## EXPERIENCE COMES FIRST

## ANTHONY GALLUP, O.P.

Out of the night that covers me,

Black as the pit from pole to pole,
I thank whatever gods may be
For my unconquerable soul. . . .

HUS WROTE a daring, arrogant young atheist of the last century. And he died a broken, disconsolate, bitter old man. His experiences of a life time had not borne out the confidence he had placed in this early conviction, nor did he mel-

low into a fine old gentleman with a kindly brow.

"Faith comes from experience!" reads a prominent advertisement in the current journals. In the picture stands a healthy, smiling youngster of three facing a wave that is breaking with tremendous force on the shore a few feet away.

The implications are clear. Experience, it is thought, will bring certainty and confidence. If one will only face the realities of life, one need not fear the future and the unknown; for experience will have shown most conclusively that one need not be afraid.

What is this thing called experience? What value does it have in the education and development of normal, everyday school children? Is it something that can be taken for granted, or can it be controlled

and utilized to greater advantage?

The first of these queries is the easiest to answer. Everybody has experienced experience; and yet even profound thinkers will readily admit that it is a subtle reality to analyze. From the viewpoint of philosophy it proves to be something so elusive that, after one has read the explanations of Aristotle, Albert the Great, or Thomas Aquinas, as well as some of the moderns, the impression is left that somehow they have missed the point. However, they have not!

The position of each of these three men of ancient thought is, for all practical purposes, the same since both Albert and Thomas built upon the strong foundations of Aristotle. Yet Albert had more to say on the subject than Thomas. The reason for this is quite simple: He was much more interested in the world of nature than Aquinas. The Angelic Doctor took experience more for granted, a legitimate presumption indeed, while Albert was out to increase the realm of knowledge in the fields of chemistry, physics, botany, zoology, astronomy, and to some degree, anatomy. Albert, as a scientist, was interested in experience and experimentation. Indicating his importance, Pius XI, in an address to a Physiological Congress held in Rome in 1932, said of Albert: "If ever there were a man in the Middle Ages who was a scientist in the modern sense of the word it was that great Doctor."

At the beginning of a school year, therefore, it might be worth-while to consider some of his comments to see how they pertain to the teaching-learning process that will be engaged in for the next nine months. Albert points out clearly in explaining a text of Aristotle that there can be no process of teaching and learning without some previous experience on the part of the pupil; all formal learning techniques presuppose that some knowledge has already been acquired. This gives a special position to the field of experience, and its scientific counterpart, experimentation.

The advertising phrase "Faith comes from experience" indicates very clearly the main function of that physical, sensible contact with reality which is called experience. Albert had said we must put our faith both in experience and necessary first principles, and this for the reason that experience is supposed to beget certitude, conviction in regard to the things contacted. This contact is primarily made by the sense of touch with the material things round about us. Only after sense knowledge has been thoroughly grounded in the soft and the hard, the hot and the cold, the wet and the dry, can a child's dormant reason begin to operate and to develop by the logical process called the syllogism.

For St. Albert the need of experience and of scientific experimentation which are grounded in the riotous colors and sounds, the fragrant odors and the succulent flavors of nature had an almost exclusively religious value since for him they led to a greater knowledge and love of God. "We must not seek in God's use of natural things for a miracle but rather for the natural causes proper to the things he has created." In defending a detailed study of plants and animals he wrote that "there are some people who attribute all these things to divine order and say that we must not consider in them any other cause but the will of God. This in part we can agree to. Yet we do not say that He does this because of a natural cause of which He is the first mover, since He is the cause of all movement; for we are not seeking a reason or explanation of the Divine Will but rather investigating natural causes which are the instruments through which God's Will is mani-

fested. It is not sufficient to know these things in a general sort of way; what we are looking for is the cause of each individual thing according to the nature belonging to it. This is the best and most perfect kind of knowledge."

In his book on plant life, Albert points out that of the things he shall treat some he will prove from his own experience, others he will leave to the dicta of men who themselves base everything on experience. "This method alone can give certainty in such things." Again, in his writings on animals, he rejects some fables such as pelicans feeding their young by their own blood by stating "these are to be taken rather as tales than as philosophical proofs based on experiment."

These statements show how St. Albert himself realized and appreciated the place of personal contact with reality for progress in knowledge, but they do not lead us to any detailed explanation of how experience takes place within the mind of man. Treating of the nature of experience. Aristotle started by showing that acts of sense knowledge lead to memory and memory leads to experience. "From memory men can get experience, for by often remembering the same thing they acquire the power of unified experience. Experience, though it seems quite like scientific knowledge and art, is really what produces them." This keynotes quite properly the whole explanation of experience. One cannot be said "to be experienced" until he has done something many times. Repetition, doing a thing over and over again, is the ordinary way by which one begins to remember, and experience is the fruit of many memories. Just as the apple never appears on the tree until the tree has reached maturity, so experience is not achieved until one has been through the ups-and-downs, the ins-and-outs that make up a precise scientific experiment or life as a whole.

When we stop to consider the amount of progress that has been made in the realms of chemistry, physics, and botany, we can easily formulate the objection that Albert could not have possibly been on the right track in agreeing with such an obvious explanation. But this difficulty is easily answered by pointing out that St. Albert, if he suddenly entered our twentieth century, would not have been too surprised to learn that the world revolves about the sun. For he appreciated the difficulties involved in the acquisition of experience and in the execution of detailed experiments. It was for this reason that he wrote that "there is a great deal of error in the physical sciences." Elsewhere he points out that there is so much to do in the world of observation that one is forced to rely to a great extent on the research of others who are reputed to be careful, observant, and not given to fables.

Experiments have to be repeated. Nothing is learned by doing

something once. These are the main lessons that the theory of experience drives home. In one way it is trite to repeat these truths, but they have a value always worth realizing. We must not forget, however, that experience is not the mere repetition of a thing. It implies an acuteness and range of observation. The repetition must not be aimless. Experimentation involves "trying" a thing under diverse circumstances, comparing the results, analyzing all the elements involved, tracing every relationship of cause and effect. All of which cannot be done without much remembering.

What connection do such thoughts as these have with teaching? First, in a true sense, teaching is always subordinated to the previous experiences of the student. A student's response to a particular subject is conditioned in large measure by his "background." Parents who take care to train their children well are already helping them to profit from future incidents that will provide them with new experiences. Secondly, when possible it is better to learn from things than from books. Children should be encouraged to "try" things; not however in any sloppy haphazard way, but rather with a view to developing their ability to make careful accurate judgments about all the numerous elements of a situation. Thirdly, with a mind carefully matured by experiences, the young student can more easily use his knowledge of natural things to grow in his knowledge and love of God; "for since the creation of the world God's invisible attributes are clearly seen-His everlasting power also and divinity—being understood through the things that are made" (Rom. 1, 20).

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