



READING: LEARNING BY DISCOVERY

Mortimer Adler

Getting more information is learning, and so is coming to understand what you did not understand before. But there is an important difference between these two kinds of learning.

To be informed is to know simply that something is the case. To be enlightened is to know, in addition, what it is all about: why it is the case, what its connections are with other facts, in what respects it is the same, in what respects it is different, and so forth.

This distinction is familiar in terms of the differences between being able to remember something and being able to explain it. If you remember what an author says, you have learned something from reading him. If what he says is true, you have even learned something about the world.

But whether it is a fact about the book or a fact about the world that you have learned, you have gained nothing but information if you have exercised only your memory. You have not been enlightened. Enlightenment is achieved only when, in addition to knowing what an author says, you know what he means and why he says it.

It is true, of course, that you should be able to remember what the author said as well as know what he meant. Being informed is prerequisite to being enlightened. The point, however, is not to stop at being informed.

Montaigne speaks of “an abecedarian ignorance that precedes knowledge, and a doctoral ignorance that comes after it.” The first is the ignorance of those who, not knowing their ABC’s, cannot read at all. The second is the ignorance of those who have misread many books. They are, as Alexander Pope rightly calls them, bookful blockheads, ignorantly read. There have always been literate ignoramuses who have read too widely and not well. The Greeks had a name for such a mixture of learning and folly which might be applied to the bookish but poorly read of all ages. They are all *sophomores*.



To avoid this error—the error of assuming that to be, widely read and to be well-read are the same thing—we must consider a certain distinction in types of learning. This distinction has a significant bearing on the whole business of reading and its relation to education generally.

In the history of education, men have often distinguished between learning by instruction and learning by discovery. Instruction occurs when one person teaches another through speech or writing. We can, however, gain knowledge without being taught. If this

were not the case, and every teacher had to be taught what he in turn teaches others, there would be no beginning in the acquisition of knowledge. Hence, there must be discovery—the process of learning something by research, by investigation, or by reflection, without being taught.

Discovery stands to instruction as learning without a teacher stands to learning through the help of one. In both cases, the activity of learning goes on in the one who learns. It would be a mistake to suppose that discovery is active learning and instruction passive. There is no inactive learning, just as there is no inactive reading.

This is so true, in fact, that a better way to make the distinction clear is to call instruction *aided discovery*. Without going into learning theory as psychologists conceive it, it is obvious that teaching is a very special art, sharing with only two other arts—agriculture and medicine—an exceptionally important characteristic. A doctor may do many things for his patient, but in the final analysis it is the patient himself who must get well—grow in health. The farmer does many things for his plants or animals, but in the final analysis it is they that must grow in size and excellence. Similarly, although the teacher may help his student in many ways, it is the student himself who must do the learning. Knowledge must grow in his mind if learning is to take place.

The difference between learning by instruction and learning by discovery—or, as we would prefer to say, between aided and unaided discovery—is primarily a difference in the materials on which the learner works. When he is being instructed—discovering with the help of a teacher—the learner acts on something communicated to him. He performs operations on discourse, written or oral. He learns by acts of reading or listening. Note here the close relation between reading and listening. If we ignore the minor differences between these two ways of receiving communication, we can say that reading and listening are the same art—the art of being taught. When, however, the learner proceeds without the help of any sort of teacher, the operations of learning are performed on nature or the world rather than on discourse. The rules of such learning constitute the art of unaided discovery. If we use the word *reading* loosely, we can say that discovery—strictly, unaided discovery—is the art of reading nature or the world, as instruction (being taught, or aided discovery) is the art of reading books or, to include listening, of learning from discourse.

What about thinking? If by *thinking* we mean the use of our minds to gain knowledge or understanding, and if learning by discovery

and learning by instruction exhaust the ways of gaining knowledge, then thinking must take place during both of these two activities. We must think in the course of reading and listening, just as we must think in the course of research. Naturally, the kinds of thinking are different—as different as the two ways of learning are.

The reason why many people regard thinking as more closely associated with research and unaided discovery than with being taught is that they suppose reading and listening to be relatively effortless. It is probably true that one does less thinking when one reads for information or entertainment than when one is undertaking to discover something. Those are the less active sorts of reading. But it is not true of the more active reading—the effort to understand. No one who has done this sort of reading would say it can be done thoughtlessly.

Thinking is only one part of the activity of learning. One must also use one's senses and imagination. One must observe, and remember, and construct imaginatively what cannot be observed. There is, again, a tendency to stress the role of these activities in the process of unaided discovery and to forget or minimize their place in the process of being taught through reading or listening. For example, many people assume that though a poet must use his imagination in writing a poem, they do not have to use their imagination in reading it. The art of reading, in short, includes all of the same skills that are involved in the art of unaided discovery: keenness of observation, readily available memory, range of imagination, and, of course, an intellect trained in analysis and reflection. The reason for this is that reading in this sense is discovery, too—although with help instead of without it.

We have been proceeding as if reading and listening could both be treated as learning from teachers. To some extent that is true. Both are ways of being instructed, and for both one must be skilled in the art of being taught. Listening to a course of lectures, for example, is in many respects like reading a book; and listening to a poem is like reading it. Many of the rules to be formulated in this book apply to such experiences. Yet there is good reason to place primary emphasis on reading, and let listening become a secondary concern. The reason is that listening is learning from a teacher who is present—a living teacher—while reading is learning from one who is absent.

If you ask a living teacher a question, he will probably answer you. If you are puzzled by what he says, you can save yourself the trouble of thinking by asking him what he means. If, however, you ask

a book a question, you *must answer it yourself*. In this respect a book is like nature or the world. When you question it, it answers you only to the extent that you do the work of thinking and analysis yourself.

This does not mean, of course, that if the living teacher answers your question, you have no further work. That is so only if the question is simply one of fact. But if you are seeking an explanation, you have to understand it or nothing has been explained to you. Nevertheless, with the living teacher available to you, you are given a lift in the direction of understanding him, as you are not when the teacher's words in a book are all you have to go by.

Students in school often read difficult books with the help and guidance of teachers. But for those of us who are not in school, and indeed also for those of us who are when we try to read books that are not required or assigned, our continuing education depends mainly on books alone, read without a teacher's help. Therefore if we are disposed to go on learning and discovering, we must know how to make books teach us well.

There is an old test—it was quite popular a generation ago—that was designed to tell you which books are the ones that can do this for you. Suppose, the test went, that you know in advance that you will be marooned on a desert island for the rest of your life, or at least for a long period. Suppose, too, that you have time to prepare for the experience. There are certain practical and useful articles that you would be sure to take with you. You will also be allowed ten books. Which ones would you select?


Trying to decide on a list is instructive, and not only because it may help you to identify the books that you would most like to read and reread. That, in fact, is probably of minor importance, compared with what you can learn about yourself when you imagine what life would be like if you were cut off from all the sources of amusement, information, and understanding that ordinarily surround you. Remember, there would be no radio or television on the island, and no lending library. There would be just you and ten books.

This imagined situation seems bizarre and unreal when you begin to think about it. But is it actually so unreal? We do not think so. We are all to some extent persons marooned on a desert island. We all face the same challenge that we would face if we really were there—the challenge of finding the resources within ourselves to live a good human life.

There is a strange fact about the human mind, a fact that differentiates the mind sharply from the body. The body is limited in ways that the mind is not. One sign of this is that the body does not continue indefinitely to grow in strength and develop in skill and grace. By the time most people are thirty years old, their bodies are as good as they will ever be; in fact, many persons' bodies have begun to deteriorate by that time. *But there is no limit to the amount of growth and development that the mind can sustain.* The mind does not stop growing at any particular age; only when the brain itself loses its vigor, in senescence, does the mind lose its power to increase in skill and understanding.

This is one of the most remarkable things about human beings, and it may actually be the major difference between *homo sapiens* and the other animals, which do not seem to grow mentally beyond a certain stage in their development. But this great advantage that man possesses carries with it a great peril. *The mind can atrophy, like the muscles, if it is not used.* Atrophy of the mental muscles is the penalty that we pay for not taking mental exercise. And this is a terrible penalty, for there is evidence that atrophy of the mind is a mortal disease. There seems to be no other explanation for the fact that so many busy people die so soon after retirement. They were kept alive by the demands of their work upon their minds; they were propped up artificially, as it were, by external forces. But as soon as those demands cease, having no resources within themselves in the way of mental activity, they cease thinking altogether, and expire.

Television, radio, and all the sources of amusement and information that surround us in our daily lives are also artificial props. They can give us the impression that our minds are active, because we are required to react to stimuli from outside. But the power of those external stimuli to keep us going is limited. They are like drugs. We grow used to them, and we continuously need more and more of them. Eventually, they have little or no effect. Then, if we lack resources within ourselves, we cease to grow intellectually, morally, and spiritually. And when we cease to grow, we begin to die.

Reading well, which means reading actively, is thus not only a good in itself, nor is it merely a means to advancement in our work or career. It also serves to keep our minds alive and growing. 

We welcome your comments, questions or suggestions.

THE GREAT IDEAS ONLINE

is published weekly for its members by the

CENTER FOR THE STUDY OF THE GREAT IDEAS

Founded in 1990 by Mortimer J. Adler & Max Weismann

Max Weismann, Publisher and Editor

Ken Dzugan, Senior Fellow and Archivist

A not-for-profit (501)(c)(3) educational organization.

Donations are tax deductible as the law allows.