

HOW TO READ A BOOK



AUTHOR OF THE ONE-IN-A-MILLION BOY

MONICA WOOD

Chapter 9

Determining an Author's Message

Not only coming to terms but also making propositions occurs among traders as well as in the world of books. What a buyer or seller means by a proposition is some sort of proposal, some sort of offer or acceptance. In honest dealings, the person who makes a proposition in this sense is declaring his intention to act in a certain way. More than honesty is required for successful negotiations. The proposition should be clear and, of course, attractive. Then the traders can come to terms. A proposition in a book is also a declaration. It is an expression of the author's judgment about something. He affirms something he thinks to be true, or denies something he judges to be false. He asserts this or that to be a fact. A proposition of this sort is a declaration of knowledge, not intentions. The author may tell us his intentions at the beginning in a preface. In an expository book, he usually promises to instruct us about something. To find out whether he keeps those promises, we must look for his propositions. Generally, the order of reading reverses the order of business. Businessmen usually come to terms after they find out what the proposition is. But the reader must usually come to terms with an author first, before he can find out what the author is proposing, what judgment he is declaring. That is why the fifth rule of analytical reading concerns words and terms,

and the sixth, which we are about to discuss, concerns sentences and propositions. There is a seventh rule that is closely related to the sixth. The author may be honest in declaring himself on matters of fact or knowledge. We usually proceed in that trust. But unless we are exclusively interested in the author's personality, we should not be satisfied with knowing what his opinions are. His propositions are nothing but expressions of personal opinion unless they are supported by reasons. If it is the book and the subject with which it deals that we are interested in, and not just the author, we want to know not merely what his propositions are, but also why he thinks we should be persuaded to accept them. The seventh rule, therefore, deals with arguments of all sorts. There are many kinds of reasoning, many ways of supporting what one says. Sometimes it is possible to argue that something is true; sometimes no more than a probability can be defended. But every sort of argument consists of a number of statements related in a certain way. This is said because of that. The word "because" here signifies a reason being given. The presence of arguments is indicated by other words that relate statements, such as: if this is so, then that; or, since this, therefore that; or, it follows from this, that that is the case. In the course of earlier chapters in this book, such sequences occurred. For those of us who are no longer in school, we observed, it is necessary, if we want to go on learning and discovering, to know how to make books teach us well. In that situation, if we want to go on learning,

then we must know how to learn from books, which are absent teachers. An argument is always a set or series of statements of which some provide the grounds or reasons for what is to be concluded. A paragraph, therefore, or at least a collection of sentences, is required to express an argument. The premises or principles of an argument may not always be stated first, but they are the source of the conclusion, nevertheless. If the argument is valid, the conclusion follows from the premises. That does not necessarily mean that the conclusion is true, since one or all of the premises that support it may be false. There is a grammatical as well as a logical aspect to the order of these rules of interpretation. We go from terms to propositions to arguments, by going from words (and phrases) to sentences to collections of sentences (or paragraphs). We are building up from simpler to more complex units. The smallest significant element in a book is, of course, a single word. It would be true but not adequate to say that a book consists of words. It also consists of groups of words, taken as units, and similarly of groups of sentences, taken as units. The active reader is attentive not only to the words but also to the sentences and paragraphs. There is no other way of discovering the author's terms, propositions, and arguments. The movement at this stage of analytical reading—when interpretation is our goal—seems to be in the opposite direction from the movement in the first stage—when the goal was a structural outline. There we went from the book as a whole to its major parts, and then to their subordinate divisions. As you might suspect, the two

movements meet somewhere. The major parts of a book and their principal divisions contain many propositions and usually several arguments. But if you keep on dividing the book into its parts, at last you have to say: "In this part, the following points are made." Now each of these points is likely to be a proposition, and some of them taken together probably form an argument. Thus, the two processes, outlining and interpretation, meet at the level of propositions and arguments. You work down to propositions and arguments by dividing the book into its parts. You work up to arguments by seeing how they are composed of propositions and ultimately of terms. When you have completed the two processes, you can really say that you know the contents of a book.

CHAPTER 9. DETERMINING AN AUTHOR'S MESSAGE 80

Sentences vs. Propositions We have already noticed another thing about the rules we are going to discuss in this chapter. As in the case of the rule about words and terms, we are here also dealing with the relation of language and thought. Sentences and paragraphs are grammatical units. They are units of language.

Propositions and arguments are logical units, or units of thought and knowledge. We have to face here a problem similar to the one we faced in the last chapter. Because language is not a perfect medium for the expression of thought, because one word can have many meanings and two or more words can have the same meaning, we saw how complicated was the relation between an author's vocabulary and his terminology. One word may represent several terms, and one

term may be represented by several words. Mathematicians describe the relation between the buttons and the buttonholes on a well-made coat as a one-to-one relationship. There is a button for every buttonhole, and a hole for every button. Well, the point is that words and terms do not stand in a one-to-one relation. The greatest error you can make in applying these rules is to suppose that a one-to-one relationship exists between the elements of language and those of thought or knowledge. As a matter of fact, it would be wise not to make too easy assumptions even about buttons and buttonholes. The sleeves of most men's suit jackets bear buttons that have no corresponding buttonholes. And if you have worn the coat for a while, it may have a hole with no corresponding button. Let us illustrate this in the case of sentences and propositions. Not every sentence in a book expresses a proposition. For one thing, some sentences express questions. They state problems rather than answers. Propositions are the answers to questions. They are declarations of knowledge or opinion. That is why we call sentences that express them declarative, and distinguish sentences that ask questions as interrogative. Other sentences express wishes or intentions. They may give us some knowledge of the author's purpose, but they do not convey the knowledge he is trying to expound. Moreover, not all the declarative sentences can be read as if each expressed one proposition. There are at least two reasons for this. The first is the fact that words are ambiguous and can be used in various sentences. Thus, it is possible for the same sentence to express

different propositions if there is a shift in the terms the words express. "Reading is learning" is a simple sentence; but if at one place we mean by "learning" the acquisition of information, and at another we mean the development of understanding, the proposition is not the same, because the terms are different. Yet the sentence is the same. The second reason is that all sentences are not as simple as "Reading is learning."

When its words are used unambiguously, a simple sentence usually expresses a single proposition. But even when its words are used unambiguously, a compound sentence expresses two or more propositions. A compound sentence is really a collection of sentences, connected by such words as "and," or "if . . . then," or "not only . . . but also." You may rightly conclude that the line between a long compound sentence and a short paragraph may be difficult to draw. A CHAPTER 9.

DETERMINING AN AUTHOR'S MESSAGE 81 compound sentence can express a number of propositions related in the form of an argument. Such sentences can be very difficult to interpret. Let us take an interesting sentence from Machiavelli's *The Prince* to show what we mean: A prince ought to inspire fear in such a way that, if he does not win love, he avoids hatred; because he can endure very well being feared whilst he is not hated, which will always be as long as he abstains from the property of his citizens and from their women. This is grammatically a single sentence, though it is extremely complex. The semicolon and the "because" indicate the major break in it. The first proposition is that a prince ought to inspire fear in a certain

way. Beginning with the word “because,” we have what is in effect another sentence. (It could be made independent by saying: “The reason for this is that he can endure,” and so forth.) And this sentence expresses two propositions at least: (1) the reason why the prince ought to inspire fear in a certain way is that he can endure being feared so long as he is not hated; (2) he can avoid being hated only by keeping his hands off the property of his citizens and their women. It is important to distinguish the various propositions that a long, complex sentence contains. In order to agree or disagree with Machiavelli, you must first understand what he is saying. But he is saying three things in this one sentence. You may disagree with one of them and agree with the others. You may think Machiavelli is wrong in recommending terrorism to a prince on any grounds; but you may acknowledge his shrewdness in saying that the prince had better not arouse hatred along with fear, and you may also agree that keeping his hands off his subjects’ property and women is an indispensable condition of not being hated. Unless you recognize the distinct propositions in a complicated sentence, you cannot make a discriminating judgment on what the writer is saying. Lawyers know this fact very well. They have to examine sentences carefully to see what is being alleged by the plaintiff or denied by the defendant. The single sentence, “John Doe signed the lease on March 24,” looks simple enough, but still it says several things, some of which may be true and the others false. John Doe may have signed the lease, but not on March 24, and that fact may

be important. In short, even a grammatically simple sentence sometimes expresses two or more propositions. We have said enough to indicate what we mean by the difference between sentences and propositions. They are not related as one to one.

Not only can a single sentence express several propositions, either through ambiguity or complexity, but one and the same proposition can also be expressed by two or more different sentences. If you grasp our terms through the words and phrases we use synonymously, you will know that we are saying the same thing when we say, “Teaching and being taught are correlative functions,” and “Initiating and receiving communication are related processes.” We are going to stop explaining the grammatical and logical points involved and turn to the rules. The difficulty in this chapter, as in the last, is to stop

CHAPTER 9. DETERMINING AN AUTHOR’S MESSAGE 82

explaining. Instead, we will assume that you know some grammar. We do not necessarily mean that you must understand everything about syntax, but you should be concerned about the ordering of words in sentences and their relation to one another. Some knowledge of grammar is indispensable to a reader. You cannot begin to deal with terms, propositions, and arguments—the elements of thought—until you can penetrate beneath the surface of language. So long as words, sentences, and paragraphs are opaque and unanalyzed, they are a barrier to, rather than a medium of, communication. You will read words but not receive knowledge. Here are the rules. The fifth rule of reading, as you will recall from the last

chapter, was: Rule 5. Find the important words and come to terms. The sixth rule can be expressed thus: Rule 6. Mark the most important sentences in a book and discover the propositions they contain. The seventh rule is this: Rule 7. Locate or construct the basic arguments in the book by finding them in the connection of sentences. You will see later why we did not say “paragraphs” in the formulation of this rule. Incidentally, it is just as true of these new rules as it was of the rule about coming to terms that they apply primarily to expository works. The rules about propositions and arguments are quite different when you are reading a poetical work—a novel, play, or poem. We will discuss the changes that are required in applying them to such works later.

Finding the Key Sentences How does one locate the most important sentences in a book? How, then, does one interpret these sentences to discover the one or more propositions they contain? Again, we are placing emphasis on what is important. To say that there is only a relatively small number of key sentences in a book does not mean that you need pay no attention to all the rest. Obviously, you have to understand every sentence. But most of the sentences, like most of the words, will cause you no difficulty. As we pointed out in our discussion of reading speeds, you will read them relatively quickly. From your point of view as a reader, the sentences important for you are those that require an effort of interpretation because, at first sight, they are not perfectly intelligible. You understand them just well enough to know there is more to understand. They are the

sentences that you read much more slowly and carefully than the rest. These may not be the sentences that are most important for the author, but they are likely to be, because you are likely to have the greatest difficulty with the most important things the author has to say. And it hardly needs remarking that those are the things you should read most carefully. From the author's point of view, the important sentences are the ones that express the judgments on which his whole argument rests. A book usually contains much more than the bare statement of an argument, or a series of arguments. The author may explain how he came to the point of view he now CHAPTER 9. DETERMINING AN AUTHOR'S MESSAGE 83 holds, or why he thinks his position has serious consequences. He may discuss the words he has to use. He may comment on the work of others. He may indulge in all sorts of supporting and surrounding discussion. But the heart of his communication lies in the major affirmations and denials he is making, and the reasons he gives for so doing. To come to grips, therefore, you have to see the main sentences as if they were raised from the page in high relief. Some authors help you do this. They underline the sentences for you. They either tell you that this is an important point when they make it, or they use one or another typographical device to make their leading sentences stand out. Of course, nothing helps those who will not keep awake while reading. We have met many readers and students who paid no attention even to such clear signs. They preferred to read on rather than stop and examine the

important sentences carefully. There are a few books in which the leading propositions are set forth in sentences that occupy a special place in the order and style of the exposition. Euclid, again, gives us the most obvious example of this. He not only states his definitions, his postulates, and his axioms—his principal propositions—at the beginning, but he also labels every proposition to be proved. You may not understand all of his statements. You may not follow all of his arguments. But you cannot miss the important sentences or the grouping of sentences for the statement of the proofs. The *Summa Theologica* of St. Thomas Aquinas is another book whose style of exposition puts the leading sentences into high relief. It proceeds by raising questions. Each section is headed by a question. There are many indications of the answer that Aquinas is trying to defend. A whole series of objections opposing the answer is stated. The place where Aquinas begins to argue his own point is marked by the words, “I answer that.”

There is no excuse for not being able to locate the important sentences in such a book—those expressing the reasons as well as the conclusions—yet even here it remains all a blur for those readers who treat everything they read as equally important—and read it all at the same speed, either fast or slow. That usually means that everything is equally unimportant. Apart from books whose style or format calls attention to what most needs interpretation by the reader, the spotting of the important sentences is a job the reader must perform for himself. There are several things he can do. We have already

mentioned one. If he is sensitive to the difference between passages he can understand readily and those he cannot, he will probably be able to locate the sentences that carry the main burden of meaning. Perhaps you are beginning to see how essential a part of reading it is to be perplexed and know it. Wonder is the beginning of wisdom in learning from books as well as from nature. If you never ask yourself any questions about the meaning of a passage, you cannot expect the book to give you any insight you do not already possess. Another clue to the important sentences is found in the words that compose them. If you have already marked the important words, they should lead you to the sentences that deserve further attention. Thus the first step in interpretive reading prepares for the second. But the reverse may also be the case. It may

CHAPTER 9. DETERMINING AN AUTHOR'S MESSAGE 84

be that you will mark certain words only after you have become puzzled by the meaning of a sentence. The fact that we have stated these rules in a fixed order does not mean that you have to follow them in that order. Terms constitute propositions. Propositions contain terms. If you know the terms the words express, you have caught the proposition in the sentence. If you understand the proposition conveyed by a sentence, you have arrived at the terms also. This suggests one further clue to the location of the principal propositions. They must belong to the main argument of the book. They must be either premises or conclusions. Hence, if you can detect those sentences that seem to form a sequence, a sequence in which there is a

beginning and an end, you probably have put your finger on the sentences that are important. We said a sequence in which there is a beginning and an end. Every argument that men can express in words takes time to state. You may speak a sentence in one breath, but there are pauses in an argument. You have to say one thing first, then another, and then another. An argument begins somewhere, goes somewhere, gets somewhere. It is a movement of thought. It may begin with what is really the conclusion and then proceed to give the reasons for it. Or it may start with the evidence and the reasons and bring you to the conclusion that follows therefrom. Of course, here as elsewhere, the clue will not work unless you know how to use it. You have to recognize an argument when you see one. Despite some disappointing experiences, however, we persist in our opinion that the human mind is as naturally sensitive to arguments as the eye is to colors. (There may be some people who are argument-blind!) But the eye will not see if it is not kept open, and the mind will not follow an argument if it is not awake. Many persons believe that they know how to read because they read at different speeds. But they pause and go slow over the wrong sentences. They pause over the sentences that interest them rather than the ones that puzzle them. Indeed, this is one of the greatest obstacles to reading a book that is not completely contemporary. Any old book contains facts that are somewhat surprising because they are different from what we know. But when you are reading for understanding it is not that kind of novelty that you are

seeking. Your interest in the author himself, or in his language, or in the world in which he wrote, is one thing; your concern to understand his ideas is quite another. It is this concern that the rules we are discussing here can help you to satisfy, not your curiosity about other matters.

Finding the Propositions Let us suppose that you have located the leading sentences. Another step is required by Rule 6. You must discover the proposition or propositions that each of these sentences contains. This is just another way of saying that you must know what the sentence means. You discover terms by discovering what a word means in a given usage. You discover propositions similarly by interpreting all the words that make up the sentence, and especially its principal words.

CHAPTER 9. DETERMINING AN AUTHOR'S MESSAGE 85 Once more, you cannot do this very well unless you know a little grammar. You must know the role that adjectives and adverbs play, how verbs function in relation to nouns, how modifying words and clauses restrict or amplify the meaning of the words they modify, and so forth. Ideally, you should be able to dissect a sentence according to the rules of syntax, although you do not necessarily have to do it in a formal way. Despite the current de-emphasis on teaching grammar in school, we have to assume that you know this much of it. We cannot believe you do not, though you may have grown a little rusty from lack of practice in the rudiments of the art of reading. There are only two differences between finding the terms that words express and the propositions that sentences express. One is that you employ a larger context in

the latter case. You bring all the surrounding sentences to bear on the sentence in question, just as you used the surrounding words to interpret a particular word. In both cases, you proceed from what you do understand to the gradual elucidation of what is at first relatively unintelligible. The other difference lies in the fact that complicated sentences usually express more than one proposition. You have not completed your interpretation of an important sentence until you have separated out of it all the different, though perhaps related, propositions. Skill in doing this comes with practice. Take some of the complicated sentences in this book and try to state in your own words each of the things that is being asserted. Number them and relate them. "State in your own words!" That suggests the best test we know for telling whether you have understood the proposition or propositions in the sentence. If, when you are asked to explain what the author means by a particular sentence, all you can do is repeat his very words, with some minor alterations in their order, you had better suspect that you do not know what he means. Ideally, you should be able to say the same thing in totally different words. The idea can, of course, be approximated in varying degrees. But if you cannot get away at all from the author's words, it shows that only words have passed from him to you, not thought or knowledge. You know his words, not his mind. He was trying to communicate knowledge, and all you received was words. The process of translation from a foreign language to English is relevant to the test we have suggested. If you

cannot state in an English sentence what a French sentence says, you know you do not understand the meaning of the French. But even if you can, your translation may remain only on the verbal level; for even when you have formed a faithful English replica, you still may not know what the writer of the French sentence was trying to convey. The translation of one English sentence into another, however, is not merely verbal. The new sentence you have formed is not a verbal replica of the original. If accurate, it is faithful to the thought alone. That is why making such translations is the best test you can apply to yourself, if you want to be sure you have digested the proposition, not merely swallowed the words. If you fail the test, you have uncovered a failure of understanding. If you say that you know what the author means, but can only repeat the author's sentence to show that you do, then you would not be able to recognize the author's proposition if it were

CHAPTER 9.
DETERMINING AN AUTHOR'S MESSAGE 86

presented to you in other words. The author may himself express the same proposition in different words in the course of his writing. The reader who has not seen through the words to the proposition they convey is likely to treat the equivalent sentences as if they were statements of different propositions. Imagine a person who did not know that " $2 + 2 = 4$ " and " $4 - 2 = 2$ " were different notations for the same arithmetic relationship—the relationship of four as the double of two, or two as the half of four. You would have to conclude that that person simply did not understand the equation. The same conclusion is forced on

you concerning yourself or anybody else who cannot tell when equivalent statements of the same proposition are being made, or who cannot himself offer an equivalent statement when he claims to understand the proposition a sentence contains.

These remarks have a bearing on syntopical reading—the reading of several books about the same subject matter.

Different authors frequently say the same thing in different words, or different things using almost the same words. The reader who cannot see through the language to the terms and propositions will never be able to compare such related works.

Because of their verbal differences, he is likely to misread the authors as disagreeing, or to ignore their real differences because of verbal resemblances in their statements. There is one other test of whether you understand the proposition in a sentence you have read. Can you point to some experience you

have had that the proposition describes or to which the proposition is in any way relevant? Can you exemplify the general truth that has been enunciated by referring to a particular instance of it? To imagine a possible case is often as good as citing an actual one. If you cannot do anything at all to exemplify or illustrate the proposition, either imaginatively or by reference to actual experiences, you should suspect that you do not know what is being said. Not all propositions are equally susceptible to this test. It, may be necessary to have the special experience that only a laboratory can afford to be sure you have grasped certain scientific propositions. But the main point is clear. Propositions do not exist in a vacuum. They refer to the

world in which we live. Unless you can show some acquaintance with actual or possible facts to which the proposition refers or is relevant somehow, you are playing with words, not dealing with thought and knowledge. Let us consider one example of this. A basic proposition in metaphysics is expressed by the following words: "Nothing acts except what is actual." We have heard many students repeat those words to us with an air of satisfied wisdom. They have thought they were discharging their duty to us and to the author by so perfect a verbal repetition. But the sham was obvious as soon as we asked them to state the proposition in other words. Seldom could they say, for instance, that if something does not exist, it cannot do anything. Yet this is an immediately apparent translation—apparent, at least, to anyone who understood the proposition in the original sense.

Failing to get a translation, we would then ask for an exemplification of the proposition. If any one of them told us that grass is not made to grow by merely CHAPTER 9.
DETERMINING AN AUTHOR'S MESSAGE 87 possible showers—that one's bank account does not increase on account of a merely possible raise—we would know that the proposition had been grasped. The vice of "verbalism" can be defined as the bad habit of using words without regard for the thoughts they should convey and without awareness of the experiences to which they should refer. It is playing with words. As the two tests we have suggested indicate, "verbalism" is the besetting sin of those who fail to read analytically. Such readers never get

beyond the words. They possess what they read as a verbal memory that they can recite emptily. One of the charges made by certain modern educators against the liberal arts is that they tend to verbalism, but just the opposite seems to be the case. The failure in reading—the omnipresent verbalism—of those who have not been trained in the arts of grammar and logic shows how lack of such discipline results in slavery to words rather than mastery of them. Finding the Arguments We have spent enough time on propositions. Let us now turn to the seventh rule of analytical reading, which requires the reader to deal with collections of sentences. We said before that there was a reason for not formulating this rule of interpretation by saying that the reader should find the most important paragraphs. The reason is that there are no settled conventions among writers about how to construct paragraphs. Some great writers, such as Montaigne, Locke, or Proust, write extremely long paragraphs; others, such as Machiavelli, Hobbes, or Tolstoy, write relatively short ones. In recent times, under the influence of newspaper and magazine style, most writers tend to cut their paragraphs to fit quick and easy reading. This paragraph, for instance, is probably too long. If we had wanted to coddle our readers, we should have started a new one with the words, “Some great writers.” It is not merely a matter of length. The point that is troublesome here has to do with the relation between language and thought. The logical unit to which the seventh rule directs our reading is the argument—a sequence of propositions, some of which give reasons for

another. This logical unit is not uniquely related to any recognizable unit of writing, as terms are related to words and phrases, and propositions to sentences. An argument may be expressed in a single complicated sentence. Or it may be expressed in a number of sentences that are only part of one paragraph. Sometimes an argument may coincide with a paragraph, but it may also happen that an argument runs through several or many paragraphs. There is one further difficulty. There are many paragraphs in any book that do not express an argument at all—perhaps not even part of one. They may consist of collections of sentences that detail evidence or report how the evidence has been gathered. As there are sentences that are of secondary importance, because they are merely digressions or side remarks, so also can there be paragraphs of this sort. It hardly needs to be said that they should be read rather quickly. Because of all this, we suggest another formulation of Rule 7, as follows: CHAPTER 9.

DETERMINING AN AUTHOR'S MESSAGE 88 Find if you can the paragraphs in a book that state its important arguments; but if the arguments are not thus expressed, your task is to construct them, by taking a sentence from this paragraph, and one from that, until you have gathered together the sequence of sentences that state the propositions that compose the argument. After you have discovered the leading sentences, the construction of paragraphs should be relatively easy. There are various ways of doing this. You can do it by actually writing out on a piece of paper the propositions that together form an

argument. But usually a better way, as we have already suggested, is to put numbers in the margin, together with other marks, to indicate the places where the sentences occur that should be tied together in a sequence. Authors are more or less helpful to their readers in this matter of making the arguments plain. Good expository authors try to reveal, not conceal, their thought. Yet not even all good authors do this in the same way. Some, such as Euclid, Galileo, Newton (authors who write in a geometrical or mathematical style), come close to the ideal of making a single paragraph an argumentative unit. The style of most writing in non-mathematical fields tends to present two or more arguments in a single paragraph or to have an argument run through several. In proportion as a book is more loosely constructed, the paragraphs tend to become more diffuse. You often have to search through all the paragraphs of a chapter to find the sentences you can construct into a statement of a single argument. Some books make you search in vain, and some do not even encourage the search. A good book usually summarizes itself as its arguments develop. If the author summarizes his arguments for you at the end of a chapter, or at the end of an elaborate section, you should be able to look back over the preceding pages and find the materials he has brought together in the summary. In *The Origin of Species*, Darwin summarizes his whole argument for the reader in a last chapter, entitled "Recapitulation and Conclusion." The reader who has worked through the book deserves that help. The one who has not cannot use it.

Incidentally, if you have inspected the book well before beginning to read it analytically, you will know whether the summary passages exist and if they do, where they are. You can then make the best possible use of them when interpreting the book. Another sign of a bad or loosely constructed book is the omission of steps in an argument. Sometimes they can be omitted without damage or inconvenience, because the propositions left out can be generally supplied from the common knowledge of readers. But sometimes their omission is misleading, and may even be intended to mislead. One of the most familiar tricks of the orator or propagandist is to leave certain things unsaid, things that are highly relevant to the argument, but that might be challenged if they were made explicit. While we do not expect such devices in an honest author whose aim is to instruct us, it is nevertheless a sound maxim of careful reading to make every step in an argument explicit. While we do not expect such devices in an honest author whose aim is to instruct us, it is nevertheless a sound maxim of careful reading to make every step in an argument explicit.

CHAPTER 9.
DETERMINING AN AUTHOR'S MESSAGE 89

Whatever kind of book it is, your obligation as a reader remains the same. If the book contains arguments, you must know what they are, and be able to put them into a nutshell. Any good argument can be put into a nutshell. There are, of course, arguments built upon arguments. In the course of an elaborate analysis, one thing may be proved in order to prove another, and this may be used in turn to make a still further point. The units of reasoning, however, are single arguments. If you can find these in any book you are reading, you are not likely to miss the larger sequences. This is all very well to say, you may

object, but unless one knows the structure of arguments as a logician does, how can one be expected to find them in a book, or worse, to construct them when the author does not state them compactly in a single paragraph? The answer is that it must be obvious that you do not have to know about arguments “as a logician does.” There are relatively few logicians in the world, for better or for worse. Most of the books that convey knowledge and can instruct us contain arguments. They are intended for the general reader, not for specialists in logic. No great logical competence is needed to read these books. To repeat what we said before, the nature of the human mind is such that if it works at all during the process of reading, if it comes to terms with the author and reaches his propositions, it will see his arguments as well. There are, however, a few things we can say that may be helpful to you in carrying out this rule of reading. In the first place, remember that every argument must involve a number of statements. Of these, some give the reasons why you should accept a conclusion the author is proposing. If you find the conclusion first, then look for the reasons. If you find the reasons first, see where they lead. In the second place, discriminate between the kind of argument that points to one or more particular facts as evidence for some generalization and the kind that offers a series of general statements to prove some further generalizations. The former kind of reasoning is usually referred to as inductive, the latter as deductive; but the names are not what is important. What is important is the ability to

discriminate between the two. In the literature of science, this distinction is observed whenever the difference is emphasized between the proof of a proposition by reasoning and its establishment by experiment. Galileo, in his *Two New Sciences*, speaks of illustrating by experiment conclusions that have already been reached by mathematical demonstration. And in a concluding chapter of his book *On the Motion of the Heart*, the great physiologist William Harvey writes: "It has been shown by reason and experiment that blood by the beat of the ventricles flows through the lungs and heart and is pumped to the whole body." Sometimes it is possible to support a proposition both by reasoning from other general truths and by offering experimental evidence. Sometimes only one method of argument is available. In the third place, observe what things the author says he must assume, CHAPTER 9. DETERMINING AN AUTHOR'S MESSAGE 90 what he says can be proved or otherwise evidenced, and what need not be proved because it is self-evident. He may honestly try to tell you what all his assumptions are, or he may just as honestly leave you to find them out for yourself. Obviously, not everything can be proved, just as not everything can be defined. If every proposition had to be proved, there would be no beginning to any proof. Such things as axioms and assumptions or postulates are needed for the proof of other propositions. If these other propositions are proved, they can, of course, be used as premises in further proofs. Every line of argument, in other words, must start somewhere. Basically, there are two ways or places in which it

can start: with assumptions agreed on between writer and reader, or with what are called self-evident propositions, which neither the writer nor reader can deny. In the first case, the assumptions can be anything, so long as agreement exists. The second case requires some further comment here. In recent times, it has become commonplace to refer to self-evident propositions as “tautologies”; the feeling behind the term is sometimes one of contempt for the trivial, or a suspicion of legerdemain. Rabbits are being pulled out of a hat. You put the truth in by defining your words, and then pull it out as if you were surprised to find it there. That, however, is not always the case. For example, there is a considerable difference between a proposition such as “a father of a father is a grandfather,” and a proposition such as “the whole is greater than its parts.” The former statement is a tautology; the proposition is contained in the definition of the words; it only thinly conceals the verbal stipulation, “Let us call the parent of a parent a ‘grandparent.’” But that is far from being the case with the second proposition.

Let us try to see why. The statement, “The whole is greater than its parts,” expresses our understanding of things as they are and of their relationships, which would be the same no matter what words we used or how we set up our linguistic conventions. Finite quantitative wholes exist and they have definite finite parts; for example, this page can be cut in half or in quarters. Now, as we understand a finite whole (that is, any finite whole) and as we understand a definite part of a finite whole, we understand the whole to be greater than the part, or

the part to be less than the whole. So far is this from being a mere verbal matter that we cannot define the meaning of the words “whole” and “part”; these words express primitive or indefinable notions. As we are unable to define them separately, all we can do is express our understanding of whole and part by a statement of how wholes and parts are related. The statement is axiomatic or self-evident in the sense that its opposite is immediately seen to be false. We can use the word “part” for this page, and the word “whole” for a half of this page after cutting it in two, but we cannot think that the page before it is cut is less than the half of it that we have in our hand after we have cut it. However we use language, our understanding of finite wholes and their definite parts is such that we are compelled to say that we know that the whole is greater than the part, and what we know is the relation between existent wholes and their parts, not something about the use of words or their meanings.

CHAPTER 9. DETERMINING AN AUTHOR’S MESSAGE 91

Such self-evident propositions, then, have the status of indemonstrable but also undeniable truths. They are based on common experience alone and are part of common-sense knowledge, for they belong to no organized body of knowledge; they do not belong to philosophy or mathematics any more than they belong to science or history. That is why, incidentally, Euclid called them “common notions.” They are also instructive, despite the fact that Locke, for example, did not think they were. He could see no difference between a proposition that really does not instruct,

such as the one about the grandparent, and one that does—one that teaches us something we would not otherwise know—such as the one about parts and wholes. And those moderns who refer to all such propositions as tautologies make the same mistake. They do not see that some of the propositions they call “tautologies” really add to our knowledge, while others, of course, do not.

Finding the Solutions These three rules of analytical reading—about terms, propositions, and arguments—can be brought to a head in an eighth rule, which governs the last step in the interpretation of a book’s content. More than that, it ties together the first stage of analytical reading (outlining the structure) and the second stage (interpreting the contents). The last step in your attempt to discover what a book is about was the discovery of the major problems that the author tried to solve in the course of his book. (As you will recall, this was covered by Rule 4.) Now, after you have come to terms with him and grasped his propositions and arguments, you should check what you have found by addressing yourself to some further questions. Which of the problems that the author tried to solve did he succeed in solving? In the course of solving these, did he raise any new ones? Of the problems that he failed to solve, old or new, which did the author himself know he had failed on? A good writer, like a good reader, should know whether a problem has been solved or not, although of course it is likely to cost the reader less pain to acknowledge the situation. This final step in interpretive reading is covered by Rule 8. Find out what the

author's solutions are. When you have applied this rule, and the three that precede it in interpretive reading, you can feel reasonably sure that you have managed to understand the book. If you started with a book that was over your head—one, therefore, that was able to teach you something—you have come a long way. More than that, you are now able to complete your analytical reading of the book. The third and last stage of the job will be relatively easy. You have been keeping your eyes and your mind open and your mouth shut. Up to this point, you have been following the author. From this point on, you are going to have a chance to argue with the author and express yourself.

CHAPTER 9. DETERMINING AN AUTHOR'S MESSAGE 92

The Second Stage of Analytical Reading We have now described the second stage of analytical reading. Another way to say this is that we have now set forth the materials for answering the second basic question that you must ask about a book, or indeed anything that you read. You will recall that that second question is What is being said in detail, and how? Applying Rules 5 through 8 clearly helps you to answer this question. When you have come to terms with the author, found his key propositions and arguments, and identified his solutions of the problems that he faced, you will know what he is saying in his book, and you are thus prepared to go on to ask the final two basic questions about it. Since we have now completed another stage in the analytical reading process, let us, as before, pause a moment to write out the rules of this stage for review. The Second Stage of Analytical Reading, or

Rules for Finding What a Book Says (Interpreting Its Contents)

5. Come to terms with the author by interpreting his key words.

6. Grasp the author's leading propositions by dealing with his most important sentences. 7. Know the author's arguments, by finding them in, or constructing them out of, sequences of sentences. 8. Determine which of his problems the author has solved, and which he has not; and as to the latter, decide which the author knew he had failed to solve.