias since then have been alphabetical. It is the easiest of all arrangements, and it made possible great strides in encyclopedia-making. Encyclopedias present a different problem from wordbooks. An alphabetical arrangement is natural for a dictionary. But is the

world, which is the subject matter of an encyclopedia, arranged alphabetically? Obviously not. Well then, how is the world arranged and ordered? This comes down to asking how knowledge is ordered. The ordering of knowledge has changed with the centuries. All knowledge was once ordered in relation to the seven liberal arts—grammar, rhetoric, and logic, the trivium; arithmetic, geometry, astronomy, and music, the quadrivium. Medieval encylopedias reflected this arrangement. Since the universities were arranged according to the same system, and students studied according to it also, the arrangement was useful in education. The modern university is very different from the medieval one, and the change is reflected in modern encyclopedias. The knowledge that they report is divided up in fiefs, or specialties, that are roughly equivalent to the various departments of the university. But this arrangement, although it forms the backbone structure of an encyclopedia, is masked by the alphabetical arrangement of the material. It is this infra-structure—to take a term from the sociologists—that the good reader and user of an encyclopedia will seek to discover. It is true that it is primarily factual information that he wants from his set. But he should CHAPTER 12. AIDS TO READING 124 not be content with facts in isolation. The encyclopedia presents him with an arrangement of facts—facts in relation to other facts. The understanding, as contrasted with the mere information, that an encylopedia can provide depends on the recognition of such relations. In an alphabetically-arranged encyclopedia, these relations are to a

large extent obscured. In a topically-arranged encyclopedia, they are, of course, highlighted. But topical encyclopedias have many disadvantages, among them the fact that most readers are not accustomed to using them. Ideally, the best encyclopedia would be one that had both a topical and an alphabetical arrangement. Its presentation of material in the form of separate articles would be alphabetical, but it would also contain some kind of topical key or outline—essentially, a table of contents. (A table of contents is a topical arrangement of a book, as opposed to an index, which is an alphabetical arrangement.) As far as we know, there is no such encyclopedia on the market today, but it would be worth the effort to try to make one. In default of the ideal, the reader must fall back on the help and advice provided him by an encyclopedia's editors. Any good encyclopedia includes directions about how to use it effectively, and these should be read and followed. Often, these directions require that the user go first to the set's index, before turning to one of the alphabetically-arranged volumes. Here, the index is serving the function of a table of contents, though not very well; for it gathers together, under one heading, references to discussions in the encyclopedia that may be widely separated in space but that are nevertheless about the same general subject. This reflects the fact that although an index is of course alphabetically arranged, its so-called analyticals—that is, the breakdowns under a main entry—are topically arranged. But the topics themselves must be in alphabetical order, which is not necessarily the best

arrangement. Thus the index of a really good encyclopedia such as Britannica goes part of the way toward revealing the arrangement of knowledge that the work reflects. For this reason, any reader who fails to use the index has only himself to blame if the work does not serve his needs. There are negative injunctions associated with the use of encyclopedias, just as there are for dictionaries. Encyclopedias, like dictionaries, are valuable adjuncts to the reading of good books—bad books do not ordinarily require their presence; but, as before, it is wise not to enslave yourself to an encyclopedia. Again, as with dictionaries, encyclopedias are not to be used for the settling of arguments where these are based on differences of opinion. Nevertheless, they should be used to end disputes about matters of fact as quickly and permanently as possible. Facts should never be argued about in the first place. An encyclopedia makes this vain effort unnecessary, because encyclopedias are full of facts. Ideally, they are filled with nothing else. Finally, although dictionaries usually agree in their accounts of words, encyclopedias often do not agree in their accounts of facts. Hence, if you are really interested in a subject and are depending on encyclopedic treatments of it, do not restrict yourself to just one encylopedia. Read more than one, and preferably ones written at different times. CHAPTER 12. AIDS TO READING 125 We noted several points about words that the user should keep in mind when he consults a dictionary. In the case of encyclopedias, the analogous points are about facts, for an encyclopedia is about facts as a

dictionary is about words. 1. Facts are propositions. Statements of fact employ words in combination, such as “Abraham Lincoln was born on February 12, 1809,” or “the atomic number of gold is 79.” Facts are not physical things, as words are, but they do require to be explained. For thorough knowledge, for understanding, you must also know what the significance of a fact is—how it affects the truth you are seeking. You do not know much if all you know is what the fact is. 2. Facts are “true” propositions. Facts are not opinions. When someone says “it is a fact that,” he means that it is generally agreed that such is the case. He never means, or never should mean, that he alone, or he together with a minority of observers, believes such and such to be the case. It is this characteristic of facts that gives the encyclopedia its tone and style. An encyclopedia that contains the unsupported opinions of its editors is dishonest; and although an encyclopedia may report opinions (for example, in a phrase like “it is held by some that this is the case, by others that that is the case”), it must clearly label them. The requirement that an encyclopedia report the facts of the case and not opinions about it (except as noted above) also limits the work’s coverage. It cannot properly deal with matters about which there is no consensus—with moral questions, for example. If it does deal with such questions, it can only properly report the disagreements among men about them. 3. Facts are reflections of reality. Facts may be either (a) informational singulars or (b) relatively unquestioned generalizations, but in either case they are held to represent

the way things really are. (The birthdate of Lincoln is an informational singular; the atomic number of gold implies a relatively unquestioned generalization about matter.) Thus facts are not ideas or concepts, nor are they theories in the sense of being mere speculations about reality. Similarly, an explanation of reality (or of part of it) is not a fact until and unless there is general agreement that it is correct. There is one exception to the last statement. An encyclopedia can properly describe a theory that is no longer held to be correct, in whole or in part, or one that has not yet been fully validated, when it is associated with a topic, person or school that is the subject of an article. Thus, for example, Aristotle's views on the nature of celestial matter could be expounded in an article on Aristotelianism even though we no longer believe them to be true. Finally, 4. Facts are to some extent conventional. Facts change, we say. We mean that some propositions that are considered to be facts in one epoch are no longer considered to be facts in another. Insofar as facts are "true" and represent reality, they cannot change, of course, because truth, strictly speaking, does not change, nor does reality. But not all propositions that we take to be true are really true; and we must concede that almost any CHAPTER 12. AIDS TO READING 126 given proposition that we take to be true can be falsified by more patient or more accurate observation and investigation. This applies particularly to the facts of science. Facts are also—again to some extent—culturally determined. An atomic scientist, for example, maintains a complicated, hypothetical

structure of reality in his mind that determines—for him—certain facts that are different from the facts that are determined for and accepted by a primitive. This does not mean that the scientist and the primitive cannot agree on any facts; they must agree, for instance, that two pluS" two is four, or that a physical whole is greater than any of its parts. But the primitive may not agree with the scientist's facts about nuclear particles, just as the scientist may not agree with the primitive's facts about ritual magic (That was a hard sentence to write, because, being culturally determined ourselves, we tend to agree with the scientist rather than the primitive and were thus tempted to put the second " fact" in quotation marks. But that is precisely the point.) A good encyclopedia will answer your questions about facts if you remember the points about facts that we have outlined above. The art of using an encyclopedia as an aid to reading is the art of asking the proper questions about facts. As with the dictionary, we have merely suggested the questions; the encyclopedia will supply the answers. You should also remember that an encyclopedia is not the best place to pursue understanding. Insights may be gained from it about the order and arrangement of knowledge; but that, although an important subject, is nonetheless a limited one. There are many matters required for understanding that you will not find in an encyclopedia. There are two particularly striking omissions. An encyclopedia, properly speaking, contains no arguments, except insofar as it reports the course of arguments that are now widely accepted as correct or at

least as of historical interest. Thus a major element in expository writing is lacking. An encylopedia also contains no poetry or imaginative literature, although it may contain facts about poetry and poets. Since both the imagination and the reason are required for understanding, this means that the encyclopedia must be a relatively unsatisfying tool in the pursuit of it.