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EDITOR'S INTRODUCTION

St. Thomas Aquinas and Modern Educational
Theory

This book makes available St. Thomas Aquinas's work entitled *De Magistro*, for the first time in English translation. Following it, is a truly remarkable essay by the translator, putting this work of St. Thomas into relation to his whole system. Both the translation and the interpretation are genuine contributions to education. To state the significance of this contribution in the contemporary discussion of a philosophy of education will be one purpose of this introduction. Another will be to state the reasons for the neglect of the work.

The *De Magistro* and the Modern Philosophy
of Education

Deals with Modern Problems

The nature of the teaching process, the function of method, and the nature of education as a process of self-development through self-activity, which is here stated more adequately than it had been in the five centuries after St. Thomas, has many advantages as a philosophy over statements since Pestalozzi. Certainly the problems which Dewey,

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for example, who dominates contemporary thinking, stresses in his philosophy of education—the conception of education as growth, the function of symbols in education, the meaning of reflective thinking, the principle of self-activity in education, the essential basis of experience needed for the educational process, and the nature of the process itself as self-development, are all stressed in this brief work of St. Thomas.

No Teaching Without Learning

Teaching, according to St. Thomas Aquinas, is not a transfusion nor transfer of knowledge. It is not the presentation of symbols or signs. It is not listening to the assertions of another. These are his specific denials. On the positive side he states that there can be no teaching without learning. Learning is self-activity. The teacher is merely an extrinsic proximate agent. What an amount of modern pedagogical literature need not have been written, and what devices, lesson plans, and schemes of normal schools could have been dispensed with if St. Thomas's position had been a part of the inheritance of the modern educator.

Learning is Self-Development through Self-Activity

Learning is the actualization of potentialities. It is the development of germinal capacities. It is progressive, evolutionary, and developmental. The major factor in the process is the individual himself, and particularly his active intellect. It is a

process of self-development. No teacher can induce it. No "presentations" in the Herbartian sense will be effective in learning; self-activity is the essence of the process. No symbols or other shorthand of experience in themselves can be effective in transferring knowledge. That depends on the individual himself,¹ and the teacher's function is exactly like the doctor's. The doctor may dress the wound, but nature must heal it, and this comparison is fundamental in the whole discussion of the first article on learning and teaching. St. Thomas states his position in the body of the First Article, as follows:

"It must be kept in mind that in natural things something may preexist potentially in a twofold manner: In one way in active, complete potentiality, that is, when the intrinsic principle is sufficiently able to bring it to perfect actuality, as is evident in healing, for through the efficacy of nature in the sick person he is brought to health. In another way, a thing can preexist in passive potentiality as when the intrinsic principle is not sufficient to educe it to actuality, as is evident when fire is made from air, for this cannot be done through any power existing in the air. When, therefore, something exists in active, complete potentiality, the extrinsic agent acts only by helping the intrinsic agent and by ministering to it those things by means of which it comes forth into actuality; just as a

¹Pace, E. A., *Educational Theorist of St. Thomas*, Catholic University Bulletin, Vol. VIII (1902), pp. 209-303.

doctor in healing is a minister to nature which does the principal work—ministering by abetting nature and by applying the medicines which nature uses as instruments for healing.² But when something pre-exists in passive potentiality only, then the extrinsic agent is that which does the principal work in bringing it from potency to act, just as fire makes from air fire in act what is fire in potentiality. Knowledge, therefore, preëxists in the learner, not in purely passive potentiality, but in active potentiality.” (See p. 52.)

Education and the Evolutionary Hypothesis

A considerable effort was made toward the latter half of the nineteenth century and the early years of the twentieth century, to bring educational theory within the scope of the evolution hypothesis. This was so successful that in the twentieth century we find it almost an axiom of educational theory. President Butler, in his otherwise significant and highly important title essay in the *Meaning of*

@Cf. Moore. Ernest Carroll. *What is Education*, pp. 16-17.

“I am profoundly convinced that, whatever else the teacher must do, he is never called upon to get inside the mind and do any burnish^{ing} or repairwork there. We use a figure of speech when we talk of the gardener causing the plant to grow, and surely we use a figure of speech, and a very misleading one, when we speak of education as the process of *molding*[^] sharpening, forming, or perfecting minds. Much as it may contribute to our pride to think of ourselves as performing such a service, the thing is inconceivable. We have no such creative power. In the Harvard Club in Boston there is one room set apart for the use of the graduates of the Medical School, and over the fireplace in that room there is an inscription, a motto, which states in a sentence the philosophy of the medical profession. It reads, ‘We dress the wound, God heals it.’ If a devoted student of education should attempt to construct a similar motto which would in like manner set forth the object of his profession, what form ought it to take? This, I think: ‘we feed the mind, God makes it.’”²

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Education (originally published in 1898, revised in 1915), says:

“The point of view from which I shall speak of them is the one given us by that remarkable generalization which has come to be known as the doctrine of evolution, a theory which we all associate with the nineteenth century, but which, nevertheless, was seen by the thinkers of the ancient world, by the lightning flashes of their genius, in what is, after all, very much the form in which the *dear sunlight of modern scientific demonstration*⁹ presents it to us. The doctrine of evolution has illuminated every problem of human thought and human action. It is a mere truism to say that it has revolutionized our thinking; but it is equally true that we have in very many cases failed to accept the consequences of the revolution and to understand them in all their important applications. It seems to me that in no department of our interest and activity is this failure more complete, speaking generally, than in that which relates to the great human institution of education.” (pp. 13, 14.)

Professor MacVannel, in his *Outline for a Course in the Philosophy of Education* (1912), says:

“The intellectual and spiritual vitality of every age as well as of every individual is due to the dominating and fructifying influence of some one comprehensive idea. The dominant thought in the intellectual life of the present is the principle of evolution—an idea which is fast becoming the atmosphere of all inquiry in the domain of science, art, religion, and education. As is true of all great ideas, this one in some form has

^sThis is indeed strange language for so competent a scholar as President Butler. Sir Bertram C. A. Windle's extraordinarily succinct *The Evolutionary Problem as it is Today* (Wagner, N. Y., 1927):

“Hobgen says that the theory is still in its infancy, but is becoming more and more the nucleus of a living body of experimental investigation, and so it is, but so far the crucial test of the development of a new species is nowhere to be seen, and thus the evidence is purely circumstantial. That is by no means enough to *prove* the truth of the theory, however strongly it may suggest it. In 1903, Professor Morgan of Columbia University said that ‘however probable the theory may appear, the evidence is indirect and exact proof is wanting; and that to my mind sums up the answer to this first question with complete accuracy today.’” (p. 13.)

been in the world from the first beginnings of thought. The conception in its present fullness has been slowly developed in the environment of the advancing human knowledge of twenty-four centuries. Evolution is no longer a theory merely; it has become a creed; and it now lends such a living interest to the past development of all organisms, institutions, and beliefs that it is a difficult matter to adequately appreciate the standpoint of those who were without the idea. No longer *can* the saying of Goethe be accepted without reservation that the history of the past is a book with seven seals. As the theory of Copernicus enabled man to reconstruct the alphabet of his relationships in space, so has the doctrine of evolution forced him to reconstruct his knowledge of his relationships in time. - - -

“As was noted in the introduction, the doctrine is now regarded as the legitimate scientific method in the search for reasonableness in human experience.” (pp. 32, 33.)

The Thomistic Conception Evolutionary

- The fundamental conception of St. Thomas is a developmental or evolutionary one. The teaching and the learning processes are both so conceived. Learning is a passage from potentiality to actuality. It is brought about in man by his own activity. It is a process of self-activity, self-direction, and self-realization of man's highest potentialities. Extrinsic agents—teachers, textbooks, and the whole range of the social tradition, are merely the conditions of its development. They are aids; the process is one of self-development.

What may seem like a denial of this doctrine is St. Thomas's conception that knowledge of universals precedes knowledge of particulars, and this would seem to be a denial of common experience. But this *is* the fact. Our knowledge grows from

vague, undifferentiated wholes to clearly differentiated wholes.⁴ This is almost the precise formula that Herbert Spencer uses in his formulation of the evolutionary hypothesis: the passage from an indefinite, incoherent homogeneity to a definite, coherent heterogeneity. It is in accord with Professor James's description of the child's mind as a "big, blooming, buzzing confusion," but it is a mind in which "the light of reason is implanted by God, being, as it were, a likeness of uncreated Truth reflected in us." The potentialities are given by God, man is the architect of his own development.¹⁻

The mind is no mere wax tablet to be written on by the stylus of experience. It is no inert thing—the plaything of a so-called natural selection. It is not a blank piece of paper to be written upon by some extrinsic agent. It has germinal capacities; it has potentialities—not the predetermined or exteriorly determined capacity of the merely animal,—but the self-determined, self-active potentiality of a human being bearing the image and likeness of God.

¹Moore» Ernest Carroll» *What Is Education*, p. 112.

²Professor James has described it as 'one big» blooming» buzzing confusion.* 'That confusion,* he declares, 'is the baby's universe; and the universe of all of us is still to a great extent such a confusion,* potentially resolvable, and demanding to be resolved, but not yet actually resolved into parts.* The process of learning, therefore, which we each begin at birth and are bound to continue until we die, is a process of bringing order out of the chaos of our own confused impressions, of noting distinctions in feelings which at first were only vague and indeterminate, and of systematizing these reports of feeling into a world of articulated things. We always start with a vague experience, and out of it, step by step, we carve the parts which need demands—an order of procedure just the opposite of that process of beginning with clear-cut things and elementary parts and putting them together into wholes which education is commonly conceived to be.**

It is, on the other hand, as we might have anticipated, in accord with the teleological conception of the nature of a thing by Aristotle.

A Conception Without Biological Vagaries or Logical Fallacies

Here is an evolutionary conception of human development that may be readily accepted and is not bound up, as in Fiske's case, with a biological hypothesis that is having its props more and more "knocked" from under it, nor with a theory of the transmission of acquired characteristics now practically universally rejected, nor based on an argument that furnishes obvious examples of fallacies. The materialists may reject St. Thomas's common-sense decision that the potentialities implanted-in beings come from God, and call the First Cause by any euphemism or screen they will, but their attitude does not affect the nature of the process.

An Orderly Universe

Consider briefly, in this connection, the fundamental aspects of the universe as stated in the *De Magistro*. St. Thomas rejects the opinion which excludes immediate causes, and which, consequently, assumes direct action from the first causes. St. Thomas sees in this, a finer conception of creative power than the direct action in every detail. He sees the universe in "the order and connection of causes." The Thomistic conception should satisfy the scientist who sees in the universe the dominion

of law, the pervading influence of causality, and man raised to a casual agency in his own growth and development. This is St. Thomas's fine language:

"But both of these opinions are without reason. The first opinion excludes immediate causes, since it attributes all the effects appearing in lower things to the first causes solely. This detracts from the universal order which is woven together by the order and connection of causes; while the first cause from the abundance of its own goodness confers upon other things not only that they may be, but also that they may be causes. The second opinion results in the same difficulties, since removing a hindrance is only moving *per accidens*, as is said in VIII *Physics* (com. 32). If lower agents do nothing else than lead from a hidden state into manifestation by removing the impediments with which the forms and habits of virtue and of knowledge are hidden, it follows that all lower agents do not act except *per accidens*." (See p. 50.)⁸

And this growth, development, evolution, if you please, applies not only to the growth of knowledge, but to the growth of character. St. Thomas continues :

⁵Darwin, Charles, *Foundations of the Origins of Species*

^{**}It accords with what we know of the law impressed on matter by the Creator, that the creation and extinction of forms, like the birth and death of individuals, should be the effect of secondary (laws) means/ And again, speaking of the vastly complicated laws required thus to produce living things: 'The existence of such laws should exalt pur notion of the power of the omniscient Creator?' (Quoted in Windle's, Sir Bertram C. A., *The Evolutionary Problem As It Is Today*, p. 10.)

“Therefore, according to the teaching of Aristotle (I *Phys.* com. 78), the middle course between these two positions must be held in each of the foregoing cases. *Natural forms* preëxist, indeed, in matter, but not in act as the others held, but only in potentiality from which they are educed to actuality by an extrinsic proximate agent, not alone by the first agent, as the other opinion supposes. Likewise, according to his statement in VI *Ethics* (II, in princ.) the *habits of virtues* preëxist in us in certain natural tendencies which are, as it were, beginnings of virtue, and afterwards, through the exercise of activities, they are brought to their due development. Likewise, we must say about the *acquisition of knowledge* that there preëxist in us certain potentialities of knowledge; namely, the first concepts of the intellect which are recognized immediately by the light of the active intellect through the species abstracted from sense presentations, whether the concepts be complex as axioms or simple as an idea of being, or unity, or something of this nature which the intellect grasps immediately. From these universal principles all principles follow as from germinal capacities. When, therefore, from these universal cognitions, the mind is led to know particular things in actuality which before were known potentially and, as it were, under the aspect of the universal, then one is said to acquire knowledge.” (See pp. 50-51.)

*Italics are editor's.

Anticipations of Modern Educators

The fact regarding the applications of the evolutionary hypothesis to modern education is that such applications are not made. The main conceptions of the best contemporary educational theory, or of the educational classics of the nineteenth century are independent of any direct relation to the evolutionary hypothesis in any strictly biological sense. Even in its more general aspects, if Professor Judd's *Psychology of Social Institutions* is significant, the explanation is passing from a biological to the sociological phase—with the biological *passé*. We need not pursue this subject further at this time, but we will concern ourselves with some of the fundamental notions and principles of contemporary education to show how fully these are anticipated by St. Thomas.

The Process One of Self-Education

When Pestalozzi said, "Let the child not only be acted upon, but let him be an *agent* in intellectual education," and when Spencer said that "it cannot be too strenuously insisted upon that in education the process of self-development should be encouraged to the fullest extent," the reader of this essay would answer that St. Thomas Aquinas had long ago pointed out that education was possible on no other condition. When Froebel says that education must be passive and following, and not active and categorical, he was merely restating an educational

principle that St. Thomas Aquinas had long ago stated more positively.

Says St. Thomas, "There is a twofold manner of acquiring knowledge, the one when the natural reason of itself comes to a knowledge of the unknown which is discovery, the other when someone extrinsically gives aid to the natural reason, which is called instruction," and he continues, "Similarly it happens in the acquisition of knowledge, that the one teaching leads another to the knowledge of the unknown in the same way as he (the learner) would lead himself to a cognition of the unknown in discovery." And were an angel to instruct a man, as shown in the Third Article, he must conform to the man's way of learning. So the process of education is a process of self-education through self-activity, whether it is (1) independent study or learning, or (2) formal instruction or other tuition.

The Significance of Symbols in the Educational Process

One of the great difficulties in modern educational theory and practice has been the failure to interpret adequately the significance of symbols in the educational process. We seem to think that symbols are a substitute for experience. They seem to pass current in educational practice without anyone's suspecting the currency is counterfeit. Our lecture method is apparently based on the assumption that the presentation of symbols is an adequate educational process. The substitution of books for ex-

perience is another evidence of the same unfortunate tendency. Making textbooks central in education is another aspect of it. The significance of project methods, and other proposals, to reinstate activity as fundamental in education, is an effort to get at realities instead of symbols. St. Thomas had put this problem in the work under consideration quite succinctly as follows:

“Hence, the words of the teacher, heard or seen in writing, have the same relation to causing knowledge in the intellect as anything outside the mind has, because from both, the intellect takes the intelligible content (meaning); yet the words of the teacher have a closer relation to causing knowledge than have the mere perceivable things outside the mind, inasmuch as words are symbols of intelligible content.” (See p. 58.)

Symbols Have Intelligible Content

“Symbols have intelligible content (meaning); there is the significant fact. Hence, knowledge cannot be transfused by means of symbols. You cannot pass it on directly. Not the symbols but the discursive reasoning is the immediate cause of knowledge. The intellect must become self-active. It must educe the knowledge from potentiality to actuality by self-activity. The function of the teacher is to propose the symbols, but the natural reason of the individual must do the work. “Hence, and according to this,” says St. Thomas Aquinas,

“one man is said to teach another because the teacher proposes to another by means of symbols the discursive process which he himself goes through by natural reason, and thus the natural reason, of the pupil comes to a cognition of the unknown through the aid of what is proposed to him as with the aid of instruments. As, then, a doctor is said to cause health in a sick person through the operation of nature, so man is said to cause knowledge in another through the operation of the learner’s natural reason—and this is to teach. Hence, one man is said to teach another and to be his master.” (See p. 53.)

In the passage quoted above, Aquinas calls symbols or words superior in causing knowledge to “mere perceivable things outside the mind.” This would seem to run counter to what St. Thomas elsewhere points out (e.g., Reply to Obj. 3, p. 55), that the interpretation of the symbols “comes about through preexisting knowledge.” Experience is declared to be the basis for the use of symbols. This is the key to the wider experience of others. The personal experience of the individual is the indispensable “open sesame” to the symbols which contain, let us say, the social inheritance. If we understand this, then we shall understand St. Thomas’s statement of the superiority of symbols. They have already impressed upon them the human intellect, they are freighted with the meanings of the race,

they summarize the experience of all people in all time so far as they have been transmitted. Consequently, their superiority to mere naked things, which things are not even environment until they enter into a human consciousness. In any case, mere experience is narrow, personal, with narrow denotation and practically no connotation. The symbol is rich in both connotation and denotation to him who has the key to unlock it.

Educability and Plasticity

“Man not only is educable, but he needs education to give a character to his fluid potentialities,” says Miss Mayer. This is a plain statement of two fundamental principles—the educability of man and the significance of plasticity in the educational process. The fact of plasticity is here adequately accounted for. Recent generations, in attempting to interpret the significance of this fact, have achieved only such unsatisfactory explanations as Fiske's *Meaning of Infancy*. To St. Thomas Aquinas this power of man's educability and plasticity is based on his power of abstraction. It is psychic, not neural.⁷ It is his capacity to distill the essence of experience, to acquire its intellectual coefficients, to get its intelligible content. It is

⁷Pitner, Rudolph, *Intelligence and Its Measurements*, *Journal of Educational Psychology*, XII, March, 1921, p. 139.

*I have always thought of intelligence as the ability of the individual to adapt himself adequately to relatively new situations in life. . . . This implies ease and rapidity in making adjustments, and hence, ease in breaking old habits and in forming new ones. Fundamentally this leads us back to the general modifiability of the nervous system.**

essentially the apprehension of the meanings of experience, their translation into symbols, and their utilization in the redirection of experience. In man's case, this is identified with the notion of active potentiality. Things may be in active or passive potentiality. In both cases they have capacity to receive and attain perfection. In a passive potentiality, an extrinsic agent brings the thing to its actuality. In active potentiality the outside agent is merely an aid, an instrumental efficient cause, but the principal effective agent is the person himself through his active intellect. The teacher is merely a mediator; the immediate cause is the active intellect.

Modern Teaching Conceived of as Animal Training

Such a conception would have helped modern education and modern psychology to avoid a series of capital errors. To a surprising degree, the teaching processes of our large-scale education are taking on the nature of animal training. We give cues and children respond precisely as an animal does. The intellectual content is lost in a scholastic ritual. The child is injured intellectually in the process instead of being helped.

In the language of St. Thomas, we have made the fundamental mistake of conceiving the student as existing in passive potentiality, not active potentiality. We imposed our ways, our methods, our plans; we robbed him of responsibility. We were

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attempting merely to train him—that seemed to us all that was possible. The errors of this fundamental misconception may be seen in our results as indicated in such an educational textbook as, for example, Burnham's *Normal Mind*. Here we find statements like these:

“The carelessness of the parent, the mistake of a poor teacher, or an unfortunate situation in the child's environment, is always likely to make a permanent association with lasting injury. Whereas, in case of the animal we blame the trainer, in case of the child we are apt to defend ourselves and say that the child was defective, had an unfortunate heredity, or was defective or feeble-minded.” (pp. 172-3.)

“The fault in many of our schools today is the lack of serious purpose and the dawdling and instability of the pupils in their occupations.” (p. 209.)

“Neither the teacher nor the mother have time for such things [to permit the child to perform his task]. It is all very well for you to say that one should wait for the child, but when shall we get our work done?”

“Well, what is your work? . . . I believe it is better to teach a child what he wants to know at the time when he wants to know it. I believe that in teaching him in that light he will get on faster and so will you. ‘What good will it do you to reach the end of the journey, panting and breathless, only to find that you have lost the child on the way?’” (p. 216.)

“Teachers and parents alike are prone to interfere, and by taking the tasks out of the hands of the children, largely destroy the opportunity for responsibility and success.” (p. 228.)

“The-practical conditions in school that tend to disintegrate the personality are largely summed up in a general statement to the effect that whatever causes continued interference and inhibition of one's tasks, or robs a child of his task, tends to disintegration.” (p. 234.)

“From the point of view of hygiene the standard scales are looked upon with suspicion as putting attention in an

unwholesome manner on the artificial and conventional products, instead of on the mental attitudes so important for the mental health." (p. 277.)

"But we give them information unconnected with experience, instruction with little training, knowledge without opportunity to apply it, tasks for which they have little ability, and that they cannot do well, exercises in mathematical logic without proper basis in concrete experience of real things, and demand oral or written description without first-hand knowledge. It is not strange that presently they become confused in their thinking and the victims of interference of association or acquire the habit of thinking of two things at once." (p. 502.)

Behaviorism, Pragmatism, and Wisdom

It may be said that such educational results are inevitable in a society in which a behavioristic psychology is fashionable. But St. Thomas would say to behaviorism what Miss Mayer says he would say to pragmatism: "You are mere scientists." On your level of fact, you are doing useful work in collecting data. Pile up your facts. But you are not a wise man, or a philosopher. Wisdom is not your characteristic and philosophy is not your field. You do not consider things in their highest causes, you cannot, on your level, "set things in order."

Animal Training and Human Education

The translator has pointed out in detail the fact that man is no mere animal. An animal cannot be educated in any human sense. It can be trained. It can be sent through the motions by setting up and controlling conditioned reflexes, but it cannot be educated. The reason for this is that the animal is not self-active, can create no personal problems,

is not intellectually plastic, is not free, cannot integrate a personality, nor form a character. But the practical thing for teacher and for animal trainer to have and to hold is the distinction between the passive potentiality which animals have, and the active potentiality which animals do not have and human beings do. No animal trick will ever be mistaken for human intelligence, and no animal training will ever be regarded as a genuine human education.

A Self-Active, Self-Directed, Self-Determined Cooperation

And so we have the place of the teacher in the educational process. The child is the star. He is, as Professor Dewey says, the center of gravity in the educational system. He is the learner—and teaching is for learning. The cooperation of the student is essential—a self-active, self-directed, self-motivated cooperation. The teacher's efforts are counterfeit, unless they have the stamp of the learner. The symbols of learning cannot be transferred nor transfused. More than the learner's presence is required, and more than a merely acquiescent listening. The teacher cannot induce the process by efforts at intense sensations or vivid word pictures.

*Teacher's Need for Scholarship, and Capacity to Stimulate
Self-Activity*

Apparently there are two main characteristics of the teacher, (1) scholarship, and (2) capacity to

induce or stimulate the process of self-activity. As for the first, the teacher must have the knowledge in actuality that the student has only in potentiality. "Instruction," says Aquinas, "implies perfect action of knowledge in the teacher or master," (see p. 65), and again, "the teacher must have explicitly and perfectly the knowledge which he causes in another" (see p. 65), and still again, in replying to an objection, he says that complete knowledge must preexist in the teacher. (See p. 65.) This is the basis of the requirement of high scholarship. And in comparing the two methods of discovery and instruction which is the essence of the Second Article, he calls discovery more perfect "on the part of the *one* receiving knowledge," and instruction more perfect "on the part of what causes knowledge." (See p. 66.)⁸ Translating this into our terms, methods of trial and error, according to the second view, are inferior to instruction because the latter leads to knowledge more quickly and easily. Immediately at least, the teacher in her own personal attainments expresses the limit of what may be

***It may be useful to remark, more or less parenthetically, that the much-despised process of trial and error has, up to the present time, produced better results in every field, from mechanics to nation-building, than any other method.**

"Experience seems to have proved that no mind is great enough to understand in advance all the factors that are at work in the production of any single result. No mind, therefore, is capable of predicting in advance exactly what will happen as the result of any experiment or disturbance of an existing balance. Owing to the complexities of every problem and the limitations of the human mind, men have been compelled to fall back upon the method of trial and of experiment, preserving those methods that turn out well and rejecting those that turn out badly." (Carver, Thomas Nixon, *The Magazine of Business*, April, 1928, pp. 414-16.)

accomplished in the teaching process.[®] As we put it, the results cannot be greater than their source. Or more directly, as the teacher, so the school. She conditions the whole process of instruction. But for teacher or angel (the Third Article), there is only one way to instruct or cause knowledge in man. And that is in "man's own way."

The Teacher as Mediator Between Child and Curriculum

St. Thomas's principle furnishes an opportunity to emphasize a point neglected ordinarily in educational discussion, namely, that the teacher is the mediator between the child and the curriculum. No matter what may be printed in the official curriculum, nor what directions are sent out by administrative or supervisory authority, so far as the child is concerned in the process of instruction, the actual curriculum is determined by the classroom teacher. It is true, as St. Thomas says, that the actuality of the child's potentiality depends on the completeness and perfection of the teacher's knowledge. The potential curriculum is the teacher's, the actual or effective curriculum depends on the self-activity of the child.

Dewey's Child and the Curriculum

In an essay that has had extensive vogue in modern education since its publication in 1902, Dewey's

[®]Not absolutely, for a student may have greater capacity (potentiality) than a teacher, but within the scope of the instruction process the statement is true.

The Child and the Curriculum, the same idea is expressed as is shown below.

So St. Thomas says, the teacher's knowledge in a particular process of instruction expresses the possibility or actuality of the students' present possibility. What a curriculum or course of study is, is determined in any case by what the teacher is and knows.

Dewey formulates the problem thus: "From the side of the child, it is a question of seeing how his experience already contains within itself elements—facts and truths—of just the same sort as those entering into the formulated study; and, what is of more importance, of how it contains within itself the attitudes, the motives, and the interests which have operated in developing and organizing the subject matter to the plane which it now occupies. From the side of the studies, it is a question of interpreting them as outgrowths of forces operating in the child's life, and of discovering the steps that intervene between the child's present experience and their richer maturity." (*The Child and the Curriculum*, pp. 15-16.)

And his essay concludes: "It is his (the child's) present powers which are to assert themselves; his present capacities which are to be exercised; his present attitudes which are to be realized. But save as the teacher knows, knows wisely and thoroughly, the race experience which is embodied in that thing we call the Curriculum, the teacher knows neither what the present power, capacity, or attitude is, nor yet how it is to be asserted, exercised, and realized." (*The Child and the Curriculum*, p. 40.)

Why the Logical is Emphasized

It may, apparently with great reason, be objected that the whole process of teaching, as St. Thomas conceives it, is purely logical and not psychological. We waive for the immediate point the fact that St.

Thomas was dealing in his actual instruction with advanced students. His point is that the teacher will follow the syllogism in the presentation of his material because that is the way the mind works. This is the only way to influence the self-determining activity of the student for his enlightenment. "Demonstration," says Aquinas, "is a syllogism that causes knowledge." (See p. 53.) Where there is not this relation to principles, the teacher "does not cause knowledge in him [student] but perhaps opinion or belief." (See p. 54.) We have learned long since that the "logical nexus" is not the only way to influence people, or even to improve them, but it is, in a strict sense, the way to educate them. Their experience must be permeated by ideas, they must see things in their relations, they must intellectualize their experience. This, as Professor Dewey puts it in another connection, "serves as a guide to future experience, it gives direction, it facilitates control, it economizes effort." (*The Child and the Curriculum*, p. 27.)

The Disputatio and the Lecture Method

If we examine the actual process of the *disputatio* as outlined by DeWulf, and illustrated in the work under consideration, we find the psychological factors given even greater consideration than in any of our own universities. What is the general method characterizing our higher academic instruction? It is the lecture method. And what is there more

futile as a regular procedure! And what justification is there for it, for the most part, in this age of textbooks and reference books, mimeographs and multigraphs, and the incessant activity of printing presses! And how superior is the medieval method!

If we put in contrast with this the medieval *disputando*, we can appreciate the force of the comment by the translator that "whatever the medieval university did not do, it certainly fostered thinking, and that whatever the medieval student could not do, he certainly could think." (See p. 102.)

The Logical as the Culmination of the Psychological

It should be borne in mind also that the logical is the last phase of the psychological. It is the culmination of a psychological procedure. Somewhere in the teaching and in the learning process there must be a formulation, a putting in order, an organization, a systematization, even an effort at unity and organization. This comes after the tortuous procedures of trial and error or other experimental method, and at the end of a more orderly process of instruction where personal experience helps us to utilize vicarious experience. But this logical formulation must come. Then, exactly as St. Thomas does in the *De Magistro*, it can be fixed or developed by the process of reviewing the whole material.

Enrichment of Experience

One of the educational ideas particularly fashionable at this time is contained in the phrase, "enrich-

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ment of experience." It is a happy phrase, and its currency is largely due to Dewey. The initial step in the educational process is the personal experience of the pupil. This is what gives rise to problems, this is what helps to give interest and motivation for the educational process. But this process, through the rational powers of man, or through reflective thinking, or by means of the discursive reason, brings to bear upon this experience the enrichment of the insight of the class, the teacher, or the social inheritance, through the mediation of the teacher. And the experience now permeated by ideas, or principles, is enriched.

"Here is," as Professor Dewey says, "the organic relation of theory and practice; the child not simply doing things, but getting also the idea of what he does; getting from the start some intellectual conception that enters into his practice and enriches it; while every idea finds, directly or indirectly, some application in experience and has some effect upon life. This, I need hardly say, fixes the position of the 'book* or reading in education. Harmful as a substitute for experience, it is all-important in interpreting and expanding experience." (.School and Society, p. 76).

Now, let St. Thomas Aquinas from his seven centuries of seclusion say the same thing: "It must be recognized that the active life precedes the contemplative in regard to those acts which are in no way compatible with the contemplative life, but in regard to those acts which take their subject matter from the contemplative life, it is necessary that the active follow the contemplative." (See p. 85.)

The Process of Reflective Thinking

In the process of self-development through self-activity, the crux of the whole matter, as conceived by St. Thomas, is found in the process of reflection. In fact, teaching is a means of stimulating the reflective process in the individual through his own activity. It is, apparently, sharply distinguished from the process of presenting" to the imagination, sensible objects. The presentation of these is apparently regarded as the essential condition prior to any genuinely educative process. There is nothing in the mind that was not first in the senses.¹⁰ It is only when these sensible objects in the imagination (phantasms) are operated on by the discursive reason in the process of reflection, that learning can really be said to take place. "To merely stimulate the pupil to review the contents of his memory is not teaching." To present him these sensible objects which are ultimately used in the reflective process is, in itself, not teaching, essential and fundamental as it may be. Habituation by custom is not teaching on the part of the master, nor education on the part of the pupil. These are the raw materials of the learning process. By bringing to bear upon them the reflective power, by intellectualizing and generalizing them, and raising them to the level of reason or insight, they become,

¹⁰A scholastic principle which historians of education credit to later writers—the sense realists; the latter nay, however, have made a more conscious educational application of the principle.

in a real sense, learning, and the efficient instrumental cause of the learning would be teaching.

*Need for a Philosophy of Education in Relation to a
Philosophy of Life*

One of the significant contributions of this work is that the philosophy of learning, of teaching, and of education is put into relation to a complete philosophy of life. The full significance of this is revealed not so much in the work itself as in the translator's critical essay, and the relation of it to the whole problem of medieval civilization is indicated. "If there is one general characteristic of medieval society, it is its absorption in a problem, the problem of man's relation to God. . . . This was the problem which the scholars of the Middle Ages were earnestly engaged upon, to know the relation of man to the universe and to his Creator." (See pp. 93-94.) The consideration of every question, as is too often the case today, in itself, in the light of the specific situation only, without relation, is the antithesis of the Thomistic idea.¹¹ "Nothing," as Cardinal Newman says, "has a drift or relation,

¹¹Cf. Branford⁸» *Interpretations and Forecasts*, p. 351.

"I perceive» then, that the modern university has not produced among its philosophers a Thomas Aquinas to tell them in the language of their own time and generation how the world of God» the world of Man, and the world of Nature are interrelated in one orderly universe.

¹²Assuredly if an Aquinas did appear he would not be understood by the Faculties. The theologian and the scientist have each developed a specialized language all but unintelligible to the other, and but feebly comprehended by the man of letters. The universities have discouraged translation from the language of one Faculty into that of another. And all endeavors toward a common language for the three Faculties of Theology, Arts, and Science they have stoutly repressed.⁹¹

nothing has a history or a promise." St. Thomas, in the Fourth Article, is not insensible to the demands of the active life—in fact, his own life showed it.¹² For St. Thomas, the active life is activity directed to the utility of the neighbor. But the active life is more perfectly pursued when the contemplative life has inflamed the mind. (See p. 85.) And the subject matter of contemplative life is 'the ^knowable reasons for things^' as its end is the "consideration of truth." (See p. 83.) It is this knowing things in their higher causes, and in their highest that marks this essay so apart from much of our fractional, unrelated theory. St. Thomas integrates, relates, systematizes, unifies. And an extraordinary illumination of the immediate problems of education follows, because they are seen *sub specie aeternitatis*.

The Contemporary Chaos ' 1

There is in contemporary education an insistent demand for a philosophy of education instead of

¹²Branford's *Interpretations and Forecasts*» pp. 293-4.

^{*}A remarkable succession of moral and intellectual leaders devoted themselves to the grand problem of unifying the whole culture resources of Christendom for the guidance and uplift of life. In the division of labor requisite for so immense an undertaking, the Cloister specialized on the moral approach to the problem, and the University on the intellectual approach—each thus following the bent of its respective rustic or urban origin. So far from the monastic and academic methods of the Middle Ages being purely dialectical and abstract, as the eighteenth century historians thought, we are beginning to see that they were, at their best and in reference to their time, concrete and experimental, i.e., evolutionary. This is, indeed, in a degree, now generally recognized as regards the monastery and friary, but less so as regards the universities. *Othenwise» historians of philosophy would make more use (for example) of the significant fact that Thomas Aquinas failed to complete his systematisation because of the too frequent calls to leave his chair in the University of Pans» and take his seat at the Council Boards of Christendom A (Italics are editors.)*

the fractional, unrelated, merely personal discussions which are so characteristic of the time.

Dr. C. A. Curtis, for example, objects to the basic statement of the Committee on Curriculum of the National Society for the Study of Education, that "curriculum makers are obliged to consider definitely the merits and deficiencies of American civilization" as weak and obscure, and goes on to say, "I want the statement to say in unequivocal terms: 'The first step in curriculum-making is to set up a basic philosophy. This philosophy should be derived from a study of cosmic evolution and should formulate the purpose of life, and the destiny of man, as far as these ultimate goals may be discerned. Then all selection and organization of curriculum materials should be in terms of the basic philosophy.'"¹³ This is precisely what St. Thomas did for the problem he was discussing. But six pages later we find Curtis saying, "We must build our individual philosophies of education according to the answers, the facts yield to our individual personalities, and grant to the other fellow a similar right."¹⁴ This is not what St. Thomas did. And the general result of the contemporary demand for a philosophy of life results in the extraordinary vagaries of behaviorism or the rationalizations of the Freudian wish, or the social expediency of

¹³STA^A *Twenty-sixth Yearbook of the National Society for the Study of Education, Part II. The Foundations of Curriculum-Making*, p. 92.

¹⁴*Ibid.*, p. 96.

Dewey, or the motiveless mechanism of Harry Elmer Barnes:

“We now recognize that every human thought or act is strictly determined by a long process of antecedents, including our physico-chemical nature, our biological heredity, our endocrinal and metabolic processes, and our personal experiences in human association from the time of parturition to the moment of the particular act or thought. There is not the slightest iota of choice allowed to any individual in any act or thought from birth to the grave. If better and saner types of conduct are to be achieved, this must be brought about by giving the individual a better set of experiences through heredity, education, and association.”¹⁵

The Neglect of the De Magistro

These, then, are the fundamental conceptions to be found in this little work of St. Thomas Aquinas. The break in the continuity of European civilization which came in the sixteenth century explains to a considerable degree the neglect or ignorance of such a work as is here presented in English for the first time. Supplementing this explanation is the unfortunate attitude or provinciality of American scholarship, or what goes by that name, to neglect Catholic sources and Catholic contributions. The creation of an institution such as the Medieval Academy fostered at Harvard University, is an evidence of the recognition of the need for the recovery of this neglected medieval material. There are, however, certain difficulties in the way of recovery.

«Barnes, H. C. *The History and Prospects of the Social Sciences*. Introduction, p. XV»

They are threefold: (1) The difficulty of the language, (2) the difficulty of the scholastic terminology, and (3) the difficulty of the form of presentation.

The Language Difficulty

The *De Magistro*, like practically all the significant work in the Middle Ages, is in the Latin language—the Latin language of the thirteenth century, and not the first. To a nation which is too largely unilingual generally, and even among its college and university teachers, if not among its scholars, this is almost an insuperable difficulty. The present translation of the work removes this difficulty.

The Terminology Difficulty

At least ever since Bacon's day when he wrote in *The Advancement of Learning*, "This kind of degenerate learning did chiefly reign among the schoolmen, who having sharp and strong wits, and abundance of leisure, and small variety of reading, but their wits being shut up in the cells of a few authors (chiefly Aristotle, their dictator) as their persons were shut up in the cells of monasteries and colleges, and knowing little history, either of nature or time, did out of no great quantity of matter and infinite agitation of wit spin out unto us those laborious webs of learning which are extant in their books. For the wit and mind of man, if

it work upon matter, which is the contemplation of the creatures of God, worketh according to the stuff and is limited thereby; but if it work upon itself, as the spider worketh his web, then it is endless, and brings forth indeed cobwebs of learning, admirable for the fineness of thread and work, but of no substance or profit," there has been a prejudice against the scholastic system by people averse to the definitions of terms and averse to the refinement of thought through distinctions—which is the essential technic for a development of an organon of thought. As St. Thomas himself says, "we progress from vague wholes by a knowledge of the parts." One can readily understand that a person not disciplined in the scholastic thinking, whether he agrees with it or not, would be annoyed at the, to us unusual, requirement of sticking to specific definitions and distinctions. It should also be recalled that these distinctions were developed as a result of human experience and reflection in the progressive occupation with the philosophical problem. The disparagement of refinement of thought, "admirable for the fineness of thread and work"; the disdain of distinction, generally speaking, can result only in intellectual stultification. In a scholar it can result only in continued work on the descriptive, without ever reaching the explanatory level.

In our time when a method of thinking in evolutionary terms is dominant, the conception of passing from potentiality to actuality, which is the basic

Thomistic conception underlying this essay, should cause no great difficulty. Nor should there be any difficulty in the subordinate conception in the distinction between an active potentiality and a passive one. But the rigorousness of the distinction, and the pursuit of all its implications, makes the whole thing seem formal and empty to a generation unused to such discipline. They want content, not method, organization, or systematization. Not sensing the problem concretely or having worked through personally the steps in building up the philosophy, the need is not apparent. This is inevitably bound to be the effect, even in our modern teaching of the scholastic philosophy where it is taught *in toto* as a *ready-made* philosophy, prepared, predigested, without even the necessity of heating it a little before taking. When thus served cold, it is no wonder there is revulsion. In the instant case, Miss Mayer has done an excellent service in the explanation of the whole system.

The Difficulty of the Form of Presentation

The third difficulty is the difficulty in the formal presentation and development of the propositions. To one acquainted only with modern thought, it must seem to be futility itself to set up, for example, in the First Article, the seventeen objections to the thesis, and then, like tenpins, to bowl them over at the end of the essay. Surely this is a Quixotic enterprise. Let us see.

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The Objections Stated. If one would keep in mind that these objections are in fact a summary of the historical positions of the problem in hand, and include citations from the authorities in the history of thought, dealing with the particular problem as well as a statement of the contemporary errors, one might be struck by the modernity of the presentation. In fact, this is the very modern thing, the psychological approach. There is also clearly revealed a characteristic, that in modern times, I fear, is followed more in the breach than in the observance, that the history of a problem is studied in order to get the setting for the problem in its contemporary form. Apparently the scholastics would indorse the wisdom of Professor James's statement that, to study anything historically, is the best way to understand it.

The Contraries. These introductory objections are immediately followed by a number of statements that take a contrary position, and these objections and their contraries are stated with extraordinary intellectual detachment and intellectual honesty.

The Body of the Article. The next part of the essay opens with the statement, "*I answer that.*" This is the master's statement of his own position, after the students have stated their difficulties, have presented the problem as they have seen it historically, and have undergone a genuine motivated

self-activity. This is referred to as the body of the article. It states the positive teaching. This function of the teacher in the medieval university is undoubtedly at the basis of St. Thomas's statement that the teacher must have in actuality—must be genuine scholar and master—the knowledge which the student has only in potentiality.

The Reply to Objections. Then follows the application of the position of the master to the various objections stated in the introductory part of the essay. Each objection is then analyzed in the light of the body of the article and its weakness or inapplicability exposed.

Teaching Procedure Conforms to *Modern* Teaching Requirements

This procedure is in conformity with the fundamental requirements of the best educational method of our day. The problems are the students' problems or are made their own by study and the "give and take of discussion." They are the results of the self-activity. They furnish an adequate motivation. They reveal the need for instruction, and the specific nature of the instruction needed. The replies to objections furnish the test of the teaching by its application to the objections stated at the beginning. Thus, do the principles of self-activity, of motivation, of apperception, of "felt need," of application, of review in new situations, find appropriate scope in the teaching process.

Epil o gue

We are pleased to publish thus early in this series a work that it seems to us will help particularly *to test* practically, one of the purposes which this series aims to promote. It is no less than a rapprochement between Catholic and non-Catholic scholars. We do not quite understand the attitude among reputed scholars by which they neglect, overlook, and disregard Catholic sources or Catholic contributions. We do not believe that if this material is readily available, it will not be consulted, and cited not because it is Catholic, but because it is significant—significant historically and significant contemporaneously.¹⁶

The editor expresses here his gratitude to Father John McCormick, S.J., for reading this introduction, and for his critical review of Miss Mayer's work, and her critical essay, and to George N.

uster, managing editor of the *Commonweal*, for reading this introduction.

Graduate School,

Edward A. Fitzpatrick.

Marquette University,

August 1, 1928.

Principles of Thomistic Scholasticism in Zybura, John L. pp. 3-98. * *On the Scholasticism*. Herder (1926).

PART II

ST. THOMAS AQUINAS'S DE MAGISTRO

ST. THOMAS AQUINAS'S DE MAGISTRO I

THE four articles or divisions of the *De Magistro*

deal with four points of inquiry, namely: (1) Whether man can teach and be called a teacher, or God alone? (2) Whether anyone can be called a teacher of himself? (3) Whether man can be taught by an angel? (4) Whether to teach is a function of the active or of the contemplative life?

The First Article

Whether Man Can Teach Another and be Called a Teacher, or God Alone? (Cf. *Sum. Theol. I, U7, A. I.*)

Objection 1. The question is on the teacher, and the first point of inquiry is whether man can teach and be called a teacher, or God alone; and it seems that God alone teaches and ought to be called a

*A "disputation" held at the University of Paris about 1257, of which St. Thomas Aquinas was master. The text used was: S. Thomae Aquinatis, Doctoris Angelici Ord. Praed., *Quaestiones Disputatae et Quaestiones Duodecim Quodlibetales, Ad Fidem Optimarum Editionum, Diligenter Recusae* (5 volumes). Editio Quinta Taurinensis, Taurini—Romae. Ex Officina Libraria Marietti anno 1820 condita nunc Marii E. Marietti Sanctae Sedis Apostolicae, S. RR. Congr. et Archiepiscopi Taurinensia Typographi, MCMXXVII. (This is the fifth Taurin Edition.)

The *De Magistro* is found in Volume III, De Veritate (1) Quaestio XI, De Magistro (in quatuor articulos divisa), pp. 263-276.

Both the editor and the translator are very grateful to Father John McCormick, S.J., Professor of Philosophy at Marquette University, for reviewing the translation and comparing it with the original.

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teacher. (Matt, xxiii. 8.) "One is your master," and preceding this, "Be not you called Rabbi," on which the gloss says, "Lest you attribute divine honor to men, or usurp to yourselves what belongs to God." Therefore, to be a teacher or to teach seems to belong to God alone.

Objection 2. Further, if man teaches, he does so only through sonjp symbols. For even if some things seem to be taught by themselves (for example, if when somebody asks what it is to walk, somebody walks), yet this is not sufficient to teach him unless some symbol is added, as Augustine says in his book *Ds Magistro* (c. iii, ad fin.); and he explains why this is so, for this reason, that in the same thing there are many elements, so that it would not be known how far the demonstration held in regard to any aspect of that object, whether in regard to the substance of the object or in regard to some accident in it. But it is not possible to arrive at a knowledge of things through a symbol, because the knowledge of things is more potent than the knowledge of symbols, because the knowledge of symbols stands in relation to the knowledge of things as a means to an end. But an effect is not greater than its cause. Therefore, no one can give to another a knowledge of some things, and hence, cannot teach him.

Objection 3. Further, if the symbols of some things are proposed to someone by a man, either he

to whom they are proposed knows those things of which they are the symbols, or he does not. If he knows them, he is not taught concerning them; but if he does not know them, then because the things are unknown, the meanings of the symbols cannot be known, for he who does not know this thing which is a rock, cannot know what this name "rock" signifies. When the signification of the symbols is unknown, we cannot learn anything through them. If, then, man does nothing more for instruction than propose symbols, it seems that man cannot be taught by man.

Objection 4. Further, to teach is nothing else than to cause knowledge in someone else. Now, the subject of knowledge is the intellect. But sensible symbols, through which alone it seems that man can be taught, are not received into the intellect but remain in the sensitive faculty. Therefore, man cannot be taught by man.

Objection 5. Further, if knowledge in one is caused by another, either the knowledge was in the one learning or it was not. If it was not in him and is caused in one by another, then one man causes knowledge in another, which is impossible. But if it was in him, it was either in perfect actuality and so cannot be caused, because what is does not become, or it was as a germ of knowledge. But germinal capacities cannot be reduced to actuality by any created power, but are planted in nature by God

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alone, as Augustine says (*super Genes*, ad Litt.)². Therefore, it remains that one man can in no way teach another.

Objection 6. Further, knowledge is a kind of accident. But an accident does not change from one subject to another. Hence, since teaching seems to be nothing else than a transfusion of knowledge from teacher to pupil, one cannot teach another.

Objection 7. Further (Romans x), the gloss on "Faith cometh by hearing," says, "Though God teaches interiorly, yet the preacher proclaims from without." But knowledge is caused interiorly in the mind, not exteriorly in the sense. Therefore, man is taught by God alone and not by another man.

Objection 8. Further, Augustine says in the book *De Magistro*, "God alone has a teaching chair in heaven, Who teaches truth interiorly, but another man stands in the same relation to the teaching chair as a farmer does to a tree." But the farmer is not the maker of the tree, but its cultivator. Therefore, man cannot be called the giver of knowledge, but the disposer to knowledge.

Objection 9. Further, if man is a true teacher, he must teach the truth. But whoever teaches the truth illumines the mind, since truth is the light of the mind. Therefore, man illumines the mind if he teaches. But this is false, since God is He

*See Appendix, p. 163, for titles of works referred to. *

“Who enlighteneth every man that cometh into this world.” (John i. 9.) Therefore, one man cannot truly teach another.

Objection 10. Further, if one man teaches another, the teacher must change him from knowing potentially to knowing actually. Therefore, the pupil's knowledge must be reduced from potentiality to actuality. But what is reduced from potency to act must of necessity be changed. Therefore, knowledge or wisdom will be changed, which is contrary to Augustine (lib. Ixxxiii *Quaest.*), who says, “Wisdom coming to man is not itself changed but changes man.”

Objection 11. Further, knowledge is a representation of things in the mind, since knowledge is said to be an assimilation of the knower to the thing known. But one man cannot represent in another's mind the likenesses of things, for thus he would operate interiorly in him, which belongs to God alone. Therefore, one man cannot teach another.

Objection 12. Further, Boethius says in the book (*de Consol.* V, prosa 5, in princ.), that through teaching, the mind of man is only stimulated to know. But he who stimulates the intellect to knowing does not make it know, just as one who stimulates another to seeing with his bodily sight does not make him see. Therefore, one man does not make another know and hence, cannot properly be said to teach him.

Objection 13. Further, there is required for knowledge a certitude of cognition; otherwise it would not be knowledge but opinion or belief, as Augustine says in the book *De Magistro*. But one man cannot cause certitude in another through the sensible symbols which he proposes, for what is in the sense is more oblique than what is in the intellect, and certitude is always produced in relation to something more direct. Therefore, one man cannot teach another.

Objection 14. Further, for knowledge there is needed only the intellective light and the species, but neither of these can be caused in one man by another; because this would necessitate that man create something, since it seems that simple forms of this kind cannot be produced except through creation. Therefore, man cannot cause knowledge in another, and hence, cannot teach him.

Objection 15. Further, nothing can form the mind of man except God alone, as Augustine says (lib. I *de liber. Arb.* c. xvii), But knowledge is a certain form of the mind. Therefore, God alone causes knowledge in the mind.

Objection 16. As guilt is in the mind, so is ignorance. But God alone purges the mind of guilt. (Isa. xliii. 2S.) "I am He that blow out thy iniquities for my own sake." Therefore, God alone purges the mind of ignorance, and He alone teaches.

Objection 17. Further, since knowledge is cogni-

tion with certitude, a man receives knowledge from that one through whose assertion he is made certain. But a man cannot be made certain by that which he hears another asserting; otherwise it would be necessary that whatever is said to anyone by a man should be held as certain. But a man is made certain only inasmuch as he hears truth speaking interiorly, to which truth he refers even about those things which he hears from man, so that he may be sure. Therefore, man does not teach, but truth which speaks interiorly, which is God.

Objection 18. Further, no one learns through the assertion of another what even before the assertion he could have answered if asked. But a disciple, even before the master speaks, could answer, if asked about those things which the master proposes. For he would not be taught by the assertion of the master unless he was confident that it was just as the master proposes. Therefore, one man is not taught by the assertion of another.

On the contrary, it is said (II Tim. i. 11): "Wherein I am appointed a preacher, . . . and a teacher." Therefore, man can be and is called a teacher.

Further, (II Tim. iii. 14), "But continue thou in those things which thou hast learned, and which have been committed to thee." The gloss says, "From me as though from a true teacher." Therefore, the same as before.

Further, (Matt, xxiii. 8-9), it is likewise said, "For one is your master . . . and one your Father." But the fact that God is the Father of all does not exclude man from being called father. Therefore, neither by this is man excluded from being called teacher;

Further, on this (Rom. x. 15), "How beautiful are the feet of them that preach the gospel of peace," the gloss says, "Those are the feet that illumine the church." It is spoken of the Apostles. Since, therefore, to illumine is the function of the teacher, it seems that it belongs to man to teach.

Further, it is said in III *Metaphysics* that a thing is perfect when it can generate things like to itself. But knowledge is a kind of perfect cognition. Therefore, a man who has knowledge can teach another.

Further, Augustine says in the book *contra Munich.* (II cap. iv), "As the earth, which before sin was watered by a fountain, after sin depended on rain descending from the clouds, so the human mind, which is typified by the earth, before sin was enriched from the fountain of truth, but after sin needed the teaching of others as the rain descending from the clouds." Therefore, after sin man is taught by man.

I answer that there is found the same diversity of opinion about the three processes; namely, the eduction of forms into existence, the acquisition of virtues, and the acquisition of knowledge.

Some have said that all sensible forms are from without, that is, from a substance or separate form, which they call the giver of forms, or the active intelligence; and that all inferior natural agents are nothing more than agents which prepare matter for the reception of forms. Similarly, Avicenna says in his *Metaphysics* that the cause of the morally good habit is not our action, but the action impedes the contrary of the habit and prepares for it, so that the habit comes to us from the substance which perfects the souls of men, which substance is the active intelligence, or a substance like it. In the same way they say that knowledge is not caused in us except by a separate agent; wherefore, Avicenna says (in *VI de Naturalibus*, IV, cap. ii a med.), that the intelligible forms flow into the mind from the active intelligence.

Certain ones are of the opposite opinion; namely, that all forms are innate in things and that they do not have an outside cause, but only are manifested by external action. For they suppose that all natural forms lie hidden in matter in actuality, and that the natural agent does nothing else than draw these out from their latent state into manifestation. In the same way, some even suppose that all habits of virtue are innate in us by nature but through exercise of activities the impediments are removed, by which, as it were, the aforesaid habits are hidden, just as rust is removed by polishing to show the brightness of the metal. Similarly, some

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have said that knowledge of all things is connatural to the soul and that through teaching and outside aids to knowledge of this kind nothing else happens than that the mind is led to a remembrance-or a consideration of those things which it knew before. Hence, they say that to learn is nothing else than to remember.

But both of these opinions are without reason. The first opinion excludes immediate causes, since it attributes all the effects appearing in lower things to the first causes solely. This detracts from the universal order which is woven together by the order and connection of causes; while the first cause from the abundance of its own goodness confers upon other things not only that they may be, but also that they may be causes. The second opinion results in the same difficulties, since removing a hindrance is only moving *per accidens*, as is said in VIII *Physics* (com. 32). If lower agents do nothing else than lead from a hidden state into manifestation by removing the impediments with which the forms and habits of virtue and of knowledge are hidden, it follows that all lower agents do not act except *per accidens*.

» Therefore, according to the teaching of Aristotle
 I ' (I *Phys.* com. 78), the middle course between these two positions must be held in each of the foregoing cases. Natural forms preexist, indeed, in matter, but not in act as the others held, but only in potentiality from which they are educed to actuality by

an extrinsic proximate agent, not alone by the first agent, as the other opinion supposes. Likewise, according to his statement in VI *Ethics* (II, in princ.), the habits of virtues preexist in us in certain natural tendencies which are, as it were, beginnings of virtue, and afterwards, through the exercise of activities, they are brought to their due development. Likewise, we must say about the acquisition of knowledge that there preexist in us certain potentialities of knowledge; namely, the first concepts of the intellect which are recognized immediately by the light of the active intellect through the species abstracted from sense presentations, whether the concepts be complex as axioms or simple as an idea of being, or unity, or something of this nature which the intellect grasps immediately. From these universal principles all principles follow as from germinal capacities. When, therefore, from these universal cognitions, the mind is led to know particular things in actuality which before were known potentially and, as it were, under the aspect of the universal, then one is said to acquire knowledge.

It must be kept in mind that in natural things, a thing may preexist potentially in a twofold manner: in one way in active, complete potentiality, that is, when the intrinsic principle is sufficiently able to bring it to perfect actuality, as is evident in healing, for through the efficacy of nature in the sick person, he is brought to health. In another way a thing can preexist in passive potentiality as

when the intrinsic principle is not sufficient to educe it to actuality, as is evident when fire is made from air, for this cannot be done through any power existing in the air. When, therefore, something exists in active, complete potentiality, the extrinsic agent acts only by helping the intrinsic agent and by ministering to it those things by means of which it comes forth into actuality, just as a doctor in healing is a minister to nature which does the principal work—ministering by abetting nature and by applying the medicines which nature uses as instruments for healing. But when something preexists in passive potentiality only, then the extrinsic agent is that which does the principal work in bringing it from potency to act, just as fire makes from air fire in act what is fire in potentiality. Knowledge, therefore, preexists in the learner, not in purely passive potentiality, but in active potentiality. Otherwise man could not by himself acquire knowledge.

Just as a person may be cured in a twofold manner, through the operation of nature alone or through nature with the aid of medicine, so there is a twofold manner of acquiring knowledge, the one when the nature of itself comes to a knowledge of the unknown, which is called "discovery," the other when someone extrinsically gives aid to the natural reason, which is called "instruction." Now, in those things which are done by nature and art, art works in the same way and by the same

means that nature does, for just as nature in one suffering from cold induces health by warming him, so does the doctor. Hence, art is said to imitate nature. Similarly, it happens in the acquisition of knowledge that the one teaching leads another to a knowledge of the unknown in the same way as he (the learner) would lead himself to a cognition of an unknown in discovery. Now, the process of reason in one who arrives at a cognition of an unknown in discovery is the application of general, self-evident principles to definite matters, and proceeding from them to particular conclusions and from these to others. Hence, and according to this, one man is said to teach another because the teacher proposes to another by means of symbols the discursive process which he himself goes through by natural reason, and thus the natural reason of the pupil comes to a cognition of the unknown through the aid of what is proposed to him as with the aid of instruments. As, then, a doctor is said to cause health in a sick person through the operation of nature, so man is said to cause knowledge in another through the operation of the learner's natural reason—and this is to teach. Hence, one man is said to teach another and to be his master. And according to this the Philosopher says (*I Posteriorum* com. 5), that a demonstration is a syllogism that causes knowledge. But if someone proposes to another those things which are not included in self-evident principles, or though included are not evi-

dent, he does not cause knowledge in him but perhaps opinion or belief. However, even belief is caused from innate principles, because from self-evident principles themselves, a man considers that those things which necessarily follow from these must be held as certain, and that those that are contrary, to them must be rejected entirely; but that to other consequents he may either assent or not. But this kind of light of reason by which principles of this kind are known to us is implanted in us by God, being, as it were, a likeness of uncreated truth reflected in us. Hence, since no human teaching can have efficacy except by virtue of this light, it is evident that God alone is He Who teaches interiorly and principally, just as nature heals itself interiorly and even principally. Nevertheless, man is properly said to cure and to teach in the aforesaid manner.

Reply to Objection 1. Because the Lord prescribed that the disciples should not be called masters, it cannot be understood that this was prohibited absolutely; and the gloss explains how it is to be understood. We are forbidden to call man a teacher in a way that attributes to him the principal part of teaching which belongs to God, as it were putting our hope in the wisdom of men, and in regard to those things which we hear from men, not referring them rather to the divine truth which speaks in us by the impression of His likeness, by which we are able to judge concerning all things.

Reply to Objection 2. The cognition of things is not brought about in us through a cognition of symbols but through a cognition of other more certain things, that is, of principles which are proposed to us through certain symbols and which are applied to other things previously unknown to us in the strict sense, although known after the fashion spoken of in the body of the article: for the cognition of principles, not the cognition of symbols causes in us a knowledge of conclusions.

Reply to Objection 3. Those things about which we are taught through symbols, we know to some degree, but to some degree we do not know. For example, if we are being taught what man is, we must know beforehand something about him, either the fact of his animality or of his substantiality, or at least of his existence, which cannot be unknown to us. In like manner, if we are being taught any conclusion, we must first know regarding the subject and its property, what they are, even though the principles from which the conclusion is being taught are known beforehand; for all learning comes about from preexisting knowledge, as is said in *I Posteriorum* (in prim). Hence, the reasoning in the third objection does not follow.

I *Reply to Objection 4.* From the sensible symbols, which are received in the sense faculty, the intellect takes the essence which it uses in producing knowledge in itself, for the immediate, efficient cause of knowledge is not the symbols but the process of

discursive reasoning from principles to conclusions, as was said in the body of the article.

Reply to Objection 5. In the one who is being taught, knowledge preëxists not in complete actuality but, as it were, in germinal capacities, because the universal concepts, the cognition of which is naturally implanted in us, are as seeds of all subsequent cognitions. Although germinal capacities are not educed to actuality through a created power as though they were infused by a created power, yet that which is in them originally and virtually can be educed to actuality by the action of a created power.

Reply to Objection 6. He who teaches is not said to transfer knowledge to the pupil, as though the same knowledge numerically which is in the teacher should be produced in the pupil; but through teaching there is produced in the pupil knowledge like that which is in the teacher, educed from potentiality to actuality, as was said in the body of the article.

Reply to Objection 7. Just as a doctor, although he works exteriorly while nature alone works interiorly, is said to cause healing; so man is said to teach, although he announces exteriorly while God teaches interiorly.

Reply to Objection 8. Augustine, in that he maintains in the *De Magistro* that God alone teaches, does not mean to deny that man teaches

exteriorly but to insist that God alone teaches interiorly.

Reply to Objection 9. Man can truly be called a true teacher teaching truth and enlightening the mind, not as though infusing the light of reason, but aiding the light of reason to the perfection of knowledge through those things which he proposes exteriorly according to the manner spoken of: (Ephes, iii. 8-9): "To me, the least of all the saints, is given this grace, . . . to enlighten all men that they may see what is the dispensation of the mystery which hath been hidden from eternity in God."

Reply to Objection 10. Wisdom is twofold, created and uncreated. Both are infused in man. Because of the infusion of this wisdom, man can be changed for the better by developing. Uncreated wisdom cannot, indeed, be changed; created wisdom is changed in us *per accidens* but not *per se*; for wisdom itself may be considered in a twofold manner: on the one hand, in respect to the eternal things with which it is concerned, wisdom is entirely unchangeable; on the other hand, in respect to the existence which it has in the subject, it is changed *per accidens* when the subject is changed from having wisdom in potentiality to having it in actuality. For the intelligible forms, of which wisdom consists, are both likenesses of things and forms which perfect the intellect.

Reply to Objection 11. The intelligible forms, of

which knowledge received from teaching is composed, are impressed in the pupil immediately through the active intellect but mediately through the teacher; for the teacher proposes the symbols of intelligible things from which the intellect takes the abstractions and impresses them on the passive intellect. Hence, the words of the teacher, heard or seen in writing, have the same relation to causing knowledge in the intellect as anything outside the mind has, because from both, the intellect takes the intelligible content (meaning); yet the words of the teacher have a closer relation to causing knowledge than have the mere perceivable things outside the mind, inasmuch as words are symbols of intelligible content.

Reply to Objection 12. The intellect and bodily vision are not the same, for bodily vision is not a logical power so that from certain of its objects it arrives at others; but all of its objects are visible to it as quickly as it is turned toward them. Hence, the one who has the power of sight has the same relation to looking toward all things visible as one having habitual knowledge has to directing attention toward what he habitually knows. Hence, the one looking does not need to be excited by another to see, except, inasmuch as his gaze may be directed by someone to something visible as with the pointing of the finger or something of that sort. But the intellective power, since it is discursive, does infer some things from others. Hence, it has not

precisely an equal relation to all intelligible objects to be considered, but it sees certain things immediately, as those which are self-evident in which are contained implicitly other things which it cannot see except by making explicit through the office of reason that which is implicitly contained in these principles. Hence, before it has habitual knowledge, the intellect is not only in accidental potentiality to knowing things of this kind but even in essential potentiality, for it needs a mover which will lead it into actuality through teaching, as is said in VIII *Physics* (com. 32). He who knows something habitually, however, does not need this service of a mover. The teacher, then, excites the intellect to knowing those things which he is teaching as an essential mover, leading it from potentiality to actuality; but he who shows something to the bodily sight excites it as an accidental mover, according as one having habitual knowledge can be aroused to think about something.

Reply to Objection 13. The whole certitude of knowledge arises from the certitude of principles. Conclusions are then known to be valid when they are resolved into their principles. Therefore, the fact that anything is known with certitude is possible from the light of reason divinely implanted in us, by which God speaks in us. It does not arise from man's teaching from without, except inasmuch as in teaching he resolves conclusions into principles; from him, however, we could not reach a cer-

titude of knowledge if there were not in us certitude of principles into which conclusions are resolved.

Reply to Objection 14. Man teaching exteriorly does not infuse the light of the intellect, but is, *ÿi* some way, the cause of the intelligible species, inasmuch as he proposes to us certain symbols of intelligible content which the intellect receives from the symbols and stores in its very self.

Reply to Objection 15. When it is said that nothing can form the mind except God, its ultimate form is referred to, without which it is considered formless, whatever other form it may have. But this is that form by which it is toned to the Word and clings to It, through which alone the rational nature is said to be formed, as is evident in Augustine. (*Super Genes*, ad lit., lib. I, c. xxv, and lib. Ixxxiii, Qq. Quaest. S.)

Reply to Objection 16. Guilt is in the affective faculty, on which God alone can make an impression, as will be evident in the next article, but ignorance is in the intellect on which a created power can make an impression, since the active intellect impresses the intelligible species on the possible intellect, through the medium of which from sense impressions and man's instruction, knowledge is caused in our minds, as was said in the body of the article.

Reply to Objection 17. Certitude of knowledge, as was said, man has from God alone, Who endowed us with the light of reason through which we know

the principles from which certitude arises. And yet knowledge is caused in us by man in some sense way, as was said in the body of the article.

Reply to Objection 18. A pupil questioned by the teacher before instruction might answer regarding the principles through which he is being taught, but not regarding the conclusions which someone is teaching him. Therefore, he does not learn the principles from the teacher but only the conclusions.

THE SECOND ARTICLE

Whether Anyone Can *be Called a Teacher of Himself?*

Objection 1. The second point of inquiry is whether anyone can be said to be a teacher of himself, and it seems that no one can; because an action ought to be attributed to a principal rather than to an instrumental cause. But the principal cause, as it were, of knowledge caused in us is the active intellect; and man who teaches exteriorly is a kind of instrumental cause, proposing to the active intellect the instruments by means of which it leads us to knowledge. Therefore, the active intellect teaches, rather than a man from without. If, therefore, on account of instruction from without the one who speaks is said to be the teacher of the one who hears, much more ought he who hears on account of the light of the active intellect, be called a teacher of himself.

Objection 2. Further, no one learns anything except as he comes to a certitude of knowledge. But certitude of knowledge is in us through principles naturally known by the light of the intellect. Therefore, it is particularly proper to the active intellect to teach, and hence, the same conclusion as before.

Objection 3. To teach is more proper to God than to man. Hence (Matt, xxiii. 8), "One is your master." But God teaches us, inasmuch as He gives us the light of reason by which we can judge concerning all things. Therefore, the action of teaching ought to be attributed especially to that light.

Objection 4. To know something by discovery is more perfect than to learn from another, as is evident in *I Ethics* (caç. iv, ad fin.). If, therefore, the name of teacher is assumed from that manner of acquiring knowledge by which one learns from another, so that one may be called a teacher of another, much more should the name of teacher be assumed from the way of learning by discovery so that one may be called his own teacher.

Objection 5. Just as one is led to virtue by himself and by others, so he is led to knowledge both by himself in discovery and by another in instruction. But those who arrive at the works of virtue without an extrinsic instructor are said to be a law unto themselves. (Rom. ii. 14.) "When the Gentiles, who have not the law . . . (they) are a law to themselves." Therefore, he also who acquires knowledge through himself ought to be called a teacher of himself.

Objection 6. Further, the teacher is the cause of knowledge as the doctor is of health, as was said. But the doctor heals himself; therefore, man can teach himself.*

On the contrary, the Philosopher says (VIII *Physics* com. 32), that it is impossible for the one teaching to learn because it is necessary for the teacher to have knowledge and for the learner not to have it. Therefore, man cannot teach himself nor be called his own teacher.

Further, teachership implies a relation of superordination and subordination, as lordship does. But relations of this kind cannot be of someone to himself, for one cannot be father of himself or lord of himself. Therefore, man cannot be called a teacher of himself.

I answer that without doubt a man can, through his implanted light of reason and without a teacher or aid of outside instruction, come to a knowledge of many unknown things, as is evident in everyone who acquires knowledge by discovery. A man is thus in a way a cause of his own knowledge; he cannot, however, be called his own teacher or be said to teach himself. For we find two kinds of principal agents in nature, as is evident in the Philosopher (VII *Metaphysics* com. 22 and 28). One kind of agent is that which has in itself everything which in the effect is caused by it, either in the same way, as in the case of univocal agents, or in a superior way, as in the case of equivocal agents. But there are certain agents in which there preexists only a part of the results which are brought about, just as movement or some warming medicine in which the heat is found either actually or virtually causes healing; but the heat is not the

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healing entirely but only partially. Now, in first kind of agent the virtue of action is perfect, but not in the second, because a thing acts according as it is actual. Hence, since the second is not actual as the cause of the effect, except partially, it will not be a perfect agent. Instruction implies perfect action of knowledge in the teacher or master. Hence, he who is the teacher must have explicitly and perfectly the knowledge which he causes in another, as in one learning through instruction. But when knowledge is acquired through the intrinsic principle, that which is the active cause of knowledge does not have the knowledge to be acquired except partially, that is, as much as is understood by the germinal capacities or potentialities for knowledge, which are the general principles; and, therefore, from such causality the name of teacher or master, properly speaking, cannot be assumed.

Reply to Objection 1. Although the active intellect is a more principal cause in some respects than is a man teaching extrinsically, yet complete knowledge does not preexist in it as in the teacher; hence, the reasoning does not follow.

Reply to Objection 2. The solution is evident from what has been said.

Reply to Objection 3. God knows explicitly everything which man is taught by Him; hence, the function of teaching can be fittingly attributed to Him. But it is otherwise with regard to the active intellect for the reason just given (Objection 1).

On p[^]reply to Objection 4. Although the mode of the requisition of knowledge through discovery is more perfect on the part of the one receiving the knowledge, inasmuch as he is thereby distinguished as being more gifted for learning, nevertheless, on the part of what causes the knowledge, the more perfect mode is through instruction, because the teacher who has the knowledge as a whole explicitly can lead to knowledge more quickly and easily than anyone can be led by himself, because of this fact that the pupil knows the principles of knowledge only in generality (vaguely).

Reply to Objection 5. Law in practical matters has the same relation as a principle has in speculative matters, but not as a teacher to a pupil. Hence, it does not follow that if one is a law to himself he can be a teacher to himself.

Reply to Objection 6. The doctor heals not inasmuch as he has health in actuality beforehand, but inasmuch as he has health in the knowledge of his art; but the teacher teaches inasmuch as he has knowledge in actuality. Hence, he who does not have health in actuality can cause health in himself because he has health in the knowledge of the art of healing; but it is not possible that one have knowledge in actuality and yet not have it, so that thus he could be taught by himself.

THE THIRD ARTICLE

Whether Man Can be Taught *by an Angel?*(Cf. *Sum. Theol.* i, 117 A2)

Objection 1. The third point of inquiry is whether man can be taught by an angel, and it seems that he cannot. Now, if an angel teaches, he must teach either interiorly or exteriorly. But he does not teach interiorly, for that belongs to God alone, as Augustine says, nor exteriorly, it seems, because to teach exteriorly, is to teach through some sensible signs, as Augustine says in the *De Magistro* (last chapter). But the angels do not teach us with sensible signs of this kind unless they appear sensibly, which happens outside the ordinary course of nature and is, as it were, miraculous.

Objection 2. But, it will be said that angels teach us interiorly, inasmuch as they make an impression on the imagination. But on the contrary, a species impressed on the imagination is not sufficient for the actual function of the imagination unless attention accompanies, as is evident in Augustine's book *de Trinitate* (lib. Ixxxiii, Qq., q. SI). But an angel cannot force our attention, because attention is an act of the will, on which God alone can make an impression. Therefore, not even by making an impression on the imagination can an angel teach us, since we cannot be taught

through the medium of the imagination except by actually imagining something.

Objection 3. Further, we cannot be taught by angels without their sensible appearance except insofar as they enlighten the intellect, which it seems they cannot do because neither do they give the light of reason, which is from God alone, natural to the mind, nor do they give even the light of grace which God alone infuses. Therefore, angels without visible appearance cannot teach us.

Objection 4. When one is taught by another, one must comprehend the concepts of the teacher so that in this way there is a procedure to knowledge in the mind of the pupil just as there is a procedure in the mind of the teacher. But man cannot see the concepts of an angel for he cannot see the concepts themselves, just as he cannot see them in another man; much less, therefore, could he see them in an angel because of the greater difference. Nor, again, can he see their concepts in sensible symbols unless the angel appears to the senses, which phenomenon we are not treating. Therefore, an angel cannot teach us in any other way.

Objection 5. Further, that to teach belongs to the One Who enlightens every man born is evident in the gloss (Matt, xxiii). "One is your teacher." But this is not proper to an angel but to the Uncreated Light alone, as is evident in John I. Therefore, angels cannot teach us.

Objection 6. Further, whoever teaches another leads him to truth and thus causes truth in his mind. But God alone has causality over truth; because, since truth is an intelligible light and a simple form, it does not come into existence successively and hence, cannot be produced except by creation, which is proper to God alone. Since, therefore, angels are not creators, as Damascene says (lib. II *orth. Fidei*, cap. iii, in fin.), it seems that they cannot teach.

Objection 7. Further, an unfailing illumination can proceed only from an unfailing light, for when the light is removed the subject ceases to be illuminated. But in teaching, a certain unfailing light is needed because knowledge is about necessities which are always. Therefore, teaching proceeds from an unfailing light only. But the angelic light is not of this kind, since their light would fail if it were not divinely preserved. Therefore, an angel cannot teach.

Objection 8. Further, it is said (John i. 38) that two of the disciples of John followed Jesus and when He asked them, "What seek you?" they answered, "Master, where dwellest thou?" The gloss at this place says, "He asked them not in ignorance but that they might have the reward for answering; and that they might answer Him when He asked them what they wanted, not merely the thing that they wanted but also the person." From this it is held that in that response they confessed that He was a certain person and that by this confession

they showed their faith and in this respect gained merit. But the merit of Christian faith consists in this, that we confess that Christ is a divine person. Therefore, to be a teacher belongs to a divine person alone.

Objection 9. Further, whoever teaches must manifest truth. But, since truth is a certain intelligible light, it is more known to us than an angel is. Therefore, we are not taught by an angel since the more known is not manifested through the less known.

Objection 10. Further, Augustine says in the book *De Trinitate* that our mind is formed immediately by God through the mediation of no creature. But an angel is a creature. Therefore, there is not interposed between God and the mind for forming it anything superior to the mind and inferior to God. Hence, man cannot be taught by an angel.

Objection 11. Further, as our wills reach even to God Himself, so our intellect can reach to the contemplation of His essence. But God Himself immediately forms our will through the infusion of grace with no angel mediating. Therefore, He forms our intellect by instruction with no mediating angel.

Objection 12. Further, all cognition is through some species. If, therefore, an angel teaches man, he must cause some species in him through which he may know. But this is not possible except by

creating the species, which is in no way proper to an angel, as Damascene says (lib. II, cap. iii, in fin.); or by enlightening the phantasms so that intelligible species may result in the possible human intellect. But this would be to return to that error of those philosophers who propose that the active intellect, whose office it is to enlighten the phantasms, is a separate substance. Hence an angel cannot teach.

Objection 13. Further, the intellect of an angel is more removed from the intellect of man than man's intellect is from the human imagination. But the imagination cannot receive that which is in the human intellect, for the imagination can only receive particular forms such as the intellect does not contain. Therefore, the human intellect has not a capacity for those things which are in the angelic intellect; and, therefore, man cannot be taught by an angel.

Objection 14. Further, the light by which a thing is illumined ought to be a suitable light as a corporeal light is for colors. But the angelic light, since it is purely spiritual, is not a suitable light for the phantasms which are in a way corporeal, as they are seated in a corporeal organ. Therefore, the angels cannot teach us by enlightening our phantasms, as was claimed.

Objection 15. Further, everything that is known, is known either through its essence or through its similitude. But cognition by which a thing is

known through its essence by the human mind, cannot be caused by an angel, for thus it would be necessary that virtues and other things which are contained within the mind be impressed by the angels themselves, since such things are known through their essence. Similarly, neither could cognition of things which are known through their similitudes be caused by them, since the things to be known are more closely related to their similitudes which are in the knower than an angel is. Hence, in no way can an angel be the cause of man's cognition, that is, teach him.

Objection 16. Further, although a farmer exteriorly urges nature to natural effects, he is not called a creator, as is evident in Augustine (*De Genes*, lib. I, cap. xiii). Therefore, with equal reason angels ought not to be called teachers and masters although they urge the intellect of man to knowledge.

Objection 17. Further, since an angel is superior to a man, if he teaches, his teaching ought to be superior to man's teaching. But this is not possible, for man can teach about those things which have causes determined in nature; but other things, such as future contingencies, cannot be taught even by angels, since by their natural knowledge they are ignorant of these things, because God alone has knowledge of the future. Therefore, angels cannot teach man.

On the contrary, Dionysius says (*Caelest. Hierarch.*, cap. iv). "I see that the angels first taught the divine mystery of the humanity of Christ and afterwards through them the grace of that knowledge descended to us."

Further, what an inferior can do, a superior can. But an angel is superior to man, therefore an angel can teach a man.

Further, the order of divine wisdom is not less in the angels than in the heavenly bodies which influence things lower than themselves; therefore, an angel can teach a man.

Further, that which is in potentiality can be educed to actuality by that which is in actuality, and that which is in less actuality by that which is in more perfect actuality. But an angelic intellect is more in actuality than man's intellect. Therefore, the human intellect is educed to actuality of knowledge through the angelic intellect; and, therefore, an angel can teach.

Further, Augustine says in his book *De Bono Perseverantiae* that some receive the teaching of salvation immediately from God, some from angels, some from men; therefore, an angel can teach.

Further, both sending in the light as the sun does and opening a window which obstructs the light are said to be illuminating a house. But, although God alone infuses the light of truth in our mind, yet an angel or a man can remove an obstruction to receiving the light. Therefore, not only God but also an angel or a man can teach.

I answer that: Angels in their dealings with men operate in a twofold manner. In one way according to our capacity, that is, when an angel appears to man sensibly either by assuming a body or some other way and instructs him with audible words. About this mode of teaching by an angel we will not inquire because in this way an angel does not teach otherwise than a man does. But in another way an angel deals with us in its own way, that is, invisibly. How far man can be taught by an angel in this manner is the object of this question.

It must be kept in mind that since an angel is an intermediate between God and man, according to its rank an intermediate manner of teaching is proper to the angel, inferior to God's teaching but superior to man's. But the nature of an angel's teaching cannot be understood unless the nature of God's and man's teaching is seen.

To make this clear we must recognize that there is this difference between the intellect and bodily sight: to bodily sight all its objects are equally immediate for knowing, for the sense is not a discursive power as to be obliged from one of its objects to arrive at another; but to the intellect not all intelligible things are equally immediate for knowing, but certain things it sees immediately, and certain other things it does not see except by examining other principles. Thus, then, man gains a knowledge of the unknown through these two, namely, the intellective light, and the first concepts

intuitively known which are compared to the light of the active intellect, as tools to a builder. With regard to both, God is the cause of man's knowledge in the most excellent way possible[^] because He endows the mind itself with the intellective light and impresses on it the knowledge of first principles, which are as certain germs of knowledge; just as He impresses on other natural things the germinal capacities of all the effects to be produced. But man, being equal according to the order of nature to other men in the kind of intellective light, can in no way be the cause of knowledge in another man by increasing the light in him. But in view of the fact that knowledge of unknown things is caused through principles intuitively known, man is, in a way, the cause of another's knowing, not giving the knowledge of principles but by educating into actuality that which is implicitly and in a certain way potentially contained in the principles, by means of sensible signs shown to the external senses, as has been said in the preceding article. But because an angel has naturally a more perfect intellective light than man, he can be the cause of knowing in man in both ways, although in an inferior way, than God is the cause and in a superior way than man is. On the part of the light, although an angel cannot infuse the intellective light as God does, he can, however, strengthen the infused light to a more perfect function of intellection; for when anything which is imperfect in some way comes in

contact with something more perfect in that respect, its virtue is strengthened. This is seen even in bodies; a body at rest is strengthened by a body in motion, which is compared to it as actuality to potentiality, as is held in IV *Physics*. On the part of the principles, an angel can teach man, not indeed by giving a knowledge of principles as God does, and not by proposing the deduction of conclusions from principles with the aid of sensible signs as man does, but by forming certain species in the imagination, which can be formed by a movement of the corporeal organ, as is evident in those asleep and the insane, who, according to the diversity of the phantasms, rising to their minds, experience different images. Thus, by the mingling together of species it comes about that an angel shows what he knows through images of this kind, to the one in whom the species are mingled, as Augustine says. (Chap. XII *De Genes*, ad litteram, xii, near the end.)

Reply to Objection 1. An angel teaching invisibly does indeed teach interiorly in comparison to the instruction of man who proposes his teaching to the exterior senses, but in comparison to the teaching of God, Who works within the mind by infusing light, the angel's instruction is to be considered exterior.

Reply to Objection 2. Although the attention of the will cannot be forced, yet the attention of the sensitive part can be prevailed on; as when someone

is pricked, he must of necessity pay attention to the wound. Thus it is with all other sensitive powers which employ corporeal organs: and such (involuntary) attention suffices for imagination.

Reply to Objection 3. An angel infuses neither the light of grace nor the natural light but strengthens the natural light divinely infused, as was said in the body of the article.

Reply to Objection 4. Just as in natural things a univocal agent is one which impresses the form in the same way in which it has it, and an equivocal agent is one which impresses it in another way than it has it, so it is with instruction. Man teaches man as a univocal agent; he gives knowledge to another in the same way as he has it, that is, by deducing causes from the effects. Hence, it is necessary that the concepts of the teacher be made evident to the one learning through some symbols. But an angel teaches as an equivocal agent, for the angel understands intellectually what to man is manifested by way of reasoning. In being taught by an angel, the angel's concepts are not made manifest to man, but in man's own way there is caused in him the knowledge of the things which the angel knows in a far different way.

Reply to Objection 5. The Lord is speaking of that way of instructing which is proper to God alone, as is evident in the gloss on that passage, and this way of teaching we do not ascribe to an angel.

Reply to Objection 6. He who teaches does not cause truth, but the cognition of truth in the learner, for propositions which are taught are true before they are known, because truth does not depend upon our knowledge but upon the existence of things.

Reply to Objection 7. Although knowledge which is acquired through instruction is concerning unfailing things, yet the knowledge itself can fail; therefore, it is not necessary that the enlightenment of teaching be from an unfailing light. Even if it is from an unfailing light, as from a first principle, the fallible, created light, which can be, as it were, a middle principle, is not at all excluded.

Reply to Objection 8. In the disciples of Christ there is noted a certain development of faith so that at first they respected Him as a wise man and a teacher but afterwards looked upon Him as God teaching. Hence, a gloss a little below that passage says, "Because Nathanael learned that Christ, though absent, had seen what he had been doing in another place, which is a sign of Deity, he confessed that Christ was not only a teacher but the Son of God."

Reply to Objection 9. An angel does not make manifest *an unknown* truth to us by making known its own substance, but by proposing to us another more-known truth or by strengthening the light of the intellect. Hence, the reasoning does not follow.

Reply to Objection 10. Augustine did not intend to say that the angelic mind is not of a more excellent nature than man's but that the angel did not so come between God and the human mind, that the human mind, through union with the angel, should receive its ultimate form as certain ones proposed that man's ultimate blessedness consisted in this, that our intellect should be joined to an intelligence whose blessedness consists in being joined to God Himself.

Reply to Objection 11. In us certain powers are subjectively determined to act, such as the sensitive powers which are excited both through union with the organ and through the formation of an object in the sense. But the intellect is not subjectively determined, since it does not employ a bodily organ, but it does yield to an objective force because from the efficacy of a demonstration a man is forced to assent to a conclusion. The will, however, is not forced either subjectively or objectively but by its own instigation is moved to this or that. Hence, only God, Who works interiorly, can make an impression on the will, but on the intellect, man or angel can make an impression in a way by representing the objects by which the intellect is forced.

Reply to Objection 12. An angel does not create species in our mind nor illumine the phantasms immediately; but by a continuation of the angel's light with the light of our intellect, our intellect can more effectively enlighten the phantasms. Even if an angel did enlighten the phantasms directly, it

would not follow that the position of those philosophers was true ; although it is part of the active intellect to enlighten the phantasms, yet it can be said that it is not the part of God alone.

Reply to Objection 13. The imagination can receive that which is in the human intellect but after another fashion. Similarly, the human intellect can receive that which is in the angelic intellect, but after its own fashion. Although the human intellect is more adapted to the imagination in the subject, inasmuch as they are both powers of one soul, yet in kind it is more adapted to the angelic intellect because they are both immaterial.

Reply to Objection 14. The fact that something is spiritual does not prevent it from being suitable to act on something corporeal because nothing prevents the lower from being affected by the higher.

Reply to Objection 15. An angel is not the cause of man's cognition, inasmuch as man knows things through their essence, but inasmuch as he knows them through their similitudes; not that an angel is nearer to things than their similitudes are, but inasmuch as an angel causes the similitudes to result in the mind either by moving the imagination or by strengthening the intellect.

Reply to Objection 16. To create implies first causality which is due to God alone, but to make implies general causality. It is the same with teaching in reference to knowledge; God alone is

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called a creator, but God, an angel, or a man can be called a maker or a teacher.

Reply to Objection 17. Even in regard to those things which have causes determined in nature, an angel can teach more things than a man can, since an angel knows more things, and those things which an angel teaches he teaches in a superior manner. Hence, the reasoning does not follow.

THE FOURTH ARTICLE

Whether to Teach is a Function of the Active or of the Contemplative Life? (Sum. Theol. IIII, 181.3)

Objection 1. The fourth point of inquiry is whether to teach is a function of the active or of the contemplative life, and it seems that it is a function of the contemplative life, for "The active life fails with the body," Gregory says (*super Ezechielem*. homily III). But to teach does not fail with the body because the angels, who have no bodies, teach. Therefore, it seems that it pertains to the contemplative life.

Objection 2. Further, as Gregory says (*super Ezech.* horn. XIV), "He is busy with the active life so that he may come later to the contemplative life." But instruction follows and contemplation precedes; therefore to teach does not pertain to active life.

Objection 3. Further, Gregory also says in the same work that while the active life is busy with work, it sees less. But he who teaches must see more than he who merely contemplates. Hence, to teach is more of the contemplative than of the active life.

Objection 4. Further, everything is through the same thing both perfect in itself and a giver of similar perfection to another, as fire through the

same heat is both warm and warming. But for someone to be perfect in the consideration of divine elements in himself, pertains to the contemplative life. Therefore, instruction, which is the transferring of that same perfection to another, pertains to the contemplative life.

Objection 5. Further, active life deals with temporal things; while instruction deals particularly with eternal things, and the teaching of these things is more excellent and more perfect. Therefore, teaching does not pertain to the active but to the contemplative life.

On the contrary, Gregory says in the same homily (*super Ezech. XIV*), "The active life is to give bread to the hungry, to teach the ignorant with the word of wisdom." Moreover, the works of mercy pertain to the active life. But to teach is numbered among the spiritual works of mercy; therefore, it is of the active life.

I answer that: The contemplative life and the active life are distinguished from each other by their subject matter and by their end. The subject matter of the active life is temporal things with which human life deals. The subject matter of the contemplative life is the knowable reasons for things upon which the contemplative dwells. And this diversity of material arises from the diversity of ends; as in all things the material is determined by the requirement of the end. The end of the contemplative life is the consideration of truth,

according as we are now treating about the contemplative life. I mean the consideration of uncreated truth according to the capacity of the one contemplating, which in this life is beheld imperfectly but in the future life perfectly. Hence, Gregory says (horn. XIV in *Ezech.*, near the middle), that the contemplative life begins here so that it may be consummated in the future life. But the end of the active life is activity which is directed to the utility of the neighbor. In the function of teaching we find a twofold subject matter, as a sign of which the function of teaching unites a twofold act. One of its materials is the matter which is taught; the other is he to whom the knowledge is given. By reason of the first subject matter, teaching pertains to the contemplative life; by reason of the second to the active life. But in view of its end, instruction seems to pertain to the active life alone, because the ultimate subject matter, in which it attains its intended end, is the material of the active life. Hence, teaching pertains more to the active than to the contemplative life, although it also pertains to the contemplative life in the way mentioned.

Reply to Objection 1. The active life fails with the body in that it is practiced with labor and ministers to the infirmities of the neighbor, according to which Gregory says, "The active life is wearisome because it is spent in the sweat of the brow, which two things will not be in the future life."

Nevertheless, there is a hierarchical activity among the celestial spirits, as Dionysius says (*Caelest. Hierarch.*, cap. iv), and it is another activity different from the active life which we pass on earth. Hence, the teaching which will take place there will be different from teaching in this life.

Reply to Objection 2. As Gregory says, in the same place, "As it is a good order of living that tends from the active to the contemplative, so it is useful to the majority of men that the mind should turn from the contemplative to the active, so that the active life may be more perfectly pursued because the contemplative life has inflamed the mind." It must be recognized that the active life precedes the contemplative in regard to those acts which are in no way compatible with the contemplative life, but in regard to those acts which take their subject matter from the contemplative life, it is necessary that the active follow the contemplative.

Reply to Objection 3. The vision of the teacher is a principle of teaching, but teaching itself consists more in the transfusion of the knowledge of the things seen than in the vision of the things. Hence, the vision of the teacher pertains more to action than to contemplation.

Reply to Objection 4. That argument proves that the contemplative life is a principle of teaching, just as heat is not the act of warming but the principle of warming, inasmuch as it determines it. So,

conversely, the active life disposes for the contemplative life.

Reply to Objection 5. The solution is evident from what has been said because, in respect to the first subject matter, teaching is compatible with the contemplative life, as was said in the body of the article.

INTRODUCTORY

The Thomistic Philosophy and the Persistent Problems of Education

Some Modern Educational Problems

A MODERN educational theorist proposes that learning is the reorganization of experience which takes place in the solution of a problem that arises in the process of living, and that the school is to provide a true life setting. Another holds that the pupil is dependent upon instruction for the integration of his experience, and that it is the duty of the teacher to present an organized subject matter that will insure many-sided interest. Another believes that the proper method of learning is the self-active process of habit-forming reflection, and that teaching technic must conform. Still another insists that the free performance of a worth-while task is essential for integration of character and happiness, and that it is the duty of the school to prevent unhealthful conditions which result in disorderly association.

St. Thomas Deals with the Persistent Problems of Education

Seven centuries ago, Saint Thomas Aquinas published a treatise on education entitled *De Magistro* (On the Teacher), in which he dealt specifically with each of these points. All of these problems he considered as aspects of his theory of the educability of man, the potentiality for self-stabilization of

human plasticity into an integrated character under the influence of an ideal. Educability, Aquinas held to be a gift from God to man alone. Man alone has insight, the power to see problems. He alone has an intuition of relation, the power to solve problems, to know truth. He alone can form intellectual habits, and benefit thereby from experience. He alone is capable of deliberately wishing to integrate his acquired powers for the solving of one supreme problem—the meaning of life.

Aquinas acknowledges God as man's Head Teacher. He, in His wisdom, arranged the universe so that man would sense problems. He ordered the universe so that it would suggest a solution. He allowed man to reflect upon the problem, but as a prudent Teacher, made it easy for man to distinguish error from truth by speaking to man in revelation and by establishing a teaching Church.

The Form of the De Magistro

The *De Magistro* is a short work of four articles. It is to be expected, therefore, that the principles will be succinctly stated. It is the report of a philosophical disputation which Aquinas, as Master, conducted at the University of Paris about the year 1257 a.j. It is to be expected that the principles will be theoretical and presented in the philosophical terminology of that day. The *De Magistro* is one of a course of disputations entitled *De Veritate* (On Truth), dealing with Aquinas's

theory of knowledge. It is to be expected that some knowledge of this theory will be supposed. Because of these facts, despite the completeness and intrinsic worth of the work, the *De Magistro*, even in an English translation, may perhaps not be fully understood.

Plan of Procedure

A philosophy is a way of living. A philosophy of teaching is, then, a mode of school life. With no pretense of treating the subject exhaustively, I shall first suggest the manner of school life of the thirteenth century of which the *De Magistro* is the articulate philosophy.

In the second place, I shall restate in a summary way, the general principles of St. Thomas Aquinas, as he presents them in his major works, the *Summa Theologica*, the *Summa Contra Gentiles*, the *Quaestiones Disputatae*, and the *Quodlibeta*,¹ particularly the principle which forms the basic assumption for the *De Magistro*, as it must for any philosophy of education—the educability of man.

The whole discussion will also be related to our main interest, the significance of St. Thomas for modern educational philosophy.

¹The text used for the citations from the *Summa Theologica* and the *Contra Gentiles* is the literal translation of these works by the Fathers of the English Dominican Province (Second and revised edition) Burns, Oates & Washbourne, Ltd. The citations from the *Quaestiones Disputatae* are my translations from the text of the fifth Turin Edition (see p. 41, footnote).

I

St. Thomas Aquinas and the Thirteenth Century

De Magistro a Handbook of Thomistic Philosophy of Education

In the *De Magistro*, Aquinas presents in a few pages the principles which underlie his conception of learning as self-activity, and of the relation of a teacher to such activity. The main points I may summarize as follows, corresponding in general to the four articles in the treatise:

1. The pupil must have a problem. He must be in potentiality to knowledge. The teacher is to minister to the pupil and to guide him to a knowledge of truth.
2. The pupil is in need of a teacher to help him organize his experience. The teacher must have perfected knowledge of his subject matter.
3. A description of method is a description of the reflective process.
4. The pupil is capable of self-determination. The teacher should respect the pupil's freedom, but he must also realize the disintegrating effects of error. The teacher's philosophy of life will determine his attitude toward what is truth.

Living the Philosophy

I know of no age that would serve as a better illustration of Aquinas's conception of a pupil, desirous of truth, self-active, reflective, free, than does the age of Scholasticism. I know of no teacher that would better illustrate Aquinas's conception of an ideal teacher, devoted to truth, having a keen insight into the nature of his pupils, respecting their freedom yet protecting them from error, than the great master of the thirteenth century, Saint Thomas himself.

The Middle Ages Had a Problem

If there is one general characteristic of medieval society, it is its absorption in a problem, the problem of man's relation to God. By natural reason, it saw that the universe consisted of a hierarchy of beings, the lower existing for the higher. Because of his rational nature, man seemed to be the natural lord of this creation. Yet the universe was clearly planned, and man seemed to be a part of the plan. This was the problem which the scholars of the Middle Ages were earnestly engaged upon, to know the relation of man to the universe and to his Creator. The Middle Ages had the first requisite for a pupil; they had a problem.

Desire for Integration

The second characteristic of a pupil is his feeling of a need for a teacher. If there is a characteristic that is distinctive of the intellectual life of the age

of Scholasticism, it is its desire for everything that would help meh to integrate their experience.

Comprehensive Systematized Knowledge

The medieval mind seemed almost obsessed by the passion for a complete unification of truth. "The desire to include all the questions to which philosophy gives rise, to explore the complete cycle of the natural, moral, and judicial sciences in order to give an account of facts and documents, and the constant endeavor to study the vast mass of detail in the light of principles of a rigorous unity, are the essential characteristics of the thirteenth-century Scholasticism."² What led them on in their search for truth was their love of knowledge for itself, and, after they had attained it, their desire to express it in order to hand it down as a heritage of truth to the future. Pope Leo XIII says, "Then the Doctors of the Middle Ages, whom we call Scholastics, set themselves to do a work of very great magnitude. There are rich and fruitful crops of doctrine scattered everywhere in the mighty volumes of the Holy Fathers. The aim of the Scholastics was to gather these together diligently, and to store them up, as it were, in one place, for the use and convenience of those who would come after."³ Their field of search was indeed vast, including, besides the teachings of the Fathers and of the

•De Wulf, M. *History of Medieval Philosophy*, Vol. 1, p. 313.

•Leo XIII, *Encyclical Letter, Aeterni Patris, ou the Restoration of Christian Philosophy*.

Councils, the available writings of Aristotle and of Plato, of their followers, translators, and commentators, the more recent opinions of those struggling over the problem of universals.⁴ All of these, the Scholastics essayed to master, to relate to their own fundamental concepts, and to synthesize in some perfected plan.

The Prince of the Scholastics

If the Age of Scholasticism was an ideal pupil, Aquinas was no less its ideal teacher.⁵ That he was in sympathy with his pupils' problem is clearly shown by his saintly life and his professorial works. That he was a competent guide to the solution of his pupils' problem—the relation of man to the universe and to his Creator—is evidenced by the fact that his solution is officially recognized by the Catholic Church. That he had a perfected, that is, an integrated, knowledge of his subject matter is abundantly proved by his works, especially the

⁴Turner, W., *History of Philosophy*, pp. 243-244.

⁵He was born (1225 a.d.) of princely Swabian and Norman blood, and received his early education on Italian soil at the Benedictine monastery of Monte Cassino and at the University of Naples. When eighteen, he entered the Dominican Order and went first, to Paris and later to Cologne as the pupil of the great master, Albert. At the University of Paris in 1256 A.D., he was made Master. He composed over thirty folio volumes of philosophical and theological works in the defense of truth against its enemies and in building the most complete and systematic presentation of philosophy and theology that has ever been written. Besides, he was constantly engaged in teaching. His fame spread from the University of Paris and he was called to teach successively at Rome, Bologna, Viterbo, Perugia, and Naples. In 1274 A.D., although in poor health, he set out to attend a council that was to take place at Lyons. On the way he fell ill and died at the Cistercian monastery of Possanuova, near Terracina in Italy. Even when dying he was fulfilling the office of a teacher, expounding the Cantic of Canticles.

Summa Theologica, which won for him the title of the Prince of the comprehensively systematizing Scholastics. He had the first two characteristics of an ideal teacher. He had thoroughly grasped the problems of his day and of the preceding centuries. He was a genius in applying to proposed solutions his touchstones of conformity with Christian dogma, Aristotle, and his own critical reason. He had a habit of linking up "even the slightest point with the fundamental doctrine and indicating its place in the whole system."⁶

Method of Presentation

The third requirement for a teacher which Aquinas demands and exemplifies is an appropriate method of presentation. Once more, if there is a characteristic that is distinctive of Scholasticism, it is its logical method, its "serried syllogistic structure."⁷ This, mode of presentation was both an expression of their intellectualism and a natural evolution to meet an exigency. For the Scholastics, the intellect of man was equipped to deal with abstractions, and in dealing with them it was essentially logical. On the other hand, there was the vast doctrinal heritage which they were filled with desire to hand down to posterity. To ease the mind of the intellectual burden that was theirs, the measured, precise, impersonal style of the dialectical method was a boon.

⁶Taylor, F. O., *Medieval Hind.* Vol. II, p. 296.
⁷De Wulf, M., *op. cit.*, Vol. II, p. 6.

Aquinas and Method

The Scholastic style and method approached perfection in the works of Saint Thomas. His language, despite the difficult subject matter, is precise and lucid. It has a certain elegance but is never emotional, although at times it gains a "certain fervor from the clarity and import of the statement which it so lucidly conveys."⁸ Anyone who has attempted to translate his writings readily appreciates his "condensed precision of thought and pregnant felicity of diction."⁹ The dialectical method of presenting authorities for, and against, a proposition was carried over from the classroom procedure that was used in the University by Saint Thomas with pedagogical intent, as he himself states in the prologue to the first part of the *Summa Theologica*.

Example of Scholastic Method

An analysis of an article of the *De Magistro*, that is, a subdivision of a question of a treatise, will show how closely the Angelic Doctor's method conforms with the psychology of problem solving. The question opens with a statement of the points which will be discussed in the various articles. At the beginning of each article the topic is stated again in the form of a definite problem.

⁸Taylor, H. O., *Medieval Mind*, Vol. II, p. 120.

⁹Wicksteed, P. H., *Dante and Aquinas*,

The Statement of Objections. Although Saint Thomas was writing for, and teaching, mature minds, still in treating such intellectual and unemotional subjects as those with which he had to deal, there was a need to appeal to the interests of the reader or pupil—"the psychological mode of approach." The successive objections to the thesis, which open each article, supply this need. They usually review the historic solutions of the problem; e.g., in the first article of the *De Magistro*, Augustine's opinion on whether one can teach through symbols without a knowledge of things. The objections also summon any relevant knowledge which the pupil has gained in the past, make the problem appear "worthy of the effort required in its solution," and through the uneasiness aroused and the desire to know the answer attain "one of the major objectives of higher education," the bringing of the pupil to "welcome the logical mode of presentation rather than a less concise and logical mode."

In the statement of objections, Saint Thomas was a master. He was, as Maurice¹⁰ points out, an inveterate disputant, and took delight in making the opposing sides as evenly matched as possible. This may seem to us mere quibbling, but Brother Azarias says, "The very words in which he formulates objections are understood only in the light of the

¹⁰Maurice, F. D. » *Medieval Philosophy*, Vol. I » p. 610.

history of contemporary error. He fought no wind-mills; he set up no men of straw in order to knock them down. He dealt with living issues. He was in touch with his age upon all its intellectual wants and aspirations."¹¹ In the statement of objections Saint Thomas was unflinchingly honest. Dr. J. J. Walsh, in, one of his historical writings, says that nowhere is there such a compendium of objections against the Catholic faith as is the armory of Saint Thomas Aquinas; Wicksteed says that "again and again we read with amazement his concise and forceful expression of objections against which he perhaps has nothing equally clear and penetrating to urge."¹² We might mark in the first article of the *De Magistro* the statement of Boethius' position that since the pupil is self-active in learning, the teacher does not cause learning any more than one, by pointing out an object, could be said to cause another to see the object.

The Counter Objections. At the conclusion of the objections the counter proposition is stated and supported by citations usually from the same source from which the objections were taken. In the first article they are from the Scriptures, from Aristotle, and from Augustine.

The Body of the Article. Now, Saint Thomas enters upon his elucidation of the true proposition, not attempting "to extract the new information"

¹¹Axarias, Br., *Errayr Educational*, p. 89.

¹²Wickiteed, P. H., *Dante and Aquinat*, p. 98.

but giving it “through direct statement, illustration, and explanation.” Sometimes the medieval illustrations from the contemporary physics are not very enlightening, but the analogies in the *De Magistro* are quite aptly drawn; for example, Saint Thomas describes the service of the teacher as similar to that of a doctor ministering to a self-active nature. Wherever possible, Thomas casts his statements into syllogistic form of which the premise is usually some formula from Aristotle; e.g., “A thing acts inasmuch as it is actual.” That this is legitimate, Turner points out in reference to Saint Thomas's empirical psychology.

“The method of St. Thomas's philosophy is, therefore, empirical and not, as is too frequently alleged, *a priori*. It is true that St. Thomas appeals to such maxims and formulas as ‘*Agere sequitur esse*.’ But it should be remembered that such formulas are not *a priori* principles or premises arbitrarily assumed; they are conclusions established by empirical or rational investigation, and as such, are perfectly legitimate principles of rational psychology—in the same way as the law of the conservation of energy, the law of the division of physical labor, or any other generalization inductively established, has its legitimate application in physics or biology.”¹³

It is in the body of the article that the Angelic Doctor displays his skill in teaching by keeping his material at every moment under control, by saying everything he says in relation to every other thing he has said on the subject, by linking up the subject under discussion with as many other subjects as possible, and by relating every point to his funda-

mental tenets. This is well illustrated in the *De Magistro* where the basis of the educative process is the principle of the actualizing of potentialities. It is in the body of the article that Saint Thomas proves that he deserves the name of The Great Master who "possessed the keenest of minds, the most capacious of memories; he could with facility take up any tangled skein, unravel it and with a mastery that might make ordinary men despair, display its whole complexity in such a manner that the student could, with the greatest ease, take in the entire bearing of the question."¹⁴

At the close of the body of the article a "statement of the solution of the problem in a helpful and concise manner" is given. For example, the close of the first article of the *De Magistro* is: "Hence, since no human teaching can have efficacy except by virtue of this light, it is evident that God alone is He Who teaches interiorly and principally just as nature heals itself interiorly and even principally. Nevertheless, man is properly said to cure and to teach in the aforesaid manner."

Reply to Objections. The refutation of the false arguments is then begun. These answers to the objections offer an opportunity to summarize and impress by repetition the principles established in the body of the article. They also afford a valuable test of the understanding of the principles by

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the application of them to related problems, and establish a definite attitude toward the false positions.¹⁵

Freedom, Thinking, Intellectual Activity

The fourth requirement for a teacher is that he respect the freedom of the pupil and yet shield him from error. If there is a characteristic that is distinctive of the university life of the Middle Ages, it is the intense intellectual activity on the part of the students and the respect on the part of the university for this activity. When we read of the students' disputations and of the subjects on which the university permitted them to dispute, we feel that whatever the medieval university did not do, it certainly fostered thinking, and that whatever the medieval student could not do, he certainly could think.

Results of Learning by Problem Solving

The lives of the people of the Middle Ages and the personality of Saint Thomas furnish a concrete example of the wholesome results of a free and whole-hearted engagement in the solving of a worthwhile problem. The religious philosophy of life, the childlike attitude, the conception of the dignity of workmanship, the 'optimistic, whole-hearted

¹⁵ Cf. Rashdall, *Universities of Europe in the Middle Ages*, Vol. I, especially on University of Paris, *passim*. For a full discussion of the whole problem of this section, the indispensable *Bibliothèque Thomiste*, should be consulted. The new researches of Mandonnet, Glorieux, Pelster, Grabmann, and others have thrown new light on the problem.

activity, the orderly association that arises from dear insight and wise planning, the objective attitude toward feeling, the desire for serenity of mind manifesting itself in a tendency to reverence authority, the scholarly, scientific attitude toward reality—all the characteristics of an integrated personality which the mental hygienists and particularly Burnham in his *Normal Mind* details, read as if they had been written to describe life in the age of both Scholasticism and Faith.

II

FUNDAMENTAL PRINCIPLES OF AQUINAS'S PHILOSOPHY OF TEACHING

Aquinas's Defense of Man's Educability

The fundamental assumption in the *De Magistro* is that man is educable, that is, self-active, plastic, and free. Man's knowledge is in "active, complete potentiality." Because Aquinas believed that a teacher should combat error, he opposed the theories which he thought denied man's educability and consequently his responsibility for his own character. Two of these theories are taken up briefly in the first article of the *De Magistro*. These*, ò, and a number of variations of these, Aquinas states and refutes in the second volume of the *Contra Gentiles*. One is struck by the similarity which these theories have to the positions which are held today by the idealists, the empiricists, the materialists, and even the proponents of the "new emergent" or the "gestalt" points of view. Each theory of the self has its corresponding theories of knowledge, and it is with these *false philosophies of education* that Aquinas is particularly concerned.

Different Actions from One Soul

The first theory that Aquinas takes up and refutes is Plato's psycho-physical theory of the nature

of man. Plato held that man had various souls but that his real self was his rational soul. The various souls were distinct and separate from one another. There was order among them but no direct interaction. The intellective soul used the body as a "sailor in a boat." Aquinas replies to this proposal of the nature of the self that there is an observed interaction between the body and the mind, that, in fact, there is what Spearman in *Abilities of Man* describes as "universal mental competition," among the various activities of the soul.

"Different forces that are not rooted in one principle do not hinder one another in acting unless perhaps their action be contrary, which does not happen in the case in point. Now we find that the various actions of the soul hinder one another, since when one is intense another is remiss. It follows, therefore, that these actions and the forces that are their proximate principles, must be reduced to one principle . . . some one form, by which this body is such a body; and this is the soul. Therefore, it follows that all the soul's actions which are in us, proceed from one soul." (C. G., II, 58.)¹⁶

Aquinas, then, rejects the theory that the self is divided up into a mosaic of faculties, each separate from the other.

Man Has a Spiritual Soul

The second theory which Aquinas takes up and refutes is that of the Arabian pantheists, Avicenna and Averroès. They held that the intellective soul which Plato said used man's body as a "sailor in a boat" was entirely separate from the body. It

¹⁶Gmfré Gmfré, Book II, Chap. 58. References to this work will appear hereafter in the abbreviated form. All citations from the *Contra Gentiles*, and the *Suma Theologica* are taken from the literal translation of these works by the English Dominican Fathers. (Burns, Oates, and Washbourne, Ltd.)

was a separate intellect, a world-soul which they called the *active intellect*. In this intellect, man could, when properly disposed, participate. Man's real self was his sensitive soul, and his individuality consisted in his empirical self, or the images which he gained from experience.

Aquinas replies that that which gives a thing its species is its own characteristic operation. If this operation is performed by something outside the being, the being cannot take its species from that operation. Thus, if man's real self were his sensitive soul (as the Arabian philosophers said it was), and his intellectual acts were not acts of his own soul but merely a participation in a world-soul, he would not be an intelligent being, but merely an animal.

"That which is a passion of the sensitive part cannot place a thing in a higher kind of life than the sensitive life: just as that which is a passion of the nutritive soul, does not place a thing in a higher kind of life than the nutritive. Now, it is clear that the imagination and the like powers which are consequent upon it, such as the memory and so forth, are passions of the sensitive faculty, as the Philosopher proves in his book *De Memoria* (i). Consequently an animal cannot be placed by these powers or any of them, in a higher kind of life than the sensitive." (C. G., II, 60.)

Aquinas, then, holds that the self has a higher operation than mere sensation, and that it has a "higher kind of life," a *spiritual life*.

Life Cannot be "Evolved"

Alexander, an interpreter of Aristotle, denied the existence of a separate intellect either in man'or

as a world-soul. He held that the self was the result of the mixture of the elements in the body. Out of the nature of the elements and their relatedness there emerged the intellectual soul, as a conversation springs up *uncaused* from the relatedness of the members of a group. To this theory Aquinas answers that the effect cannot exceed the sum of its causes.

“Even the operation of the nutritive soul exceeds the power of the elemental qualities. . . . Consequently the vegetative soul cannot be produced by the mixture of the elements, and much less, therefore, the sense and possible intellect.” (C. G. II, 62.)

Aquinas held, then, that life cannot be *evolved*. The self must be created by God.

The Self Not a *Mere Mechanism*

Lastly, Thomas dismisses as unworthy of consideration the materialists who held that the self was merely a body. They, he said,

“were moved to take up this position through believing that there is nothing that is not a body, being unable to outstrip their imagination which is only about bodies. Wherefore, this opinion is put forward in the person of the foolish as saying of the soul (Wis. ii. 2), ‘The breath in our nostrils is smoke, and speech is a spark to move our heart.’” (C. G. II, 65.)

One would almost think that Aquinas were referring to the modern materialists and behaviorists who feel certain that their self of selves is somewhere in the region of their vocal cords and that deliberation is the interval of time consumed by a deadlock between language mechanisms.

Philosophies of Education Based on False Theories of Self

Aquinas objects to these theories of the nature of the self particularly because of the corresponding theories of knowledge which he believed, as he states in the *De Magistro*, did not account for man's self-activity, freedom, plasticity, and responsibility for the formation of his own character.

Plato's Learning as Self-Realization

Plato held that ideas, intellectual habits, or "forms" as they are called in the *De Magistro*, are innate in the rational soul. Learning was the coming to consciousness of these ideas or intellectual habits, an unfoldment of latent perfections—self-realization. There was no potentiality to form habits in the intellective soul. There was only negation of opportunity to manifest the existing actuality.

"But since that which has a form actually, is sometimes unable to act according to that form on account of some hindrance, as a light thing may be hindered from moving upward; for this reason did Plato hold that naturally man's intellect is filled with all intelligible species, but that, being united to the body, it is hindered from the realization of its act." (S. T. I, 84, 3.)¹⁷

Sensation and other motor activity roused the intellective soul to remember or become conscious of its ideas or habits.

Summa Theologica, Part I, Question 84, Article 3. References to this work will appear hereafter in the abbreviated form. (See form of citations in appendix.)

The Results of this *Theory on Educational Method*

Such an interpretation of the origin of concepts as Plato held, naturally paves the way in educational practice for emphasis on symbolism, object lessons, motor activity or "busy-work," and the maieutic method of periodic extraction to see, as Dewey says in *Democracy and Education* in his criticism of some of the results of Froebel's theory of unfoldment, if the perfection has advanced enough to satisfy the teacher. Aquinas points out in the *De Magistro* that Plato's theory holds that "the natural agent does nothing else than draw these (forms) out from their latent state into manifestation . . . just as by polishing, rust is removed and the brightness of the metal is made manifest."

Plato's self-realization, Aquinas did not consider to be self-activity.

"Intelligibles which the human intellectual soul understands, were asserted by Plato to be intelligible of themselves, namely, ideas: wherefore it was unnecessary for him to admit an active intelligence in respect to intelligibles." (C. G. II, 77.)

The abstraction of meanings from things, the making of them intelligible, is self-activity according to Aquinas. Mere yielding to suggestions coming from the environment he assigned to vegetative life, not even as high a "kind of life" as animals have. Aquinas would have no sympathy with "plant metaphors" to describe the development of man.

Avicenna's Learning as the Acquirement of Many-Sided Interest

Avicenna, who held that the self was empirical and that man participated, when properly disposed, in the knowledge of the separate intellect, the "giver of forms" (as Aquinas says in the *De Magistro* the active intellect is called by Avicenna), observing the individual differences in intellectual capacity and knowledge even among those who had had similar experiences and who, according to the Platonic teaching, should have reached the same stage of self-consciousness, proposed a psychology of learning that would explain this difference. He held that by sense experience man collected images, or phantasms, in his imagination. When these phantasms had reached sufficient numbers and had been properly arranged, then the "giver of forms" infused knowledge into the mind of man. No intellectual habit was retained by man, but the sensitive power through exercise gained a certain aptitude in disposing the phantasms for the reception of the infused form.

Aquinas Criticizes Avicenna's Psychology

"If we consider it carefully, this position, as regards its origin, differs little or not at all from that of Plato. For Plato asserted that intelligible forms are separate substances, from which knowledge flows into our souls; while he (Avicenna) affirms that knowledge flows into our souls from one separate substance which, according to him, is the active intellect." (C. G. II, 74.)

“The statement that through considering singulars which are in the imagination, the possible intellect is enlightened with the light of the active intellect so as to know the universal; and that the actions of the lower powers, namely, the imagination, memory, and cogitative powers, adapt the soul to receive the emanations of the active intellect is a pure invention.” (C. G. II, 74.)

Of his “faculty” psychology, Aquinas says:

“If some species (habits) were not preserved in the passive intellect, but only the aptitude of turning to the active intellect, man would be equally adapted for knowing anything whatsoever. According to this, man might learn one science and yet not know it more than other sciences.”¹⁸

Aquinas Defends Mans Moral Freedom

Thomas threw all his strength into his struggle against the theories of these Arabian pantheists because in denying man his own intellectual soul, they denied to him self-activity, and moral responsibility. According to the theory of the empirical self and the separate intellect, man is a mere slave of his environment and of the world-soul.

“A thing that cannot set about its proper operation unless it be moved by an outward principle, is moved to operate rather than moves itself; wherefore, irrational animals are moved to operate rather than move themselves, since their every operation depends on the outward principle which moves them; for their sense, moved by an outward sensible, makes an impression on their imagination and thus there is an orderly process in all their powers down to the motive powers. Now, man’s proper operation is intelligence, the first principle of which is the active intellect which produces the intelligible species, to which in a sense the possible intellect is passive, and this being made actual moves the will. If, then, the active intellect is a substance outside man, all man’s operation de-

¹⁸Translated from Qq. Disp. (i.e., *Quaestiones Disputatae*) *De Veritate* X, 2.

pend on an outward principle; and consequently he will not move himself but will be moved by another. Hence, he will not be the master of his own operations, nor will he be deserving of praise or blame; and there will be an end to all moral science and social intercourse, which is absurd. Therefore, the active intellect is not a substance separate from man." (C. G. II, 76.)

Aquinas's Conception of Man's Educability

Having criticized very briefly in the *De Magistro* Plato's and Avicenna's theory of knowledge, Aquinas sets forth his own theory which accounts for man's educability, his self-activity, plasticity, and capacity to form habits. He does this in these words:

"Therefore, according to the teaching of Aristotle (*I Physics* com. 78), the middle course between these two positions must be held. . . . Natural forms preëxist indeed in matter, not in actuality as the others held, but in potentiality only, from which they are reduced to actuality by an extrinsic proximate agent, not alone by the first agent, as the other opinion supposes. --- It must be kept in mind that in natural things a thing may preëxist potentially in a twofold manner; in one way in active, complete potentiality, that is, when the intrinsic principle [agent] is sufficiently able to bring it to perfect actuality, as is evident in healing. . . . Knowledge preëxists in the learner, not in purely passive potentiality, but in active potentiality. Otherwise man could not by himself acquire knowledge." (*De Magistro*, Art. I.)

Fundamental Theory of Matter and Form

Aquinas solves this problem of man's nature and educability as he solved almost every problem he dealt with, by an application of the Aristotelean theory of *matter and form*.

To illustrate the general notion of matter and form, we may fall back upon an example used by

Aristotle. A piece of bronze in the hands of a sculptor may turn out to be a statue of Socrates or a statue of Jupiter. As far as the bronze is concerned, it could be either. Therefore, we say that, in relation to the result to be attained, the bronze is potential, it is capable of receiving the form given to it. It corresponds to the idea of matter or the material cause. But that which determines what the result is going to be, whether a statue of Socrates or a statue of Jupiter, is the form which the sculptor gives to the bronze. Both form and matter contribute something to the result, but it is the form which determines what the nature of the result is going to be.

Matter is any kind of potentiality; form is the actualization of that potentiality. From matter comes the limitation of potentiality; from form comes the determination of the species of a thing, what it is and does. A form is developed or generated (educed) from a potentiality by an agent which is said to move the being to act. If a being moves itself to act, it is a self-mover. It causes itself to act and thus develops its own self out of the potentialities that have been given it in its own matter. Substance with its potentialities, according to Aquinas, was created by God, but He does not directly develop all the forms to correspond to these potentialities. He allows beings to develop themselves or to cause other beings to develop themselves by causing them to act.

“The first Cause from the abundance of His own goodness confers upon other things not only that they may be but also that they may be causes.” (*De Magistro*, Art. 1.)

t *The Self as a Person*

The intellective soul of man, according to St. Thomas, is a spiritual form substantially united to a particular body, forming together with the body an integrated, unique person.

“From the operation of the human soul, its being can be known. Inasmuch as it has an operation transcending material things, its existence is elevated above the body, not depending on it; but inasmuch as its nature is to acquire immaterial knowledge from material things it is clear that the soul cannot be the complement of its own species without union with the body. For a thing is not complete in species unless it has that which is required for the proper operation of that species. If, then, the human soul, inasmuch as it is united to the body as a form, has being, elevated above the body, not depending on it, it is clear that it is constituted on the confines of things corporeal and incorporeal.” (Translated from Qq. *De Anima* I, i)

The Self as Unique

Since limitation of potentiality comes from matter, individual differences between persons are accounted for by hereditary differences in bodies, both because only such potentialities as exist can be actualized, and because the intellect uses the body in acquiring knowledge.

“It is plain that the better the disposition of a body, the better the soul allotted to it; which clearly appears in things of different species; and the reason thereof is that act and form are received into matter according to matter's capacity; thus because some men have bodies of better dispositions their souls have a greater power of understanding. --- Secondly,

this occurs in regard to the lower powers of which the intellect has need in its operation; for those in whom the imaginative; cogitative, and memorative powers are of better disposition, are better disposed to understand.” (*S. T. I, 85, 7.*)

The Self as Integrated

The self is unique through the body; it is integrated through the soul, the one source of all activity. It is true that a finite being cannot be the principle of its own activity immediately, that is, through its essence. God alone can be that. A finite form acts through powers, or properties.

“The essence of the soul is not the immediate principle of its operations, but it operates through mediating, accidental principles or forms; hence the faculties [powers] of the soul are not the very essence of the soul, but are its properties.” (Translated from Qq. *De Anima I, 12.*)

These powers or faculties are distinct from the essence of the soul but they are not separate from it, as the faculty psychologists supposed. These faculties “spring from the essence of the soul as boughs on the trunk of a tree, distinct from it but natural products of it” This distinction does not divide the self up into a mosaic, for the faculties and all of their developments by habits are all actualizations generated from the potentialities of the self through action.

The Acquired Self as a Character

An abiding actualization, or form, generated by action from a potentiality of a faculty is a habit. The ability to form a habit is the criterion of educability. We may say that: '

1. A being that can form a habit through its own agency is self-active.
2. A being that has a potentiality to be actualized is plastic.
3. A being that can retain its self-acquired habits can form a character.
4. A being that can integrate its character into an organized structure is educable.

Can Animals be Educated?

At first glance one might think that animals have these conditions for educability, since animals consciously react to sensations, have some power to adapt themselves to changing conditions in the environment, and have some capacity to retain these adaptations. Aquinas, however, denies that an animal can be educated.

An Animal is not Self-Active

First of all, an animal is not self-active. Self-activity is the power to educe a form from a potentiality through self-movement. An animal is moved by the object which it senses and by its nature or instinct. An animal devises for itself no problem. Every problem is forced upon the animal from without; every solution of a problem is prescribed from within.

“The principle of every operation is the form whereby a thing is actual, since every agent acts as far as it is actual... [For *form* here we might substitute *hypothesis*, or a proposed plan of action in the solution of a problem.]¹⁹

¹⁹Bracketed remarks are another's.

Hence a form that does not proceed from that which acts by that form, causes an operation over which the agent has no dominion. ... In dumb animals, the forms, sensed or imagined, which result in movement, are not discovered by the dumb animals themselves, but are received by them from exterior sensibles which act on their senses, and judged of by their natural estimative faculty [instinctive judgment]. Hence, though they are said after a fashion to move themselves, insofar as one part of them moves, and another is moved, yet the actual moving is not from themselves, but partly from external objects sensed and partly from nature." (C. G. II, 47.)

An Animal has no Insight—It Creates no Problems

An animal has no insight. It can see no problems for itself which will act as ideals soliciting solution. The environment imposes on the animal its problems; the animal adapts itself to an environment which it does not make. Hence, to train an animal, tasks must be imposed; their instincts must be appealed to; they must be habituated by custom. This leads to the second point:

Are Animals Plastic?

Plasticity means the ability to react in a variety of ways to the same stimulus. Plasticity means potentiality from which various forms or habits may be generated. Is an animal's instinct, or intuition of what is advantageous or harmful, plastic or potential? Can an animal form a *general* habit, an *attitude*, as Bagley would say, or a *free idea*, as Dewey would say? Aquinas does not think so. He does not consider even a "conditioned reflex" any index of plasticity on the part of the animal.

“The sensitive powers of dumb animals do not act at the command of reason; but if they are left to themselves, such animals act from natural instinct; and so in them there are no habits ordained to operations [that is, ideals]. . . . But whereas by man's reason brutes are disposed by a sort of custom to do things in this way or that way, so in this sense, to a certain extent, we can admit the existence of habits in dumb animals. . . . But the habit is incomplete as to the use of the will, for they have not that power of using or refraining, which seems to belong to the notion of habit; and, therefore, properly speaking, there can be no habits in them.” (S. T. II-I, 50, 3, ad 3.)

An Animal has no Intuition of Relation—Is not Free

An animal is determined by nature to take one attitude, one problem from each object of sense. It has intuition of only one meaning for each object. An animal has no repertoire of hypotheses to choose from in the solving of its imposed task. An animal is not plastic; an animal is not free.

Can an Animal Form a Character?

A character is an acquired self. It consists in a set of habits. To form a character, then, a being must be able to retain its acquired habits. A character is “changed with difficulty,” Aquinas says. We have seen that an animal cannot form a habit in the true sense because it cannot conceive an ideal. Even if an animal could acquire a habit, because of the instability of the nervous system of an animal, the habit would not be a stable quality. It has been noted in experiments that the “conditioned reflexes” which animals form are very easily de-

stroyed. This, Aquinas says, is because the sense powers have "thresholds"; they are corrupted by age and by excessive stimulation.

"The sense is corrupted... through being excelled by its object, for instance the sight by very brilliant objects... and also on account of its subject being corrupted." (C. G. II, 55.)

Can an Animal Form an Integrated Self?

An integrated self is a personality. It is a character organized under an ideal. Since an animal cannot conceive an ideal nor form a character, it cannot be a personality. An animal, then, is not *self-active, plastic, character forming, nor educable.*

Self-Activity, the Basis of Man's Education

The De Magistro and the Educability of Man

The four articles of the *De Magistro* are a brief statement of Aquinas's conception of the educability of man. The first article represents man as self-active; the second as plastic, needing the help of a teacher, yet able to make good use of the help given; the third as free and self-determining yet amenable to the influence of ideals; and the fourth as a character architect. These conceptions are treated in seeking a solution to the following problems:

1. Whether man can teach and be called a teacher, or God alone?
2. Whether anyone can be called a teacher of himself?
3. Whether man can be taught by an angel?
4. Whether to teach is a function of the active or of the contemplative life?

The First Article—Learning, Self-Active
Development of God-Given Potentialities

The first article of the *De Magistro* is entitled, "Whether man can teach and be called a teacher, or God alone?" We have seen that according to the

theory of matter and form, every development is the generation of a form from a potentiality by some agent. The question may, then, be read, "Whether man can generate a form or God alone?" We have already seen how Aquinas, in the first part of the article, rejected Plato's and Avicenna's theory that forms are given by an outside force exclusively. Aquinas holds that an outside force, God, gives potentialities, but that "from the abundance of His goodness," He allows beings to acquire actuality by action, either by being moved by another being or by moving themselves.

Man is a Self-Mover

Man is a self-mover. By his own action he generates forms from his potentialities.

"The form understood, whereby the intellectual substance acts, proceeds from the intellect itself, being conceived and after a fashion thought out by it; as may be seen in the form of art, which the craftsman conceives and thinks out, and whereby he works. Accordingly, intellectual substances move themselves to act, as having dominion over their actions. (C. G. H, 47.)

"The apprehended form is a moving principle according as it is apprehended under the aspect of good or fittingness. Wherefore those alone move themselves to judge who apprehend the common notion of goodness or fittingness. And these are intellectual beings alone." (C. G. II, 48.)

Thomistic Psychology

In order to understand the process of self-activity we must know Aquinas's psychology. He describes the equipment:

“There are higher actions of the soul which transcend the actions of natural forms [e.g. the form of a plant or an element] to such a degree that the soul is made to act inasmuch as there is present in the soul an object immaterially. For the soul is in a certain way everything by sense and intellect. But there are various degrees of this immaterial existence. One degree is when an object is in the mind without matter, under the singular and individuating conditions which follow matter; this degree is of the sense faculty which is receptive of individual representations without matter, but in a corporeal organ. A higher and most perfect degree is of the intellect which receives representations entirely abstracted from matter and individuating conditions, and without a corporeal organ. Just as through a natural form a thing has an inclination to something (as through its form fire has a tendency to rise), and has a movement and an action to attain that to which it is inclined; so upon the apprehension of a sensible or an intelligible form there follows an inclination toward the thing apprehended by the sense or the intellect. This inclination pertains to the *appetitive* power [manifested in attention]. Again it follows necessarily that there be a power of movement through which the thing desired is reached; and this pertains to the *locomotive* power. For a complete cognition on the part of the sense faculty, such as suffices for an animal, five powers are required. The first power is that the sense may receive a representation from sensibles; and this pertains to the *proper* sense. The second power is that it may discern the sensibles perceived, and discriminate among them. It is necessary that this take place through a power to which all sensations come [and in which all are fused], which is called the *common* sense. The third power is that the perceived representations of the sensibles may be preserved. For an animal needs to apprehend things not only at the time of the actual sensation, but also when the sensibles are absent. This makes necessary another power, for in corporeal things there is one principle for receiving and another for preserving, for what is *well able to be received* is at times *ill able to be preserved*. This power is called the *imagination* or the *phantasy*. Fourthly, certain meanings are required which the outer sense does not apprehend, such, for example, as harmfulness, or usefulness or something of that kind. Man comes to a knowledge of these mean-

ings by inquiring and comparing, but other animals know them by a certain natural instinct, as a sheep naturally flees from a wolf as harmful; hence for this in other animals the natural *estimative* power is apposed, which in man is called the *cogitative* power which compares particular meanings; whence it is called the *particular* reason and the passive intellect. Fifthly, it is required that those things which have previously been apprehended through the senses, and preserved in the interior power, be again recalled for actual consideration. This pertains to the *memorative* power, which in other animals operates without inquiry, but in man with inquiry and with a conscious desire for recollection. Hence in man there is not only memory but *reminiscence*." (Translated from Qq. *De Anima*, XIII.)²⁰

These powers, we remember, are not considered by Aquinas as being separate from the soul, but as properties of the essence, potentialities for action.

The Agent of *Self'Activity*

Besides the sense powers, man has a distinctively human power which not merely receives forms as they are presented to it, but abstracts intelligible forms from sense representations of experience, or "phantasms," as they are called. This aspect of the human intellect is the intellect considered as acting, and is called the "active" intellect. The intellect considered as receiving the abstracted form is called the "possible" intellect.

"The intellectual soul is not in potentiality to the likenesses of things which are in the phantasms, according to the mode in which they are there, but according as these images are raised to something higher, by being abstracted from the individualizing conditions of matter, so that they become actually intelligible. Consequently, the action of the active intellect on

■ Italics are translator's.

the phantasm precedes the reception by the possible intellect. Wherefore the preeminence of the action is ascribed, not to the phantasms but to the active intellect. For this reason Aristotle says that it is compared to the possible intellect as *art to matter*.

“We should have a perfect example of this if the eye, besides being a diaphanous body and receptive of colors, had sufficient light to make colors actually visible; even as certain animals are said to throw sufficient light on objects by the light of their eyes.” (C. G. II, 77.)

Comparison of Sense and Intellect

The operation of the sensitive faculty may be taken as furnishing analogies for the understanding of the operation of the intellective faculty. The *proper* sense, analogous to the active intellect (although it is acted upon and does not initiate action as the active intellect does), receives sensible forms from each of the five exterior sense organs. These various sensations fuse in the *common* sense which discriminates what the object *is* which is causing the sensations. A representation of the discriminated object forms in the imagination. This imagined form is analogous to a concept and serves as a kind of suggestion soliciting action—a problem. Because, as Aquinas says, a tendency follows every form, when the sensible form appears in the imagination, the attention is aroused, and a judgment is made of what the object means, whether it is a good or an evil, that is, a judgment of what the object being sensed *does*. An animal knows instinctively what each object means in terms of harmful or beneficial, and immediately the animal

takes a definite *attitude* toward the object, and either moves toward it to appropriate it if it is good, or moves away to avoid it if it is evil. By this act of judgment a habit is formed in the memory. Since, in the animal, each habit is the result of a particular judgment instinctively determined there are no "free meanings" which can serve as a basis for association and consequently for the organization or integration of habits. Hence, an animal cannot recall by "reasoning back" to an experience which took place in the past. Since, through his active intellect, man can abstract for consideration any number of meanings from a single object and can take as many attitudes toward the object, man can compare these aspects and associate and organize them in any order that he desires. Hence, man is responsible for the order of his intellectual memory, his intellectual habits, his character.

Causes of False Interpretations

In this act of thinking there is a possibility of false inference and a consequent disorderly association. If man judges from external appearances immediately and does not resort to his power of "collating ideas" from the memory of past experiences, that is, to test in imagination the "suggestion" which first appears in the imagination, he may be deceived, especially about things which resemble each other. Lack of concentrated attention is also an occasion for false interpretation. "As to com-

mon objects of sense, and accidental objects, even a rightly disposed sense may have a false judgment, because it is referred to them not directly, but accidentally, or as a consequence of being directed to other things." (S. T. I, 17, 2.)

Only a rational being can know truth, according to Aquinas. Only a rational being can be conscious of the "equation of the thought and the thing." The abstraction, the intelligible form, is not a knowledge of truth or of falsity. Intellectual habits, the result of a judgment, are "truth as known."

"Now since everything is true according as it has the form proper to its nature, the intellect, in so far as it is knowing, must be true, so far as it has the likeness of the thing known, this being its form as knowing. For this reason truth is defined by the conformity of intellect and things; and hence to know this conformity is to know truth. But in no way can the sense know this. For although sight has the likeness of a visible thing, yet it does not know the comparison which exists between the thing seen and that which itself apprehends concerning it. But the intellect can know its own conformity with the intelligible thing; yet it does not apprehend it by knowing of a thing *what a thing is*. When, however, it judges that a thing corresponds to the form which it apprehends about that thing, then first it knows and expresses truth. This it does by composing and dividing; for in every proposition it either applies to or removes from the thing signified by the subject, some form signified by the predicate. . . . Therefore, properly speaking, truth resides in the intellect composing and dividing, and not "in the senses, nor in the intellect knowing *what a thing is*. (S. T. 16, 2.)

If the intellect has no direct intuition of a relation between "the form which it apprehends about a thing" and the thing from which the form was abstracted, it resorts to reasoning. The active intellect

holds up another aspect for consideration or combines several aspects until a relation is self-evident. For example, in the application of the term *mortality* to man in the proposition, "Man is mortal," if the equivalence is not immediately evident, the active intellect can resolve "man" into a more universal notion "organism, or a thing composed of parts," and "mortality" into "dissoluble into parts." This is "tracing back to first principles," as it is called in the *De Magistro*. The intuition of the relation expressed in first principles, such as "the whole is equal to the sum of its parts," man has as a potentiality "infused by God."

Man's Knowledge is in Active *Potentiality*

Through the two potentialities, the active intellect, or "the light of the mind" and reason, or intuition "the first principles intuitively known," the "light of uncreated truth reflected in us," man's knowledge is held to be in "active potentiality."

Conclusion Reached in the First Article

The conclusion reached in the First Article of the *De Magistro* is, then, that God teaches man principally in giving him his potentialities, but that man can develop his potentialities through himself in the method of discovery, or he may accept the aid of a teacher who ministers to his nature as a physician does to a patient, "applying medicines which nature uses as instruments in healing."

IV

THE SECOND ARTICLE—THE FUNCTION OF ENVIRONMENT, AND LEARNING BY SYMBOLS

The second question in the *De Magistro* is: Whether one can be called a teacher of himself? Learning is a process of self-activity by which an intellectual habit is formed. Teaching is the helping of that process by ministering material and tools. The question, then, may be read, Can one supply himself with all the materials and tools necessary for an act of knowledge? Can man, as Bacon said the Scholastics did, spin knowledge out of his own substance? Can a blind man teach himself to know colors? Aquinas says that according to Plato's theory he could; man's intellectual habits, according to Plato, were already formed at birth, just as an animal's instincts are. An animal teaches itself; it is in a way self-active. An animal, however, cannot learn; it cannot profit by experience; an animal is not plastic. Man is plastic. He "is all things by sense and intellect." His intellect "is naturally apprehensive of the universal," and the "universal is potentially infinite" because it represents an infinite number of particulars. The price man pays for his plasticity is that man cannot teach himself. Not having any knowledge at birth, man

has no material upon which to start to work. He cannot supply the material for himself, but when it is supplied he can use it effectively, through the use of symbols as tools. Man cannot teach himself, but he can learn, he can profit by his own experience and by the experience of the race.

A Review of the Psychology of Reflection

“The external objects which we understand, do not exist in our intellect according to their own nature, but it is necessary that our intellect contain their species whereby it becomes intellect in act. And being in act by this species as by its proper form, it understands the object itself. And yet the act of understanding is not an act passing into the intellect, as heating passes into the object heated, but it remains in the one who understands; although it bears a relation to the object understood, for the very reason that the aforesaid species, which is the formal principle of intellectual operation, is the image of that object. It must furthermore be observed that the intellect informed by the species of the subject, by understanding produces in itself a kind of intention of the object understood, which intention reflects the nature of that object and is expressed in the definition thereof.” (C. G. I, S3.)

It will be noted that, in the process, an object is required both when the intellect makes the abstraction and when it reflects or judges. This object is supplied by a *phantasm*, a sense record of an experience.

“In the present state of life in which the soul is united to a passive body, it is impossible for our intellect to understand anything actually, except by turning to the phantasms. It is clear that for the intellect to understand actually, not only when it acquires fresh knowledge, but also when it applies knowledge already acquired, there is need for the act of the imagination and of the other powers: for instance, when the act of the imagination is hindered by a lesion of the corporeal

organ, as in a case of frenzy; or when the act of memory is hindered from actually understanding things of which he had a previous knowledge. Secondly, anyone can experience this of himself, that when he tries to understand something, he forms certain phantasms to serve him by way of examples, in which, as it were, he examines what he is desirous of understanding. For this reason it is, that when we wish to help someone to understand something we lay examples before him, from which he forms phantasms for the purpose of understanding." (S. T. I, 84, 7.)

Man Cannot Teach Himself

Since the phantasms are the results of *sensé* experience, it is evident that man does not entirely supply for himself the material for his knowledge. He is dependent in this respect upon his environment, a teacher in some form. "All learning comes from previous knowledge," Aquinas quotes from Aristotle. This is true even if we must trace back to the knowledge of God, the ideas in His mind which were the exemplary causes of the things in the environment.

Why Experience is Necessary for Learning

The reason why sense experience is necessary for a perfect act of knowledge is that without this experience the mind knows only *about* an object of thought, not *of* it. To know a thing thoroughly the mind must know not only *what a thing is* but also *what it does*.

Our intellect's proper and proportionate object is the nature of a sensible thing. Now a perfect judgment concerning anything cannot be formed, unless all that pertains to that thing's nature be known; especially if that be ignored which is the

term and end of judgment. Now the Philosopher says (*De Cad.* iii), that as the end of a practical science is action, so the end of natural science is that which is perceived principally through the senses; for the smith does not seek knowledge of a knife except for the purpose of action, in order that he may produce a certain individual knife; and in like manner the natural philosopher does not seek to know the nature of a stone and of a horse, save for the purpose of knowing the essential properties of those things which he perceives with his senses. Now it is clear that a smith cannot judge perfectly of a knife unless he knows the action of the knife; and in like manner the natural philosopher cannot judge perfectly of natural things, unless he knows sensible things. But in the present state of life whatever we understand, we know by comparison to natural sensible things. Consequently, it is not possible for our intellect to form a perfect judgment, while the senses are suspended, through which sensible things are known to us." (S. T. I. 84, 8.)

Is Aquinas a Pragmatic Psychologist?

It is the contention of the pragmatists also that a definition of a thing is functional, not structural, that it expresses not *what a thing is*, but *what it does*. They are relativists. They hold that there is no being-as-such, and that *what* a thing does may be interpreted differently by each individual mind. There is no "changeless in the midst of change." Aquinas would hold that the modern pragmatists are mere scientists. They do not know things through their ultimate causes; they are not wise men or philosophers.

"In regard to that which is last in this or that genus of knowable matter, it is *science* that perfects the intellect. . . . That which is last with respect to all human knowledge, is that which is knowable first and chiefly in its nature. And above these things is *wisdom*, which considers the highest causes, as

stated in *Metaph.* (i, 1, 2). Wherefore it rightly judges all things and sets them in order, because there can be no perfect universal judgment that is not based on the first causes." (S. T. II-I, 57, 2.)

The pragmatists, then, cannot attain to perfect integration of their knowledge. They keep the various sciences in mutually exclusive compartments. It is only through philosophy, "which judges all things and sets them in order," that integration of knowledge is attained.

Philosophy and Character Formation

Since knowledge is composed of intellectual habits, and habits are the elements of a character, it would seem that a perfectly integrated character, one that is not divided up into "scientific" selves, mutually exclusive, can be attained only by having a philosophy of life, one that recognizes the "highest causes," the ultimate meaning of life.

The Units of Integration

Although man cannot teach himself because he is not a "perfect agent," "which has in itself everything which is in the effect caused by it," as Aquinas says in the *De Magistro*, yet he can see order in the material that is given him and can cause order in his own character. The potentiality which makes this possible is intuition, a natural sensitiveness to relation, to principles. Through intuition man is able to judge, and an act of judgment, as we have seen, generates an intellectual habit. An intellectual

habit may be thought of as resulting in a concept, a known order.²¹ The concepts are the elements of an integrated character.

“The virtues [habits] of the speculative intellect are those which perfect the speculative intellect for the consideration of truth; for this is its good work. Now a truth is subject to a twofold consideration—as known in itself, and as known through another. What is known in itself, is as a *principle*, and is at once understood by the intellect; wherefore the habit that perfects the intellect for the consideration of such truth is called *understanding* which is the habit of principles.” (S. T. II-I, 57, 2.)

Understanding is a God-given potentiality—

“The understanding of first principles is called a natural habit. For it is owing to the very nature of the intellectual soul that man, having once grasped what is a whole and what is a part, should at once perceive that every whole is larger than its part; and in like manner—with regard to other such principles. Yet what is a whole, and what is a part—this he cannot know except through the intelligible species which he has received from phantasms.” (S. T. II-I, 51, 1.)

A concept, or a known order,²¹ contains potentially other relations. For example, the concept, “an animal is mortal,” contains potentially, “a lion, a bird, etc., is mortal.” As the concept is thus *developed*, it itself becomes more distinctly understood, and, at the same time, serves as an organizing principle, since all the particular orders developed from it are grouped in a class under that concept. The concept that contains potentially all the items of knowledge that can be known is the concept of

²¹An order consists of related beings. The simplest order possible is two beings and their relation, as a mother and a father and their relation to each other. The concept of this order would be Parent-hood.

being which, according to Aquinas, is the first concept or intellectual habit that a human infant forms. All learning is a development of this concept. Learning, then, is called the actualization of first principles.

“As sense, like the intellect, proceeds from potentiality to act, the same order of knowledge appears in the senses. For by sense we judge of the more common before the less common, in reference to both place and time; in reference to place, when a thing is seen afar off, it is seen to be a body before it is seen to be an animal; and to be an animal before it is seen to be a man; and to be a man before it is seen to be Socrates or Plato; and the same is true as regards time, for a child can distinguish man from not-man before he distinguishes this man from that, and therefore ‘children at first call all men fathers, and later on distinguish each one from the other*’ (*Phys.* i. 1). The reason of this is clear; because he who knows a thing indistinctly is in a state of potentiality as regards its principle of distinction; as he who knows *genus* is in a state of potentiality as regards difference.” (S. T. I, 85, 3.)

The Problem—To Retain Integration

The child with his first potential habit, the concept of being, is integrated. He is a homogeneous whole. The problem is for him to develop his knowledge; to make it heterogeneous but still retain unity. We saw how disorderly association was the result of false judgments. If every judgment made by man from his cradle to his grave were a true judgment, he would retain his original state of integration. This raises the question:

What is the Basis for Truth?

What is truth and what is its relation to character? If there is no objective basis for truth, and

“truth is within,” then knowledge becomes purely subjective, virtue becomes self-knowledge. On the other hand, if there is no subjective basis for truth, knowledge becomes aggregates of sensations, and virtue becomes social efficiency. In the first case, character could be distorted but not disintegrated, as a plant can be distorted but cannot be disintegrated without perishing. In the second case, there is no integration possible, because there is no natural order in sensations just as there is no order in an animal's instincts. Each sensation is a “self.” “The thought is the thinker.” Order cannot come from society because society's standards are always shifting. For the better, the evolutionists will say. But whence did the “social mind” derive its potentiality to develop?

Aquinas and Truth

Aquinas is a moderate realist. He combines the best features of both of the mentioned positions.

“Moderate realism, in the spirit of true synthesis, maintained *universalia ante rem*, the types of things existing in the mind of God, *universalia post rem* concepts existing in the human mind, and *universalia in rem*, the potentially universal essences existing in things.”²²

Truth, according to Aquinas, exists first in the mind of God who conceived the universe; secondly, in things, the embodied ideas of God, the symbols of His concepts; and thirdly, in the mind of man,

²²Turner, W., *History of Philosophy*, p. 267.

who in abstracting the meaning from the universe and interpreting it, knows the mind of God.

Truth and Symbolic Teaching

We may represent truth as a message. God conceives it and embodies it in symbols which are in orderly sequence—intelligible. To man he gives, in endowing him with insight and intuition, the potentiality to read and to interpret. Men of all ages have read and interpreted the message. They have embodied their interpretations (concepts) again in symbols, in books. Some have had keen insight and faithful intuition. These are the great philosophers. But to one philosopher there are thousands of illiterates, who, nevertheless, cannot build an integrated character unless they know the right plan which is prescribed in the message. God in His love for these illiterates, supplemented His “correspondence course” with direct visitations to His pupils, through the Prophets, and His Word. Again, this interpreted truth is embodied in symbols in the Scriptures. It remains to be interpreted, however much it has been annotated and expounded. Man is not his own teacher. He does not supply himself with objective truth, the embodied or re-embodied concepts of God, but he must be a learner. He must read the symbols in order to know; he must interpret them aright in order to keep an integrated character.

What is a Symbol?

In order to understand how a symbol can be interpreted, we must understand what a symbol is. A symbol is an expressed concept, a word. It is some kind of embodiment of a known order.

“We must know that our own word taken in its proper sense has a threefold meaning. The dearest and most common sense is when it is said of the word spoken by the voice; and this proceeds from an interior source as regards two things found in the exterior word—that is the vocal sound itself and the signification of the sound. For, according to the Philosopher (*Peri. Herm.* i), vocal sound signifies the concept of the intellect. Again the vocal sound proceeds from the signification of the imagination as is stated in the *De Anima* (ii, text 90.) The vocal sound, which has no signification, cannot be called a word; wherefore the exterior vocal sound is called a word from the fact that it signifies the interior concept of the mind. Therefore it follows that, first and chiefly, the interior concept of the mind is called a word; secondarily the vocal sound itself, signifying the interior concept, is so called; and thirdly, the imagination of the vocal sound is called a word.” (S. T. 1,34,1.)

A Word is a Self-Expression

We see that Aquinas holds that the imagination is the medium between the concept and the spoken word, and we shall see later that it is also the medium between the spoken word and the concept, that is, when a symbol is interpreted. To understand fully the nature of a word, we must understand what is meant by the concept.

Self-Consciousness and Self-Knowledge

The reflective process has been described. The active intellect abstracts from a sense experience,

(a phantasm), an intelligible form, a hypothesis of the true. Then it turns about and tests the hypothesis by examining the phantasm again. When the intellect has an intuition that the phantasm represents the order that the intellect is seeking, it enunciates a judgment or a mental word. As a result of the process the intellect is formed or habituated. The intellect may now take its own actualized potentiality, the intellectual habit, as an object of thought. In such an act of self-knowledge, Aquinas holds that the mind must go through exactly the same process as it does in any act of reflection. First the imagination pictures the habit—embodies the concept. From this phantasm of its own habit the intellect abstracts the intelligible form, or what order it thinks a habit ought to belong to. Then it reflects and judges whether or not the habit belongs to that order.

“Everything is knowable so far as it is in act, and not, so far as it is in potentiality (*Metaphy.* ix.): for a thing is a being, and is true, and therefore knowable, according as it is actual. This is quite clear as regards sensible things, for the eye does not see what is potentially, but what is actually colored. In like manner it is clear that the intellect, so far as it knows material things, does not know save what is in act. . . . Now the human intellect is only a potentiality in the genus of intelligible things — — — hence it is called *possible*. Therefore, in its essence the human mind is potentially understanding. Hence it has in itself the power to understand, but not to be understood, except as it is made actual. . . . Therefore the intellect knows itself not by its essence, but by its act. This happens in two ways: In the first place, singularly, as when Socrates or Plato perceives that he has an intellectual soul because he perceives that he understands [self-conscious-

ness]. In the second place, universally, as when we consider the nature of the human mind from knowledge of the intellectual act. It is true, however, that the judgment and force of this knowledge, whereby we know the nature of the soul, comes to us according to the derivation of our intellectual light from the Divine Truth which contains the types of all things as above stated (Q. LXXXIV., A. 5). Hence Augustine says (*De Trinitate*, IX, 6) 'We gaze on the inviolable truth whence we can as perfectly as possible define, not what each man's mind is, but what it ought to be in the light of the eternal types.' (S. T. I., 87, 1.)

The expression of this act of self-knowledge is a *word*. This explains fully the conclusion reached in the second article of the *De Magistro*, that man cannot be his own teacher, a perfect agent of his own knowledge. To be a perfect agent he must be able to make an act of self-knowledge without first having actualized a habit, which is a kind of "lay figure" of himself. God alone is a perfect agent, His act of self-knowledge is the Second Person of the Blessed Trinity, God's Word.

The Spoken Word

A natural tendency follows every form. The form of fire, is followed by a tendency to rise and a movement to "act out" the tendency. A sensible form appearing in the imagination is followed by a tendency to act out the form, to express it. The vocal expression of a sensible form in the imagination is a spoken word. When the sensible form is an image of a concept in the mind, the spoken word is the symbol of that concept, an embodied concept.

The Constructive Imagination

The power that makes it possible for man to imagine his own concepts, "to receive that which is in the intellect," Aquinas calls it in the *De Magistro*, is the constructive imagination. This, man alone has.

"Avicenna assigns between the estimative and the imaginative, a fifth power, which combines and divides imaginary forms: as when from the imaginary form of gold, and the imaginary form of a mountain, we compose the one form of a golden mountain, which we have never seen. But this operation is not found in animals other than man, in whom the imaginative power suffices thereto." (S. T. I, 78, 4.)

This imaginative power is under the control of the will.

"It is in our power to form phantasms adapted to the consideration we wish to make. . . . By the command of the intellect there is formed in the imagination a phantasm corresponding to such and such an intelligible species, and in this phantasm the intelligible species is reflected as an exemplar in the exemplate or image." (C. G. II, 73.)

If the object of thought is immaterial, as a concept is, the phantasm is constructed by comparison to things of which we have had some sense experience.

"Incorporeal things, of which there are no phantasms, are known to us by comparison with sensible bodies of which there are phantasms. Thus we understand truth by considering a thing of which we possess the truth. . . . And therefore, when we understand something about these things, we need to turn to phantasms of bodies, although there are no phantasms of the things themselves." (S. T. I, 84, 7, ad 3.)

Imagination and Learning

The tremendous importance of having an imagination well stocked with phantasms, or records of

sense experience, is easily seen. The advantageous-ness in learning of having an aptitude for combining images is equally evident. This is undoubtedly the "gift" that Aquinas refers to in the reply to the fourth objection in the Second Article of the *De Magistro*.

"Although the mode of acquisition of knowledge through discovery is more perfect on the part of the one receiving the knowledge inasmuch as he is thereby distinguished as being more gifted for learning, nevertheless on the part of what causes the knowledge the more perfect mode is through instruction, because the teacher who has the knowledge as a whole explicitly can lead to knowledge more quickly and easily than anyone can be led by himself, because of this fact that the pupil knows the principles of knowledge only in generality [vaguely]."

Symbols and Learning

The reason why a teacher "can lead to knowledge more quickly and easily than anyone can lead himself," is because the teacher, having completed an act of knowledge, presents his concept with a symbol, and "the words of the teacher have a closer relation to causing knowledge than have the mere perceivable things outside the mind." The words of the teacher represent his concepts, and concepts are the distilled wisdom of a reflective mind. The economy of the use of symbols, and the superiority of teaching by symbols when there is a sufficient basis of experience to interpret them is shown in the second objection of the First Article of the *De Magistro*.

“Even if some things seem to be taught by themselves (for example, if when somebody asks what it is to walk, someone walks) yet this is not sufficient to teach him unless some symbol is added, as Augustine says in his book *De Magistro* (iii) and he explains why this is so—for the reason that in the same thing there are many elements, so that it would not be known how far the object-lesson held in regard to any aspect of that object; whether in regard to the substance of the object or in regard to some accident in it.”

Conclusion of the Second Article

Man cannot teach himself, but he has excellent teachers, namely: the symbols; the orderly universe; the embodied concepts of God; Revelation, the spoken word of God; the books of all ages, man's interpretations of the symbols of God. This inheritance of symbols, man sees with his imagination, reads with his insight, and interprets with his intuition. Man cannot teach himself, but he is an *efficient* student.

The Third Article—Learning, Teaching, and
Character Formation

The last article emphasized the learner. The Third Article deals with the teacher, representing the human teacher as a colleague on the faculty with God and the angels. The Second Article emphasized the necessity for scholarship, the Third Article brings out the inspirational value of a teacher's personality. The previous article pictured man as dependent upon a teacher for his scientific knowledge. This one represents man as free and undetermined in his interpretation of facts. Man may be influenced by his reverence for authority and motivated by the ideals of his heroes, but individual thinking is his privilege and his duty. The analogy offered in the First Article is pertinent here. There the teacher is compared to a physician ministering to an ill, but self-active, nature. However much a patient may need the aid of a physician, however much he may realize that the physician will help him, he may yet refuse assistance, and he feels morally responsible for the results of his refusal. Even when a patient accepts the aid of a physician, his nature must do the principal work in healing. The question which entitles the Third Article may

then read, "Can even a teacher with a most inspiring personality and the most profound scholarship cause a pupil to learn if the pupil refuses to cooperate and to think?"

Aquinas and the Physician Analogy

The physician analogy of the nature of the relation of teacher and pupil is perhaps the best that can be found in educational literature. Plato's and Froebel's self-realization, illustrated by the plant metaphor, is mere passivity in comparison. A plant has only capacity to adapt. Its "character" is determined by nature, it cannot be improved either by the efforts of the plant or of the gardener. The plant is helpless against either a favorable or unfavorable environment. The physician analogy represents man not only as self-active but plastic, habit forming, responsible for his own character and for the plan of his character.

The Persistence of the Analogy

The physician analogy is not a mere fortuitous or extemporaneous illustration with Aquinas. That it embodies his firm conviction of the nature of the educative process is evident from the fact that wherever he mentions the relations of a teacher to a pupil he repeats the analogy. Attention may be called to Question 117 of Part I of the *Summa Theologica* and Chapter 75 of Book II of the *Contra Gentiles*. In the last mentioned reference he says;

“For his [Averroës] statement that knowledge in the disciple and in the master is numerically one, is partly true and partly false. It is numerically one as regards the thing known, but not as regards the intelligible species whereby it is known, nor again as regards the habit itself of knowledge. And yet it does not follow that the master causes knowledge in the disciple in the same way as fire generates fire: since tilings are not in the same way generated by nature as by art. For fire generates fire naturally, by reducing matter from potentiality to the act of its form, whereas the master causes knowledge in his disciple after the manner of art, since to this purpose is assigned the art of demonstration which Aristotle teaches in the *Posterior Analytics*, for a demonstration is a syllogism that makes us know.

“It must, however, be observed, in accordance with Aristotle’s teaching in *7 Metaph.*, that there are some arts in which the matter is not an active principle productive of the art’s effect; such is the art of building, since in timber and stone there is not an active force tending to the production of a house, but merely a passive aptitude. On the other hand there is an art the matter of which is an active principle tending to produce the effect of the art; such is the medical art, since in the sick body there is an active principle conducive to health. Consequently the effect of an art of the first kind is never produced by nature but is always the result of the art. But the effect of an art of the second kind is the result both of art, and of nature without art: for many are healed by the action X of nature without the art of medicine. In those things that can be done both by art and by nature, *art copies nature*, for if a person is taken ill through a cold cause, nature cures him by heating. Now the art of teaching is like to knowledge, namely, the intellect, and those things which are naturally understood, namely, first principles. Wherefore knowledge is z , acquired in two ways, both by discovery without teaching, li and by teaching. Consequently the teacher begins to teach in IA the same way as the discoverer begins to discover, namely, by 11 offering to the disciple’s consideration principles known by him, since *all learning results from preexisting knowledge*; and I by drawing conclusions from those principles; and again by proposing sensible examples, from which there result, in the disciple’s mind, the phantasms which are necessary that he

may understand. And since the outward action of the teacher would have no effect, without the inward principle of knowledge, which is in us from God, hence among theologians it is said that *man teaches by outward ministrations, but God by inward operation: even so the physician is said to minister to nature when he heals.* Accordingly knowledge is caused in the disciple by his master, not by way of natural action, but after the manner of art, as stated." (C. G. II, 75.)

Aquinas and the Logical Method

It should be kept in mind that Aquinas is concerned with higher education only. His emphasis upon the logical method of teaching is natural. The university students, in times anterior to ours, were expected to have all the phantasms and all the skill with the use of tools that they needed in *thinking*. The university was an opportunity for interpreting, determining, and disputing, not for memorizing and reciting. A great amount of memorizing was involved because of the scarcity of books, but it was not an end in itself. The "authorities" of the past were memorized only to provide a basis for individual interpretation.

Aquinas on Elementary-School Method

Aquinas dearly indicates his attitude toward sense training or physical habit formation by pladng his rules for memory training under his treatment of prudence, the virtues of the *practical* intellect. The first prindple of the practical intellect is the memory of what was best in the majority of cases. Sense training is, then, for the provision

of materials and the attaining-of skill in the use of tools.

Rules for Habit Formation

Aquinas's rules for memory training may be taken as his recommendation for elementary-school method. The first rule calls attention to what Bagley calls the "focalizing" of attention on the thing to be learned; the second, to the importance of orderly sequence in presentation of matter; the third, to the need for motivation; and the fourth, to drill.

"Just as aptitude for prudence is in our nature, while its perfection comes through practice or grace, so too, according to Tully, memory is perfected not by nature alone, but also by art and diligence.

"There are four things whereby a man perfects his memory. First, when a man wishes to remember a thing, he should take some unwonted illustration of it, since the unwonted makes us wonder more and so makes a greater and stronger impression on the mind; and this explains why we remember better what we saw when we were children. Now, the reason for the necessity of finding these illustrations or images, is that simple and spiritual impressions easily slip from the mind, unless they be tied, as it were, to some corporeal image, because human knowledge has a greater hold on sensible objects. For this reason, memory is assigned to the sensitive part of the soul. Secondly, whatever a man wishes to retain in his memory, he must carefully consider and set in order, so that he may pass easily from one memory to another. Hence the Philosopher says (*De Mem.* ii), 'Sometimes a place brings memories back to us; the reason being that we pass quickly from one to another.* Thirdly, we must be anxious and earnest about the things we wish to remember, because the more the thing is impressed on the mind, the less it is liable to slip out of it. Wherefore Tully says (*Ad Mener, de arte rhet.* iii) that 'anxiety preserves the figures of images entire.' Fourthly, we should

often reflect on the things we wish to remember. Hence the Philosopher says (*De Mem.* i) that 'reflection preserves memories,' because he remarks, (*ibid.*), 'custom is a second nature': wherefore when we reflect on a thing frequently, we quickly call it to mind through passing from one to another by a kind of natural order." (S. T. II-II, 4, 1, ad 2.)

The two important points in sense training are the two things which Burnham in his *Norman Mind* stresses, namely, concentrated attention and orderly association.

Secondary Method a Complete Act of Reflection

A description of secondary method is a description of a complete act of thought, or the formation of an intellectual habit, written large in classroom procedure. It will be remembered that, in the reflective process, the active intellect first abstracts an intelligible form from a sense experience. Because of the natural tendency which follows a form, the abstraction becomes a problem of a hypothesis. Then the intellect reflects and tries out various solutions in the imagination. Finally, through an intuition of relation and order, a conclusion is reached. By a further act of reflection upon the habit just formed, it is incorporated into the character, in view of a final end, a true, ideal self.

Aquinas's Application of his Theory of Method

The *De Magistro* is not a treatise on educational practice. It is purely theoretical, but mirroring, as it does, the classroom procedure which Aquinas actually used, the form of the treatise is in itself

a demonstration of the application of the theory of method which he proposed, "teaching in the same way as the discoverer begins to discover." De Wulf summarizes the results of investigations to ascertain the exact manner of conducting a *disputatio*, as the classroom procedure was called in the medieval universities.

"The *disputatio* was a cooperative form of teaching. It was a sort of living lesson, to which each one contributed according to his ability. . . . The *disputatio ordinaria* like the *disputatio de quodlibet*, consisted of two acts: First there was a passage at arms between one or many objectors and a person replying different from the one charged with the final defense. When the discussion had gone on sufficiently long, the master entered upon the scene, and in another part of the function (Pelster) or on another day (Madonnet) he took up again in a methodic way each question proposed, grouped the opinions and arguments, summed up the objections and replies, dealt with certain difficulties which the person replying had intentionally left in suspense, and finally presented a definitive solution or *determinatio*, introduced by the words "*respondeo dicendum*" or a similar formula."²³

An analysis of a question and of its divisions, the articles (i.e., of a medieval *disputatio*), shows a remarkable combination of what are today considered the best procedures: namely, the inductive, psychological, or developmental discussion lesson; the deductive, logical, or authoritative lesson; and the application or review lesson.

Every question opens with a statement of the questions which are to be discussed in the various articles. This gives a bird's-eye view of the work

²³De Wulf, *History of Medieval Philosophy*, Vol. I, p. 225.

to come. The opening of the first objection states the "resolved that." For example, in the First Article of the *De Magistro* the question is, "Whether one man can teach another and be called a teacher, or God alone?" and the opening of the first objection states, "It seems that God alone teaches and alone ought to be called a teacher." Part of the students, or their representative, then supports this position, and the other part offers the counter objections. This part of the lesson corresponds to the first part of the reflective process, the testing of hypotheses in an effort to arrive at a true solution of a problem which is "apprehended under the aspect of goodness or fittingness." This is the psychological method of approach. On the part of the pupils, the projecting of hypotheses causes the pupils to apperceive the question and the aspects which it has. It induces the pupils to summon all the relevant knowledge they have and to review the historical solutions which have been given to the problem in order to support their hypotheses. For example, in the First Article of the *De Magistro*, in the objections and counter objections, Augustine, the Scriptures, and Boethius are quoted, and the theories of Plato and of Aristotle are mentioned to support the contention that man is entirely self-active and has God alone for a teacher. On the part of the teacher, the preliminary discussion by the pupils provides a point of departure, because the students' objections reveal their experience,

their previous knowledge and their interests. Most important of all, the psychological method of approach, by arousing the pupils' desire to know an authoritative answer to the question, brings the pupils to welcome the teacher's logical presentation of the solution.

The teacher now, in the body of the article which opens with "I answer that," presents the solution by logically integrating the facts. Aquinas does this by making the entire solution hinge on his theory of the origin of forms. He clearly enunciates the principles and deduces the conclusions, giving, wherever necessary, illustrations and examples. For example, in the First Article, Aquinas states that knowledge exists in active, complete potentiality, and deduces the conclusion that the learning process is a self-active realization of forms from this potentiality, and that the teacher is the minister to the process. He illustrates by the physician analogy. _____

It is in this logical presentation of facts alone that a teacher can justly be said to teach according to Aquinas. The psychological approach only provides an occasion for the pupils to form concepts or to clear up the concepts which they have, and to desire an authoritative statement of the truth. The teacher's work is to integrate these concepts by showing their logical connection. To do this, the teacher must have the knowledge which he is to teach "perfectly and explicitly." He must see the question whole, the materials which he has to use,

and especially the attitude which he wishes the pupils finally to take. Hence the importance that the teacher have a philosophy of life, a knowledge of "the highest causes," so that he may judge rightly and "set all things" in the right order.

This teaching is not merely stimulating the pupils to recite or to review the contents of their memories. It is the soliciting of them to reflect, to judge, to integrate their knowledge. It is the causing of the pupils to actualize their potential knowledge, to form their minds.

The body of the article closes with a concise statement of the teacher's solution, and then the answers to the objections are entered upon. This is the summary, or review lesson. The principles established in the body of the article are used to solve the objections and thereby are repeated and impressed. The applications to the various objections widen the pupil's viewpoint and show the validity of the principles. Above all, they leave the students with a definite attitude toward the false positions, with a state of satisfaction with their orderly associated knowledge—with their possession of truth.

Teaching and Learning as Integrations

In every case, learning is an organization of experience. In discovery, the learner, by trial and error, methods on the sense level, or *by "composing and dividing"* on the intellectual level, gropes his way toward an intuition of order in the midst of

confused elements. In every case, teaching is an organization of elements for the purpose of making it possible for another to have an "intuition with certitude" of order. This is done by a teacher, on the sense level, by arranging the actual environment in such a way that the learner will form orderly associated phantasms, or records of sense experience. On the intellectual level, it is done by arranging symbols of concepts, the elements of the intellectual order, in such a way that the learner will, through "intuition with certitude," form true intellectual habits, the elements of a character. Learning is character building, and teaching is character architecturing.

CHAPTER VI

THE FOURTH ARTICLE—A LIBERAL EDUCATION AND CHARACTER ARCHITECTURE

The title of the Fourth Article is, “Whether teaching is a function of the active or of the contemplative life?” In order to understand this article we should review the second act of reflection mentioned in the discussion of the Second Article. After an intellectual habit has been formed, it can be made the object of thought, and the result of the process is self-knowledge. The formation of the habits is the subject matter of the active life. The second act of reflection is the contemplative life, “the consideration of truth (i.e., known truth or an intellectual habit) by which we dwell in reflection on ‘the knowable causes of things.’”

Contemplation—A Complete Act of Reflection

We saw how, through the constructive imagination, a contemplator can construct an image of one of his own concepts or intellectual habits. In the same way, he can construct an image of his entire character—his acquired self. This image is a kind of “lay figure” of himself. Then the active intellect abstracts from the image the intelligible form, what he *ought to be*—his ideal self. Again, the intellect reflects on the image and judges whether or not the

contemplator is justified in asserting that his character is as it ought to be, that is, conforms to his hypothetical ideal of himself.

The Result of Contemplation—A Principle of Action

The result of this act of self-knowledge, the contemplator's concept of himself, is a principle of action. We have seen how a concept is a synthesis, the result of an intuition of an order, two beings and their relation to one another. A principle of action is a concept of a moral order, the contemplator's character and his relation to his ideal or standard or end. We saw also how a concept could contain potentially other relations, and that, as these relations were developed, the concept itself became more distinctly known and the developed relations were integrated by the concept from which they were developed. Such is also the function of a principle in character development and integration.

The Importance of Habits

The tremendous importance of the subject matter of the active life, the intellectual habits, is evident. First of all, there can be no act of self-knowledge unless there is in existence a character to be known. In the second place, the existing organization of the habits will determine what ideal will be abstracted from them, just as the organization of accidental qualities, such as color and size in a concrete object, determine, to a large extent, what

notion of the nature of object will be abstracted from it. This is what Aristotle means when he insists that one must first be habituated to right action before he can conceive a right moral principle.

“As by the habit of natural understanding or of science, a man is made rightly disposed in regard to the universal principles of action; so, in order that he be rightly disposed with regard to the particular principles of action, viz., the ends, he needs to be perfected by certain habits, whereby it becomes connatural, as it were, to man to judge aright to the end. This is done by moral virtue: for the virtuous man judges aright of the end of virtue, because such as a man is, such does his end seem to him. (Ethic, iii 5.) (S. T. II-I, 58, 5.)

Ideals

Since man is responsible for his habits, he is also responsible for his ideals. The influence of great models of virtue upon the formation of ideals is exercised in the process of the formation of the lay figure of the self in the imagination. It will be remembered that a derived image is constructed out of previous images. If the contemplator has images of great heroes, when he constructs an image of himself, he will incorporate them to represent any virtues he thinks that he has. If the lay figure is too sublime and the mind cannot agree that its character corresponds to his ideal of himself, the contemplator cannot come to a decision and cannot form a principle of action.

Character Architecture

Such, then, is the process of character architecture, the evolution by contemplation of oneself of

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principles of action, which become plans for integrating the elements of character—intellectual habits. When the result of the building is well done, it is called a work of art, and the architect is a craftsman. Motivation for building well, comes from either a sense of a duty, of justice, or of love, due to either one's fellow men or to God. "A craftsman is inclined by justice, which rectifies the will, to do his work faithfully." (S. T. II-I, 57, 3.) "A virtue which perfects the will, as charity or justice, confers the right use of these speculative habits. And in this way, too, there can be merit in the acts of these habits, if they are done out of charity; thus Gregory says (*Moral*, vi) that the *contemplative life has greater merit than the active life.*" (S. T. II-I, 57, 1.)

Liberal Education is Good Character Formation

Work is the making of something, and art "confers an aptness for good work." The art that confers aptness for the good work of the intellect, the knowledge of truth or character formation, is a *liberal art*.

"Whatever habits are ordained to suchlike works of the speculative reason, are, by a kind of comparison, called arts, indeed, but *liberal* arts, in order to distinguish them from those arts that are ordained to works done by the body, which arts are, in a fashion, servile, inasmuch as the body is in servile subjection of the soul, and man, as regards his soul, is free [*liberl*]. On the other hand, those sciences which are not ordained to any suchlike work [the production of something], are called sciences simply, and not arts. Nor, if the liberal arts

be more excellent, does it follow that the notion of art is more applicable to them." (S. T. II-I, 57, 4, ad 3.)

Teaching the Best Example of a Liberal Education

Teaching (and contemplation is in a way teaching oneself), combining as it does a twofold act (as Aquinas says in the *De Magistro*), habit formation and character architecture, is the best example of a liberal education.

Aquinas's Conception of a Liberal Education

In the introductions to the first two volumes of the *Contra Gentiles*, Aquinas describes his conception of a liberally educated man—a wise man—a character architect who, in his personality, is a harmonious union of a scientist, a philosopher, an artist, and a saint.

The Scientific Self

First of all, a wise man will have a wide basis of experience, a comprehensive knowledge of facts, and an open-minded, scientific attitude toward reality.

"The consideration of creatures is likewise necessary not only for the building up of faith, but also for the destruction of error. For errors about creatures sometimes lead one astray from the truth of faith, insofar as they disagree with the true knowledge of God. This happens in several ways:

"First, because through ignorance of the nature of creatures, men are sometimes so far misled as to deem that which can but derive its being from something else, to be the first cause and God, for they think that nothing exists besides visible creatures. . . .

“Second, because they ascribe to certain creatures that which belongs to God alone. This also results from error about creatures for one does not ascribe to a thing that which is incompatible with its nature, unless one is ignorant of its nature; for instance, if we were to ascribe three feet to man....

“Third, because something is withdrawn from the Divine Power in its workings on creatures, through ignorance of the creature's nature. ---

“Fourth, man, who is led by faith to God as his last end, through ignoring the natures of things, and consequently the order of his place in the universe, thinks himself to be beneath certain creatures above whom he is placed. ---

“Accordingly it is clear that the opinion is false of those who asserted that it mattered not to the truth of faith what opinions one holds about creatures, so long as one has a right opinion about God.” (C. G. II, 4.)

The Philosopher Self

In the second place, the liberally educated man will be a philosopher. In reflecting upon the meaning of life, he will gain a clearer insight and a greater appreciation of beauty and harmony, and a religious spirit of reverence for God. In his social life he, from his experience with the “rivulets of goodness which we find in creatures,” conceives a longing for the source of all goodness. Lastly by his combination of the active and the contemplative life he will be “transformed into the image of God”; he will become Christlike.

“Through meditation on His works we are able somewhat to admire and consider the Divine Wisdom. For things made by art are indications of the art itself, since they are made in likeness to the art. Now God brought things into being by His Wisdom: for which reason it is said in the psalm (Ps: dii. 24) ‘Thou hast made all things in wisdom.’ Hence we are able to gather the wisdom of God from the consideration of

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His works, since by a kind of communication of His likeness it is spread abroad in the things He has made. . . .

“Second, this consideration leads us to admire the sublime power of God, and consequently begets in men's hearts a reverence for God. For we must needs conclude that the power of the maker transcends the things made. Wherefore it is said (Wis. xiii. 4): ‘If they (the philosophers, to wit) admired their power and their effects,’ namely of the heavens, stars, and elements of the world, ‘let them understand . . . that He That made them is mightier than they. . . .’

“Third, this consideration inflames the souls of men to the love of the Divine Goodness. For whatever goodness and perfection is generally apportioned among various creatures, is all united together in Him universally, as in the source of all goodness, as we proved in the First Book (Chaps, xxviii. xl). Wherefore if the goodness, beauty, and sweetness of creatures are so alluring to the minds of men, the fountain head of the goodness of God Himself, in comparison with the rivulets of goodness which we find in creatures, will draw the entranced minds of men wholly to itself. . . » .

“Fourth, this consideration bestows on a man a certain likeness to the Divine Perfection. For it was shown in the First Book (Chap, xlix) that God, by knowing Himself, beholds all other things in Himself. Since then the Christian faith teaches man chiefly about God, and makes him know creatures by the light of Divine Revelation, there results in man a certain likeness to the Divine Wisdom. Hence it is said (2 Cor. in. 18), ‘But we all beholding the glory of the Lord with open face, are transformed into the same image.’” (C. G. II, 2.)

Not only will the liberally educated man be interested in scholastic pursuits and in the esthetic aspect of social life, but he will also produce. He will be a teacher; a character architect, and he will do his work well.

“The general use which, in the Philosopher's opinion (2 *Top.* i, 5) should be followed in naming things, has resulted in those men being called *wise* who direct things themselves and govern them well. Wherefore among other things which men conceive of the wise man, the Philosopher reckons it *belongs to the wise*

man to direct things (*Metaph.* ii, 3.) Now the rule of all things directed to the end of government and order must needs be taken from their end; for then is a thing best disposed when it is fittingly directed to its end, since the end of everything is its good.... These arts which govern others are called *master-arts* (*architectonicae*), that is *principal arts*, for which reason their craftsmen, who are called *master craftsmen* (*architectores*) are awarded the name of wise men. Since, however, these same craftsmen, though being occupied with the ends of certain singular things, do not attain to the universal end of all things, they are called wise about this or that, in which sense it is said, (I Cor. iii. 10) 'As a wise architect, I have laid the foundation'; whereas the name of being wise simply is reserved to him alone whose consideration is about the end of the universe: wherefore, according to the Philosopher (I, *Metaph.* i, 12) it belongs to the wise man to consider the *highest causes*. --- Wherefore the twofold office of the wise man is fittingly declared from the mouth of Wisdom in the words quoted above²⁴, namely to meditate and publish truth --- and to refute the error contrary to truth." (C. G. I, 1.)

The Saint Self

Such a liberally educated man will be happy; in building his character he has made a work of art, a model of his Teacher, through which by grace, a gift of the Teacher, may be transformed into a living model—a child of the Teacher.

"Now of all human pursuits, that of wisdom is the most perfect, the most sublime, the most profitable, the most delightful. It is the most perfect, since in proportion as a man devotes himself to the pursuit of wisdom, so much does he already share in true happiness, wherefore the wise man says (*Eccles.* xiv. 22) 'Blessed is the man that shall continue in wisdom.' It is the most sublime because thereby especially does man approach to a likeness to God, Who 'made all things in wisdom' (*Ps.* dii. 24); wherefore since likeness is the cause of love, the

***For this was I born, and for this came I into the world; that I should give testimony to the truth.** (John xviiiL 37.)

pursuit of wisdom especially unites man to God by friendship: hence it is said (Wis. vii. 14) that wisdom 'is an infinite treasure to men; which they that use, become the friends of God.' It is the most profitable because by wisdom itself man is brought to the kingdom of immortality, for 'the desire of wisdom bringeth to the everlasting kingdom' (Wis. vi. 21). And is the most delightful because 'her conversation hath no bitterness, nor her company any tediousness, but joy and gladness' " (Wis. viii. 16). (C. G. I, 2.)

FINIS

APPENDIX

CITATIONS

In the Commentaries:

C. G. — St. Thomas Aquinas *Summa Contra Gentiles*

Qq. = One of the *Quaestiones Disputatae* by St. Thomas

S. T. = St. Thomas Aquinas, *Summa Theologica*

In the *De Magistro*, the titles of the works referred to are:

Aristotle, the Philosopher:

Analytica Posteriora

De Memoria et Reminiscentia

Ethica Nichomachea

Physics

Metaphysics

Politica

Topica

Augustine:

Contra Manichaeos

De Bono Perseverantiae

De Libero Arbitrio

De Trinitate

Quaestionum

De Genesi* ad litteram

Avicenna:

De Naturalibus

Metaphysics

Boethius:

De Consolatione Philosophiae

Damascene:

De Fide Orthodoxa

Dionysius:

De Caelesti et Ecclesiastica Hierarchia

Gregory:

Super Ezechielem