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The
EDUCATIONAL PHILOSOPHY
of ANTONIO ROSMINI-SERBATI

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DEDICATION.

The original inspiration for the following dissertation must be attributed to William P. Burris, formerly professor of the Principles and History of Education at University of Cincinnati, with whom the writer first came in contact as a student in those fields. His position was that the lack of attention that has been Rosmini's fate, is indicative of a general condition in education, which, in spite of marvellous progress in its mechanics, suffers at present from a loss of direction in its grand purposes, which can only be rediscovered by a retracing of the past for a satisfactory point at which reorientation may begin, and to which the sage of Rovereto may possibly hold the key. It is not claimed that this paper succeeds in this quest, but the sympathetic assistance, particularly as rendered by Dr. Burris and by Dr. Louis A. Peckstein, of the same institution, confirms the prevailing opinion that any light shed on the problems of the conjunction of modern scientific methods with educational final purposes can only assist in making the science of education still more competent in achieving the social unity and moral alertness of mind that are necessary if democratic institutions are to survive in a growing and progressive society, by directing the mechanics of the science to the perfection that the art of education has the right to demand.

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Part 1. INTRODUCTION.

CHAPTER I.

THE SITUATION.

In all the enthusiastic bustle that occupied the leaders of the educational movements of the nineteenth and early twentieth centuries, when education definitely took on the aspects of an applied science, not every contribution succeeded in receiving the appreciation that was its due. To borrow a clause from sociology, educators were just becoming class-conscious. The problems of better presentation of matter, of more consistent use of the possible helps offered by contiguous fields of knowledge, of the preservation of the teacher's class-room function and dignity amid the growing centralization of administration, had all forced the educator to stand back for a broader perspective. A teacher on the higher levels of the educational ladder had generally been regarded as a repository of minutiae in a narrow field, in love with his subject, and content to pour it out indiscriminately with the hope of a growing appreciation and sympathy on the part of his pupils. If doomed to the elementary level, his work was considered as purely routine, relieved by the amount of enthusiasm he could put into an

ungrateful, and often unappreciated, task. The problems mentioned above, and the general increase of intellectual curiosity that marked the growth of the democratic spirit were, as a consequence, somewhat disturbing. The first view of the broadened perspective produced a surprize by its very vastness.

But the common reaction was encouraging. It consisted in a serious attempt to analyze the situation, and to conform to what seemed demanded. Hence the bustle. This was soon followed by results that were recognized as good. Hence the enthusiasm for more of the same, and a gradually increasing improvement in the general tone of responsiveness. This in turn increased the spirit of conformity to the demands of the age, a condition which still endures.

But the process of evaluation was not always able to keep pace with that of discovery, which has gone on at a frantic pace. It frequently happened that what was closest to hand sometimes achieved a prominence that was later found to be out of proportion to its real value. In America, for instance, local lights were exaggerated by their nearness; English authors, being easier to read, were accepted more readily, while the favor enjoyed by the German universities made that nation an easy second in the race for educational repute, with France farther in the background. We need only instance

Horace Mann, Barnard, Herbert Spencer, Locke, Froebel, Pestalozzi, Herbart and Rousseau in the order named, as the gradually less potent gods in the educational pantheon of the passing generations.

Italian and Swedish were less known languages, and the vogue passed them by. When it did reach them, the earlier jejune enthusiasm had calmed down as the adolescence of scientific education passed its zenith, and Montessori and the sloyd were comparatively lesser ripples on the surface. By the time the vogue brought them to notice, the maturer deliberation of the educational leaders was engaged with the possibilities of the new and growing science of experimental psychology, and the forefront of discovery was not in the field of principles or educational philosophy any longer.

Hence it happened that the contributions of one thinker not favored by the accidents of the new movement in education have generally remained unknown. He wrote in Italian and Latin, his religious affiliations made him suspicious of the genuineness of much of the dogmatically intoned matter that German scholarship and philosophy were offering the world. His perspicacity of vision made him see that education, even though it borrow from science, remains an art with canons and ideals that are eternal. But his busy life and early death prevented him from stating explicitly

all that he had to give to education. Hence, his name today hardly finds a place in the history of education. But it is just possible that his educational writings may contain the germ, at least, of something that has value for education today, and the search for these values is the purpose of this paper and its antecedent studies. This man was Antonio Rosmini-Serbatl.

Scion of a noble family of Rovereto, he was born March 24 1797, son of Pier Modesto and Joanna. Of a very sensitive nature, but thoughtful, serene and of quick perception, able to make friends easily, by sixteen the leading spirit in a literary "Accademia", and engaged in serious literary correspondence with provincial men of letters, he was ordained priest at Chioggia in 1820.

It was during his studies that he felt his first professional interests awaking in education through the fact that his sister had now become a teaching nun, and he wrote for her inspiration and guidance a work, "Dell' Educazione Cristiana". He also at this time completed plans for a new religious order, the "Institute of Charity", with a general and flexible regime, by which the membership divides its attention between social work and education. So successful was it that a similar organization for women was begun in 1838. All during this period Rosmini

was still able to devote some time to his favorite avocation, that system of philosophy which is now known by his name, and which he actually committed to print in a steady stream of volumes, beginning with the year 1938, when the first, the "Psicologia", appeared, the first of eleven in which he explains his entire system (Bibliografia delle Opere di A. Rosmini, Carlo Caviglione, Torino, 1925).

CHAPTER II.

ARE ROSMINI'S EDUCATIONAL CONTRIBUTIONS
COMPLETELY AND CORRECTLY KNOWN ?

A problem presents itself in the fact that, though such a writer should have made his mark in the philosophical field, and should have assured himself a place in its hall of fame, he should not have left a mark of equal prominence in the field of education. It is hard to imagine a philosopher of his importance being able to write on "the ultimate grounds of all things", without having left something of value to the then rising science of education.

But the fact is that he has not been given the attention held out by such a possibility. That Rosmini has been overlooked by the educational world is not difficult of proof. The smaller compendia of the history of education either pass him by altogether, as Cubberley, or restrict him to a footnote, as Graves. The dictionaries and encyclopedias unite in stressing his accomplishments as a philosopher, and devote a closing paragraph to his activity as an educator. We shall let Munroe serve as an example of the latter type. He says:

"During the last years of his life, Rosmini exerted great influence on educational thought and practise, especially in Italy He consciously used his philosophy as a basis for education. Psychology and anthropology present the manner of action of the human faculties; ideology and ethics state the objects which are to stimulate the mind in order to educate it aright, while ontology and theology exhibit the ends which human development is to realize in rest and satisfaction as the goal of all life. Education must find 'The invariable law of progress (of the human mind) and the natural scale of thought by which it ascends. The law must hold good for all intellects alike, because it is intrinsic to the human mind The practise of education, or method, must therefore be guided by the development of knowledge through the successive periods of life, which are fundamentally characterized by the degree of cognition attained' In this effort he worked with Herbart and Froebel, but independently, in laying the basis of modern education, and anticipates, in form, at least, modern genetic psychology." (Encyc. of Edu.)

Graves, in his "Great Educators of Three Centuries", is hardly more specific. On p. 193 we find the following footnote:

"The Ruling Principle of Method by Rosmini-Serbati (1797-1855) represents a third possible development of Pestalozzi's theories. It emphasizes Pestalozzianism on the emotional side, as do Herbart and Froebel on the cognitional and volitional, respectively natural development to moral perfection through obedience to law, human and divine, natural and revealed. His system unites the ordered evolution of Froebel and the apperception of Herbart. Although it grew out of his subtle system of metaphysics, and is not fully emancipated from the scholastic effort to reduce all intellectual processes to categories, it professes to adopt the observational attitude of modern science and the psychological method."

Even the Catholic Encyclopedia, which would be supposed to give him more attention than would be the case with less sympathetic references, confines most of its article to his philosophy, and merely adds by way of commentary a paragraph as follows:

"His basic idea is that education must follow the natural order of development. The mind of the child must be led from the general to the particular. The natural and necessary order of human thought is expressed in the law: A thought is that which becomes the matter, or provides the matter of another thought The ruling principle of method is: Present to the mind of the child (and this applies to man in general), first the objects which belong to the first order of cognitions, then those which belong to the second, and so on, taking care never to lead the child to a cognition of the second order without having ascertained that his mind has grasped those of the first order relative to it Both in his general theory of adapting education to the needs of the growing mind and in the importance he attached to instinct, feeling, and play, Rosmini anticipated much that is now regarded as fundamental in education . . ." (Vol. XIII, p. 197).

Just how far these statements may represent correctly the essentials of Rosmini's contributions to education we hope to see in the course of these studies. What they do show, however, is that Rosmini has not been given the

attention in detailed study that the encomiums seem to indicate as his due, at least among English and American authors. It was not until Thomas Davidson translated him in 1882 that he was generally known among us, and it was not until 1887 that his best known work on education, "The Ruling Principle of Method", was translated into English by Mrs. William Gray (Heath, Boston, Heath's Pedagogical Library, No. 8). The very extensive bibliography that Davidson gives in his synthesis of Rosmini's philosophical system (pp. lxxii- lxxxviii) contains only two English references, exclusive of his own, and neither of these is to the educational writings. It is difficult to trace the authority for the statements of either Graves or Munroe, as cited above, since no sources are given except the "ruling Principle", and this is admittedly a fragment of a much more detailed and extensive work, and can hardly be a criterion of a man's complete idea regarding the many and fundamental theories he would advance.

It seems a fair statement to make, then, that his work has not been subjected to that careful and detailed examination that would tend to bring out the peculiar and original contributions he had to offer the educational field, and that, consequently, much may lie hidden which may have value for the present day.

Such is the purpose of this paper, and in the course of it, we hope to peruse all that he has left to posterity, in order to discover, if possible, what, first of all, may be the warrant for the statements we have seen above, second, what may have been omitted that has value for us today, and third, what corrections may be necessary for a rounded out and complete picture of his mind as regards education, both as an art and a science. We shall, as much as possible, quote his original testimony, translated literally from his own words, giving each source at the time.

PART II.

ROSMINI AS A PHILOSOPHER.

CHAPTER III.

CONNECTION BETWEEN ROSMINI'S PHILOSOPHY AND EDUCATION.

It seems well for our purpose, first to take up a review of Rosmini's philosophy. In first place, it is stated that he based his educational principles "consciously" on his philosophy, so that an understanding of the former would be impossible without the latter. In second place, the quotations at the beginning of this dissertation point out his first interest as in philosophy, and his acknowledged leadership as an original contributor to its problems. In his own mind, it would seem Rosmini was only incidentally a writer on educational theory. His ambition contemplated a complete reformation of his favorite science, and a restoration of it to its original place as the foundation and basis of all other sciences, both speculative and practical. In the completion of this task, it was but natural that education should receive its meed of attention, and it is in these passing references that we ought to find the key to his contributions to education as a practical science.

True, he himself was so impressed with the im-

portance of his discoveries that he founded a religious order whose object was their realization, and he produced, as we shall see, incidental pieces of educational import, some even before completing his philosophy. But, because he was cut off by death from systematizing these contributions, and from elaborating them into a complete ex professo educational philosophy, we find it necessary to piece together just what he did contribute.

CHAPTER IV.

ORIGIN OF IDEAS AND KNOWLEDGE.

Rosmini began his evaluation of reality with an interesting topographical view, in which all branches of human knowledge are listed in the order they proffer to man a summary of the race's experiences. In outline this scheme would present much the following appearance (next page).

There are two ways in which the list is to be read, the first, from the left downward in columns, which gives us the logical content of what makes up education as far as its material is concerned, and the second, upward, and beginning just above the last main division, continuing in concentric circles, which is the psychological arrangement in which the content is in practise presented to the average mind in the course of life and formal education. The first order of its reading was of interest to Rosmini as a philosopher, the second has its value in the work of the educator.

Under the first aspect we are concerned only with the understanding and mastery of man's accumulated experience and knowledge, hence, the first order presupposes the languages, the sciences, the appeals of the arts, which make up the particulars of earlier life. But philosophy's real work is concerned with their treatment in the mass. As man organized his knowledge,

<u>Philosophical</u>	<u>Inferential</u>	<u>Experimental</u>	<u>Applied</u>
<u>Ideal</u>			
Epistemology	Ideology Logic		
<u>Real</u>			
<u>Ontological</u>			
Gen'l Ontol.			
Theodicy	Nat.Theol. (Theological Sciences)	Religion	
Psychology	Rational Ps. Anthropology	"Anthropol." (Experim. Ps.)	Medicine
<u>Dynamilogical</u>			
Spec. Ontol.			
	Cosmology	Sociology History Natl. Sci.	
	Mathematics		Polite lit. Linguistics
<u>Deontological</u>			
Gen. Deont.			
Callology	Esthetics	Fine Arts Useful arts	Crafts
<u>Agathological</u>			
Eudaemonol.	Teletics		Religion
	Gen. Ethics	Spec. Ethics	Asceticism
Spec. Eudaem.	Ascetics		
Jurisprudence	Law	Politics	
	Pedagogy		
	Economics		

immediate principles were recognized as a field of their own and became a means of classification of his experiences. Rosmini also subjugates these experiences and the means of recording them to a minor position, and, as a philosopher, goes on to the treatment of those masses, fitting them to the more comprehensive task of ordering man's life by a higher unity than is possible by mere accumulation and mastery of the data.

The real task of philosophy, then, is to give a "unity to education" by its being the science of the "ultimate grounds or reasons of all human knowledge", and of all truth, including their proper reciprocal relations. Now, truth is only the recognition of being, and since being is found in the three forms of ideal, real and moral, there is a three-fold division of truth throughout the entire extent of knowledge, and consequently, of philosophy. So philosophy is forbidden by its definition to limit itself to a treatment of man in as far as he is intellectual, but must include also his physical and moral-social aspects, or, put into philosophical language, philosophy, to be complete, must be ideological, dynamiological and agathological.

At best, then, the outline can be only a map or plan of the entire field of knowledge, but its main portions and the relations to each other of all the parts must be understood before real progress, or genuine edu-

education can be assured. As workers, of course, we must each pick out our favorite section, no matter where it may fit into the outline as part of the whole scheme. But education essentially is the learning of the total as a total, and a proper grasp of the underlying principles that bind it into a unit, reality, so that on the principles there may be worked out a consistent theory of values and the resultant principles of action that the dynamic in man will produce as their consequences.

Philosophy, then, as such, occupies itself with the higher divisions of our outline, and becomes less itself as it reaches out into the more specific and tangible accumulations of knowledge, which are in turn its support and the source on which it draws for the material of which it treats. Its proper sphere is the ideal and the general field of being in its broadest concept, the real doing little more than presenting those aspects of being, which by their determinateness, as it were, conceal being in its more general and ideal aspects.

So, the farther down we get in the outline, the closer we come to the heart of the educational problem, in as much as it concerns content and attitudes. The inference, then, would be that the sounder general philosopher a person is, the sounder would be his educational philosophy. How true this may be, we shall see from a perusal of what Rosmini has to offer in both fields.

We shall begin with a general outline of his system. Naturally, the first section will be the ideological, but he departs from tradition by prefacing what he called ideology, an original attempt to divide formal logic from constructive or genetic logic. His theory is given in full in the "New Essay on the Origin of Ideas". In short, we look first at the creation of knowledge, then, in logic at the conditions under which it assures us of its reliability, after which we can formulate a correct definition. Rosmini's chief reason for beginning thus was his dissatisfaction with Kant's system, then prevailing in Europe, and unconsciously it was in the foreground when he constructed his own. Kant had used the word "intuition" as synonymous with sense perception, and thus confused the objective and purely mental act of cognition with subjective sensation. Rosmini states at the outset that this sensism is erroneous (Psych. I, 53), and reduces the fundamental act of the intelligence to the purely spiritual act of viewing, or having before itself, the essence of the thing that produces the sense perception (Log. 320). Therefore, the necessity of separating thought which is objective, and sensation which is subjective, is paramount.

In Rosmini's case, this beginning is logical, as well as conforming to tradition. The three possible points of beginning, logic, metaphysics and psychology, really advance to their objective on an equal front, since they

are, from their mutually varying points of view, interdependent, and merely consider the same phenomena from varying aspects. Logic is the sum total of objectifying the results of the mind in operation, and deducing the general laws that evaluate these products as to reliability. Psychology is effect objectifies the mind in operation, and treats it, to all intents and purposes, as a division of the natural sciences, meanwhile allowing the laws governing the thought-products to function without attention. Both these sciences presuppose a theory of cognition in relation to the certainty of the knowledge gathered, which is formally taken up in what Rosmini calls Metaphysics, and what most other philosophers call epistemology, whose final product is a judgment concerning the relationship between the objective and the subjective. It was because of this relationship, and because of the indirect and inferential nature of proving the certainty of our cognitions, and because of the sense-testimony regarding the objectification of the mental processes in psychology and in logic, that Rosmini felt obliged to make his arrangements of order, and to base his first grand division of his system (Psic. I, 37).

The second grand division is the collection of the sciences of the ideal, namely, that of perception, or metaphysics in the original sense, the things next to, or beyond physics, the collection of all the facts

in nature, including man, and their reduction to their final principles.

The third grand division of the philosophical sciences is that of reasoning, or moral. This means primarily the content of the reasoning process, being, whose nature, therefore, is fundamental to an understanding of Rosmini's system, the more so as it is quite original. In consequence of his consecutive concept of the modes of being (reality), the heart of his system, we find several changes in the order of his sub-divisions. In first place, he removes from his "Metaphysics" (our epistemology) the entire treatise on Ontology, which he objectifies and makes the first section of our metaphysics. In the narrower and traditional sense of the term his objectified ontology (being) is a subdivision of his general ontology, and the first section of the third grand division of his system, and treats of being in general. Next to it he places the science of the Ideal-Real Being, God, or Natural Theology. Next in order he groups the so-called deontological sciences, namely, things as they ought to be, as opposed to the manner they are conceived in ontology. These may, therefore, be called the theory of special kinds of being, or the special speculative sciences. Of these the first is Callology, the science of beauty and its realization in fact; the second is teletics, or the science of the archetype of man in all his endowments, powers and faculties, and that in their ideal and com-

plete perfection. An ontological completion of this ideal aspect of man is to be found specifically in ethics, or the science of man's actions. The actual application of the rules of ethics to man's own being gives us next the science of ascetics, its application to the perfection of one's fellow-man gives pedagogics, or the science of education. The extension of these rules of ethics to applications in the family relation gives us Economics, in that of civil society it gives us Politics, and in that of the theocratic unity of all mankind, it gives us Cosmopolitics.

Such, then, is the general frame-work of all philosophy, and within it, according to its author, ought to be found the ultimate grounds of all knowledge, or the light "which enables the spirit to know that what any given judgment affirms in the order of possibility, is" (Log. 188). Within the limits of each separate experimental or applied science, as in history, mathematics, natural philosophy, etc., there are also similar grounds, but only relatively ultimate. But the grounds represented by philosophy are clearly separate from these others, "as the guide and mother of them all" (Purposes of the Author, 9). These subsidiary sciences are philosophy only to the extent that they are able to furnish to philosophy the summations, or ultimate grounds, which in turn then become the immediate material of philosophy.

On this frame-work, then, we shall try to reconstruct Rosmini's entire philosophical system. By internal observation we note that our activities begin with external sensation (New Ess. I, 31), and that from it there arises a general notion of being. Summing up his experiences, man distinguishes the subjectivity of his sense perceptions and the objectivity of his intellectual acts. The primal intellectual act is that of mental seeing, during which the seer is conscious of nothing but its term, the object seen, without any relation to the seer.

By analysis of the objects, they are found to have a common element. Since the intellect in the act of intuition is not really acting, but, as it were, assuming an attitude of receptivity toward the object, there can not be a judgment or an affirmation regarding the object. The common element of all objects so seen, therefore, reduces itself to a concept of intelligibility, whose essential constituent is its opposition to nothingness in some degree of greater or smaller complexity and determinateness. But since there is no judgment, no analysis, the complexity or determinateness does not enter into the concept, which remains the simple and elementary notion of being. It conveys no knowledge, it entails no attempt at determining itself, it offers no hint as to its reality, it only separates itself from nothingness. The cognition of a particular being can not be supposed as prior to it, nor is it the necessary prerequisite condition from which it is drawn,

for it has no relation to reality. In fact, the abstractive process of the intellect can not produce it, for, before this can begin, the idea of being is already found to be present to the mind; it is, in short, innate. It is "the luminous point from which all other cognitions derive their clearness, certainty and truth" (New Ess. II, 5), the pure essence of objectivity.

Hence it can not be defined, though a clear idea of it is present to the mind from the beginning, and by it other beings (real entities) are defined and understood.

"When I say to myself that there exists any particular real being or entity, I should not understand my own meaning if I did not know what entity was. The notion of being, or entity, therefore, must in general be in my mind before I can express any judgment by which I affirm the existence of the particular real entity" (Ideol. I, 15).

It can, however, be described by a process of elimination, and its qualities defined; the generic term "being", as it falls within man's experience, is predicated in varying senses, such as a subject, or a specific type of existence in a subject, or as an "entity", an object of thought irrespective of actual existence. This last is the particular real being, and is produced in the mind by the act of affirming, which, as we

said before, presupposes ideal being.

Being, therefore, presents itself to the mind as

"two modes of knowing, clearly and distinctly different, and so related that intuition must precede affirmation. Human cognitions, therefore, divide into two great classes, those arising from affirmation, and those arising from intuition" (ib. 16).

Each of these two modes has its own attributes, conditions and laws, which differ but do not contradict each other. The fundamental idea of being is indeterminate and general, it can not present to the intellect any knowledge of a particular, but only its essence, and when it presents itself to the mind as passively intelligible, it has assumed the first of its modes, namely, the ideal, in which it merely illuminates the mind, but does not stimulate it to a mental act. In this ideal mode, being is simple and objective, its attributes are universality, necessity, immutability and eternity. By them it transcends all contingent and finite beings, and as the foundation and beginning-point of all knowledge it gives us the basis of our apprehension of the absolute, the finite and the true. By it we explain the variable, the finite and the infinite, but it must not be confused with God, Who has these attributes in an ideal-real mode which transcends the ideal mode, supports ideal being and

gives it its source and reality.

Real being, on the other hand, modifies the human subject in sensation, acting on or being acted on in feeling, so that it has none of the transcendental qualities of ideal being, being subjective, particular and contingent, temporal and varied indefinitely in aspect. Our knowledge of reality is reducible to a judgment of what is felt by us by the realities which are particular activities of ideal being. Recognition is due to the fact that being in its ideal mode energizes the subject to collate his feeling of real being with his intuition of ideal being, so that ideal being becomes the form of the human intelligence, and is prior to intuition, perception and reason. Being anterior to its subject, it exists in an absolute mode, and, as such, is innate.

On this basis of ideology, logic is then built up. In last analysis, the truth of a thing is its being. Being, as the object of knowledge, is the principle of cognition, and certainty, the scope and purpose of logic, is, in its turn, the attainment of a firm persuasion of the exact nature of its being, or the truth. Being also the form of the intellect, it is the crowning attribute of being to furnish in the primitive intuition of being, the criterion of truth and certainty, as being in its ideal mode is the incorporated representation of the things represented in real being, and, as such,

is anterior even to the principle of contradiction (Log. 53- 63).

Error is not possible, then, until we begin to find relations between ideas, since the next act of the mind, perception, is the affirmation of the mode or limitation of being as determined by the feelings. As these are particular and possibly incorrect, identifications, the collation is contingent. Error becomes possible in reflection, when we try to determine the exact mode of the perceived being, for sensation is coexistent and coextensive with perception, and when the mental processes become complex, the possibility of substituting the always imperfect internal image for the external perception, must be recognized. But the affirmation of what we feel in exact terms, that is, judgments respecting the modes of perceived being can be free from error (Log. 67), for

"it is evident that my knowledge of the fact is equal to the form of reason; when the first is justified, the second must be also, and, therefore, certain" (New Ess. II, 1169),

in which is our criterion of truth.

Reasoning, therefore, is a process that may be summed up as follows: Knowing intuitively the essence of being, the mind can affirm real being from feeling, and by comparing and referring this affirmed being back to the

essence of being, can learn by reflection its conditions and limits and relations. By continuing such reflections new cognitions can always be drawn from the essence of being.

The rest of Rosmini's logic requires little attention. But the next item, perception, which we saw is the immediate result of the initial mental activity, is so closely connected with his logic, that we must now see the dependence of the science of perception par excellence, Psychology, on his logical foundation.

CHAPTER V.

PSYCHOLOGY, THE MEANS OF IDEAS
AND KNOWLEDGE.

Psychology, the third division of Rosmini's philosophy of being, investigates how the means of our knowledge are applied to the various real beings which present themselves to us.

As soon as intuition has occurred, reason begins its processes of perception and reflection, and in them the intellect is active, the former supplying the matter of further thought, and the latter designating all the species of thought that the intellect performs after it is moved to activity.

The approach to psychology, then, is by way of analysis of the perceptive process in its subject, namely, an examination of the ego in its primal condition. The essence of the soul is feeling (Psic. I, 45 sqq). As the ideal sciences presented the ideal rudiment and the beginning of knowledge, so psychology presents the real rudiment and beginning of actual knowledge, the feeling of reality. This is to the soul as a sentient principle, what intuition is to it as an intellectual principle (ib. I, 6). The soul first feels itself, hence it is in its essence feeling, for only feeling can be felt by itself. Feeling, then, is an original innate, which can not be

defined (New Ess. 717 sqq), for the soul is felt by and through itself, and is, therefore, the principle of feeling. But its perceptions of the ego are not to be confused with sensation, and the use of the words "feeling" and "sensitive", as applying to corporeal sensation, is not made till later in Rosmini's explanation of his system, and receives only secondary consideration there, when the sensational phenomena come into the discussion. For the present, then, we must remember that

"the soul has by its nature both the intuition of being and a feeling whose term is extended" (ib. II, 640),

that is, it

"furnishes by its nature, so to say, the substantial unity of sensation, by positing the ego which underlies every affirmation regarding the individual bodily sensation it predicates of itself" (ib.).

This subject, therefore, is not an act, but an abiding principle, which remains and abides even when deprived of all special and accidental feelings.

The extended term of feeling stands in the same relation to the sentient principle, as being stands to the intellective principle. Like being, too, is its two-

fold nature, first an underlying sense-being, simple, immovable, illimitable and indivisible, namely, space. Within pure space there function the second, a movable, limited, divisible and composite force, which diffuses itself within a part of pure space and is known as body. As ideas are individuations and determinations of ideal being, so bodies are individuated in pure space by their passive reception in extension on the part of the sentient principle. The variations of body correspond to variations of sensation in (our human and corporeal) body, and are, in turn, reflected in the sense perceptions that characterize the activity of the soul as a sensitive principle (ib. 127). From pure space the corporeal material term obtains the unity and coherence which are necessary for existence and permanence, just as real thought can not be conceived except as a determination of ideal being.

The nature of the soul, therefore, appears from what has been said. It is the conscious, spiritual and immaterial principle of man, residing in his body. It expresses its nature to itself by the idea of the ego, which represents an intellectual perception of itself as reality, and as in a state of activity in which it recognizes itself as both perceiving and the perceived substance of that activity. The substance of the soul is its ego-sentience, its persisting identity in both its intellectual and sentient capacities being due to the form of its activity, in which the term accidentally varies. So the souls of the intellectual order are endowed with the qualities of simplicity and immortality, excluding multi-

plicity, extension and materiality. As a sensitive principle it is affected by determinate corporeal being.

Corporeal being is of two kinds, either our own bodies, or foreign and external ones, but between them there is no essential difference of action, though a difference of terminology is necessary to an accurate description. We feel both through the senses, but external bodies modify the bodily term which is connected with the soul, and, therefore, they produce an extra-subjective perception. We can also feel our bodies in this manner, but, since they are the seat of the corporeal feelings (sensations), subjective feelings are more direct and immediate, and are apt to be more fundamental, since they partake of the identical and the substantial more than do the varying and accidental feelings of external bodies.

But, in either case, the net result of a feeling is the setting off of a judgment in the soul, which, to fall back on our parallel with ideal being, is an intellectual perception, primordial and immanent, by which real being is applied to the affecting body as ideal being is applied to the intellectual perception and underlies it in its birth. Similarly, in connection with its first term, unmeasured space, the sensitive principle exercises in this operation no activity, and causes no modification of space, and so is generally called "fundamental feeling",

The perception of body by this fundamental feeling is the nexus that makes man a unit functionally and essentially, consisting of an intellectual principle in a body*in-space.

"When we perceive our own bodies through fundamental feeling, which is given us by our being alive, we perceive them as one with ourselves. In this way our bodies become, through the individual union with our spirits, part of the sentient subject" (New Ess. II, 702).

The body is the

"felt-understood term of the human principle", and "life is the incessant production of all those extra-subjective phenomena which precede, accompany and follow corporeal and material subjective feeling" (ib.).

What these phenomena are, we must now take up. For the explanation of the sensitive principle to be complete, not only its function, but the consciousness of the fact of functioning, which is the characteristic feature of the sentient principle must be emphasized as such. Being a principle, the soul is by nature prone to activity and a source of power. So there is a converse aspect, and, on the lowest level, in as far as sensitive, the soul springs

into activity as soon as any determination of sensation acquires a relation with it, and produces a transient act or modification of it. This activity is a receptivity which interprets the term as the corporeal felt-extended, followed by an internal motion of the next higher level of sensitivity, namely, the arousal of the entire machinery of corporeal sensitivity, affecting the special senses into an intensity of action, each producing "sensions". As these special senses respond, the simultaneous sensations fuse and produce a new series of sensations, which arouse the internal or non-figured sensations of the sensitive imagination, which, in their order, send on a third series to the brain. At the same time the intrinsic unity of the soul causes it to send across to the intellectual part of itself a particular arousing impulse, which sets off a similar intellectual order of "intellections", which, however, on account of their complexity will be treated later.

This receptivity and reactional activity of the sensitive principle then arouses a still higher order of activity, called the instincts. These are the sum of the activity of the sensitive principle, and may be blind or joined to a complex activity of the intellectual side of the principle. In the former case, we list them as given here, and include with them a fourth class, the purely animal cooperation in the production of the lower, their voluntary reproduction in the absence of an external

stimulus, and their association into new combinations and direction to objects of conscious or sub-conscious cognition. (In modern psychology, these will be recognized as the reflex actions of the neural machinery).

They, in turn, excite the next higher order of sensitive activity, the passions (in modern terms, the instincts, properly so called). These are of two kinds, the concupiscible and the irascible. The first include the philo-genitive tendencies, aversion, appropriateness and gregariousness (including the herding propensity, parental instinct, domestication, etc.). In the second group we find anger, fear, expectancy, etc., Rosmini's list not having been completed. Allied to the passions is a third group, "modifications of the sensiferous", namely, the self-preservative instinct, which includes bodily movement for increased ease, the tendency to form habits, the morbid results of poor adjustment to environment (sickness), and the self-curing powers of nature.

When instinct is united to a cognition, we have the addition of a wider choice of modes and deliberate objects. The special senses are directed to the intenser pleasure of their new uses, and produce "mixed feelings", intellectual and moral. Through their close union with the cognitive they become rational, and open up the entire vista of the distinctly human achievements that make up life. Thus, the concupiscible passions are rationalized so that love (not necessarily sexual) arises

as a human trait, aversion becomes hate, appropriativeness becomes desire, joy or sadness; and surprise, laughter, wonder and the entire range of the sympathetic passions follow on satisfaction or frustration. From the irascible group we have disdain, dread, audacity, hope, despair, etc. Appropriativeness also gives rise a special series of non-blind instincts, whose lowest form is quiet, or absence of pain, followed in ascending order by personal perfection, personal perfection, while with the addition of gregariousness it leads to a cultivation of the ideal entities, truth, justice, goodness, gratitude, and their embodiment in friendship, domestic (filial, conjugal) society, and the relations of tribe (patriotism), church (religion) and the human race (philanthropy). The tendency to produce habits, when directed by a cognitive element, produces the individual virtues, or vices, as justice, prudence, temperance and fortitude, and the rational habit of memory, ordered movements (science and arts), and dealings with our fellow-men (shrewdness).

The next higher step in the activities of the sensitive principle depends on the fact that all the above activities send a continuous stream of sensations to the perceptive principle and are identified there. Most of the activity remains on the lower levels (Psic. I, 14), but a disturbance of any kind may cause a halt in the stream, and cause a diversion of both the intellectual

and sensitive parts of the principle to a particular series of the activities, with an attendant awareness of the detailed elements of it. This is consciousness, and the crowning characteristic of the sensitive principle, for it is the distinctive human feature of life.

"We must distinguish between the existence of a feeling in us, and the attention we pay it. We may well experience a sensation or a feeling without reflecting on it or being conscious of it. He who has not been able to distinguish feeling from the consciousness of feeling, has never come to understand the essential difference between sensation and idea. Sensation can never become aware of itself, it is the understanding that becomes aware of sensation; this consciousness is the intellectual perception of it" (Psic. II, 712).

We must, therefore, return to the other aspect of the actuating principle, and observe how the intellectual element functions while the sensitive has been busy.

The first act of the intellectual element of the principle is the simple perception, by which the

determination of ideal being is recognized as such. At this point the intellect also springs into activity, reacting either to the instincts or passions, or to a cognition of its own. The activity that follows from it is directed to forming a cognition, to modifying a previous one, to preserving it, or to recalling it to serve as the subject of a later activity. In any case, the object so called to the attention is subjected to three processes, first, recognition as a determination of being, second, affirmation, an analysis of the sensible qualities which lead to its identification, and third, persuasion, or the completion of the identification and a resulting satisfaction received from the union of the subject with its object. This is, of course, figurative language, and must not be closely scrutinized, since these terms occur also in a technical sense later.

The next step is the reflex cognition of the object, a further determination of its identity. The complexity of this step varies with the stage of development at which the mind has arrived, and with the newness of the object. But it invariably begins with an analysis of the sensible qualities presented by the special senses, and this act is the first of the activities embraced in the Rosminian "order of cognitions", to the explanation of which most of his "Antropologia" is devoted. The number of orders, theoretically, is infinite, and in fact is

achieved by the infinite intellect of God. In practise man seldom attains to more than a very low stage of perfection in this regard.

Every return to the same thought which produces a new and higher mental product is a higher order of thought. But not every return of the thought, as in memory, or in the addition of new sensible qualities, makes a higher order. The average orders attained by man are grouped into three types, first, the direct cognitions we have just seen, second, the various "reflex cognitions", and third, the "faculty of principles". Conscious perception does not arise till in the second group, where we add to or modify the content of previous apperceptive masses. The step of "persuasion" we saw above is the beginning of the reflex group, for it does not stop at cataloguing the sensible qualities, which group around the first attempt at universalization and are the basis of the "idea" of the logicians. As this idea may be extremely sketchy and imperfect, the greatest part of the ensuing activity is their perfection and completion, depending on the nature of the gaps in the idea. Hence, this type of reflection is called partial, dealing with the parts of the whole idea; its variations can not be definitely numbered on account of the possibilities in the nature of the gaps and the mental habits of the subject.

But a division by purpose is possible, giving

four general types. The first is analytical reflection, which decomposes an idea into its notes to discover new relations of an internal kind; the second, synthetic, rebuilds them into those new relations; the third, credential, adds such notes as are not obvious but inferred from knowledge external to the idea under consideration; the fourth, creative, is the building out of mental structures, such as hypotheses, disjunctive or conjunctive suppositions and conditional aspects, for better analysis; its commoner form is comparison for samenesses and differences. These types of reflection, of course, vary infinitely in degree and it is only when the higher degrees have become habitual, that we can be said to have arrived at full consciousness. In the ordinary course of events, this partial reflection alone exists at the onset of puberty, though the growth of the powers is not a matter of age, and the "orders" at which any given ideas may have arrived at any time in life will vary from the lowest to the highest, since the series must be gone through from the bottom up with any new idea, no matter how late in life it first appears as a perception.

Reflection does not come to maturity till it has taken the form of "total reflection," and deals with mental principles, so that such ideas as analysis, category, hypothesis, mental entities such as naught, surds, principles, etc., are recognized and labelled for use in thinking, and stand out as clear, abstract notions.

They then serve as norms of judgment, and give rise to the functioning of "theoretic judgment". becoming principles by which a recognition of being in all its ramifications is possible. By transfer to the perfections residing in real beings, it becomes "practical reason", permitting of the contemplation of beauty, law and moral, and the drawing up of the canons ruling these fields. We are able to reflect on "things in themselves".

Finally, the parallel between the sensitive and the intellectual is completed with habits and passions, and assures the intimate coordination of their joint operations. The appreciations and tendencies to higher and higher expressions of being indicate a power of selectivity by which man moves himself to objects, adheres to them and takes satisfaction in them, so that the soul's intrinsic activity, taken as a whole, involves the sensitive and affective with the intellectual, and includes the dynamic nexus between his perceptions and instincts, that results in movement decreed by the net of feelings and cognitions under which the fulness of being is more or less fully represented as worthy of adherence, when viewed and evaluated reciprocally by the two elements of the mind. Hence, the supreme moral law: recognize being.

CHAPTER VI.

REALITY, THE OBJECT OF IDEAS
AND KNOWLEDGE.

In a direct development of his system, the second of the perceptive sciences for Rosmini would have been Cosmology, which has as its object the ordered universe. But he regarded it as only a sub-division of ontology and deontology, the two sciences of reasoning.

The sciences of reasoning, then, his theories on being, are Rosmini's magnum opus in philosophy. They are divided into two groups, the ontological, treating of being as it is, and the deontological, treating of being as it ought to be.

Ontology treats specifically of the three essential forms of being known to man, the ideal, the real and the moral. The first is the necessary object of the intellect, manifested to us in intuition, the second is the manifestation of being in perception, so that neither operation is complete in itself, just as neither form of being's action on the mind can be conceived as other than complementary. The relations of the ideal and the real make the foundations of truth, because the latter are recognized as the imperfect and contingent realizations of the ideal being whose recognition is innate in us. As realizations set up in the intellect an "affectionate recognition", or adherence to the object, in addition to the cognitional rec-

ognition, and is distributed to the known real beings in proportion to their measure of participation in complete real being whose fulness is ideal-universal being.

Now, ideal being, besides the object of the intellect, is also the light by which the soul intuites and perceives, so that the affectionate recognition and adherence are a more or less complete identification of the soul with its object, and the source of his intellect, his senses and will in equal measure; being, then, is a perfecting power which unites the subject to its necessary object-bliss of being, and renders him adequate to the habitual repose that this union brings. From this fact arises the term "moral", the values that are attributed to the manifestations of real being, according to the measure of complete being they reveal, or in other words, of good.

The one necessary demand of our being, then, is for ever more complete and perfect communications of being, in its three attributes of manifest, manifesting and manifested, and the possession of this "dianoetic" knowledge of all being is the source of intellectual light, life and love, or completely human life. Its presence in us is shown by the fact that being in its manifestations reaches us in forms that reach equally into the intellect, the sense and the will.

Consequently, the three orders, ideal, real and moral, in which all limited being comes within the

range of human ken, constitute the primordial forms of being and the categories of the logician. These are the principles of plurality, so that the three forms of being indicate the three elements in every judgment. The judgment sets the real subject and the ideal predicate against a background of being in order to measure both, first absolutely, or in their moral relation to being in general, and second in their relations to each other. From this there follows the ultimate criterion of truth, namely, the law of the synthesis of being. Most simply expressed this is that the intrinsic order of being postulates being as unable to exist in any one of the three forms without existing also in the other two. Our knowledge from relations is a reflection of what is at the same time an ontological relation existing independent of us. Cosmology is only the search for the properties of nature and for the origin of being

Now after our survey of reality in its contingent forms, we find that the possibilities of the essence of being have not been exhausted, and its full realization must be in a form transcending all our experiences, and also exceeding ideal being purely, which is limited to its own mode, as well as real being is. So complete realization must be in a Real Being Who has none of the limitations of either mode, or, Whose existence is Absolute. This knowledge, however, is

negative only.

These three sciences of Ontology, Cosmology and Natural Theology, then, constitute the first division of the perceptual sciences. They regard being from the point of view of actual existence in its orders, of being.

Deontology, then, regards the perfections of being in themselves. Perfection also has three degrees or modes, intellectual, real and moral, the ideal not being capable of increases or decreases of perfection on account of its simplicity. Perfection is essentially a study of relations, so that the need for perfection is either objective or subjective, in the former case arising from the nature of being in general, in the latter from our conception of the individual real involved.

Moral perfection, on the other hand, is subjective-objective, in as far as the will is perfected by distributing its affections over the range of being according to the degree of being found in it, and its correspondence with truth, or its intrinsic claim for such recognition. This is the source of moral obligation, which is essentially the acceptance of the judgment of the mind as to the degree of being found in the real entity under discussion.

Special deontology considers the degree of realiz-

ability of being in all things. It, too, has a three-fold division, according as the realization is complete, the means by which it is attainable, or the mastery of the means to that attainment, are referable to the threefold division of perfection given above. A large number of sub-sciences result from this division, of which only Callology, the science of ideal perfection or beauty, and Esthetics, the science of sensible beauty, deserve attention in the inanimate order of being.

Human deontology, in consequence of man's existence in all three orders of being, is deserving of special treatment, in as far as moral perfection is peculiar to him, the integration and union of the ideal and real orders, bound up with the consequences of the moral obligation that flows from this three-fold relationship. Man in his highest perfection is treated in teletics, whence he draws the picture of his exemplar and ideal, actually realized only in the person of Christ. The means of attaining this perfection are given us in Ethics, which treats of virtue or moral goodness (*Compendio di Etica*, I, 1) in three full and complete treatises, first, the nature of virtue, second, the modes of virtue, and third, eudaemonology, or the excellencies and consequences of virtue. The first takes up in detail the

the nature of law and free will, the source of specific obligations in reason, in authority and under what circumstances. This is reduced to the supreme moral law: recognize being, a parallel to the purely intellectual act, and an adherence to the good seen in the entity, and an appreciation of that good with an intensity proportioned to the dignity seen in it. The second part of Ethics is the evaluation of the individual acts and habits that flow from this adherence, and make up life in the concrete, while the third describes the intrinsic excellence of good, the consequences both in nature, in society and in eternity of adherence or its absence.

On Ethics depends the Law and all political science. The moral order is for the protection of man in the enjoyment of all good within his power, and which can be reduced to practical purposes to freedom and property. The social environment as affecting these two rights, both from the point of receiving assistance from the social body and its members, and from that of the presence of reciprocal obligations, brings out the place of authority and the contacts of the different societies in which man is a member.

The means of attaining his perfection are open to man in all three orders. In the ideal order are the fine arts and their supporting sciences. In the moral order there is the science of ascetics in as far as he is an individual, and education in as far as he is a

social being. This science is either domestic, professional, ecclesiastic or civil, according as it prepares man for his place in any one of the forms of society in which he has his being. The societies, themselves, are governed by sciences which are also mentors in the order named.

The philosopher, then, to be true to his name, continues his investigations in all these different fields, and pursues them till he has found complete satisfaction and repose in the ultimate grounds of each. Each of them harks back to the preceding series, so that, as far as possible in the limits imposed on him by time and his nature, man attains to the possession of complete truth.

CHAPTER VII.

EVALUATION OF THE SYSTEM.

On examining this outline one must naturally be in admiration at its undoubted magnificence. It was possibly the last attempt in the history of philosophy to touch on the "grounds of all knowledge", for specialization is becoming usual in this field of research also. The inner consistency of this system is bound to attract favorable consideration as an analysis of "all knowledge" that does not allow itself to be drawn off balance by grandeur of imagery. Whether Rosmini was able to bring his own mind to a state of philosophical repose, and how far he succeeds in persuading us to a similar state, is, of course, impossible to answer categorically.

First of all, he did not live to complete his system. In second place, some of the things we have seen as his views brought them out for discussion, will not be permitted to remain in his system without an argument as to their valid place in a philosophy. For instance, the various divisions of social philosophy, the practical sciences, jurisprudence, have a right to consideration as philosophical only as constituting the foundations of final knowledge, the handmaids who give the individual data on which philosophy builds up its

speculations. Where the line is to be drawn has long been a pure tradition, and that it has not been a static one, is shown by Rosmini's own case. Witness the usurpation of the term "psychology" for what is now a recognized branch of the natural sciences, and which, in spite of his originality of contribution, is labelled philosophy. There is, of course, a possible paucity of terminology that forced Rosmini to use the same word in both a general and a restricted sense. It may be unfair to blame him for the poverty of necessary terms.

Much more to the point is his constant effort to preserve a symmetrical trilogy of ideas throughout, which, possibly an unconscious harking back to Hegel, affords basis for an objection to at least some of the dicta as not philosophy. It possibly forces him to place rather practical and unphilosophical sections as preliminaries and corollaries to very speculative and illuminating ones. His doctrine of means, in Ethics, is thus foreordained to treatment according to his opening of the discussion (Etic. I. 1-9), but it soon becomes a treatise on political economy and on education. The subjective criterion we have introduced, then, can not give us an answer. That he was able to produce as logical and developed a system is one of the wonders of his character. The balance of evidence swings to an affirmative answer to our first question, and it seems

as definite an answer as we can hope for.

But whether the system satisfies the neutral investigator of philosophical questions, is not as easy to answer. Rosmini appears on the scene, historically speaking, just as philosophy takes on a national character, and in a nation apt to be ignored as not offering decisive contributions ordinarily. Then, too, the completeness of his system offers increased points of attack, and at the same time sets him apart from the protagonists of the leading questions of his day. The detailed building out of the extraneous consequences of his views, as his annexation of law and justice to ethics and politics, detracted from his doctrines as a possible vogue.

Still, it must be taken for granted that he would be a creature of his times. He was bound to be influenced by the state of philosophy during his adolescence. Points in his system hark back to his contemporaries, as Kant and Hegel, and his departures from tradition are attempts to refute, modify or integrate their teachings. On the other hand, not quite as much is original as first appears on the surging up of all the matter he treats. His extensiveness is a tribute to his borrowings, particularly from Scholasticism and the times to which he looked back so wistfully. He wrote with an acute consciousness of dissatisfaction with the new doctrines that were causing ills in the body politic during his impression-

able years, and with the hope of making a substantial contribution to his science of philosophy and to the amelioration of society. In philosophy his underlying purpose became that of reconciliation and integration, even though it involved a radical's return to first principles.

With this background we can evaluate his offerings. Except for the borrowed certitudes on which all men agree, in law, in the natural sciences, in ethics, for which another foundation can be provided without disturbing the superstructure, Rosmini's system stands or falls with his peculiar concept of being. This is an innate idea, and the beginning of all thought, and necessary condition for the cognition of particular real beings (New Ess. I, 355 et al.)

"When I say to myself that there exists a particular being or entity, I should not understand my own meaning if I did not know what entity was. Therefore, the notion of being or entity in general must be in my mind before I can pronounce any of the judgments whereby I affirm the existence of any particular real entity"

As a theory of ideal existence this thought provokes an immediate reference to Plato, whom we saw Rosmini ad-

mired from the first. It was probably suggested by the condition existing in philosophy, a quarrel between sensism and idealism, in which the three centuries preceding had been merely adding new chapters. Sensism was found wanting in supplying a basis for what the intellectual and moral world refused to deny in practise. Idealism had become a nebulous theory that overlooked the importance of matter, and had in Leibniz come to an inglorious end, Kant administering the coup de grace. With Kant, Rosmini realized that a compromise was necessary to arrive at an approximation to the truth. It was true that the object of all judgment is supplied by the senses, but the first predicate would seem to be a fundamental sense of objectivity, so that a connection between the two is of importance, as the data of experience can not be hemmed in by the subjectivity of sense testimony alone.

Both the "New Essay" and the "Ideology" are taken up with the point of the difficulty as lying in the confusion of the principle of knowledge and that of existence. Hence, the suggestion that the ideal world has objectivity in the intellectual order only. Such a view would provide for the recognition of a universal whose ideality would serve the purpose of cognizing the individual real without confounding the two orders of the felt and the understood. In every thought there are two undeniable elements, first, the quality thought,

corresponding to the reality which the senses bring out in the individual being, and second, the universality of the thing, which is obviously not in the sense perception, but just as certainly in the thinking mind. Universality, then, could well be a mode of existence which the quality would assume in the mind. Sense can thus remain subjective, while thought invested it with an objectivity that was not denied to the mind. All that remained was to find a common denominator, the basis of the universalization. This was undeterminate ideal being into which real being merged in the intellectual order, and from which it again emerged when sense testimony stirred the "fundamental feeling" to activity.

The hypothesis is alluring. It saves the sensitive and intellective character of the human subject, and separates the external world from its conception and representation. But we feel on less sure ground in considering this ideal being as a sine qua non for the formation of ideas, and the whole cloth from which they are cut as needed. The separation of the notion of being from all other notes of an object seems to confuse indeterminateness and determinability, and so invests the ideal with an objectivity that does not agree with the testimony of conscience.

For the logician, too, its innateness calls in question the reality of the common element in our ideas, and by that much favors the conceptualism that makes a

universal something merely logical and subjective, or, as Locke puts it, a mere convenience. Kant postulated several a priori forms in the mind as the basis for a universalization conformable to reality, and there is occasion here for comment on Rosmini's youthful impatience with him, in view of his agreement in principle with him as to the means of a solution of the problem of the essential existence of substance. For, Rosmini on this point has correctly been said by Gioberti to be a mere simplification of this phase of Kant, who admitted several a priori forms, which were reduced by Galuppi to two, and by Rosmini to the single idea of being. By origin, at least, this reduces Rosmini to taking away the common element of all ideas and to substituting a gratuitous ideal objectivity, so that categories become a mere convention, which is not conceded by conscience.

On the other hand, as objectivity increases, indeterminateness becomes still more vague, and that this is recognized by Rosmini is shown by a letter in which he says that

"not only is this ideal being the form of the intellect, with the disappearance of which man loses his most distinctly human attribute, but it is, in fact, 'a picture of God in the mind', in so far as it is a necessary part of Him, and is also the distinctive character of the Logos, and consequently, as such, it is

the exemplar of the world, by which all things are made (Jno. I, 3)" (Letter to Orsi, Epist. II).

Now, this "form" is a definite hylomorphism, and fixedly means potentiality in the ontological order. If, then, the statement is correct, either this exemplar has objective existence in the mind of God, and we are by the fact of our humanity ontologically of the essence of the divine, and participate in His being by virtue of our rational character, all of which is scarcely a satisfactory description of our unconscious and rudimentary union with pure ideality. Neither horn of this dilemma would present a comfortable resting place for Rosmini, and still, both consequences flow from his description of ideal being.

Another difficulty recurs from Rosmini's equivocal predication of being of all conceivable entities together with God, even in the ideal order, where his attribution of unity, simplicity, eternity and necessity make the matter worse (Rinnov. 42), because there extension implies the same measure as in the ontological order. Now, even Rosmini's indeterminate being is said to be divine and a divine appurtenance (ib.), all of which is pantheistic. On the other hand, there is the ontological unity of all rationality, with the alternative of potentiality and imperfection in the Ideal-Real, a position Rosmini not only denied, but detested. To make

the matter worse, in ontology he places the bridge from the ideal to the real in existence as the principle of individuation, so that only confusion can result from an attempted distinction between the objectivity maintained by ideal existence prior to its determination through the predication of real beings. In short, determinate being, ontologically as well as epistemologically is the nobler and more substantial entity, even though he speaks of "limitation" in defining its essence, and even when he compares it with the Ideal-Real, Who is the seat of existence of these ideas in their ideal state. So the contained is greater than the container, and a relative estimate of purely ideal existence and corporeal existence is impossible. The final decision seems to be that the entire system shows an unconscious reflection of Fichte and Hegel in spite of protests against them, and it has a subtle tint of sensism, for which his reconciling propensities may be responsible.

In fine, the realization of finite being by the addition of a limitation to infinite reality, to which God is united in any case, has an ontologistic ring, and Rosmini's substitution of an objective ideality that defies retention in the ideal, for Kantian and Hegelian subjectivity, does not materially affect his position. By admitting that the originally ideal initial being is the essence of all real being, he has already given away his whole case, prescinding entirely from the fact

that he had already conceded that initial being is nothing else than the divine essence in as far as cognized. True, he says later (Log. 77) that pantheism consists in a unity of substance, but this is only a quotation from Spinoza, which the German school had rejected in favor of a unity of being, which Rosmini accepted, and found it the cause of his fundamental difficulty in ontology.

The similarity of the psychology to the ontology as an escape from the antithesis of sensism and idealism must be apparent. The psychology seems another attempt to unite them practically as the former did speculatively. The vital place psychology has in his educational philosophy requires a more careful analysis of this part of his system.

Philosophically, the difficulty of keeping the intellect and sense separate is complicated by setting up an "intellectual feeling" in psychology to keep sensation in its place. We merely find three forces to reconcile to a relation with objective ideality where before there had been but two. Intellectual feeling and corporeal feeling

"are the two original and universal forces from which proceed all the special active faculties and all operations of the animal" (Antrop. 369).

Hence, we have a dual, almost parallel activity in the intellective and sensitive, which ultimately unites just before the "limitation" that causes real being to emerge from ideal being and metamorphose into the idea. But it leaves the real problem unsolved, the more so since "feeling" is spiritual and not corporeal. The "felt-extended" is not the physical world affecting the inanimate, but a mere "sensiferous", a purely neural and biological appendix to the principle whose two-fold function forms the distinguishing human element. Its function is that of a receiver to bring the external impressions to the principle on its sentient side, so that the passions and instincts are an endowment of the soul only in a manner of speaking. It is not till the principle turns active on its intellectual side that man becomes the reproduction of the complete universe and the producer of the microcosm that is his world. The picture, then, offends by its disregard of the law of parcimony, All that is necessary is the mutual influence of the intellective and sentient principle, resulting in an entity with appropriation of activities that are both regular and normal.

The difficulty is that the physiological basis of thought is idealized to an extent that is contradicted by consciousness itself. This is emphasized by the proposition that cognition is to be denied to the collection of faculties which represent to us the sensible qualities

of material things, for their very names, "sensations" and sense cognitions", show the arbitrary disagreement of Rosmini with general consent and universal language. The lower animals not only feel but recognize, and only by rushing the innate concept of ideal being into the breach can Rosmini save the situation.

The further consequence of his position is seen in making ideal being not only the object of the intellective principle but its constitutive element in the ontological sense also. Man is bound to act according to his rationality, and if this is only a radiation of ideal being deliberate non-conformity is impossible, so that man is subjectively unable to do wrong. Rosmini says that moral evil is a wilful closing of the attention to certain aspects of the "full-specific real being" in practical recognition (Psic. 1426 sqq), but this hardly saves his premises, as the reason for the act of closing the attention must also come from the same source, so that ideal being becomes a rather sorry spectacle in the sinning individual whose rationality is realized in immorality.

In substance, then, a double principle does not seem necessary for us to feel first and cognize next, and then respond to the phenomena coming to us through the senses. The reactive nature of the less intellectual phases of psychological behavior can be explained in a satisfactory manner without it, just as the objectivity of the moral relation can be saved by the intellective.

The average student will be content with the general assumptions that can be drawn from the psychology and ontology, namely, the analysis of morality into the conformity of action with right reason, the rational basis of ideal beauty or callology and esthetics, as well as of ascetics. The detailed descriptions of the psychological phenomena have a special value aside from their ontological implications in their exactness, and will be of special help in our paper later, as all we need do is to extract the constructive value of his writings from the duality of principles which he presupposes, to be in possession of well-ordered and accurate matter for the empirical and experimental psychological phenomena that have a place in an educational theory.

So we can admit the inadequacy of Rosmini's philosophical substructure, and still examine his psychology in particular, for its practical content, which is quite original, and, for education, quite valuable. It is generally recognized that he was only to a slight extent familiar with what was transpiring in this science across the Alps in his far day, and that his method was the now disparaged one of "arm-chair introspection". But it is surprizing how accurately he succeeded in anticipating what was discovered and published by Weber, Fechner and Wundt. It is on the evidence of this similarity of treatment that admirers base his claim for recognition as at

least a cofounder of experimental and empirical psychology. This claim can be allowed, even if he regarded his contributions as only preliminary to answering the real questions of the field, in as far as his extensive treatment of the phenomena of mental life and its conditions was definitely a new contribution to the matter now covered by the science of that name, as given to us both in the "Antropologia" and the "Psicologia".

What militates against his being accorded the honor is the fact that he refused to regard the material of this new science as self-sufficient, and consistently set aside as arbitrary the distinction of Wolff between empirical psychology and rational, in so far as experience and observation are scientifically impossible without reasoning, and are not invested with a greater certitude than this last, "a sensistic error" (Psic. 33). His own work is, as is to be expected, devoted first to defining the nature and qualities of the soul, and only incidentally does he bring in the "sensual soul" and the "fundamental feeling" as the bonds between the neural machinery and the intellectual process. It is only when, in Part two, almost the centre of the work, he brings up for discussion the activities of the soul, that the sensitive, as the impelling stimulus of activity from without, is introduced as the sensiferous, responding to the external felt, and opens the way for a really marvellous description of both the neural and conscious activities that

result in thought. On the other hand, however, the "Antropologia" is taken up largely with the reflex unconscious and conscious activities of the nervous system, and is in harmony with the suggestion to include his name with the founders of the science as now understood.

The consequence is, then, that we have in the main an earnest, detailed, and, for the most part, correct analysis of what actually takes place in both the cognitive and sensitive processes of man, with remarkably little absolute dependence on his metaphysics, as far as practical values go. We can mention as instances the stimulus-response mechanism, including the nervous readiness that brings the response to the higher "faculties" (Psic. 939 sqq.), the mechanics of habit formation (ib. 919 sqq), vividness of impression as a determining factor in retention (1507 sqq.), the duration and intensity of stimuli in attention (2052 sqq.), as well as the details of the building up of the apperceptive mass (passim), individuality of its conformation and its use later as a unit in "reflection by principles". These last apparently are not only an anticipation of Herbart of even of the "gestaltists" of today (1452 sqq).

The distinction between reflexes, habits and instincts is possibly not as clear as could be wished, and has been modified since, but his work in the field ought not be passed over, his table of instincts, with

their ramifications on the human level (ib. 1098) appearing to be still authoritative for later attempts in this direction. Of a piece with this is his exploration of the genesis of thought, and the laws that govern "practical reasoning", matters we shall see more of below.

In conclusion, then, Rosmini's success in the field of psychology is clear, and is due to the abandonment of the traditional. Where he is still the "objective idealist", he fails to satisfy us in proportion to the earnestness with which his favorite featured hypothesis of being is brought into the discussion. Metaphysically, sense and intellect insisted on running together and fusing, in spite of his efforts to separate them, because his concept of ideal being does not lend itself to the task that he marked out for it. But the practical psychologist in him, and afterward the educator receives a light from this condition that is of great help in suggesting a solution of the question of mental activity in action, as we shall see in the next section.

In fine, then, for an understanding of Rosmini's educational position, the following summary of his philosophical doctrines must be carried over into the next section of our study to trace the degree of "conscious dependence" which his educational theories are claimed to bear to his philosophy. If what we read at the beginning is true, we shall find not only the "what" but also

the "how" of education hidden in these theories of reality we have just perused. Judged by his marshalling of the total of reality in the sciences summarized by him, the tie-up between his work as a philosopher and as an educational theorist ought to lie in the fact that, though the complete picture of education required by the teacher is the logical course of educational activity, an evaluated approach and mastery of all its pertinent data is the only correct answer to his question of means for artistic performance.

1. All reality is a determination of being. This determination is one of degree, and one or more possible kinds, namely, ideal, real or moral.

2. Objective reality is the real order, its ideal totality, both quantitatively and qualitatively considered, is the ideal order, while the mutual relationships between these two orders are the basis of describing either in terms of morality, including intellectual and sensitive proportions as the measure of realizability.

3. The higher degrees of determination of being are characterized by a representative power over being, in addition to an ontological participation in it.

4. Essentially this representative power shows a two-fold activity, sensation and recognition (perception), which is inherent in the being as a constituent and activating principle. The activity is paralleled on the corporeal level by the reactive activity of the neural ap-

paratus, which in turn is actuated by the principle to the coordinated performance of fixed or spontaneous movements of greater or less complexity, and embracing all the physical and psychological activities of life.

5. In man this sensitive-intellective principle achieves its specific perfection in the direct intuition of ideal being; sensation and perception are integrated by an appreciative interpretation of, and affectionate adherence to the ideal and moral determinations of being, in addition to the real, enjoyed in common with the less perfect animals; and the principle itself is capable of reflexive perception and activity in addition to the objective connection it has with real being.

6. The human representative power is, therefore, equally ideological (cognitional), dynamiological (deliberately reactive) and agathological (contemplative and adherent), in addition to its participation in, and enjoyment of the psychological activities held in common with the lower animal and vegetative orders of real being.

7. Each of these three activities is an aspect of ontological being, ideal, real or moral, respectively, and each activity functions according to fitting and objective laws described respectively in the sciences of logic, callology and ethics, respectively. The course of the activity is ordinarily from perception to appreciation and moral union with the relative object, and finally and perfectly integrated by a reaction of

the entire sensitive-intellective principle with its neural and physical dependencies, in the achievement of a destiny dictated in time by its mental, physical and social nature, and permanently by the immortality of the principle and its innate tendency to an intuitional, appreciative and moral union with the Ideal-Real Being, God.

8. Man achieves his destiny by a complete realization of his three-fold powers, which, therefore, assign values to all contacts he has with being, according as they affect him intellectually, socially or physically in the production of the "complete man". The process of realization, as an individual activity, is ascetics (in the broad sense), as a social activity, education.

9. Education, therefore, is first individual in purpose as well as in contacts with reality; but it is indirectly social, in as far as the realization of the perfectibility aimed at includes family, social, religious and political-civic contacts, both as means and as cognitional material.

10. Education is primarily concerned with the grouping of all necessary cognitions, appreciations, adherences and reactions of the principle, a) in time so as to assure gradually increasing facility in the manipulation of ever larger and more complete groups, b) according to principles deduced from the genetic development of the mind and neural machinery.

PART III.

ROSMINI AS AN EDUCATOR.

CHAPTER VIII.

ROSMINI'S CONTACTS AND WRITINGS IN EDUCATION.

Rosmini's contacts with education were casual rather than deliberate, and his contributions are the more remarkable as a consequence, being by-products of the philosophy in which he left an abiding influence as a Neo-Idealist. Still, historically his interest in education can be definitely divided into periods. The first period is the sudden appearance of juvenile enthusiasm that culminates in 1823 in his first formal work, "Sull' Educazione Cristiana" (On Christian Education). Except for this work, what he wrote during this time was of a fugitive nature, and the result of a local and temporary interest, such as his sister's new vocation as a teaching nun.

His first professedly educational work was a brief essay entitled: *Dei Testi a Formarsi per la Gioventù del Ginnasio Roveretano secondo il Metodo già Posto in Uso* (Of the Production of Texts to be Used in the Gymnasium at Rovereto, According to the Method now in Use). It was not published till after his death, and apparently was written in 1813, and is hence to be counted among his juvenilia, for at the time he was

still a student of the rhetoric class there. It need not detain us here, because its main ideas occur again in his "Unità dell' Educazione". It owes its existence to his having at the time read Locke's "Thoughts on Education". Rosmini, himself, later described his effort as "weak and primitive", and his biographer agrees that, aside from its indication of his earnest academic interest in the general question of education (p. 77), it does not stress the importance of the practical and contingent any less than the scientific dignity and the permanent and universal values of the field (p. 164).

Similar in nature, though never published in their original form, are copious notes for an ambitious "History of Humanity", which dates back to 1817, and which had for its purpose, among other things, a systematic research of the laws of education among all nations. The same procedure was invoked in the preparation of another work: "Political Writings", with which he was occupied till 1827, and for which he had already completed the Introduction in full and formal manuscript by 1821. The body of this work finally became the plan of his political teachings, as published in his "Etica" and "Deontologia", a part of which we will remember as taken up with assigning education its place in the outline of all knowledge and science. The Introduction was used up in his "Essay on Happiness" and his "Utility of Cultivating Reason", which appeared in 1819, and apply to our subject only obliquely.

His next work of educational import appeared in 1821, "Del Modo di Catechizzare gli Idiotti" (Method of Teaching Catechism to the Unlettered), a translation of St. Augustine's "De Catechizandis Rudibus". To the translation Rosmini added nothing of his own, it being apparently a labor of love, inscribed to a newly-made friend in Venice, with whom he had come into contact in a series of official conferences held with the object of improving the diocesan methods of instruction of both children and adults in the truths of their common faith. Rosmini's dedicatory letter speaks in high terms of the keenness of mind of the original author, especially on the theories of instruction he advanced.

At this time he was also engaged for a while in gathering together, with the help of a similarly inspired friend, the material for another educational work, which he hoped would "reform" that science (Vita, p. 79). All that came of it was the germ idea of his later essay on "The Unity of Education". Another contact with another acquaintance, who was occupied with the question: "How to Make Intellectually Received Truths Descend to the Heart?", served to bring the educational field more deliberately to his attention as requiring assistance through improved methods and clarified aims (Letters, p. 626). From other letters written about 1825 we find (ib. p. 697) that these years were filled with research that culminated in an essay,

"Fundamentals of Education", struck off at white heat, and revised into a more extended "Method of Education". The letters show that the manuscript had passed through several hands for criticism, and had somehow become lost, most probably in Paris. According to Orsi, its content is practically the present form of the "Unity", with few and unimportant changes. These works, then, would seem to show only the origins of those ideas that later gave Rosmini his place in the educational field. The characteristic work of the period is rather the one we must take up now.

This work, "Sul Cristiano Insegnamento" (On Christian Instruction), appeared in 1823, and is his first original work of any pretensions, though in form a letter to his brother Joseph. It consists in substance of an explanation of the three possible ways in which the logical connection between the various truths of religion and moral can best be arranged for serial treatment. The first is a parallel development of the doctrines of the church and of the moral precepts and principles dependent on them for their sanctions. The second is the more psychological method of following the liturgical year and its cycles, and profiting by the natural interest already existing in the minds of the faithful by their participation in the services of the feasts and seasons, to show their significance for moral development. The third is the method of Saint Augustine as exemplified in the "De Catechizandis Rudi-

bus" mentioned above, namely, the historical method in which the order presented by the gradual development of both dogmatic and moral religious truths in the course of time, is made to serve as the key to the series of subjects and their application to the needs of the times.

In the same year there also appeared the more pretentious and formal work, "Dell' Educazione Cristiana" (On Christian Education). It was composed for his sister, Josephine Marguerite, who had entered the religious life as a teaching nun, and whom her brother held in particularly intimate esteem. The book is rather a Vade Mecum for the teaching nun than a formal treatise on the methods of education, though its constant references to the underlying principles of educational practise are of value.

The volume is divided, as are practically all of Rosmini's works, into three parts. The first describes the preparation of the "wise educator", the self-education needed by the teacher, and particularly the need of a deep acquaintance with the matters of faith and its practise, and stresses the impossibility of teaching it well unless it has been made real and comprehensive by its practise in her own life. The necessity of reading, especially the Scriptures and the application of the lessons drawn from them, is emphasized by the responsibility of the teacher's position in

the formation of characters in the model of Christ Himself. The consequent requirements of simplicity, obedience and charity are brought out, and their fostering is explained as possible only through constant prayer. Since his sister was appointed superior of the community Rosmini takes advantage of this added responsibility to insert at this point a chapter on the proper manner of reading to insure the sense of the passages being better understood by the mien and voice of the reader.

The essentials of the work of teaching are summed up as the five-fold task of confuting ignorance as instructor, counselling the inexperienced as a friend, exhorting the hesitant as a leader, reprehending failure as a sister and punishing the delinquent as a mother. The last chapter of the first book then sums up the qualities of Christian education in general as a search for the hidden pearl (Matt. XIII, 44), discovered in the attainment of the virtues of simplicity, humility and innocence in communication with God. There is a touching simplicity and humility of style throughout this work that is very effective, and gives us, not only an idea of the veneration the author held for his sister and the sisterhoods in general, but also a warm and tranquil love for his church and a deep appreciation of the presence of God.

The second book, entitled: *The Teaching of Christian Truths and the Practise of Virtue*, takes up the subject of instruction itself. Beginning with a review of the magnificence of man's intelligence and super-

natural nobility in the midst of his weakness through original sin, he expounds man's responsibility to civil society through temperance, health and profitable school-life, and its motivation both in the supernatural and in the consequences of real human brotherhood. The value of these truths as a means to those ends is described as consisting in their divine origin, if the inculcation is undertaken with due regard to the maintenance of interest and the careful and adequate proportioning of the treatment to the age, sentiments and character-traits of the children. The gradually increasing capacity of the pupil also furnishes the criterion by which the more sublime, the more socially complex and the more ascetic aspects of these truths are graded for later presentation, till the complement of the fullness of the mystical body of Christ has been attained, and is realized in social, religious and family solidarity of sentiment and action, foreshadowed in the prospects of eternal union with Him. The third book is concerned with the practise of the individual virtues in their three aspects of personal, religious and social realization.

This work, then, represents a big advance in the definite and less individual statements of educational principles, and shows a grasp on the necessity of consistent and pervasive methods governed by conscious aims. It indicates that the work of the teacher is de-

pendent on a reasoned procedure, so that we have the beginnings of a philosophy of education. The book, then, seems to be a logical place to mark the end of the first period of Rosmini's development as an educator.

Though published in the same year, 1826, his first theoretical work: "Saggio sull' Unità dell' Educazione" (Essay on the Unity of Education) would then mark the beginning of Rosmini's second period of development. In form it is also a letter, written to a friend who had taken a tutorship in Genoa. But it is much more formally organized, and is, in fact, really a treatise on the philosophy of education, and, aside from its local and temporary allusion, is of value as indicating his general attitude to the place of education in society.

It begins with a review of contemporary social conditions, and distinguishes the two classes of men who are giving serious thought to the improvement of them. There are, first, those who are sincerely of the opinion that "the war which vice makes on virtue can only be more terrible when the latter fights, so to speak, from desperation; and that Divine Providence permits these blows in order that men, finally aroused by danger, may eradicate those fundamental roots of error and vice, which otherwise would endure

longer, or, either unnoticed or habitually tolerated, and even defended by prejudices always ready to defend evil and feed their delusive hopes, would have them exist with, and, so to say, consort with virtue". His own position in the opposite group is due to the fact that this attitude is impossible of success, because at the bottom of every man's heart there is a feeling of religion that must be satisfied, certain truths that mix with his consciousness and becomes a part of his nature and the prime elements of his life, so that the recent orgy of desperation ought soon come to an end.

But, in order to save the future from the same scourge, to repair the damage of that war, and gather all the fruits of victory, to bring out into the open the timid virtue still hiding in the hearts of men and restore to it the government of all things that make life worth while, there is need of education, and above all things of an education joined to religion. This union is productive of a certainty of direction in education, whose necessity is seen in the consequences of its absence from the society now recuperating from the conditions described. What social institutions and education require in the continual changes of circumstances, is a unity. With the help of religion it is possible for education, first of all, to be consistent with itself. Education is concerned primarily, not with

merely teaching things, but rather the values of these things. Hence, the moral aspects and the underlying principles of these things seem to be the outstanding objective of education. Now, religion gives us these values, and through them a basic point and purpose to life. Religion, then, furnishes the purpose, the fullness and the character that make life complete and consistent, and, in second place it furnishes also, by its breadth of principle, the means of education that assures the order and the value of all studies used, by showing us through them, the knowledge, the appreciations and practises that make up a unified life. In last place, it assures unity of the energies which are to be marshalled and trained by this method of teaching.

Unity of purpose is achieved in education by considering man as a whole, and by appraising the good as the result of the whole, and evil as the result of the defects it discovers. The presence of good qualities of body or mind, agility of person, health of members and vigor, width of information, brilliance of genius and initiative, are matter of indifference to religion, which is concerned only whether what is present in him is ordered so as actually to forward his improvement and perfection as a whole. Lack of proportion or of direction in any ability or attachment can only result in the production of a monstrosity.

Therefore, the first principle of education is:

man must assimilate his spirit to the reality about him, and must not conform these things to the casual affections of his spirit. In application his knowledge and affections must have God as the essential and necessary, and all other things as accidental. He must regard God as the ordering principle of all else and all else as receiving its order from Him (I, 35-36). Religion points out and extends to man all components of education, and, while they are approved and commended, they are restricted to their correct values as necessary for the maintenance of a balanced life. What is necessary to this end is a sine qua non, but relative and not absolute, because not dictated by life itself, but by the better values by which life itself is directed. In those fields in which necessity does not intervene, she with condescension and sweetness grants a wide and pleasant field of action to man's desires. Where her precepts end, she opens a vista of counsel, well ordered charity, to fill men with joy, which comes alone from the acceptance of the imposed order. When realized in all its perfection, this order leads to the pleasures of a common felicity and takes away that inertia which prevents stimulation to a constant activity for the common good (ib., p. 43). The power of rising above dependence on sense is not empty curiosity, or the taking refuge in the things of sense as the good of the soul, but a love of our fellow-men, which is a fertile fount of study and action and of never completed movements of magnanimity (ib., p. 49).

Unity, with regard to immediate objectives, can only be achieved by a simplification of the material to be set before the juvenile mind. The lack of correlation between the many things set before the child is one of the greatest causes of our later unhappiness (ib., p. 55), as they sink the mind in the details without leaving an opportunity for the ordered and evaluated understanding of them, and give no opening for the things of the spirit (p. 56) and for the mental birth of purpose (p. 58). What education requires more than all else at the present time, is a clear separation of individual development from the acquaintance and appreciation of his needs for his contributions to the society in which he lives. The latter is utilitarian and should follow after the requirements for his individual development of powers and tastes. For the most effective contributions to society, there is first required the contributor's perfection as an individual (p. 60-67). The chief defect from which education, as prevailing, suffers is its refusal to see that uniformity and sameness can only be the death of the best that is in the individual, since its acquisition occupies proportionately too much of the time allotted to educating the young.

Even the matter of allowing texts in a subject to be the product of a single author is a weakness; they should be the joint effort of the entire body of educators of a community, and their work should be under

expert guidance in close co-operation. A second defect arises from the importance of method as now understood. Its chief argument lies in the facility with which the child learns, and which produces a false sense of mastery from the outset, leads to a false feeling of clearness and understanding where it does not exist, deprives the student of the humility that precedes success and of those encounters with difficulties that build up character, and hides from him the depth of reality in which genuine education is actually accomplished. It gives him instead a superficiality that in the end causes more trouble than would otherwise be the case (pp. 68-72). The texts, then, must be the work of minds that know the growing mind in all its variations, for by such means alone can a unity of purpose and objectives be achieved, "for all the texts used should form together a perfect unity, so that each of them is actually part of one and the same whole, and the one joined to the other so as to make them reciprocally an aid and a light, and each in turn facilitating the learning of the young" (p. 82).

As to the subjects of study, they should all be links in one chain, all equally designed to carry his nature toward a harmonious development in body and soul till he arrives at the accomplishment of the courses, when he should give thought to turning them to a participation in the increase of the general good. In sub-

stance, this knowledge must cover God and nature, with the stress rather on the student's development, so that as a full man he can go out about his particular work, and bring his full development to bear on it.

By reason of their successive development, it would seem that memory, imagination and intellect, in the order named, should be brought under cultivation in the educational process. This arrangement also corresponds to the three levels of education, grammar, rhetoric and philosophy (in Italy, -- primary, secondary and university, in general), though separate and exclusive attention to each as such is only a method of speaking, and can not be fully realized throughout, for the end sought is, after all, the education of a unity, man. Three languages together, rather than the vernacular alone, seem to have advantages in the acquisition of knowledge, and their careful and correct use makes it necessary to give them considerably more attention than is at present the custom.

History should be begun early in the lower grades, and in the formal teaching of religion, the historical books of the Bible should precede the sapiential, so that the latter may rather correspond to the second level of the educational ladder, where the practise and development of imagination are the chief ends to be sought. A similar correlation is also of value in the study of the foreign languages assigned, since the race as a whole has a history that can be more easily united into a co-

herent whole by a simultaneous approach through these three channels.

The reverent and a longe treatment which the classics received in the past and the possibility of classical productions as restricted to distant times and foreign places is also to be deplored. This attitude is cause of much of the passivity shown by pupils and grown-ups, who fail to see the unity of the race and the universality of genius, and so hesitate to make their contributions to the present from a feeling of deference to the perfection of the specimens they hear so lauded. For the same reason, national history should remain till last, so that the present and future may be properly connected by means of the living present.

Under philosophy as an educational "subject", Rosmini understands not only the formal science of that name, but also all that is embraced under the phrase "progress of the human spirit", and which includes polite literature, fine arts, useful arts, and, in general, all that leads to a development of the appreciative in man, so that in this sense, philosophy begins already on the elementary level, continues through the humanizing courses of secondary education, and finds its complement in the Liberal Arts of classic standing in the college. The properly correlated study of such philosophy with history and religion must, of course, not be a merely passive acquisition of isolated facts, for their multiplicity and content is primarily used

to impart caution in judgment, broadness in the toleration of opinions and judicial calmness of view in all things. The final product should result in an urbanity and facility of association, united with a firm adherence to principles and truth. In this way, the whole of the man, rather than the mere mind, can be developed, so that all the necessary qualities are at his command in assisting him really to live (p. 90 et sqq).

Nature, for Rosmini, includes mathematics as well as the natural sciences. With regard to the former, it is a bit difficult to follow his reasoning, as he presupposes all the details already in the mind of his readers, and the sequence of arithmetical, geometrical and algebraical content, even if uniform, which is doubtful even in Italy at his time, is not clear. It is rather interesting to note, however, that he prefers to eliminate all algebra from the secondary level and restrict it to college, a suggestion based on its nature as a sort of philosophy of quantity (p. 99), and a tendency actually becoming more popular since his day. In teaching the natural sciences, he also advocates beginning in the lowest grades of the elementary school, and continuing the study in increasingly formal treatment as the pupils move upward. His chief plea with regard to the involved class-room problems is a more definite and precise vocabulary, a desire that seems to have

been achieved in the intervening century (p. 101).

On the college level, his most urgent demand is for a closer union between philosophy and the sciences, which he intimates is the one necessary means for the latter to get a new impulse to renewed development and better direction and purpose. In them he also feels the need of the guiding hand of religion, in order to eliminate the closed narrowness that comes of their present isolation (p. 110).

The third part of the book, then, naturally is only a corollary from the conditions and needs sketched out here. as seen in the light of the purposes of education he espouses. The individual's education is in fact a calculated by-product, and depends for its realization on the watchfulness and anticipations of the shrewd instructor as he oversees the growth of his charges. In its broad outline, method consists in fostering this development along the lines of the desired unity that results when the intellect apprehends, the heart feels and the actions manifest. Precision of apprehension, as the work of the intellect, is the first requisite; the heart will naturally follow if it has been provided with fulness, freshness of outlook, purpose and sympathy. The achievement of these four qualities is the real secret of method, and no rules can be formulated for their inculcation, though they remain the only criteria of success for the teacher. In fact, here more than in any

other connection is to be remembered the old scholastic adage: *nemo dat quod non habet*. Those qualities rise out of the character of the teacher, and in their regard his influence and his power are most to be felt. Given them, he can trust that his efforts will be successful, and he will see in the pupils he sends out that order and unity which make up the full life, in which religion, humanism and knowledge go together to produce perfection.

That the "Essay on the Unity of Education" is an advance over his earlier works is apparent. In spite of the defects of partial ideas and of inexperience, the results of serious thought and an appreciation of the weight of fundamentals are noticeable. The work promises an early achievement of complete ideas and the rounding out of a philosophy and theory of education that deserves attention. The argument suffers at times from a want of perspective, and there is an occupation with the problems of the moment, such as the revival of the religious sense after the excesses of the French Revolution and the Napoleonic influence. But most leaders made their contributions under similar circumstances of time and problems, so Manzoni seems to have put it well when he tells us that Rosmini's pages express to the full the personality of the author and the truths to which he had turned the face of his aspirations (letter to Rosmini). The theme of the work has been summed up

for us by the author himself, and a quotation from him may serve to bring the discussion to an end by showing his interpretation of its message.

"Providence, having formed mankind for a constant and sublime end, and having preordained and directed all events of the world to this one end, has made itself the exemplar which is to be copied by all who participate in the education of humanity, and who are called apart by God for the grand business of realizing the system designed by Him from eternity and begun in creation" (Opusc. Philos., Pref., p. 6-7).

To this second period there must now be added, at least for a true picture of his development, the issuance of his "New Essay on the Origin of Ideas", which, though philosophical, has so much importance as a psychological study of educational possibilities.

The only other educational matter that we have from his pen in this period consists of two letters. The first of these now is known under the title: "How to Conduct the Study of Philosophy", and is used as the Introduction to his collected philosophical works. It is occupied, for the most part, with the unnecessary tendency to create new philosophical vocabularies and add to the difficulty of being understood clearly

through the definitions and restrictions that make up so much of the matter of modern authors. For the general educator it is of little value, except for the similar need of agreement in the use of terms.

The second of the two letters, written also to Orsi, and found among his educational varia, is entitled: "The Reason Youth so Often Goes Astray soon after Leaving College". As an essay it is short, and its substance is a repetition of his sentiments on the necessity of educating the whole man. He admits in the course of it that some educational practitioners are at fault in the matter by their imperfect explanations of what the young may expect in the way of practical difficulties in living up to their ideals after leaving the protecting influence of the school and its religious atmosphere. He advocates a more concrete and coherent explanation of those difficulties and the occasions of harm, and stresses the necessity of a conviction from principle as one of the major objectives of college education in general.

To this period belongs also the mention of his religious order, whose foundations were laid during these years. It is rather surprizing in view of this fact, that the Rule he wrote for the guidance of the members should deal so little with the daily and practical problems of the school-room. But the little that is said appears here and there among the spiritual and ascetic instructions and rules of guidance he devised.

This practical activity may account for the fact that his next educational work did not appear till 1838. The "Catechism Arranged According to the Order of Ideas", as its name implies, follows the traditional form of successive questions and answers grouped under chapter headings which give the series their logical order. In its content, therefore, it is ordinary, and in most cases the answers are taken, at least in substance, from the recognized catechisms then in existence, all of which are modifications of the Catechism of the Council of Trent. The change that is characteristic and peculiar is the rearranged order of the chapters, and in cases of the questions, so that the order of the truths of faith has a sequence less logical than psychological. Another change is in the care with which the vocabulary is kept simple, concrete and uniform, so that clearness is never sacrificed. A third is in the deliberate omission of much matter that for completeness would appear necessary, and the admission in the Preface that the omissions are premeditated and planned on the basis of a spiral method intended to provide its gradual inclusion as the pupils advanced in years and in the regular classes where the book was to be used. (Apparently, the method was never committed to a form fit for publication, as there is no reference to the order of inclusion of this matter in the upper grades in Rosmini's published "Ecclesiastical Writings".)

In the Introduction Rosmini states that his purpose in composing the work was, in the words of St. Jerome, to do as St. Matthew did in his Gospel, who "began with carnal things so that we may begin to learn God through man". For

"there is among ideas an order, and according to this order human intelligence develops; and in this order of ideas, which is settled by nature, the regulating principle of the didactic order is found, and it is: 'The truths must be placed in an ordered series in such a manner that the preceding do not need the later ones to be understood'. Whoever claims to instruct by disregarding this order, does violence to human intelligence by forcing it to go against the laws of its nature, and does not instruct; unless one prefers to call instruction the loading of the memory of the student with words and sounds which he repeats in parrot fashion without comprehending their meaning. It may be that he will understand later, but after a useless expenditure of energy and time, repeating laboriously and by himself and step by step the way he was forced to cover in leaps by his teachers".

So Rosmini changed the order of the chapters and often inserted historical matter, so that dogma and history illustrate each other, the work thus affording a nice example of the precepts we saw in the "Unità". There occur questions whose subject-matter at times reaches far afield from the chapter heading, so that there may be no doubt of the existence of the preliminary ideas on which the chapter depends for its understanding.

In 1839 Rosmini set himself to the composition of the remaining work of this period, and the one that has made his reputation as an educator, the "Sul Principio Supremo della Metodica e di Alcune Sue Applicazioni in Servizio dell' Umana Educazione" (On the Ruling Principle of Method, and Some Applications in the Service of Human Education), to give it its full title. Its original inspiration seems to have been Mme. de Necker, and its immediate occasion was the birth and infancy of a girl cousin, in whom he took great interest while formulating his theories on the orders of reflex thought in his "Psicologia". She is generally supposed to have been the subject of the experimental sections of that work, where his descriptions of the mental order of child life stand out as clearly as in the work we are now discussing. A posthumous impulse to the writing of the book is also seen

in the foundation of the Sisters of Providence, an order for women formed in imitation of the other for work in the girls' elementary schools.

In its present form the book is a small volume of less than 350 pages, and remains in the condition it was left at Rosmini's death, for he never lived to complete it. It is a comparative fragment, the introductory part of a ponderous tome that was intended to embrace the entire educational field. The plan involved the completion of five sections, with the purpose of showing the gradual development of the child mind from infancy through adolescence and into full manhood, and all the types of mental activity proper to each stage. What further was to go into the later volumes we can not say, as they were not so much as sketched out.

The existing single volume is divided into an "introduction" and five books, each descriptive of one of the five mental "stages" of mental growth from early infancy to adolescence. Following the characteristic mental functions and concrete activities of the stage of life under discussion, there is a mention of the outstanding educational problems and the necessary teacher activity for securing the best results from the new mental powers arising, and the new material that best improves the opportunities. The final chapter is then given to the parallel moral and character-

building instruction that is integral to the content.

In style, the book shows a remarkable insight into the child mind, clear ideas, keenness of analysis and attention to psychological detail, and copious illustrative material that keeps the subject on the concrete level. Except for the Introduction, the plan of the book is the temporal order, the growth of the child making it easy to follow the thought. It was doubtless the plan of the author to continue this order throughout, as the "orders of cognitions" dictate such a procedure, the phenomena of each stage presupposing those that had begun to be active earlier. This causes Rosmini to draw regularly on his philosophical works for that "unity" we saw, on his "Antropologia" and "Psicologia" for the "faculties" and characteristic mental activities of each period, and on his "Ideologia" and "Etica" for the choice of subject-matter. The "harmonious development of the whole man" is, of course, the end he presupposes throughout.

The Introduction begins with an extended account of the three possible ways of developing cognition, from the particular to the general, from the general to the particular, or a chance method. The difficulties connected with comprehending through differences, as compared with the simplicity of learning through similarities, occupies the author through the seventh chapter, and it is not till the eighth that the theme of the work is formulated in the statement that there is a natural

order of cognitions which corresponds in time to the gradual unfolding of the mind of the child. From this fact the fundamental rule of correct method is then defined as:

"Present to the mind of the child (and to man in general) first the objects which belong to the first order of cognitions, then those that belong to the second order, then those that belong to the third, and so successively. Take care never to lead the child to a cognition of the second order without having first ascertained that his mind has grasped those of the first order relative to it, and the same with regard to the cognitions of the third, fourth and the other higher orders".

The rigidly logical character of the book becomes evident in the second part, and the "sections", generally speaking, coincide with the "stage" of childhood under discussion. The author warns us, however, that the age limits are not to be taken too literally, as individual differences and local and accidental factors modify the general rule radically for the continual caution of the teacher. The first period of childhood is from birth to approximately the age of six weeks, when the child first smiles and cries; during this time no education really takes place, as all the child can do

is cognize being in general. The second period extends from the end of the first to about the end of the first year of life, or until the first articulate use of the voice. Then begin cognitions of the first order, the simple perception of concrete things, accompanied by the "affective-volitional" movements that are a natural consequence of perception, namely, the animal wants and activities.

The second stage follows from about the end of the first year and continues through the third. It is distinguished by the appearance of the power of analysis on the sensible level, and the recognition of qualities in objects, so that the volitional begins to take on a more deliberate "affectionate-volitional" activity. Hence, not only internal judgments, but a strong development of the will in affection, stubbornness, quickly changing impetuosity and joyfulness appear at this time. It follows that education can do little more than strive to cultivate the feelings and the will be exposure to the proper objects, and that intellectual activity is not to be stressed.

But in the third stage a change is noted. Beginning with about the third year, some idea of relations on the concrete level only, of course, is perceptible from tacit or vocal judgments, though almost entirely as occasioned by the external objects themselves. In other words, though there is a synthesis in the mind,

it is restricted to objects, and though words are used more abundantly, there is not yet an abstraction of qualities, so that the activities of the period must not be interpreted as generalization, except in the narrowest sense of that term, as the result of sensation and not of thought. Conscious comparison between the qualities does not appear till about the seventh year, and it is at this stage that the moral sense, as such, begins to function.

Abstraction, then, is the sign of the fourth order of cognitions. But the process is a gradual development. First there appears the correct use of common names, followed by the correct use of the plural and of number. Then follows the classification of sensible objects, and mental integration, as Rosmini calls it, when differences as the complement of similarities are recognized, and a rudimentary sense of appreciation is inferable.

The fifth order of cognitions sets in about the middle of the seventh year. The more complex relations are noted more frequently, and judgment is no longer restricted to analysis, but goes on to the more complex synthetic type, and even to the hypothetic, because attention is under sounder control, and because decomposition of ideas has developed to a point where all the pertinent parts of the ideas formerly produced by the lower mental processes can now be kept consciously at command

for manipulation in more complex masses. Hence, the child can speak sensibly of differences, numbers, can use collective ideas, and can express the relation of means and the ego-relation correctly, and has the beginnings of the idea of time. Praise and blame are in order as the concept of morality forms, and a use of the imagination begins to be manifest, so that the end of Book II finds the pupil almost completely developed as far as "partial reflection" is concerned.

The educational procedure corresponding to these last two stages is almost unnecessary of explanation. With the development of language, with the ability to make comparisons among the tremendous flood of new concepts, and with the habitual use of decomposition in the process, the need for the use of action in educational practise for its comparison and appreciation values is evident, not to mention its incidental physical benefits. The growth of the imagination and the absence of self-consciousness after the discovery of the ego-relationship open up large possibilities for moral development, and for responsiveness to the stimuli the teacher can put forward at a time when memory (a form of habit) is open to unreflecting response to a degree that from this point on will grow continually less.

This is as far as Rosmini brought his work. The editor of the (posthumously published) book tells us in a note (p. 13) that from a memorandum in the author's

handwriting, which he was fortunate enough to find, it would seem that Book III was to treat in equal detail the next four stages of life, which would, of course, have been divided also into smaller parts. According to the note, the next stage extends from the seventh to the twelfth or fourteenth year, and embraces the task of acquiring those reflex cognitions of mental order, moral obligation and law, to which the increasingly elaborate sweep of reflection now opens the way. On the safe passage through this period depends the strong moral or immoral "set" of the individual, which will probably not be fundamentally changed in all life. For since the callow and inexperienced growing mind naturally abandons itself with all its power and enthusiasm to its purposes, these will always be fuller and more innerly sincere and complete than those of a later age. The result is an inclination to good or evil so tenacious that the first deliberate moral or immoral act sets up loyalties to virtue or vice the harder to change the more intense the first adherence.

The next stage extends from puberty through adolescence. During it the pupil attains generally to the use of full reflective power, achieves clear notions of law, duty and good in the abstract, and a knowledge of himself and his potentialities, so that he can now give himself to the task of building up that individual adherence to principle and that cultivation of the collective virtues and mental qualities that bring about

at least a comparative fulness and rounded-out completeness. This naturally prepares the way to the study and contemplation of things in themselves, and to the understanding of the necessary and the eternal, parallel with all of which is that entire field of activity and enthusiasm that carves out the appreciation of beauty from the fine arts and letters as a guiding light, and prepares him for his contributions to society. In simplest form, these are the confronting of reality, armed with the ideals of justice and humanity, and a continuous and sincere striving to realize the beautiful, the good and the true in a "life of thought and action" (Preface to Mrs. Gray's translation of the "Principio Supremo", p. viii).

From this time on we find no further educational writings among Rosmini's works till 1854. In the interval he was busy with philosophy, as we saw, and with the foundation and spread of his new religious orders. When he did again enter this field, it was in the rôle of a defender of the rights of education against interference from without. The "Principio Supremo", then, represents the highest point in Rosmini's development as an educational writer, and is his most effective contribution. With his "psychology", the principles of which are applied throughout the

work, we have the substance of his contribution to education. What precedes is his preparatory learning of the fundamentals of the science, and what follows is the sociological frame into which it fits. So it seems a fair statement to make that Rosmini stands or falls as an educator by what he offers us in this second period, his most characteristic, representative and detailed attempt at working out education's problems as he saw them. In its most condensed form, his statement is that education is an individual task, primarily for the individual's benefit, which can be successfully accomplished by regarding its major objective as a unit, the production of the "full man" of Bacon's description, and which can best be approached by a reorientation of method based on a scientific psychological foundation that uses most of the traditional subject-matter on which the growing mind feeds.

What he has to say after this is almost in the nature of an epilogue, and his third period is contained in the single work we have still to review before trying to reconstruct his system as a whole. In its present form this last work is called "Libertà del' Insegnamento" (Freedom of Teaching), and it appears as a single unit in his collected works. But in its original form it was a series of fourteen articles in "Armonia" (Turin);

the series was interrupted before completion by differences with the editor, and was republished in consequence in pamphlet form in the "Review" of the University of Turin. But Rosmini died before the completion of what he had begun, and the nature of his complete ideas on the subject remains conjectural.

In its present form the book is only remotely educational in content, and is more aptly described as a treatise in law. It is occupied for the most part with a defense of the right of education as one superior to government, and one toward which the government, both in theory and in practice has definite duties.

In our times and country, the entire problem seems superfluous, a tilting against wind-mills, so accustomed have we become to the idea that the office of the government is only to foster and assist education (ch. 9), and not to hamper it or monopolistically and arbitrarily to direct and conduct it. But the historical fact is that even long after Rosmini's day there were governments, and admittedly among the civilized ones of Western Europe, which were in the clutches of the so-called "liberal" political philosophy that arose during the last two centuries, and which claimed an absolute and superior right over every act of every citizen, including that of the education of his children.

This attitude had its origin in the principle that all rights are the creation of the state and of civil legislation. And it was with this position that Rosmini took issue, maintaining that among the rights with which man is naturally endowed is that of exercising freely and without undue restriction his freedom in both teaching and learning. The only restriction that he conceded was competence on the part of the teacher, and on the part of the learner matter free from error and pernicious consequences for the student and the general welfare, or as he puts it, honesty of education. In practise, he added another, namely, an exercise of teaching that offends neither other teachers nor the rights and dignities of pupils nor the general tranquillity (ch. 3).

Regarding competence, he admitted the right of the state only to licensing as a testimonial of competence, not as an assurance of adherence to prescribed content or methods, but with regard to the other two items, he suggested the real attitude of the state should be non-interference and even indifference till proven and sufficiently serious disturbances might demand an exercise of the police power of the government. The power of the state itself to engage in education as an activity he described as equivalent to service rendered for the convenience of the people and as a sup-

plement where private initiative is lacking or insufficient; but, granted the existence of the latter, the former must still remain a free and open choice (ch.2). For, antecedent to the state in this field there are five other agencies whose rights are in danger of violation by the policy of a general establishment of government schools. These five, in order are: first, the Catholic Church, whose duty of teaching goes back to divine command (Matt. xxviii, 19), second, to the learned generally, who have the natural right of turning their competence to profit by offering their knowledge to those who need it or desire it for a consideration, third, heads of families, whose responsibility for their offspring by natural law includes training and preparation for life, either in person or through agents, and which is entitled to freedom from hindrance by less prepotent agencies, fourth, "benefactors" of education, donors, sponsors, investors in educational enterprizes, all of whom are entitled to freedom from interference as partners in any legitimate undertaking whether for profit or philanthropical, and fifth, local communities and provincial governments, whose needs are consulted best by the defense and encouragement of the wholehearted exercise of their rights by the other four groups, and a genial supervision over the whole.

The rights of the Catholic Church require a

distinct treatment (p. 19 sqq; 84 sqq.). In religious and moral content her authority is supreme in so far as divine, and in this regard she is entitled to the assistance of the state not only in the actual presentation of her message, but in the suppression of erroneous and pernicious teaching, which, incidentally, is to the advantage of the state itself. In secular content the church has the same status as the others who are grouped under "four" above, and her clergy and communities rank among the "generally learned" of group two, granted the proper conditions.

As we remarked, this work is also among the incomplete writings of Rosmini. The next chapter is taken up with a long defense of the right of the Church to teach and a refutation of the arguments of the self-styled "liberals" at that time seeking to curtail or deny this right, both in actual governmental legislation and in juridical and journalistic treatises. Since this does not affect our purpose, we must be content to gather from a footnote at the end of the work, that Rosmini had still in mind to write a last chapter of this first section on "Tolerance, to be Exercised toward non-Catholic Education", and a whole second section on "The Attitudes of the Government toward a) The Learned, b) Fathers of Families, c) Sponsors and Investors in Schools, and d) Local Communities. A third section, "What the

Government can Do in Education Beyond its Duties to its Subjects", is also indicated as part of the planned work, and in view of the limits set forth in the extant portions, arouses interest as to its possible content.

This, then, with the exception of some very short and minor writings grouped among the varia, completes the review of Rosmini's educational contributions. It now remains to recast the ideas given us in them into a logical unity with a view to their survey and evaluation. In this task we are fortunate in not being obliged to reconcile earlier and later positions, as consistency remains obvious throughout. There is no shifting of the view-point from early years to later periods, and there is for guidance a general dependence on the philosophical system outlined above that serves as a help in rendering our task more simple.

CHAPTER IX

ROSMINI'S VIEW OF EDUCATIONAL PRINCIPLES

We shall now attempt to draw up such a logical summary of Rosmini's educational views as he has left them in various parts of his collected works.

Some of his statements are, of course, hardly original, and a great deal is merely a review of what has been accepted since the beginning of the art and its accompanying science. Some, again, are more arresting in their presentation of new view-points, either on account of the novel outlook with which they discuss old problems, or on account of an originality of content that deserves attention. We have noted before that every writer is to an extent the creature of his own times, and that much of what has a value in a general way is in fact the product of local and temporary conditions, and is caught up after expression as a solution of problems not as confined as their writer imagined. We may take it for granted, then, that parts of Rosmini's contributions have little application outside the environment and age for which he wrote, so that his solutions and suggestions, if they have conspired to suggest for him the eminence found at the beginning of this essay, prove that he saw more truly and deeply into the nature of the general problems than he knew. In

fact, it is the general and frequent reappearance of our own problems in his works that has drawn attention to him and has characterized him as far-seeing and anticipatory in his contributions.

It is this quality in him, then, as much as the more accidental items that we enumerated at the beginning of this study that have caused Rosmini most probably to be passed over by later writers of the history of modern education. He appeared to have nothing new to offer because he was so far ahead of his own times. And at the same time he has a contribution of value in the fact that that his restatement of the old educational principles and their new addenda assimilate him to the outstanding figures who reorientate great movements at critical moments in their careers and indicate the best course of development for the period immediately following their own times.

Rosmini appears on the scene so soon after Pestalozzi, Herbart and Froebel that the modern scientific movement in education was still too new to be recognized as an era with characteristics of its own, and its exponents and their influence was still too intangible and uncrystallized to permit of classification. He came upon the scene almost by chance, and in the pervasive and still uncatalogued contemporary "zeitgeist" he discovered there, he felt his work to be first that of translating its meaning into terms of his own background, and then that of restating its underlying principles of permanent value in

terms of his own day.

Education as one of the deontological sciences, and, as such, part of philosophy, is reducible to at least relatively final principles, objective, comprehensive and universal. As a deontological science, education is practical on the one hand, and ideal and speculative on the other. Under this second aspect it has an archetype, or ideal perfection, to which its activities as an art must tend. This archetype is the ideal and complete man, realized in all these orders in which he has his being, the intellectual, the real and the moral, and of these the last is the most important. Under its practical aspect, education has need of the "useful art", or science of means, called pedagogy, which is practical and experimental, namely, the method by which the achievement of its ideal becomes possible, and is, at least in part attained in practise.

The most clear-cut statement of this part of Rosmini's philosophy of education is to be found in the author's "Sistema Filosofico", in paragraphs 121 and 213, where he is laying down the distinction between self-education, as achieved in Ascetics, and the education of others, as attained in the science here under consideration. Except for the phraseology and terminology, it can hardly be said that there is anything very original in its concept. Education as an attempt to lead the growing

mind, and specifically, as a knowledge-diffusing activity, practised, at least in theory, as a recognized life-profession, has been a common-place in social history for centuries. It would appear, however, that there is space for a more detailed examination of his specific definition of pedagogy as a science, for on this point he at least felt it necessary to lay down clearly the principle that there is a fixed and major final purpose in this activity, not only sometimes passed over unrecognized, but deserving special emphasis and review at the time that he was writing, as accepted from without.

But in substance the principle pervades all his writings, and its striking feature is that he refused to be turned aside by the desperate efforts of his contemporaries to declare themselves autonomous and "scientific" in the sense of breaking away from the allied philosophical sciences. We all agree that a development of science takes place in the separation of a definite department of human knowledge, and that such progress arises thus in the setting up of a science of childhood in general and of a science of mental and moral development of childhood in particular. To do this successfully Rosmini postulates a formal aspect in addition to the material one here given. With this latter aspect of contemporary conditions he has no quarrel. In fact, his own contributions to the psychology of education, though per-

haps not fully assayed, are admittedly positive. But he does deny that the material object, the child and its psychological processes, is sufficient to make an autonomous science, in so far as it alone does not sufficiently provide the formal aspect under which that material object is to be considered. By its very nature as a "deontological" or practical science it is a means to an end and even more imperative of definition than that material object.

This formal object then, this new department of knowledge must borrow, and that by the very fact that it is deontological, treating of perfection in the abstract as well as of its means in the concrete. No science is autonomous to the exclusion of any other science, and philosophy, the noblest of them all, must be harkened to for the general laws by which this formal object is determined. What this is we shall now see.

A consistent practise of education is therefore impossible without a sane educational philosophy. There seems no difficulty in accepting this statement in so far as we recognize education as an art. As such, education must have a reason for its existence, and this reason has been expressed in one form or another by every educational writer whose thoughts on the subject have been considered worth preserving. But Rosmini goes a step farther, and tells us that while

"it is not difficult to speak of principles of an educative science, which would na-

turally be found in the definition: 'Education, both as a science and an art, is intended to bring man to the highest point of perfection possible for him, and therefore to eternal happiness by means of a well-ordered development and harmonious cultivation of all his faculties',"

and while

"from this principle all is derived",

still,

"to deduce that all that should be deduced from it is difficult because this principle is very general",

like all scientific principles. As such,

"it presupposes a deep knowledge of the faculties of man, and of their relative subordination, and there is need to classify them, as for example, into first, moral faculties, which must be developed and cultivated so that man may acquire through them virtue and holiness; second, into intellectual faculties, which must be developed and cultivated so that (man) may acquire through them the sciences and the arts in that measure and man-

ner which assures their service to virtue; third, into animal faculties, which must be preserved, developed and cultivated, not without limits, but still in such measure that they may be prompt to render service both to virtue and to the arts. Each of these three groups demands a special activity of the educator, and they compose, as it were, the three arts which together form pedagogy (the term Rosmini reserves to pedagogy as a science). And each of these three arts (sic) in turn has again its own principles" (Epist.II,738-40).

"One of the most common defects that it seems to me necessary to point out in the different educational systems, is that not one, possibly, defines definitely and contemplates consistently the end which human education must attain. And this defect is of such a nature as to render, wherever it may appear, all education vacillating, useless and harmful, since it is impossible to pursue an end without knowing it, and such less so if it is not even defined and determined, because it does not give sufficient light to the mind to select the appropriate means" (Introd.).

For Rosmini therefore, this philosophy of education must recognize the dignity of the human subject as

raised above the material and sensual, and set him off from the rest of creation as the possessor of ideas on the intellectual level and of law on the moral level. This recognition and fostering of the human endowment has, of course, always been acknowledged as the first principle of education as an art. But for Rosmini the same principle, in all its consequences, underlies education as science as well as an art, and its practical aspects must start out from it as their point of beginning, and must not be satisfied with the mere mechanics of efficient use of tools. The reason for the pervasiveness of this principle in both these phases of education lies in the fact that incidental to those perfections that accrue to man as an individual, there are presupposed another group which accrue to him as an animal and as a participant in human nature.

Accordingly, then, man tends to perfection as an animal, but this is his lowest stage of perfectibility. On it in turn rests his perfectibility as an individual, which in its intellectual aspect is the second lowest. Each of these has its value, and true education recognizes their relative importance fully. But man's personal perfection supersedes his specific perfection as a member of the race, for as an individual he tends to rise to the dignity of personality, to the perfection and happiness that results from his educated recognition of the facts here enumerated. From them again, he makes efforts to satisfy the legitimate demands of each possibility in more

extensive and correct proportions, and that always as an individual (*Anthropoligia*, II, 4.10). In the strict sense, the common element and less individual features of man are not, correctly speaking, a matter for education at all. For education does not attain to the dignity of either a science or an art till this stage has been passed, and the real problem of education begins where man is most prone to differ from his fellows by the full development of his individuality. (*Unita*, p. 30).

Most important, then, for the educator is the concept of unity (*Anthr.* 966). Rosmini has emphasized the concept by assigning this word the place of title of what he himself considered his most telling production for the improvement of education. For us it would stress the fact that the preservation of a unity has been one of the chief problems that has ever existed in the field, and one which has particular value in our own day, especially since the rise of scientific education.

Possibly the ideas of unity that we may have conceived, are not the ones that Rosmini had in mind, but the fact that he already foresaw a century ago the need for this emphasis shows that it was not as obvious in contemporaneous practice as he felt should be the case. It does not mean, at least in the main, the specialization that has arisen in consequence of the newer divisions within the science, as such, but rather the existence of a something which must be accepted equally among all the divisions offering their services to the teacher of today.

Rosmini was not face to face, to the degree that we are, with the nice problems that come, for instance, from the efforts of the psychologists to make the path of learning easier, nor the elimination of much that has till now been considered part of the common heritage that man must come in contact with to feel his common bond with the rest of his kind. His problem of unity goes back farther to the fact that in substance education can not be confined to the arbitrary and concentrated learning situations of the classroom, where only the common and lower elements of that heritage can be treated in common. On that level there is no difficulty as to unity, at least there should not be, if the teacher knows the rudiments of her art. We can catch a partial glimpse of what Rosmini was driving at in the statement that his first difficulty is in the fact that

"Man is educated partly by himself, and partly by domestic society (to which we reduce the education he received from the tutors who supply for and supplement the duties of parents), partly by the influence which the civil societies in which he is born and grows up, exercise over him, and partly by the influence which theocratic society exercises over him.... And each of these treatises naturally divides itself into three parts, in so far as man receives from these (influences) an educa-

tion that affects him morally, intellectually and physically. But it is necessary that the education which he receives be a unity; and it is a **grievous** error to believe that physical, moral and intellectual education are three separate and distinct things. Therefore, the first rule of the art of education is that of unity. There is one good which education must tend toward, and that is moral good, and that is its end" (Sist. Filo. 244).

True education, then, in its widest extent must indeed give proper regard to the perfection of the animal, to the reasoning faculties within the animal, and to the common fund of knowledge and motive that he shares with the rest of his kind, but its chief concern is with him as an individual, existing in the three orders mentioned, with all the emphasis on the moral order.

"It is inconsistent, then, to suppose that there is any real intellectual or physical education disjoined from moral education; but it is consistent that these former should be considered as means to this latter, so that no single cognition, no mental endowment, no physical ability may be advanced in the subject to be educated, without at the same time it be subordinated to moral education. And everything that the educa-

tor does, all the means that he employs in educating must with perfect coherence and consistency be directed to this end" (ib.).

Now, we saw that by the moral order are understood not only the immediate claims of responsibility to social environment, but all that is recognized as flowing from man's perfectibility individually, as indicated to him in his recognition of being in its orders. Hence education concerns itself primarily with the complete meaning of things, "the recognition of being". Now the deeper meanings of life for man as an individual reveal three fundamental forms of experience, the scientific, the esthetic and the moral,- for Rosmini, the religious,- each a manifestation of being under the aspects of the true, and beautiful and the good.

In the first category, the mind is purely intellectual in its operation, seeking to discover the composition and the relations of things, first in individual units and then in increasingly more comprehensive classifications and generalizations, culminating ultimately in the highest degrees of participation in "manifesting being"; in the second category, the affective side of man's nature is brought to bear on his knowledge together with the purely intellectual, so that an enjoyment of the harmony, the balance and the precision of these various manifestations of being in their aspirational and satisfying qualities may provide a point of

rest and well-being for this distinctly human element in him; while in the third category, the religious, man tends to an interior perfection by the harmony resulting from a complete realization of the ethical contacts which he makes, and which afford him an active participation, as opposed to the passive and esthetic enjoyment outlined above, in the production of the truth, beauty and goodness of which he catches glimpses and reflections from the essence of the Ideal-Real Being, God.

These three categories of experience then, are closely related, and if given free play, a poise and a broadening and a harmony result, for the individual that, at least in part lead to a realization of the perfection of which man is capable.

"By culture we understand the facile equipment of wide and many-sided cognitions which is required both by application to one's opportunities and by intercourse with one's fellowmen, united with the ability to manage one's share in all contacts" (Logica, 871).

However, the progress of each of them is not to be conceived as possible, regardless of the other two. Each must add its ingredient to the whole, for scientific truth can demonstrate in its own field and to its own satisfaction only, but moral truth is felt, and both of them in their turn must demand of sincerity that they be appreciated and loved, and until this appreciation is

confirmed in active reproduction, man has not realized the possibilities of his advance. Further, this perfection is not fixed or static, and though its possibilities may be infinite, it is still definite in the required presence in full of all three components, and its definiteness of form and direction are due in final analysis to the fact that man's highest perfection is in the moral order. This much has been ontologically determined for him by the nature of his being (Antol. p. 8).

Rosmini's concept of unity, then, is concerned chiefly with the preservation of a hierarchy of values and motives that will prevail more and more as man ascends in the range of his definite human perfectibility. In theory, this perfectibility increases geometrically rather than arithmetically as the subject advances on the educational ladder, because every advance involves four possible steps: knowledge of truth, contemplation and realization of the beauty of being in its orders, appreciative volitional adhesion to being as recognized in this knowledge and reflection, and realization in action of the fulness of being (Unità, p. 117).

Now, since these steps apply equally to all three orders of being in their relative excellence, the more play and freedom of choice the higher faculties of his humanity (in the renaissance sense of the term) en-

joy, the greater the number of possible spiritual ingredients in the "ideal and complete man" becomes, and at the same time, the greater the danger of un-subordinated influences, of skewed growth, of contradictory and inconsistent activity, and even of the presence of equally flourishing cross-purposes, all productive of disrespect of the fundamental law: recognize being. This law gives unity to the moral order, and the preservation of unity on the moral level in its turn assures unity within the other orders and among the orders themselves.

As a practical consideration, then, education is concerned with unity within the subject to be educated, both as a whole and within the orders and categories within which his humanity is active; next, and to a far less degree of cogency and importance, it is concerned with unity between its task and the influences out of school with which the subject meets, and with unity within the school tasks themselves, and, finally, with unity within the stages of the educational ladder. Education's chief duty in its highest and most appropriate sense, is to be faithful to the principle that unity must be served throughout the entire range of the human subject, if education herself, both as a science and as an art, is to be true to its archetypal essence (*Unitá, passim*).

Complete education, then, does not overlook

the bread-and-butter aspects or even the physical interests of life, but these remain very minor and subordinate, almost disappearing as the secondary and college levels of formal education are reached. For, the higher the subject stands on the educational level, the more the moral phase preempts the primacy among the perfections of which he is capable, and so brings out his individual needs. And the consciousness of meeting these needs emphasizes in equal proportions the fundamental place of this unity. But even on the lower levels, education in its true and narrower meaning, must not confound the moral element with the sensual and intellectual elements of life; these latter are means to an end, and when there is a question of conflict, the morality of all activity of body and mind, by the very order of objective being, is determined by conformity to the supreme law: recognize being.

At this point it is interesting to observe the first indications of contemporary conditions affecting Rosmini's attitude. From the history of philosophy we know that the influence of sensism was far from dead, and Rosmini (Intro. c 10) gives full play to his indignation at the consequences of it. He says definitely that he recognizes its sorry sequel in the destruction of the foundations of morality in social life, in law, in politics, in letters, even in medicine and education (Rousseau), and the dangers still threatening society, with the consequently great-

er problems confronting education in the reestablishment of the foundations of security in the social fabric.

The practical consideration that flows from the general conditions described, is the realization that man's perfection is not sufficiently consulted by the negative education of prevention, but requires the positive method of providing the dispositions to realize justice as the complement of the moral order (Epis. V, 623). Now it happens that at the apex of morality is religion, and therefore an essential component of education, since it definitely sets the nature of man's ends in the knowledge that comes in its teachings. So Christianity acts, and even offers possibilities for still higher perfection in active and personal contributions, and puts the urge to their realization into the soul. For, as we saw,

"the first principle, being in the ideal order, is the natural light of reason, and the divine element that resides in us. But one may ask whither this light leads us, and it is not sufficient to say, to ideal being, for this it is by which, not toward which we are led. Nor would it satisfy him (sic), for being real, he aspires to the most real, and this is God.

Ideal being can only make us know, and has no place of its own as ideal in a real world.

Man feels within himself the authoritative voice, the internal necessity of cleaving to the whole of being in its orders. And independently of this, he is persuaded by the moral principle in himself to acknowledge the demands of duty, the force of obligation, that he feels within. He is convinced of having powers in himself that are supremely necessary, and of having them affectively, so that he is able to fulfil the urge of arriving at the destiny which the fulness of being in him holds out for his adherence and loyalty.

But nature fails him in this quest, because it is limited, while his aspirations go out beyond. So God Himself comes to meet man, makes Himself perceptible, unites and communicates Himself to man, so that man may adhere completely to the Supreme Being, Who exceeds all nature. Reason, then, first suggests the fact of this communication, and it is then found in existence in the system of thought called the Christian religion.

This system is the complement of philosophy, the satisfying answer to the demands and aspirations of the most highly developed reason. Moral reason next tells man what he must do, where he must go, but this is too

ideal while his arrival at his destiny must be real, as man himself is real as well as his powers. But this contact, though real, is limited, is finite, and its moral possibilities are not sufficient to his dignity and aspirations, so that Complete Being in Its entirety must, and has, revealed Itself to us to give us the strength to adhere to Itself. This is Christianity, and it differs from philosophy, because, though neither excludes the other, philosophy is only a plan, while Christianity is the structure of human virtue and human greatness" (Crit. dei Sist. Mor., c. 6).

The other and more general aspect of the requisite accidentals of unity in education that Rosmini underscores, are easily seen to fall into a very minor place in his consideration of the whole problem. They are also means to an end. Among them we have already mentioned several, and we can not understand, for instance, why his statement on joint responsibility for education among parents, school and society, should be less exalted in tone than his fervent plea for the humanist but balanced devotion to personality. As a whole, it has a much more familiar ring.

It has, too, an incidental value for our own day in that it forecasts at least one phase of the charge

of failure brought against the school as an institution responsible to society. The modern necessity of mass production even in things of the mind, with its consequent tendency to levelling downward, and its often mistakenly set aim of likeness as the equivalent of equality, is the real object of attack in this portion of Rosmini's writings. Education, as understood in the wider sense, as the result of contact with environment, both general and social, is an assurance of likemindedness and of common participation in those things that are the basis of our social nature, and, under the spur of proper responses, to our contributions to the general advancement of the social total.

Some components of this foundation, and quite a large amount of informational material touching this social aspect must, of course, be formally provided by the school. But the bulk of the material, as a working factor of man's equipment, even today is furnished through out-of-school contacts, and, until Dewey's startling attack in our own day and country, the condition was taken for granted as desirable, in as much as the school was supposed to give the necessaries that could not otherwise be well procured.

The schools of Europe, even today, follow this philosophy of Dewey to a less extent than is the case with us, and, allowing for the increase in the technical and the scientific that characterizes modern life so much more than was the case in the comparatively small-

town and rural Italy that Rosmini knew, it still holds good to day as a fair description of the scholastic mind viewing the relationship. For the schoolman who has glimpsed the exalted picture that Rosmini has painted, the tool subjects are tool subjects as much for the school as for life, if not more so, and the big question to be answered of all of life's phenomena, is not the "how" as much as the "why". On the lower levels, naturally, the "how" predominates perforce, as we shall see in our consideration of Rosmini's psychology, and as the modern exponent agrees. But this is due only to the fact that the child mind must first be filled with the means of thought before thought can take place.

But, as soon as this stage has been passed, and thought does begin, the individuality of the thinker must assert itself and originality and differentiation appear. And it is this aspect of education that, according to Rosmini, is its prime purpose and great objective, namely, the attainment of that individual perfectibility that marks man off from his fellows, and develops those regions of his higher self where no teacher can serve as companion, though he must be the perfect mentor. From the unity of this development as an individual, the student achieves the perfection that should be descriptive of him to the full. Having attained it, his perfection as a member of do-

mestic society, first as a subordinate and later as a parent, his perfection as a member of civil society and of the church, his participation in the advancement of the race as a whole, his participation in the very effective contributions dispensed by the accidental agencies that "providential education", that is, the order and disposition of the whole sequence of historical events of a single person's experience, provides,-- all ought to follow as a matter of course.

But the fear is well-grounded for all of us, and also was for Rosmini, that all these experiences do not fall naturally into their correct place in the pupil's mental and moral make-up, and do not give him that unity of outlook and moral responsiveness that are a natural demand of the coordinated moral, mental and physical education that he has outlined (Sist. Filo., 246).

Now, the implication that all out-of-school life can be drafted into a regimented whole, so that every contact is absolutely governed by its educational content, is readily inferable from his argument, and the inference is strengthened by his division of education at the beginning of the book. Does he seriously hope for the realization of such a condition? From the careful reasoning we have seen on other practical questions, it would hardly seem a serious hope for the future of education as an organized activity. We are obviously facing an ideal, and it is made impossible

of realization by the intrinsic conditions of the daily hurly-burly of society. The setting of a stage completely and only for the presentation of a perfect harmony in mental contacts and for a consistent activity and birth of outlook, is a delusion. Its importance is, then, in its presentation of an ideal, in much the same spirit in which John B. Watson declared his wish for the uninterrupted control of the child till his sixth birthday, and is an echo of the peculiar problems that arise in the elementary grades and even before.

Beyond this, "osmini offers no practical means of bringing about the actual cooperation of the school and the other agencies, except his mention of the importance with which, in his outline of the deontological science, he invests the natural rights of parents as the first and naturally endowed educators (See also "Liberta' dell' Ed.). On the secondary level he omits a definite reference to the problem beyond the general plea for uniformity of textbooks. We must recognize that the problem, therefore, as stated, is insoluble, and we have in our complex modern civilization come to regard it as hardly worthy of constructive thought; some of us are even convinced of the doubtful desirability of such uniformity, even in the wider sweeps of intellectual activity. A degree of uniformity as to general attitudes is, of course, desirable, and, in fact, social life would be impossible without it.

In his more practical thoughts on the matter,

Rosmini also seems satisfied with such a partial solution. Thus, in the letter we saw regarding the non-functioning nature of much taught in college, he comes our way in evaluating the factors in the problem, and in "Degli Studi del Autore", he reduces the effective remedy to intensive drill on careful, logical and concrete thought, to an intensive educational campaign for concord as the first requisite of national unity of sentiment and action. This thought is repeated in his "Rinnovamento della Filosofia in Italia", which might be described as developing that theme exclusively, as it is a plea for unity by way of compromise, first in philosophy and letters and next in politics. We know the unsatisfactory political conditions under which he wrote.

In fine, then, it would appear that Rosmini refined his quest for unity in education to too fine a point in this phase of the problem. It may be an instance of that scholastic over-subtlety and categorizing to which Munroe refers, as it spins out an educational ideal that does not conform to objective needs. Certainly, that he found a solution to the problem as he posed it, both as to its general desirability in itself and its social possibilities, is dubious. On the other hand, as a disguised plea (for political reasons) for a spirit of national cooperation and political unity among the after-school population, it assumes a significance that deserves attention in

view of his comprehensive stand for unity in educational objectives.

On the other hand, we find that Rosmini was most fortunate in his insistence on the type of unity assured by the coordination of subject-matter, or what we would call correlation. We have noted that this coordination was emphasized even to the extent of disparaging the preparation of text-books by individuals, and on this point it would appear that a case can be made out for his originality and well as for his appositeness. The type of text Rosmini had in mind was seldom the occasion for laudable comment, being in that earlier day just as seldom the result of the most scientific, or even careful hands, so that neither the best of taste nor reliable of information found an expression in them. On the secondary level, the content of the classics naturally made for a more general rigidity, not shared by the grades. When stodginess and antiquity of the curriculum of tradition, and the exclusively logical order of presentation and content is remembered, we can see the revolutionary nature of the suggestion that the whole wealth of educational experience of a country should be drafted to the work of preparing a coordination in the entire succession of school years.

More radical still is the resulting coordination of related fields of subject-matter, to be obtained by a unified treatment. Rosmini points out the advantages of cross-reference and transfer, and the light that a subject

must, under the circumstances, throw on another, so that the various fields of the curriculum might be reduced to a unity, not alien to the spirit that governs at present in the merging of several subjects into, say, social science. His argument for the arrangement is the resultant compactness of the total informational and emotional mass, the facility of adhering to the "orders of cognitions", and the even and steady progress of balanced mastery that guarantees the unified development of the pupil. This, of course, is correlation in the sense we understand it today.

Since his desired type of texts were never as much as outlined, we can not say apodictically how far he may have seen the consequences of his theory. But in his "Catechism" we have an example of his own work on the point. In it the wealth of references, and even of complete (for children) treatises on nature, on both sacred and profane history, and on (elementary) "anthropology", as well as the revolutionary departures from the logical order, and the adherence to the developmental order in general, all warn us that we must not be too ready to minimize his recognition of the radical nature and practical consequences of his theory.

Another means for unity is found in the immediate aims the teacher is to bear in mind. These are the varying degrees of emphasis to be put on memory, imagination and reason at the various stages of the presentation. We shall see this more in detail under psychology, but here we may note that proper presentation for mastery always

implies an order indicated by the successive but inclusive activation of those three "faculties". This holds good in general, as we can not take a mental position with regard to anything of which we know nothing. By imagination is here understood the mental manipulation of new ideas and apperceptions with the object of a thorough command of implications and details (Psic. II, 960 sqq.).

Therefore, analysis, synthesis, integration and the other processes to which we subject perceptions in reflexive thinking, all conspire to an orderly arrangement of the data and prepare the way for a reasoned attitude of appreciation and adherence, dependent on principle rather than on impulse. So the psychological order of presentation of this matter is dictated by the successive awakening of these faculties in that order. The complete task may cover years, especially in the treatment of large masses. Thus, we can see now the reasons for the postponement of algebra to college years, to quote only one example, in the fact that the general laws of quantity are so wide, many-sided and comprehensive, that the relationships and consequent manipulative possibilities require the whole period till college for a mastery of their implications, especially when the abstract nature of the material is considered. "Reasoned" attitudes toward quantity and its governing principles are simply impossible till the required orders of thought have brought about a perception of relations adequate for

collective manipulation. So, in a sense the immediate preparation for it covers years literally, and demands attention equally in all of the parts of the subject that grow more imperative as "total reflection" begins to function, as then we lay the basis of manipulations of quantity as a whole. And the same requirements apply proportionately to all fields of knowledge.

The next item in the field of general educational principles to which Rosmini devotes attention is the right of education, and specifically the right of untrammelled exercise, particularly against the incursions of the civil government. The foundation of his position is given in his deontological conception of education, and the expression of its details, in as far as he was able to define them before death interrupted his labors, is in the "Libertá del Insegnamento (Freedom of Teaching).

We have already remarked on the long hiatus between the appearance of the works that characterize the second and the third period of his educational development, and the different character of the content of the latter, issued shortly before his death. What the immediate occasion for his taking up again of the cudgels late in life was, we are not informed by his biographers, though political events were probably a factor. But we can see an appropriateness in the spectacle of Rosmini, spending a life-time in vindicating the nobility of education against its short-sighted

friends and practitioners by his insistence on a restoration of ultimate purposes, and in assisting in the improvement of its mechanics by his psychological contributions, finally completing his work by a vigorous protest against the meddling of rank outsiders.

The main points of his position are easily given. The essential nature of educational procedure is dictated by intrinsic considerations, and its exercise is consequently dictated by nature. In fact, as a profession it can and should be regarded as a naturally cooperative activity in which not only every competent individual may engage professionally as his contribution to the general welfare and that from purely economic motives, but there are phases of it in which the community as such, willy-nilly, makes the contribution also, and is necessarily effective by the very nature of its contacts with the educand. The imperfect and uncontrollable nature of this kind of cooperation he was only too ready to concede, and the abuse of discretion on the part of those professionally engaged in formal education was also clearly known to him, but on the whole there is a liberal spirit of broad tolerance in his review of the practical question of exercise that may appear startling to certain prepossessions regarding the general political and religious atmosphere of his times. His only restrictions appear to be those resting on his doctrine of unity and his ideas of teaching competence.

It may seem strange, then, that Rosmini should suddenly cease his liberal distribution of rights when the province and central government are in question. But he justifies his position, first by the distinction between the local com-

munities, where the elected or selected officials are representatives of, or agents for the individuals of the community, and the more remote authorities, who, if they represent at all effectively, which he doubts as a general proposition of fact, represent only the common good as over against the individual good, so that education, properly speaking, is not in order in the deliberations of such officials. This argument is reinforced by a second distinction between the natural and active bond between the citizens of a single community, a creature of nature, and the vaguer and artificial bonds that hold together the juridical persons (political entities) in a confederation, not of persons, but of communities. In third place Rosmini then advances the two practical arguments of unnecessary complexity in a centralized government, with the almost certain resultant inefficiency, and the historical tendency to opposition of interest between authorities and subjects. Rosmini admits (p. 78) that he is no friend of centralization, but hopes his argument on this point is valid as well as prudent, and bases his stand on the necessity of preferring liberty with possible imperfection of results, to efficiency with probable tyranny. The most that he concedes the central government, as a consequence, is, first, the duty of assisting the weaker local communities to a supply of means and competent teachers, and a supervision that shall prevent minority manipulation, and disregard of the more serious and fundamental needs of the smaller community and its component individuals.

The entire problem has, therefore, a reminiscent aspect that is not far from our own problem. Freedom from official interference is a demand typical of the profession,

and has been since the increasing power of the state has brought its activity to every door. The feeling of newly acquired power on the part of local officials seems to shine out between the lines of Rosmini's treatise, and this aspect was one feature of the desperate attempts of Europe to return to a stable equilibrium after the excessive demonstrations of the "liberals" of the preceding decades. Passing references also occur to the anti-religious factions of his day, and show the personal fears and apprehensions of the founder of a religious teaching community whose future was dependent on absence of friction between Church and State. But these are incidental. The main problem is the harmonious development of individual, family, national and cosmopolitan education side by side as a practical matter, and its reconciliation with the general theory laid down by him in that earlier period. That any of the types mentioned can be an obstacle to the others is plain, their spirit can be conceived in the narrowness that has often been exemplified in history. The final answer, unfortunately, is not given us in complete outline, for the work was never finished. As far as can be determined, the solution would have been placed in the relation of religion to these various types of life-contacts, so that we can see another reason for its being placed at the apex of the forces that give form to the moral element in man and his education. By the same logic it happens that the principles of liberty demand that the government must not attempt to solve this problem by imposing its will on those concerned. Its rights are the very last when compared with those of its subjects, and its action must not usurp any of those

anterior to its own, so that its action, as a matter of prudence, would in practise be restricted to a benign supervision of the field and a clearance of obstacles within which these various agencies would be assured a free hand, and the natural and absolute rights of the educand would be most completely provided for.

CHAPTER X.

THE PSYCHOLOGICAL LAWS OF LEARNING.

Possibly the most characteristic, and certainly the most important educational contribution of Rosmini is his Methodology. It is the core of his system, and it is, as we saw, strictly psychological. The details of its development are scattered through the "Antropologia", the "Psicologia" and the "Principio Supremo". The general opinion that all of value is to be found in this last is true only to the extent that it contains the canons for content-presentation in practical form, but even there an understanding of his theories of school-methods requires a familiarity with parts of the other works. The entire teaching process is only an application of what he found to be a universal law in all mental activity.

The famous "law" is its expression, and on no point of his contributions is there possible a greater confusion. In form it appears to refer to the order in which things should be graded in being presented to the child. But the nature of the content is actually a minor consideration. Rosmini is laying down, not an order of cognitions in the sense of recognitions, but of all mental processes, and is giving us what has since been named the "psychological order" as opposed to the logical order. What he

is insisting on is a spiral method of mental operation rather than of content, which lasts all through the educative process and even life, and, though described by him in detail as applying to the early years of school, it, in fact, extends over the entire range of the educational ladder and all other thinking processes.

We must bear in mind that the extant presentation in the "Principio Supremo" refers only to exposition. In the Introduction there are six types of purely mental activity, expository, critical, polemical, demonstrative, inductive and perceptive-inductive (Baconian), of which the first alone is the essentially didactic, on the levels of childhood especially. To follow the child in his first exercise of the mental functions was a natural method for a descriptive treatment, in view of the purpose of the book, and it did lead to the exploratory organization of what we now call genetic psychology. Incidentally, it does not even cover fully the content field, and the review, the drill, the appreciation lesson are hardly mentioned, and certainly not explicitly taken up. The out-of-school functions are not given any more consideration, as it should be plain from the nature of the work.

For an understanding of the general psychology he has left us, then, we must go rather to the other two works, and apply the "Principio Supremo" to interpreting its chronological implications. In a sense, this development is in the law itself, and the complete book was in-

tended to bring out in their proper place all the orders of cognition on all levels of life, including adult studies and activities.

There is, then, a definite order in which the intellect develops after man is born with the innate idea of ideal being in him. This order always begins with the simple perception in which the idea of being is "realized", or separated from ideal being in its pure mode. When Rosmini says that this first order of cognition arises about the end of the first year of life, he means that this power begins to function for the first time at this age, but this does not mean that it is characteristic of this age to the exclusion of the later ones. Each order persists through life, and perception is always the first cognition relative to any object or its part, and only from it can the other orders follow in their definite sequence, though not necessarily in a definite temporal limit. Naturally, when the mind has attained its full vigor, whole steps can be traversed in very short time, and many of the processes will be abbreviated by means that we shall see later, but not one can be omitted.

"We must here observe that the cognitions attained in the third period of childhood are not all cognitions of the second order; for, though it is impossible that the child should attain cognitions proper only to later periods, yet it is possible that he

should attain those proper to a preceding one" (p. 85).

So, given the birth of the required process and the material with which to think, the entire process is reducible to law. Hence, our fundamentals are to be sought in psychology, and method is only a corollary. The two sciences described in the "Antropologia" and "Psicologia" cooperate in presenting the information we need for this purpose, as they are so inextricably connected together, that they are really not two, but one science, considered from two different angles. (Psic. I, 11). The background is that of physiology and anatomy, and from it there emerges Rosmini's definition of man as "an animal, intellective and volitional subject". The animality is found in the passive and receptive faculties and organs, whose nature is reducible to sensitivity and instincts, whose diversity leads to the necessity of a principle that is unifying and, consequently, simple, and bound to its subject by a "sensiferous" connection of the subjective and the objective.

But the principle is also seen to participate in a spiritual nature, by the presence of the intellectual faculties of attention and the unification of activity that is known as will. Activities are therefore, either spontaneous or deliberate, and the latter class presumes a morality, whose nature is the reconciliation of causality and freedom, and of law and liberty.

A subject so endowed with the animal and spiritual rises to the dignity of a personality, with the consequent necessity of correct use of his powers to attain some realization of those higher perfections by which man expands the natural limits of his nature by uniting himself to being in its orders, and in the Origin of all being in which his happiness is concealed. The machinery for this union is then the peculiar concern of the science of Psychology.

Of particular importance for our purpose here are the "vital instinct" and the "sensual instinct". The first is described as that principle of life that gives unity and immanence to the total of phenomena in an organism, and in man is responsible for the vegetative functions, either in themselves or as the basis of those higher ones, of which the lower are really imperfect manifestations; in short, it is the sum of the stable excitations that tend to preserve and perfect life on its lowest, purely animal level (Psic. II, 1805 sqq).

The sensual instinct is the next higher evolution of vital instinct, and the source of the transient elements of the sensual and intellectual life, before these rise to the dignity of a proper order; blind, like the vital instinct, it is the basis of sensitivity, and completes and integrates the vital instinct, so that the two are sufficient to account for all that occurs in animal nature, whether for its preservation or destruction (ib. III, 1964). Hence, the former is in complete charge of the vegetative functions of nutrition, generation, the

mechanics of physical movement, the excitative intensity and stability of the "fundamental feeling" and even spontaneous motor activity on a small scale. The latter governs the sensual spontaneity of the reactive phenomena, sympathetic, aversional or counter-spontaneous, the last being already a rudimentary form of organized activity, which is perfected in the realization of the sensitive "faculties of reflexes, instincts and passions".

These last are the full development of the the Rosminian "instincts", which constitute the "synthetic animal force". On them the psychological rests as its foundation. Now with regard to this list of activities we must first note the following points. The use of the word "instinct" is purely arbitrary, and has since been superseded by "reflex", from which in its turn it is now customary to exclude such phenomena as the natural resistance of a living body to decay. Rosmini does lay claim to any originality in describing these activities, though much is surely his own observation. His use of medical and zoological data of common knowledge is obvious, though the treatment is broad, and the generalizations are made with the intention of reducing the phenomena to an order and uniformity from which a common element is extractible.

This element is the presence of a simple principle that governs and controls all, and is identifia-

ble with the same principle that on still higher orders of organized life goes under the name of soul, whose essence is in the "fundamental feeling" to which he refers so constantly. The substance of his doctrine, then, is that feeling is the one and only cause of movement, but that, though feeling has movement as its effect, as we ascend higher in the orders of life activities, these lower movements again become the cause of higher feeling or sensations, which, by their power of inducing the second series of movements, distinguish the higher orders of being from the lower (Psic. II, 1, and passim).

On that order, then, where sensation is the characteristic phenomenon, these two types of psychological activity appear in all their fulness, producing two similar and parallel series of results, that in their manifestations are, item for item, cognitions or representations of the lower orders, but in the sensitive order only. So then, the higher animals, and this is not mammals only, are living in both orders, and the "instincts" (in Rosmini's sense of the term) or higher reactive movements are so representative of the sentient principle as to obscure the complete and continuous lower activity that is going on all the time that the animal has life (III, 3). This is the point at which the original sensations and sensitive perceptions and cognitions enter into the picture and designate animal life by its reactive principle.

So far, then, it would appear that Rosmini has followed the road, if he did not discover it, along

which psychology has come during the past century, and has placed no serious distinction between the life of the brute creation and that of man. It is at this point that he tries to make clear this separation. Granted the existence and activity of a principle, by which the living is separated from the non-living, Rosmini notes in man the presence of two active principles, as opposed to merely reactive, namely, sensitivity and intelligence.

The former, sensitivity, is the principle that effects the union of the soul and the body, so that the ordinary mechanical laws of action and reaction do not apply. The soul is the sentient, and the body (whether objective or subjective) is the felt, the latter being always the term, so that there is a single primitive and fundamental feeling, with no essential distinctions, and the union effected through its presence is a substantial one and gives to human and animal nature its peculiar intimacy and unity (Psic. III, 249 sqq).

When the soul is endowed with the additional element of rationality, the resulting compound is essentially rational, or man. By virtue of this rationality, the perception of the fundamental feeling is of a peculiar type, namely, in full essence a conscious perception of both the principle in itself and of the term in its principle. The essential difference between the two orders then, is that man unites the animal feeling to intelligence through a fundamental perception which is the first act (philosophically) of the intellectual principle, and

that, as a consequence, there is no single sense activity in him when he is performing any distinctly human act, for there must necessarily be a parallel and complete counterpart of the animal sensitivity and perception observable on the strictly spiritual side of his two-sided principle. So the principle in its completeness manifests itself by functioning equally on all three levels of the vegetative, the sensual and the intellectual (ib., 570 sqq), in the full realization of the "zoetic course" and in its consequent reciprocal excitation across the boundaries of these spheres.

Now, the essentially intellectual element in the highest of these spheres is the spirituality of the principle, by which it can perform the singular act of uniting itself to ideal being in intuition. This union is possible without any relation to the fundamental animal feeling, and is the ordinary and general state of quiescence and repose of the principle as spiritual. This expresses the "first psychological law", that an inherent inertia of the soul keeps it quiescent in the union with ideal being till a "second act" arouses it to activity. An object perceived by the fundamental feeling and transmitted to the intellect as a limitation of that ideal being in the ontological order is always the cause of the arousal, so that the inertia gives way to a spontaneity, in virtue of which it can not only respond to a stimulus, but can initiate activity on all three levels of its influence.

But this first law is not infinite in its effects. Given the term and stimulus called for by the first law, the tendency of the principle is to concentrate its naturally limited (by the nature of the stimulus) activity on a single part of that term and withdraw it from the rest, just as in the ontological order, there is a natural tendency to let go of the ideal and substitute for it the real being that happens to constitute the stimulus. This concentration of attention is the expression of the "second psychological law".

The third psychological law, then, is that this activity will maintain itself on an objective level as held by the objective term, and be continued without consciousness. Consciousness, then, is an accidental state, in the sense that it will not be produced, except according to the first law. Hence, it is not only possible to have knowledge without consciousness, but this is a general condition that can be disturbed only by the nature of an impulse to the second act, which makes the subject himself the term of that act. Consciousness, then, rises like all other concepts from the deliberating placing of the subject, the ego, as the term of the act of perception.

But in any case, the tendency of the entire activity is to add something of its own as the term of man's intellectual principle, as the real term was added to the sensitive principle in the form of the fundamental feeling. Now, what the spirit does add of

its own must be intellectual, namely, an "interior word", which changes the cognized term into an object, and makes the final product a judgment, either an affirmation or a negation. The fourth psychological law, then, states that from the "theoretical reason" (intuition, perception or judgment) a word of the mind (concept or idea) is produced, which is matched with the perceived stimulus by the "practical reason", to find a duality of such a nature as will furnish a predicate for the subject.

These four laws constitute the basis of all rational behavior, and on them the laws of thought are built up, so that on them the totality of all possible thought, even the most involved and abstract, rests. In the order of time, of course, there is a genetic relationship of the thought-types, which is the theme of the "Principio Supremo". The key to the increasing complexity of the orders of cognitions is the functioning of the four laws, and the rigidity of successive origin that they impose.

Consequently, after the first perception, the second order of cognition is in order regarding that particular object. This is the analysis of the sensible qualities in that object, "relations between cognitions of the first order", as the author calls them (Prin. Sup., p. 95). For the most part they consist of the associated images that impinge on the attention, and are united to the object principally by the unitive

force of language, at least in the more adult uses of the order where the names of the perceived cognitions are generally specific. But in childhood, the images are in most cases not even the constitutive notes of the ideas, and so are not to be confused with abstract or full ideas, which, however, in precocious cases need not be excluded. This associative activity is the origin, as a consequence, of the classification of objects that occurs after a fashion at this stage, and of the responsiveness of the instincts and the appreciative and adhesional volitions. The discovery of relations, then, implies grouping and plurality, though on the basis of a mental or sensible note or passing instinctive reaction thrown into the mind by the neural machinery in the course of the analysis. But the analysis of this early stage is to be remembered as only the accumulation of notes of qualities perceived, and a merely reactional process instead of a rational one.

This activity goes on at a terrific rate all during life, and is the fundamental cause of the emergence of the higher stages that follow its existence. In childhood it is predominant and consequently, the cause of the vast increase of general information that is characteristic of late infancy. Its frequent repetition on the same familiar material produces eventually the greater accuracy and intensity of associations and perceptions from which the third order of cognitions arises.

This order essentially consists of the recognition

of relations between the first and second orders or the perceptions within either of them. At first the recognition is passive and inadvertant, but with attention at some point accompanied by the definite awareness of the relation. At this point reflection, in the sense of direct and directed conscious awareness arises, though it is still for a long time confined to the more obvious inferential judgments. So they are called "synthetic judgments" but within the limits of partial (and imperfect) reflection only. In time, then, they are followed by the reverse process of analysis.

"The synthetic and the analytic judgments alternate with each other in such a manner that, if we dispose in a series the various orders of cognitions, we shall find the uneven numbers of the series composed of so many files of analytic judgments. That this must be the course of things is manifest from the fact that we can decompose only what we have previously put together. Hence, composition must be followed by decomposition, and the latter by recomposition, and so on in continual alternation" (ib., p. 175) "The child is quite unable to express such propositions, but their substance undoubtedly passes through his mind. But al-

though a child, at the age of which we speak, is capable of catethetical (categorical, or absolute) reasoning, and of rising to the third order of cognitions, he is as yet incapable of conceiving hypothetical or disjunctive reasoning, because both these forms require that the major permise shall be composed of two predicates compared with each other, of which the one implies or excludes the other" (ib., p. 176).

Therefore, though not yet able to use abstractions in the strict sense, the child is already able to use collective ideas, and their corollary, number. Parallel with these ideas is the beginning of the practical judgments that guide the child's actions, or the beginnings of the moral sense. This must be understood in the limited meaning of admiration of the beautiful, the animated and the intelligence, and a sense of approval and appreciation which demands conformity. Rosmini, expressing himself in terms that refer to childhood in this stage, states specifically that the first appearance can be expected from the third year onward, a suggestion as to the possibilities of the function of the kindergarten.

In older minds the successive steps will naturally not present the clear sequence he has drawn for us, but it is still determinative of the logical succession with which the apperceptive masses are built up,

and only the relative difficulty and complexity of the fundamental percept,, and its strictly abstract nature, will remain as a factor of understanding when dealing with the more mature mind. This is a matter of proportion only, as the fourth stage is the full exercise of the judgment faculty and the process of abstraction, which, however Rosmini prefers to call elementary decomposition, using the other term as descriptive of the second level of cognition. The purpose of the distinction is to call attention to the recognition of the relations between the component notes of the object and the object itself, with the emphasis on the conscious direction of the attention to the desired abstract. Hence it follows that

"in abstraction (second order) there is something resembling comparison; but if we look closer into it, we find that it is not a comparison of the things themselves, which are left aside, but of the qualities extracted from them, and these can be abstracted from any one thing without comparing it with another, since the attention is limited to a quality of the thing, and does not extend to the whole thing. . . . but the process of comparison shows the necessity of having, first, the quality of abstracted entity in the mind, second, the perception of two sub-

jects, third, the comparison of both with the abstract quality". (ib. 220).

From this it is logical to infer at least the presence if not the realization of hypothetical ratiocination, and of differences, means, and the intellectual perception of the ego.

Rosmini differs radically from contemporary philosophy on the nature of the substantial ego-relation, as we saw in his system, and bases his position for its comparatively late appearance on this argument.

The chief difficulty in a clear realization of the consequences of the ego-concept lies in the fact that all perceptions are not mere photographs of reality and that every object contains a mixture of elements, part of which are due to the naked object itself, the other part being due to the operation of the mind in the perception. "I" certainly pronounces the soul to itself and includes the idea of individuality and reality, as well as of perception. Now this attention to itself is due, like all other perceptions, to some stimulus, aside from the mere substantial feeling which we have seen is its nature. Hence the third element that completes the ego-relation is the passing on to a secondary act, and it requires a separate action of the synthetic or analytic kind to separate the subject of that action from the action itself, followed by

a realization of identity with that subject. But this consciousness of the soul is not the essence of the soul, for reflection by which it becomes thus conscious of itself is one of those accidental and secondary acts of the soul, and the entire difficulty of the latter German school is founded on this confusion of the soul with its acts. The fact is that in the perception of selfness there is already included the identity of the perceiving with the perceived, and this identity arises from the "subjective feeling" which is the real of an object arising before and for the mind out of the general concept of being that is innate in us, and which is impelled to this objectivation by the force of the feeling acting on the soul.

"In other words, the soul, when it moves to perceive itself-- that is with its own act reaches itself-- finds itself already moved toward this perception; so that the beginning of the act of self-perception is seized by the completed and perfect perception. . . . so that it is impossible for the perception which expresses itself by the monosyllable 'I' to take place without including this identity" (I, 79).

There is therefore a real distinction to be borne in mind between the reflex ego and the ego of first information, the latter is the naked rudiment

which nature gives to the human spirit from the beginning, while the former is the product of the mind itself; so that at bottom, there is an ego-feeling that is anterior to consciousness, and the essence of the soul is in this feeling and not in the consciousness, which superadds the relationship of operation on itself to the idea of the soul, and constitutes the essence of the ego-idea (Psych. I, 70).

In the fifth order, the full exercise of the analytic judgments and their converse continues, and becomes more perfect, but there is a distinction in the manner in which the relations are recognized. For there are species of relationship, the first being that of mere perception, the second the predication of qualities of things, and third is

"The process of comparison (which) appears now in express and distinct form, and not cursorily and accidentally, as in the previous analyses, and moreover, the relation, which is the result of the comparison, is also seen in a determinate form, and not in a general and imperfect one, as before. Not only are subject and predicate bound together by relations, but the relations may be found between any two things which present themselves together, and between which there is some connection making the mind regard them as a unity, a complete object of thought. With regard to subjects and predicates,

the mind can discover what the law is which unites them in one object, whether accident or necessity or the essential nature of the thing, so that the distinction between them is one of conception, not of objective truth" (ib. 303).

Consequently, disjunctive ratiocination can be now a conscious process, an abstract idea of number and a definite order of values grow up in the mind, time can be abstracted from events, and morality based on principle becomes possible.

This was as far as Rosmini was able to complete his series of orders of cognition, but from the memorandum discovered by the editor among his papers after death, we now know that the sixth order was that in which reflexive knowledge becomes conscious to the ego and is deliberately directed by it.

We find then that we have here a definite series of steps of increasing difficulty and complexity, which is a natural psychological order and furnishes the basis of a method that endures not only well past the age of puberty in school life, but forms the average of all every-day mental activity in any intellectually-psychological situation. It may perhaps be summed up as,

1. Perception,
2. Sense perception of quality,

3. Sentence Sense,
4. Intellectual analysis,
5. Abstract reasoning,
6. Conscious evaluation of entire perceptive masses.

This last was of course, as stated, only indicated, and can be extended to include the clear abstract notions that furnish the basis of metaphysical abstraction, and which carries us well into the involved type of reasoning represented by college work.

From the point of view of the teacher then we have here a complete outline of the methodology of informational learning. In spite of the addition of the time in life when these successive steps first appear, we are told definitely that in essence these steps are the logical successions of the gradual accumulation of the apperceptive masses regarding any idea or group of ideas that will eventually make up man's mental stock in trade. For all the grades of school life from the kindergarten on through college life, all informational learning is the repetition of this series of steps, either in intense and short bursts of activity, or in extended and, in most cases, intermittent applications of it to the continuation of the unfinished complex, broken off by the continuous variety of life's contacts.

After laying down the general laws of psychological procedure, Rosmini next turned his attention to "practical reason" as opposed to speculative (II, 1405 sqq).

Practical reason for him means the readiness with which the conclusions of the "theoretic reason" are translated into action. We have already seen the inference he drew from the close interaction of the sensitive element of reason with the intellectual, by virtue of which to every intellectual action there corresponds an effective and volitional adhesion, which colors and evaluates every item of knowledge and every reflection that occupies the mind. Now in consequence of this adhesion, the normal course of procedure of the subject is that the practical reason engages in an active and vivid participation in the action that Rosmini has called "practical recognition", and this participation is measured by its readiness to spring into action according as the thought is entire and comprehensive or abstract and partial. Hence, memory (recall to consciousness), habit, and reflex actions generally depend for their grounding and thoroughness on the "law of prudence" (not to be confused with the similar moral law), in virtue of which readiness to act is due to "the ability to find the means of attaining any end whatsoever".

The origin of reflexes, of habits and the quickness of memory then that constitute the mechanical side of the learning process are likewise based on the condition and perfection of the apperceptive masses from which the "practical reason" goes out in any of its activities, and we can see the inference with regard to directing association of ideas as Rosmini brings it out in his des-

cription of the second order of thought. In fact he goes a step farther and tells us (1413 sqq) that as practical recognition grows out of perception, so also out of the third type of intellections, reflection (both in its imperfect forms and in its true "full-specific" forms), there arises by another special law an inclination to the contemplation of the idea, a readiness to return to the idea and consider it from various aspects, as truth, exemplar, beauty, ideal, etc., and with every return and every external act resulting from the increased delectation there is a greater love or adhesion, so that we have here the root of all development of ideals, both from reflection and from information, and the third side of educational endeavor, the inculcation of ideals out of the informational masses. Unfortunately, Rosmini did not succeed in extending in his "Principio Supremo" the classroom aspects of this part of his psychology, but the inferences we have here indicated are at least a suggestion on which further development according to a preconceived plan, based on selected social desiderabilia on the part of educational theory today is possible. We can see then that while his minute description of the successive order of thought is only one aspect of his psychological structure, namely the logical or mental, that he did nevertheless build his foundations so broad that no essential reconstruction is needed to make his theories fit the expressed needs of education today and we can see more clearly why he should, as Munroe put it, have

exercised such influence in his day both as an educator as well as a psychologist. We have, without knowing it or giving him credit for it, been building not only on the foundations that he laid down, but actually on the plan that he marked out as the necessary development of the science of education as he found it.

By way of illustration of this statement it may be well to call attention to some of the incidental details that he touches on in the course of developing his theories. It must be admitted that the stimulus-response theory of psychology probably was not his discovery in the sense that it was not known before his formulation of it. But it would be unjust to deny him the credit of having discovered it independently of what may have been the knowledge that had developed elsewhere. Thus we find in his description of normal responsiveness (II, 935 sqq.) what is clearly an original explanation of the inner urge to response as dictated by the state of the nervous system, and in it he specifically determines the two conditions that produce motion, namely the pleasure that comes from response to readiness to act, and the uneasiness that arises from not acting when conditions imply that readiness.

On the school level the implications that are made on the basis of this readiness form quite a contribution that is worthy of preservation. To understand the implication we need only remember that for Rosmini the practical reason is the readiness to act, in substance.

On this basis it is not at all surprising that Rosmini should say that when the mind is only occupied with a few ideas or apperceptive masses, and the field is, so to say, clear from unrestricted action, the acts of the will are actually stronger than in adult years. Consequently, he insists that the tendency in these years of the first two orders of thought should be along the lines of the cultivation of feeling and of volition, and that the perception should be regulated by a controlled environment that will assure exposure both to the type of experiences that lean to feeling and the type of positive habitual reactions which will have value later. The reason is that intellectual contacts are hampered by the disconnected nature of the child's feelings and volitions at this stage, so that there is a definite necessity of introducing some logicity and continuity into the intellectual life (Bk. II, 3, 4). On the other hand, as soon as the third order of thoughts, the cognitions derived from sensible things and the, granted imperfect, classifications that follow have been attained, the necessity of a direct reversal of the manner followed till then, appears just as logical, so that a regularity and an order (183) become a necessity, so that the processes of integration, the first signs of reflective thought, may profit by the associations that such regularity and order will present to the mind as guides in the process. In other words, the stimulus-response principle is here being invoked for the express purpose of

increasing the number of responses that will be close to the experience of the child, and will appeal to him by that process of self-education and suggestiveness that characterizes Rosmini's appreciation of school matters. The entire list of suggestive "educational activities proper" to each order of cognitions could similarly be listed to show this application of the principle.

Most telling in this connection however, is Rosmini's explanation of habit-formation (Psych. II, 918 sqq). We know that the term of activity, whether a sense-activity or an intellectual one, is required to stir the principle and rouse it to the performance of a "second act". The transition from the passive to the active state leaves, even after the stimulus ceases, a residue of activity, so that a further arousal finds the principle more ready to respond to a new excitation by the term, because in addition to the arousal there is the added parallel arousal of the memory (either sense or intellectual or both) produced by the unfinished condition of the apperceptive nucleus left from the first excitation. There is, then, a distinct trace of the earlier experience left in the "feeling" after each experience, and this tension is increased by every return of the external stimulus, so that the sensitive, as well as the sensiferous, are more ready and, so to say, eager to participate in the actuation for the effect to be produced. With each return, then, there is

an extension of the readiness throughout the entire series of neural machinery and associative sensitive and intellectual masses which becomes more automatic and intensive each time the group is exercised by the application of the same stimulus.

Memory is merely a variant of this phenomenon. (ib. 1145 sq.) For the most part we apply this word to the things of the intellect and senses, but this is in fact a mere manner of speaking. Memory has two separate functions, retention and reminiscence. The first is the preservation of knowledge, while reminiscence is the recalling of this knowledge to reflective attention. In the former, a moment's thought will show the adequacy of the above description to meeting all the requirements of a complete explanation of the phenomenon, and in the second case the only added feature is the arousal by a search among the accumulated data of the apperceptive mass for a stimulus that will harmonize with the traces of activity remaining. Not only does this explain "where remembered things are when we are not thinking of them", but it also gives us a possible reason for the clearer and more perfect retention of those things which were consciously absorbed by the memory, and were accompanied by reflective thoughts at the time of the first experience. But it applies as well to the automatic responses that have become the ideal of the drill lesson of our day, and presents us a definite and apparently satisfactory explanation of the underlying reason for avoiding both

"crutches" and errors before intensive practise is permitted to begin.

Another point that illustrates the keenness of insight of Rosmini into the operations of the mind is to be found in his description of the actual formation of an apperceptive mass (ib. II, 1456 sqq.):

". . . Psychological development proceeds by the following steps of modes of action on the part of the spirit, all of which we venture to think that an adequate explanation has been given for.

1. The rational principle does not move unless an object be given to it to unite itself with;

2. If this object is the infinite ideal only, the rational principle rests in it, and then its action (intuition) is, like the object, perfectly simple. It can not move any farther, its movement having reached its final term;

3. If the object is a real, given in feeling, this promotes perception, in which there is multiplicity, in as much as it includes at once a) the infinite ideal, b) the ideal as measuring the essence of the real (concept of the real, measure of the real), c) the affirmation of the real, that is, of the realization of the concept. All these are, so to speak, organically united;

4. If for any cause the affirmation of the real, or the memory of it ceases, there remains in the mind the concept of the thing, upheld by some real vestige of the feeling, which vestige takes the place of the thing;

5. But a real perceived by our theoretic reason may become an object of our wills (psychological activity), not merely as conceived but as real. Thus the soul is united with the object in two different ways.

In fact, the will sometimes takes delight in simply actually knowing a thing (contemplation), and then it is satisfied with having the object present in the concept of the theoretic reason, and with the contemplation of it, which is an act of the practical reason. (This contemplation is considered by the Schoolmen as an act of the theoretic reason; but since it is delightful, voluntary and loving, it ought in my opinion be assigned to the practical reason. It is, indeed, the practical act, that approaches most closely to the act of the theoretic reason and is a reinforcement of it; and it is precisely in this act of practical reason, reinforcing and completing the act of the theoretic, that I would place beatitude, not in an act of more theoretic reason without any intervention of the will).

6. But sometimes the will is not satisfied with merely contemplating the known object; it desires to have actual fruition of it, to possess it as a real, as the term of feeling, and not simply of cognition.

And with regard to this real union, there may be two kinds of volition, the affective and the appreciative (Anthrop. 612-35). In the merely affective volitions, the rational principle limits itself to seconding the instinct, and therefore holds itself in a negative attitude with respect to the term of the instinct, conceiving it indeed in being, but not distinctly appreciating it as good. In appreciative volitions, on the contrary, the act of appreciation comes in before anything else.

Now the appreciative volition (we shall confine ourselves to this at present), which longs for the real as the term of feeling, is different according to the different sensories, and the different ways in which they unite their term to themselves. Hence,

a) In the case of sight, in order that there may be appreciative volition, it is enough that the real be visible to the eye. The visive perception of it will be the object of

the longing. Thus, it is enough to look at a fine peach hanging perfectly ripe on a tree, in order to feel a wish for it.

b) In the case of the touch, it will not be enough that the real be at a certain distance at which it can be seen; it must be within reach of the hand. For example, the child in its mother's arms, seeing that fine peach hanging on the tree, will stretch forth its little hands toward it, and give other unmistakable signs of its desire to have that beautiful fruit plucked so that it may be able to handle it at pleasure.

c) In the case of taste or the alimentary sense, there will be a longing for eating the real thing itself. The child will wish to put that fruit into its mouth and eat it.

The same may be said of every other sensory. In general, therefore, there is a desire that the term longed for should be united to the sensory to which it belongs, in the particular way which that sensory demands.

7. Hence it is that the real conceived by the theoretic reason, whenever the will longs for it as the real term of a feeling, receives the character of end with respect to the will, whose activity is therefore at once roused to seek the means for attaining that end. These means may be found by a play of the merely affective volitions,

or else the practical reason may set itself in motion for finding them by appreciative and calculating volitions.

8. In this last case, the practical reason moves the theoretic reason to find the means in question.

At the same time we must not conclude from this that the abstract concepts of end and means are hereby formed. There is as yet nothing really abstract in the theoretic reason. It acts according to the relations of the several beings without abstracting these relations from them. It sees the relations in, and not separately from them, although the seeing is a part (of the acts) which have already a complex and manifold term, so that its parts are, as it were, organs of the single understood whole, existing in and through that whole.

This manner of acting in view of means and ends without yet abstractly knowing them as such, does not belong to abstract thought, but to complex or manifold thought; for in the object of thought there may be multiplicity without abstraction. Thus we have seen that in the object of perception there are three ele-

ments distinguishable; and yet it is a single operation, and its object is one, though organic.

9. But this relation of means and ends is already a link between ideas and perceptions. Other links subsequently manifest themselves, which associate them in a thousand forms, and out of many forms make a single thought; and the instrument which imparts new activity to thought is the association and spontaneity of phantasms. In fact, we have seen that it is a law of the reational principle to unite the idea to every feeling. Hence, the phantasms excite thought. Now it is a peculiarity of the phantasy that it has a kind of spontaneous motion; whence it happens that, on one phantasm being formed, others and yet others make their appearance. As a consequence, thoughts are likewise made to succeed each other by this stimulus.

Again, the phantasy is subject to the law of habit, and this law is imposed on it partly even by the thoughts. For, as phantasms move the thoughts corresponding to them, so the thoughts in turn move the phantasms. Now thoughts are bound together by their logical nexus, and hence the corresponding phantasms also are wont to exhibit themselves in a series

which might be called rational. Indeed the various series of reasonings which the mind has once gone through, have the effect of binding together and producing the corresponding series of phantasms. Hence, subsequently, these reasoned series of phantasms which are bound together in conformity with the different reasonings, are habitually aroused in us as soon as the necessary impulse is given to our internal sense, and along with them there return the corresponding reasonings. Thus, the habit to which the phantasy is subject is communicated to the faculty of thought which is linked to it; and this is what we call the reasoning phantasy, or reasoning habit. And here it must be remembered that this reasoning habit begins at this stage of man's intellectual development, grows and amplifies much more with the other grades of development of thought.

10. The association of perceptions and ideas causes one real to become a sign of another real, and one perception of another perception. In this way a language naturally begins to form "

While this is not the end of the description as a whole,-- in fact there follow page-long descriptions of

the various abstractions we saw listed under our sketch of the "Principio Supremo", far beyond our needs here, or even our purpose in adducing, -- enough has been given to show that Rosmini, though never using the Herbartian terminology, has here a far clearer picture than that author or his school has given us, and it has particular value from the fact that it furnishes us a definite guide in teaching for an efficient use of the review principle, as well as for the presentation step in arranging the matter on its first appearance, both of which have been found to be so necessary in assuring certainty of progress in the presentation of matter over longer periods of time. The principle of association of ideas by the natural links between the connotations and implications of all the items of a series is, after all, the one used in building up complex and in unifying larger informational masses, and the use to which it can be put by the teacher is obvious, aside from its interest as an indication of the reinforcement the five-step method received in the independent investigations of the Italian. In passing it is also worth noting that the inclusion of the non-rational factors so early in the development of the mass, is a resemblance to the gestaltist theory of psychology of which mention has already been made.

But possibly the most conspicuous part of Rosmini's psychology is his investigation of the actual processes of thought, and the laws that govern. This he has placed under the general heading of reflection, which ac-

cording to his definition, is the perception of a perception, and the means by which our increases in knowledge actually take place. By means of it we take the content of a past thought, or an apperceptive mass and subject it to a scrutiny that is in effect a judgment just as our original percept resulted in a judgment. But this scrutiny must not be confused with the mere bringing back of this thought or mass to consciousness; that is, as we saw, only reminiscence (1032). The most general division of reflections is that into partial and total. The former, which occurs first in mental activity, as already explained in the "orders of cognitions", aims at discovering relations within the individual real beings that have presented themselves to the mind in earlier perceptions. Total reflections on the contrary, tend to comparisons of objects with being itself. Reflection in general accomplishes its purpose by two major modes of action, analysis and synthesis, both of which are again divided into material and formal. We analyze or synthesize materially when the objects under scrutiny are of the same nature and logical condition, as chemical analysis, numerical division, etc.; but when the nature of the subjects differs, as when we separate a genus into its constituent species we are analyzing formally. The first is concerned rather with quantity, the latter rather with quality, modality and relationship.

This scrutiny in any one of these types of reflection is a manipulation and active rearrangement of

selected items by the intellective principle, followed by a perception and judgment on the impression created by the new picture thus formed. The process is very rapid, and often results in many such rearrangements and perceptions in an instant of time, as the old knowledge passes in review. But, though there is involved a great deal of what since has been called "trial and error", the series is not the result of hap-hazard activity, for the different divisions of reflection characterize the general nature of the type of rearrangements supplied, and no judgment is made just to be thrown aside; even when it does not fit the final purpose of the activity, it is added to the general apperceptive mass, and is a temporary return to the "order of cognitions". So, instead of "trial and error", Rosmini classifies the series of judgments rather as a purposive experimental process, governed by the general tendency to lay aside and return to the new knowledge obtained from the repetitions of the process.

This new knowledge arising from the successive steps of this thinking process is due to the fact that one judgment in a series, when followed logically, always leads to a higher order, so that we have not only the judgment but the nexus between them. The nexus is in the identity of the perceptions of an earlier and a later judgment, one of which is a wider and more general statement of the relationship discovered in the perception, and the simultaneous presence of the identity with a

dissimilarity, by which a third term is isolated, and gives us a new item to add to the mass. One of these judgments becomes the major and the other the minor of a syllogism when the thought process is put into words. The reasoning process essentially consists in the continued process of comparison between syllogisms and judgments, which are, then, alternating sequences of analysis and synthesis, so that the general results of reflection rather than the successive steps of the process furnish the denomination of either synthesis or analysis, to describe the whole series. It is only natural to compare and then note similarities, and after these have been distinguished, to note the separations and the differences. The preponderance of the final result determines the type to which the entire process is then referred, for even negative judgments are in their formation, positive in conception,

But these recurrences of mental manipulation are still of the lowest or "judgment" order of cognitions. Its components are the comparisons made from the mental material at hand. In time it becomes complex, as we saw from the multiplicity of new percepts that continually flow into the mind. But real reasoning begins when we can go a step farther. Early in concentrated thought we find that a certain truth depends on another percept which we have never seen, and a rational persuasion of the existence of this new term arises without other proof than its oppositeness to the known materials under scrutiny. The acceptance of this new truth is rational faith, or intergration. Examples of such reasonings are those that bring out the existence of

natural laws, and deductions similar to that by which the necessary existence of an unknown planet is brought out by the results of mathematical manipulations and known actions of previously ascertained astronomical bodies. (Rosmini was writing this part of his "Psicologia" at the time of the discovery of Neptune by LaVerriere and Adams). The argument from authority is a similar variant of this process(1046 sqq.).

Rational creation, the next variety of thought process, is, on the other hand, a form of synthesis in which the mind assumes or pretends the subsistence of a being whose essence it has previously perceived. It has three forms, hypothesis, personification and error. Hypothesis differs from integration in the fact that the latter proceeds from the necessity of being in its order, while the former is definitely a conjecture. Personification, the symbolization of feeling, has a limited field in informational growth, its purpose is rather the field of feeling; but error is the deliberate assumption of an attitude contrary to facts for the purpose of seeing the relations that logically follow and by their means leading to the logicians' "reductio ad absurdum".

In total reflection the mind works along the same lines as in partial, but does not stop at the particulars with which that type of thought is concerned. There are four principles (Rosmini calls them faculties) which underlie all thought in this field, and which are used for the discovery of the underlying unities of multiplicity. The first of these is the sense of principle, or the recognition of the universal value of certain propositions, and is based essentially on the orders of being that are evident in creation. The

second principle is that of archetypes, which "pushes any known essence to its ultimate perfection, it is in short, the creation of the ideal in any order". The third principle is that of method, which is the arrangement of particulars with reference to each other, or to a selected unity. The fourth principle, finally is that of absolute or transcendental knowledge and is the distinction of the subjective and phenomenal of any series of propositions from the ontologically independent.

What we mean by the age of reason, then, according to Rosmini, is the time when in the fourth stage of mental development we become capable of turning our attention on our previous perceptions and of drawing from them the comparisons that the diversity of judgments presents to the mental view, the weighed judgment of a perception. According to the "Principio Supremo" this occurs sometime after it has become possible to abstract **qualities** from perceptions, and make a judgment regarding them, and occurs somewhere near the completion of the seventh year. Now allowing for the precocious development of the Latin race, it would appear that among us the phenomenon need not be expected till somewhat later, and Rosmini specifically warns us that the habitual use of the faculty rather than an isolated appearance of the activity is the criterion of its presence. Now, in school matters it is evident that individual differences in pupils will present a wide divergence of this appearance, and the necessity of varying the procedures in the classroom that follows from this fact, is indicated by the additional truth brought out in the "Principio Supremo" that conscious reflexive knowledge is far from being the same as the presence of reflexive

reasoning. The former does not begin according to him (see editor's note), till the dawn of puberty or somewhere near the age of twelve, and covers all the period intervening till adolescence, or about the twentieth year. The mere presence of reflexive reasoning, on the other hand, is indicated by the first appearance of the sense of duty (ib. 391), while the great and sudden increase in the powers of the imagination soon after (406) shows the definite presence of the faculty of integration, and the beginning of analysis and synthesis. So it would appear that the distinction between the two may have more than a passing meaning on some of the phenomena of our mass education, particularly in the increase of failures at about the sixth grade, and still more so in the failures in the first year of high school. The former may be explained by the sudden increase of abstract notions and the insistence on a too early introduction of total reflections, as opposed to the partial which appear to be proper to this age, and the problem in high school is similarly due to the absence of clarity in the ideas the child should carry with him from the grades.

The fact that in the earlier stages mental development is broken up into intervals of comparatively short periods of life, while in the description of the fifth stage, the change from judgment to conscious reflexive knowledge, we have a long period of five years, and in that of the sixth, the author uses up the time from the twelfth or fourteenth to the twentieth, a period of about seven years, shows that a gradation of matter and a deliberate attention to the change in the processes comprising these steps requirss far more attention

in content examination and evaluation than has been bestowed on it. And in addition, there occurs to the mind another possibility, that the sudden and enormous increase in the acquisition of informational knowledge before the use of reason might indicate that Rosmini's unified series of text-books would not have been so characterized through the middle elementary grades by a formal treatment of the content branches. It may be well to return to this idea when we speak again of method in general.

It is now necessary before passing on to method, to call attention to another group of laws that obtain in psychology, which Rosmini has called "cosmological laws of the rational principle", for the assistance they render to better control of the thought processes, and as further arguments for the place as a psychological pioneer that has been claimed for him.

We saw that the movement of the spirit to its second acts is communicated to the mind by the action of the external world (which includes for practical purposes the animal part of the subject). Now, the law governing this movement expresses the action of the stimulus itself, and is the first of these laws, but the second, the law of the quality of this action, is the law of esthetic harmony, as imposed by the harmonious nature of that world.

The first law, in its simplest form, states that the fundamental perception is always due to an external stimulus, the real, which arouses the attention, and by the stability of the real attention and thought are kept in action. The fundamental feeling, then, which we saw is the first to be

aroused, must not be thought of as a relationship, the ego as opposed to the non-ego; this does not enter into the act at all, so that all the concentration after the actuation is objective and outward. If the attention aroused is mild, the result is perception, if more radical, it leads from this process all the way to reasoning, and the ego-relationship may or may not be brought into the thought-sequence, dependent on the nature of the arousing perception and the direction of the reasoning sequences aroused. The fact is that the second acts, which follow the arousal are not mechanical but free, and the real objective of the entire process is not the subjective but the external. We have, then, here in an outmoded form a definite statement of the law of stimulus and response, with the definite modification, that the tendency is toward completion of the chain on the higher levels of the intellectual, rather than of the merely physiological, and that any stimulus that does not reach this level is imperfect and incomplete in its nature. This is, therefore, the explanation of the scholastic adage: nihil in intellectu quod non prius in sensu, and explains the reason for our continual use of corporeal language in our explanations and descriptions of the incorporeal. The reason is that only the sensations excite in first instance, and the neural paths from earliest experience on, interpret all experience in terms of this medium of communication, the corporeal. The second deduction from the law is the origin of abstracts in purely spiritual nature as requiring natural or artificial signs for their comprehension and communication. Among these signs the complicated group we call language stands out as pre-eminent among images

and symbols, as particularly representative of the analysis and synthesis that the frequent recurrence of the same thought-processes has bundled into unities of large dimensions. The third consequence is the necessity of marking for recall, either mentally or physically, all our cognitions, otherwise we are subject to the certainty of the information or experience sinking back into the sea of universal being. The necessity of practical attention to methods of developing concentration and ease of recall by the proper manipulation of the reals, either internal or external, in a way to assist constructive thought, and the subjugation of the reals that cause distraction in this process, also follows; this last is impossible, of course, as far as our absolute control of internal conditions of an animal nature, and remains so by the activity of the "vital instinct", though partial success at both extremes is within our capacity. This is, therefore, the principal task before the psychologist whose practical field is methodology.

The second law, that of esthetic harmony, is less certain and clear than the first. In substance it means that the order and harmony which is attributed to the universe through our experience, includes the subjective nerve structure and its terminus, so that the "feel" of any sense is proportioned to the sensitivity of the relative sense in recognizing units of vibration or texture of its objects, not merely as a recording operation, but with greater or lesser feelings of enjoyment in proportion to the amount of harmonic relation in the object and consequently in the response. Now, from the laws of instinctive behavior we saw that the animal tends to preserve and increase the actions that are agreeable to it (II,1554), but in this each sensory is limited to its own world, so that a comparison between the dif-

fering sensations, whether simultaneous or in succession, is purely one of analogy, being not a comparison of size with size, but of proportion with proportion (ib. 1555). This sense of proportion is what is analyzed by the sentient principle, so that an action once begun with the pleasurable accompaniment tends to continue as its interruption, being a loss of proportion, is in its tendency painful. The succession or continuation of the action in its progress and intensification consists of an increasing series of links through the communication of one power to another so that the more intense the action has become, the more diffused and multiplied is the feeling of pleasure and the more intense the pain of its interruption, so that even its completion is not sudden but gradual.

Rosmini admits that the verification of this law still demands much experimentation, as far as the nervous system is with its individual organs concerned, but realizes that in practise it is almost impossible. Therefore, the use of the word "law" is to be taken here in a restricted sense, in as far as it is an attempt to formulate a hypothesis that will supply the explanation for the phenomena of psychology that his age was not yet able to furnish. And if we examine the law for a moment, we will note how far it does go in finding a common bond for much of the problematical material of the science. In first place, the arousal of the attention to a certain item of the great flood of stimuli that come to the mind, finds a reasonable basis in the pleasure and pain theory that is involved in the hypothesis. Its similarity to the "tone" theory of emotional response and of the instinctive responses in the tonality of the organs and neural machinery

is striking, and, in fact, is described by the author by an elaborate comparison with the tone relations of the musical scale with the physical activity of the auditory nerve ends and plexuses in their perception (ib. 1557 sqq). It gives a background for the laws of learning, especially those of use and disuse, and its idea of proportion is an alluring hypothesis for both the law of reaction and the arousal of quick simultaneous reactions. As a corollary to this fact, there is suggested a reason for the quick and easy establishment of habits both physical and mental.

But the most important deductions from the hypothesis arise on the mental level. On the appreciative side, there is the suggestion of the physical basis of taste and enjoyment, with the canons of the arts as they have been developed in time by the general concurrence and consent of mankind. On the intellectual side, the fact that the data of one sense are interpreted in the terms of the others by the sense of measure and proportion resident in the others, furnishes the basis of the fundamental mental processes mentioned before, analysis and synthesis. "The several sensations fitting into the "sense-prism" at various points, divide the body perceived into several aspects or natures, from which the items of the analysis are selected by the subject, according to the needs of his human nature, the groups of active and passive feelings of which are in their turn the registrations of the harmonic relations of the feelings in the centre of the nervous system. Hence, the reliability of processes that are in their nature really subjective, but correspond with the objective reality, which impinges on the sense organs in analogous vibrations. Accord-

ing to this hypothesis, then, the sensories divide up being, and present it to the nerve-system and to sensitive perception translated into terms of harmonic vibrations of the sensories, and, if, as the hypothesis states, the harmonic principle holds good throughout the entire mental machinery, psychological analysis continues this process, and, on account of its much finer tuning, is able to even divide up things not divided by nature, and so give us the mental being, analytical reflection, abstractions, etc., which are later identified in the word-descriptions of vibrational proportions and intensities, which practical reason and convention use for the partial glances of the perceptions and summations of experience of the matter brought in by the sensitive. The correlative of analysis, synthesis, is likewise cosmological, according to the same law, in as far as it unites the different sensible representations furnished by the organs and interior senses, and forms a unity from the harmonic relations of the various perceptions and sensations of an entity or entities in the identity of space, thus giving it its individuality and coherence. But, in view of the fact that much of man's knowledge is based on signs, which he has attached to these feelings that come to him in this manner, he extends the principle of signs to things of which he has no direct perception, and his appreciation of the ontological relations of percepts and their combinations is based, not on similitude, but on proportions which make up and are identified in their common and harmonic elements. Specifically different things are compared on this basis, and hence the meanings of those things in life, whose knowledge and understanding man does not have from immediate perception and direct reflection. (ib. 1604-60).

CHAPTER XI
UNIFIED SCIENTIFIC METHODS APPLIED TO
CONSERVATIVELY SELECTED CONTENT.

Methodology, therefore, in its widest sense, is a subdivision of the practical science of psychology, and its task in each instance is dictated by the end in view. The major ends are dictated by the six major divisions of thought, as given at the beginning of the "Principio Supremo", and of these the didactic, or informational is primarily scholastic. The school is only one of a series of educational agencies, and a very specialized one, but its importance is shown by the emphasis Rosmini gives to formal education in his exalted tone of treatment in the "Unità".

In its more technical sense, then, we find that Rosmini has provided for method, which

"we understand as the order given to the various mental operations as necessary for the purpose of the reasoning proposed. Before taking up any special methods, it is necessary to see whether there is an outstanding principle on which the rules of those methods depend, as an effect. That there is such a principle, which directs all methods with its light, is certain, and it is nothing else than the very nature of the human understand-

ing. It has, so to say, its own peculiar mechanism, and the laws of this mechanism are fixed and unalterable, so that the mind can not move, except in taking the steps and following the way that is determined by those laws. Hence, it is that there is an art of moving the human mind, it is that of helping it to make those steps which are determined by its nature, expeditiously and assuredly, according to a fixed order.

This art is method regarded as habitual. Now, the science of method is the determination and description of the natural order of those steps which the mind must necessarily take successively according to its nature, to achieve the purpose it set for itself and which is proper to it. There is, then, a natural method, which is as a model for the art of method. So, whenever man finds a means apt to stimulate and assist his mind to take its natural steps quickly and confidently, he has found a method. If, then, he stimulates or excites his mind to an order of action different from that of its nature, it will resist, being unable to obey the whim and the ignorance that tries to guide it, and the man tires himself with vain thinking, he tangles himself up in error and finds darkness instead of light. This

is not method, much as he may believe it so and name it so.

And the awkward result depends on the general principle that in all things man only uses himself up in his own impotence whenever he presumes to dictate laws to nature, instead of obeying those imposed on it by its Creator. . . .

Wishing now to lay a firm foundation on which to set up the doctrine of general method, it becomes necessary to recapitulate the laws of the movements of the mind, which determine its steps as it goes from one truth to another. The original acts of the cognitive order are intuition and feeling. These by nature give man the first two elements of all his cognitions, ideas and feelings. If man did not have these two elements, no one could give them to him; he would understand no speech directed to him. These elements, therefore, can not be imparted to him by way of teaching, they are preliminaries to every deduction and reasoning problem.

The subjective principle, common to both these acts of intuition and feeling, contains at the same time, by the generosity of nature, the two elements of everything knowable, the idea, that is, being known per se, and fundamental feeling, and it contains them united in its own simplicity and identity.

The subjective principle is also endowed with activity, and through it, by continuous use of those two elements, it produces for itself all other cognitions, and, in as much as it must, through this power, pass from cognition to cognition, it is called rational. The rational principle produces those other cognitions by means of two general operations, first the application of ideal being to fundamental feeling, to the result of this application and to itself; second, the acquisition of new feelings to which it can make a similar application. The rational principle does not make the first application of being freely, but by a natural instinct, and applies it as a whole to its own feeling. This is the first and fundamental perception.

Thus, through the application, the subjective principle has achieved an additional perception. . . . As all reasoning has for its original element, besides the intuition of being, a perception, therefore whenever it (reasoning) is directed toward cognizing that which can not be derived from it (perception), either because not known to the speaker or his hearer, it loses itself in nothingness, or gives us only error, or ends in an abstruse play with words that have no meaning, because the first rule of

method is that reasoning must be founded on perception. In psychology this fundamental rule is also often offended against. Instead of being intent on first bringing to light and ascertaining the internal facts of the spirit, which can not be known except by examination, the reasoning process is begun at once and fails for lack of material.

When the desired knowledge is not at hand or possible except by way of the application of being to other previous knowledge, clearly man exerts himself in vain in trying to attain to it or conduct another to it, unless the first induces the application which will produce it, and to this knowledge then being used he apply anew for the knowledge that was first sought. Every such application of being to any given knowledge, whether percept, specific idea, generic idea, category or being, is a reflection. There is therefore, in the development of the human mind a succession that has this prescribed order, that it can not develop a reflection above a preceding reflection or its consequent, without this reflection and its consequent having preceded it (whether it be appreciative, volitional or another non-intellective corollary).

This rule is the real explanation of the other which says that we must proceed from the known to the unknown. In this latter form it is generally vague and of no use, but the two items here given tell us what is the known element from which we must start, namely, the feeling which presents the matter, and being which extends to us the form of knowledge. These also show us in what the passage from the known to the unknown consists, that is in a mental operation which applies being to the primitive felt and perceived, a process which can be repeated indefinitely to the constantly new consequents of the preceding applications" (Logica, 750-67).

We have already pointed out that all this is directed primarily to the problem of content arrangement since the laws of procedure of the human mind can be pretty well described, it should not be impossible to determine rather accurately the content and the order of the things that are to be taught the childhood of the nation, at least as far as the common and civic element is concerned. This content then is definitely the substructure of Rosmini's method. We may recall his insistence on the theory that the content was a necessity for its own sake and at the same time a process that with intelligent direction assured the appearance of those qualities of character that after all are set down as the major objective

of the entire school period of life. Being based on the usual arrangement of only six years as elementary, the problem is modified by the earlier introduction of secondary objectives, where content matter actually is more important. Here too, he was content to use the traditional curriculum with its insistence on the intellectual heritage of the race, and for Italy, there is more reason for following it, than may possibly be conceded to it in centres less intimately connected with the origins of our western civilization. At the same time we must have noticed the stress given to keeping the curriculum up to later developments in social science and in the greater cultivation of the natural sciences. This has of course been realized since, but it seems only fair to admit that the strictures brought against the overly conservative attitude of educators generally a century ago was directed especially against the prevailing modes of treating the new matter. Tradition had become too rigid for its own good, and the influence that Rosmini attracted to his theories in content was undoubtedly caused to some extent by the fact that he recognized the tendencies of the times and the consequent necessity of a reorientation. Though perhaps his own contributions now seem mild to us, the possibility of the changes that he pointed out, to mention only the rearrangement of mathematics, and the unity of all social science in its implications, must have excited rather dubious

attitudes in the days when they first appeared. The suggestion of three languages rather than one only, and that on the elementary level, considered under the circumstances of European geography is of course less startling after analysis than on first sight.

If, now, we add to these citations the other psychological laws we have discussed earlier in this paper, such as that of synthetic practical reasoning, subconscious activity of the rational principle, the reactive product of the speculative and the practical reasons, we suddenly find that, in spite of our first conclusions, we have an extensive amount of material on methodology, that is practical just in proportion to its being based on what Rosmini has named the intellectual instincts and has grouped as of value for methodology by their nature as spontaneously effective. Thus, the orders of reflection bring up the possibility of Rosmini's having mastered the principle of the correct use of the deductive and inductive lesson. Though not confined to the informational, in fact, having special values in the field of appreciation, it is logically contained in his general rule of progressive reflection, and has particular bearing on its most widely voiced variant, the rule "of the known and the unknown".

In this connection, special attention must be given to the law of method that has so often been in-

cluded among Rosmini's major deductions from his "Principio Supremo". That he espoused this statement as the most general of all methodology, either as an original discovery or as an accepted truism, we have already seen. But there are certain aspects of it, to which we must give attention, to see how it is, in turn, embedded in his contention that the secret of successful method is in final analysis and exclusively, as we said, the happy manipulation of the content matter.

In as far as the known at any stage of the pupil's progress has definite limits, dictated by the psychological growth outlined in the "Principio Supremo", the emphasis is entirely on the genuine meaning of the word "known". Only what we have been able to master at any particular stage can be known matter, and progress can be assured only by the active use of it on the way to the acquisition of the next item in the logical mass. Here is the reason for the necessity of content-analysis with the "orders of cognition" which he gave us. The two are required together (Psych. II, 1314). But the rule does not indicate the steps by which the mind passes to the unknown, nor distinguish the known from the unknown to make clear the direction of the passage. It is only in the sense that the known is easy (by recall) that it is fair to paraphrase the given rule into "from the easy to the difficult", and only in this sense are these two rules contained in the principle enunciated above (Log. 1013-10-14).

On the contrary, it more frequently happens, especially in children, that the order of nature is not from the particular to the general abstractions of the reflective and reasoning "faculties", but vice versa, and action is confined

by preference to "level movement" instead of up or downward, to similarities rather than to differences (Rinnov. II, 31-2). It is on the basis of this partial reading of his statements that Rosmini has also been quoted as making the general rule the equivalent of the other principle "from the general to the specific". This is just as unfair as the opposite statement.

What he does insist on is that the natural passage of development is from the indeterminate idea of being to specifically felt sensations on which the apperceptive mass is nucleated. Now he does admit that attention is aroused first to a whole situation, but this happens, as we recall, without any relation to the intellective and specifically to the reflective or rational. The perception may be general or specific or even individual, depending on the arousing agency but its first result is general. But this is quite different from supposing that general ideas arise thus. The first act of the reflective process is to analyze, or in Rosmini's terminology, to separate the compound sensations of the percept. The sensations in the Rosminian sense, as we have seen, are individual and not properly abstractive, for this abstraction is a distinctively intellectual process, and does not begin till the third stage of development is reached. Before that, all his perceptions, "imaginal notes", "full-specific imperfect ideas", are individual and often confusedly individual to a point of substitution (Prin. Sup. II, 3; Nuovo Saggio, 761). The process, then, is not so much from the general to the particular, as from the whole to the parts. But, and this is the important point under any circumstances, the process on the sensational level is alternate, for as soon as analysis has begun, synthesis also takes part, and as soon as the reflexive is included in the general learning ope-

ration, none of these phases is necessarily accurate nor wrong, though as long as we stay on the reflexive level or the lower rational basis of the orders of cognition, the tendency is rather to deal with the individual perceptions within an apperceptive mass than with the masses as wholes, and on this basis the statement is true as a tendency only and not absolutely, so that the error is rather in the direction of too broad an application of general meanings and their representative words. Absolutely, therefore, only the formula, "from the known to the unknown" is correct and Rosminian.

Much of the difficulty is due to a confusion between perceptions and the words by which we designate them. With regard to the use of words as signs of perceptions, the general tendency should be rather in the direction from the particular to the general, so that the collection of perceptions may be as wide and untrammelled as possible, while the largest number of instances of the perceptions leave their traces on the animal memory. When, then, speech becomes habitual, the individual nature of the application of words to these instances should continue as a mental exercise of storing up perceptions and facilitating their recall, so that the essential core of the enucleated apperceptive mass may be gradually reformed in the mind till the extractive process of generalization be ready to function, and so prevent the loose use of general words from the beginning. The teacher, therefore, is particularly to be on her guard against the error of supposing the use of words in even approximately correct a manner to be a sign of the birth of the reasoning

process and the ability to speak intelligently in terms of a general nature. Abstraction does not function till the idea of relations between perceived objects emerges, and this is in most cases that of the resemblances that are common to the individuals of the species, and is most ordinarily indicated by the correct use of the plural.

In other words, the danger of a type of word-calling which is often not recognized by the teacher is frequently induced by anticipating the fourth stage of development. And this not only applies to the lower stages of mental development but may continue through later years, especially when the next stage, the perceptions of secondary relations, both on the reflective and the rational levels, is arrived at. This is especially to be noted as one of the difficulties of our own times, when abstract words, slogans and catch-words are the order of the day. The danger is in the fact that the terms are not clarified by ordered analysis, while the words have become overly familiar by constant use, so that their use produces a state of emotional response not built up on a regularly formed intellectual basis, and causes so much of the muddled thinking that is so common.

Rosmini foresaw the danger, then, but did not ~~fall~~ into the opposite error of consequently letting his formula mean merely an excessive dwelling on familiar material where recall did not lead to meanings resulting from mental exertion that really kept the activity near the peak of what the respective pupil is capable of within the respective "order of cognition" he has attained. His opinion is best indicated by his own words:

"Both opinions (the absolute rule of general to particular, or vice-versa) contain something of the true and something of the false. First, -... particulars never become universals, the latter is given by nature, the former is in the mind.... But through particular cognitions the intellect, by way of its first reflections, ascends to the mediate universals which have a place midway between the most universal idea of being and the particular cognitions or perceptions, and at once it descends to the lower and individual. The teacher must, therefore, not only impart the cognitions according to the classes and orders shown by reflection, but note which precedes and prepares for the next, keeping in mind the natural steps of the mind. He will give first place to those cognitions which are the formal cause of thought, which are, the idea of being, then particulars, then specific universals and from them generic ideas.

Therefore, the progress of instruction is to go from the most universal to the particular, from these to proximate universals and from these to the less proximate abstracts and generic ideas, from where the necessary step is to redescend to the particular. Instruction, then, in so far as it responds to the ruling principle of the didactic method, must alternate its movement, now going from from the universal to the particular, now vice-ver-

sa" (Log. 1034).

Consequently it should not be surprising that his methodology should have the familiar sound of the distinction between ease and lucidity. Apparently "making learning easy" for the child had its advocates already in his day. These one-sided interpretations of the advances in presentation are scored as vigorously in his "Unitá" as has ever been their portion in this recurring controversy of educational procedure. In a sense it is a pity that he did not go into detail a bit more and set out at length the details of the two positions; it would have afforded diverting reading, though possibly little new light would be furnished as to the essential contentions of either side.

His final position is again an anticipation of the present prevailing feeling on the question. Brushing aside with some impatience the "coddlers" of children, and failing to see the reasonableness of the position of those who exaggerate the training value of harshness and unnecessary toil, he advocates a recognition of the objective facts on the part of both teachers and pupils. which, in simplest form, is the expenditure of the requisite amount of energy commensurate with a successful mastery of the task in hand. For the teacher this involves the presentation of all the factors of the problem psychologically to insure effective attack, the hiding or omission of none, to prevent a mistaken notion of ease of success or presumption of mastery, methodical patience to assure the preservation of the orders of thought, and their prerequisite, clearness, throughout

the entire process. The pupil must respond with a willingness to exertion to a point where vagueness gives way to clearness, mental laziness to perseverance, and where the challenge of difficult matter is accurately estimated, the interest is to be derived from the matter itself. The problem, therefore, as that of painless short-cuts leading only to smattering, as opposed to inefficient wrestling with needless difficulties leading only to discouragement, has been correctly stated, and its originality is again a question whose final answer can not be determined objectively in view of the general attention of his day to it. Subjectively, it would seem necessary to credit to Rosmini as original in view of its dependence on his psychology. This conclusion is strengthened by the fact that his entire system does set up implicitly the value of an appeal to interest in school life with definite clearness. We know, of course, that, according to his psychological system, the instincts are not to be enlisted, they are to be regarded as a necessary and automatically active step in the procedure of learning. The arousal of interest by external or formal means is not even suggested, except for his mention of the instincts as naturally active in all human education. This is the most plausible reason why there should be no separate treatment of the topic of motivation, or of punishments, as a separate problem. It is obvious, of course, that the existence of motives is presupposed throughout all we have seen of his works, as is clear from the continual use of the term "moral", which occurs constantly, so that the inference is always that in the success of this sort of response successful education

finds at least one of its measures and rules.

The only other reference to this problem of motivation that we have been able to find is one short paragraph, in the letter to Orsi on the failure of college boys after graduation, which is also repeated in his "Rule" for his religious order. from which it is apparently a quotation.

"There shall not be any use made of the motive of emulation or competition to stimulate the students, nor shall it be taken advantage of when arising spontaneously, whenever it may degenerate into envy or hatred".

This is certainly definite enough to clearly indicate that the present-day adherence to the rule is but an imitation of and an acquiescence in his attitudes.

But psychologically we find that motives were recognized throughout in general and catalogued in particular by Rosmini in the inimitable way he had. The close of the same letter, referring to the development of character, distinguishes between primary motives and secondary as conducive to keeping the eye single in the pupils, the primary being two,, first the beauty of virtue and second, the intrinsic reasonableness of serving God and obeying and imitating Christ. Secondary motives are those that should be used only as auxiliary to primary, and these are incompletely listed, the nobler nature of man, for instance, requiring the exercise of compassion, of love for our kind, and the incidental advantages of the virtuous life, as for instance,

the healthy results of temperance, the gains of industry and thrift, the value of being esteemed, are genuinely of value only when used in relation to the essential beauty of virtue practised for its own sake. Similarly, rewards and punishments, especially those of the next world, should be invoked only relatively to the intrinsic reasonableness of conformity, service and religion, so that in all cases the subsidiary motives may not usurp adhesion to and from principle (p. 20-21).

The chief motivation problem, then, of the teacher is the maintenance of a purity of intention, and a recognition of principle as exalted in its own nature, so that their "incidental learning" is fully taken care of in the routine of the every-day class-room task. The most that he would concede to the use of rewards and punishments was, that with prudence it is possible to avoid the harmful disturbance of the faculty of assent, if used to assist its exercise by assuming the nature of a sanction to reason, which alone has the right to be the decisive factor in every case of assent (Log. II, 3, 2).

Now, this hardly refers to the immediate motivation of class-room tasks, except as noted as incidental to education's remote object, the production of a "moral" character to whom motives will be readily recognizable as desirable and in danger of being cheapened by an appearance of sugar-coating. An acquaintance with the Latin character and particularly with the Italian, makes the suggestion highly probable.

The second fact explanatory of Rosmini's theories

on motivation is his insistence on a pervading aim. For instance, in the study of history, Rosmini stresses from the beginning the necessity of such an aim, as opposed to a mere commitment to memory of sequences of dynasties and battles. The first of these aims is a healthy and active interest in civics through justice and concord. In "The Philosophy of Politics" he definitely lays down as the major purpose of this subject a knowledge of the laws according to which society moves toward its ends and the place of the citizen in their achievement. The nature of society and the policies of the citizen with regard to them are given as, first, knowledge of the natural constitution of civil society, and second, of the mutual relationships of population, wealth, rights, sanctions and of authority and knowledge. The last of these is the bond of the citizen to society which vivifies and controls his participation so that in third place there is to be put the lawful and disinterested participation and intelligent support, as opposed by its nature as an "indirect force" to action initiated from above downward, and consequently of greater effectiveness. This is merely civics as we understand it, and represents an attitude of social consciousness that has received much emphasis in our own day. The difference that appears most vital to us is the insistence Rosmini places on the "estimation of the respective values of all political means supplied by the special political sciences", which means that in the disturbed political conditions in Italy and Europe generally at the time he wrote, special attention

was necessary on account of the excesses of the insurging democratic spirit which confused individual and selfish desires for revolutionary changes with the reasoned and scientifically established needs of the times. In other words, even democracy must be intelligently directed by knowledge, and guided by scientific principles, so that the good citizen is guided by what he ought to wish and strive for rather than by a mere political emotionalism.

We can not at this time tell with certainty how far Rosmini's personal feelings and fears entered into his adoption of this position. We must remember that this was written while the tempest of 1848 was quietly brewing, that the danger of writing at this time on political subjects was great, in so far the authorities were uneasy and suspicious and that the situation in northern Italy, then becoming articulate for national unity and against the continuation of Austrian rule, was particularly ominous. Political thinkers of the times and the citizenry in general thought in terms of a congenital opposition between government and governed, and the idea of a democracy without a stabilizing agency in the royal authority with which American politics has entirely dispensed, was not well-known in Europe. Civics as a practical participation in the dictation of policies was not possible, or, at least, hazardous, and the necessity of a more general knowledge of political science, as a means of supplying standards of "estimation" was more essential than in our own country. But in spite of the immediate political situation in which Rosmini was living, he stressed the general aim of social study as

intelligent participation.

A similar aim is stressed as the guide to the presentation of the group of studies he called philosophy. In spite of its grandiose title, he was referring to what we know as the appreciation lesson, and had in mind all that matter that touches the refining influences of life, literature, art, music, as well as those less outstanding achievements of everyday life that make its cultural values. It is on the basis of their general recognition in society, and their acceptance by all classes that their treatment is possible in school life, already on the elementary level. Hence, their presence as a teaching task so far down in the curriculum and their more extensive cultivation than is possibly the case with the social aims mentioned above. Hence too, the greater respect shown the standard cultural course of European educational systems, and its culmination in formal philosophy as an appreciative subject, and Rosmini's own theoretical unity as the greatest problem in education.

General methods, then, find Rosmini a rather progressive advocate. There can be no doubt of his insistence on inner mastery as the key to discipline, nor of his emphasis on the real needs of the child for an active and self-expressive mental life, with the place of the teacher's place as guide, rather than as task-master, clearly marked out. Rosmini's concept of the place of methods seems to have been a disparage-

ment of its mechanical possibilities, in as much as in them lies the real danger of the possible strangulation of individuality, both of pupil and teacher, and of an unproportioned isolation in the minutiae of the traditional curriculum. In all this, it would seem that our author was expressing his own mind very convincingly, and it is remarkable how little of it is out of harmony with the advanced fashions of his time, when the schools of Pestalozzi and Froebel on the other side of the Alps were advocating also the same claims of interest, child needs, social living with all the insistence that is so noticeable in our own day. His point of emphasis however is that all this is actually in the content and that the teacher's task is to use it as such. On the other hand there is a distinct disappointment in the unfinished nature of the concrete recommendations he bequeathed to posterity. The details of a rearranged content even on the elementary level are still a problem that has not been solved to the satisfaction of educators generally, and the task of revising the schedule according to the principles Rosmini laid down has as far as known not been systematically attempted, though the theories of progressive and social modern education seem to be attempting the same goal from another direction. But his help would have been an interesting contribution.

As to the fundamental laws of method for both

of these levels it seems only fair to point out that on the basis of their psychological background, the following might be definitely laid to his credit, as exemplifying his underlying opinion of the necessities of the situation, and of conveying in original language the laws of the operation of the human mind in the process:

1. Ideas must be presented in psychological order, from the known to the unknown, from the easy (the mastered) to the difficult (new).

2. Clearness of ideas, the chief of the teacher's objectives, demands explicit subdivision, rearrangement for presentation and simplicity.

3. Exactness in the use of words as symbols.

4. ^{Ad}aptation of matter to the pupils' capacity; frequent repetition and patience before proceeding.

5. Perception precedes reflection, and reflection has distinct grades or orders.

6. Variety of method between general and particular, abstract and concrete, and frequent summations.

7. Reflection falls first on the

easily observable (on the concrete, the pleasurable, the novel and the marvellous), therefore, pass from these to the important and the difficult.

8. Be certain that the lower order of cognitions is sufficient before passing to the next higher.

All of this is ultimately reducible to our modern formula stressing the passage from the known to the unknown, which is based on the necessity of not only having the intellectual point of departure clearly in the mind, but on the added requirement of a conscious and reasoned selection of the items of old information that must be brought together to serve as the basis of the new, and the emphasizing of the relationships that are the reasons for their formation into a new apperceptive mass which is to receive the increment represented by the unknown matter whose presentation is the major immediate aim of the entire activity. The place of the the proper appreciative and volitional elements in this formation, of course, is obvious, especially in the matter of the securing of the relationships in clear perspective.

An example in point is the "Catechism Arranged According to the Order of Ideas", by nature a summary for reference and recall, demanding adherence to the logical order, and in the field of religion, especially,

a book whose content is concerned with ideas not always easy to understand, and with backgrounds and implications that have an extreme extension. Hence we can understand the sense of Gioberti's praise on seeing a complimentary copy:

"Read with pleasure a book which shows how well the author, accustomed to the deepest and most exalted speculations succeeds, and that so felicitously, as prince of theologians and Christian philosophers in 'catechizing the illiterate' " .

Chapter one for instance begins with the idea of man as a compound of body and soul, and comes to an end after making definite and clear the mortal nature of the body, the immortality of the soul, and the separation of the two in death, and with these points clear, man's creation with that of the world is logically as well as psychologically in order as the matter of the second chapter. The end of man's creation does not appear till chapter five, and the entire scheme of Redemption is treated from the historical point of view exclusively. We know from the Preface that the use of the book was based on a use with the spiral method, so that the more difficult and abstruse ideas of religion could be brought in at the proper places in later reviews of the course. In short then the historical method, the spiral method and the logical method are so intertwined, subordinated and adapted that none protrudes,

none is slavishly followed, none is exclusive, and the unity of aim and of content is preserved in a setting where the educational process lasts over the entire range of the class' elementary school life.

"Of mental operations, some precede, some follow; and consequently there is a fixed and necessary order, according to which informational items are brought to the mind, and of these ideas such as by this order are anterior can under no circumstances nor by the wish of men become posterior. Hence the necessary and universal formula: Method necessarily is that by means of which the mind may be guided to attain the end for which it strives with speed and certainty, by making it perform first the actions which precede in nature and to receive the notes which they can give, and then make it perform the actions which follow in nature, and be enriched with the corresponding notes, so that both actions and notes are distributed by the user of method in a series preordained by nature" (Log.762).

The secret of success and the most general rule of method then is the general proposition that all the rules of method are based on the fact that the main task of the teacher is to communicate truths by way of symbols (generally words) which presuppose reception by the student with directness, clearness, and conviction. Hence the first requisite is the proper orderly disposal of the ideas according to a

precedence that assures the presented matter not being dependent on future announcements. This avoids the necessity of the mind taking in words or statements memoriter dependent on still unknown truths, so that the labor of thinking is not confused by the necessity of a rearrangement of the symbols, a process requiring much exertion, time and many attempts. This is merely a restatement of the rule: from the known to the unknown.

We have now to add Rosmini's contribution to the mechanics of method. In one sense there are no mechanics, beyond the arrangement of the matter as described in the plea for unity. Part of this lack is certainly due to the incompleteness of Rosmini's writings. Otherwise it would be strange to try to assign him a place as a practical educator, and still be obliged to admit his overlooking such conveniences as economy of drill procedure, physical conditions of the classroom, and the many appliances of the school that at present appear so important. To a degree it is true that late developments in the science of teaching, in the application of the methods of efficiency to the imparting of knowledge, were not well established, and even among the practitioners were not well known. What we are able to say today regarding the progress of the teaching profession is due to well established and warranted improvements of technique, but these had a very ordinary value still at the time he wrote and may still give rise to a very interesting question suggested by Rosmini himself (Logica 871).

According to him all method of this kind is reducible to the stimulus that can be brought to bear to provoke an attitude, whether natural or artificial is immaterial. He lists "love of truth" and "curiosity to know", "love of duty" and as less noble "human glory" and "the material interests of life". These are "natural" in the sense of being in the make-up of every normal person, and as such are admitted for their value but not specifically commended. Next among the "means that are effective with some persons" are given "example, emulation, necessity of succeeding, good reputation", all of which are dismissed without comment, except as we noted before with regard to the competitive idea against which Rosmini frowned in a personal instruction. Motivation then receives an unsatisfactory treatment, as far as Rosmini went to discuss it at all, though his putting his hand on the effective means shows that it was not from ignorance.

Among objects that are of assistance we find only one short reference to books "selected with care", to collections and museums, to "machines and instruments used in experiment" (ib. 879). This last is at least an indication of his knowledge of laboratory method. Play as having a value in method has already been mentioned (Principio Supremo p. 195), and the use of actions and pictures, oral exercises with the increase of spontaneous activity at the beginning of the fourth order of cognitions is also given more than passing mention (ib. 192 sqq). Use of the "instinct" of imitation

after this point is also mentioned (p. 198).

On the whole then we need not look for much of a detailed nature on the mechanics of method in Rosmini. We must admit that his principle of using instinct which underlies all intellectual activity in his system expresses the principle involved correctly and comprehensively but the applications were not touched on to any extent by him. So also we have been able to verify his appeal to interest, curiosity and activity, but their applications to assisting the "spontaneity" of his psychology was never committed to writing.

Of more tangible nature is his implied insistence on attention to informational detail and comprehensive drill work on a systematic basis during the years of the development of the reflective processes of the "imagination", as he calls the individual mental activities of actual thinking, no matter what "order of cognitions" is in a state of activity. A necessary by-product of attention to this angle of content manipulation, in the course of preparatory selection and rearrangement of matter will be the identification of the new and disordered and the difficult, by the teacher, and the suggestion of a possible order and system in the pupils' active "trial and error" thinking, to serve as a guide by the opportune injection or isolation of the determinative components of the apperceptive mass under construction and a deferring of formal organization of content matter till after the "imaginative" process of "partial reflective"

thinking has become familiar, and its relationships have become the object of attention.

After what has been said there is not much need for specific comment on content. For the most part Rosmini seemed satisfied with the traditional curriculum content, which takes away any incentive for hoping for much originality.

Language problems in the very phonetic Italian tongue are reduced to a minimum, and we saw that reading received only one passing mention (Dell Educazione Cristiana), and there presupposed an audience situation, where he also remarks that enunciation is an incidental aid to correct spelling. Language is described by Rosmini as "natural", hence he insists (Prin. Sup. 194 sqq.) that its learning is entirely a matter of imitative learning, as the pupil can not be expected to know of the forms, as opposed to the materials, of speech, on account of its intangibility so that rules of grammar and syntax are clearly out of order. There is, however, one plea of particular value for our day in his desire for accurate use of words, first in avoiding "word calling", and second in a better agreement in the shadings of vocabulary, by no means confined to abecedarians in every-day life as a fault, and a very common proof of confusion in abstract thinking. (See also ib. 163 sqq.).

Arithmetic is not given any prominence by Rosmini, though his comments on the origin of the number concept (Principio Supremo 264 sqq.) as late as the third order of

cognitions, also has since been accepted for practise in the elementary grades of our more progressive schools. It is worth recalling in this connection also the logical continuation of this principle through secondary education as noted in the strictures on algebra in the "Unità".

It should hardly be necessary to add here the inclusion of Religion as an integral and formal component of the content-program. Rosmini evidently understood no other type, and his distinction between the formal content facts and its inspirational and moral values has been noted more than once. And just as often have we seen the necessity and the type of religion needed by the teacher himself to be successful in the larger sense. In a letter to a friend (Epistol. II, 22) he speaks of a "higher order of things" that can not really be enjoyed, even in this world, without respect to the next, unless the appreciative in man is regularly cultivated, and in this sense he sees a special meaning for teachers in the command: "Seek ye first the kingdom of God and his Justice, and 'all these things' shall be added unto you" (Matt. VI, 33).

In spite of all the author's insistence on the physical as one of the three divisions of the educational field, there is only one passing reference to activity for its own sake in the "Principio Supremo" as based on the physical advantages it contains (p. 195), and one extended reference to physical education as such, and that refers only obliquely to its connection with school work. It is an appendix to his first volume on "Political Philosophy" and advocates public games as a regular part of the functions of local government:

"It appears to me a beneficent thing, if instead of the sedentary and stupid games of cards and of chance, and the pleasures of the table and sense, some thought were given to substituting public and private games of movement and physical exertion. All writers remark how modern peoples are enervated and drooping, of weak health and of no robustness in comparison with the ancients. Some calumniate monarchy as responsible for this because it prefers obedient men to robust, and by encouraging all forms of luxury and of passive and sensual pleasures, uses them to weaken the minds and the spirit and subjugate them. So much the more therefore must an enlightened and well-intentioned monarchy deny the accusations with facts, affording an opportunity to arouse energy of body and soul in its people, prudently obviating those evils which either a false policy or a monarchical grouping of human institutions formerly permitted to eventuate by chance. Nothing is more harmful to any form of civil society, and particularly, to a monarchy, than luxury left to itself, just as nothing is more terrible to the human body than those vices to which it is prone by temperament. These public games of exertion, carefully promoted in Europe would have the following advantages: 1) they would increase the general health; 2) prepare for military service, and so decrease the number of soldiers necessary, though at first without

improving the quality; 3) afford a balance between the spiritual and physical development and their mutual powers. In addition where physical education is too much in evidence in comparison with mental, it eliminates the instability of those barbarians, who though possessed of great power have not a spirit strong enough to control themselves. On the other hand the growth of the spirit increases in a healthy body to a real control of the body, and if otherwise the body becomes weak and flaccid.....And the desire of some modern systems of education to give a precocious development to the child mind, and to wallow in the less necessary cognitions, has not only brought about an instability between the science of virtue, legitimate governor of all the others, and the other sciences over whom she feels herself placed but without the power to direct them in their variety, but has given a mortal blow to the equilibrium between body and spirit, and the body abandoned to inaction, has made itself an annoyance to the too active mind and forced the spirit itself to slackness and inaction...so that the effect was the opposite of what had been expected... general lightness of thought, which always rules in union with presumption, incapacity for serious and exalted thought and an irresistible tendency toward the sensual and inert interests of luxury and pleasure."

CHAPTER XII

SUMMARY AND COMPARISONS WITH CONTEMPORARIES

For an understanding of Rosmini's educational position, therefore, the following summary seems now in order, first, in order to trace out the degree of "conscious dependence" that his educational theories bear to his general philosophy, and secondly, to place and evaluate his position and worth in the history of educational progress.

a. Rosmini's Underlying Philosophy.

1. All reality is a determination of indeterminate being, an eternal, amorphic, purely positive entity. This determination is of higher or lower degree, and is possible in one or more of three directions, ideal, real or moral.

2. The physical world is the aggregate of determinate real being, both contingent and necessary. The ideal totality is the plethora of perfection in all three orders, toward which the real world tends in its possession of the actual amount of reality it displays. The moral world is the aggregate of the evaluations placed on reality, and of the relations within any of the three orders of being, and among the orders themselves.

3. Determinations of being are the sum of the tendencies to perfection on the part of all three divisions of reality. All real perfections, whether objectively or subjectively necessary, are relative and

remain within their respective orders. Among the philosophical sciences, ontology treats of the degree of being within the three orders, and deontology treats of the perfections of being in their orders.

4. Among real beings, the higher degrees of determination are characterized by a bond with the ideal and moral orders, which consists in a representative power of the real order, and a creative power over the ideal and real together, in addition to their participation in the real order ontologically.

5. The relationships between the real order and the ideal are the basis of truth, and between the limitations of the real involved in the creative function and the ideal order are the basis of morality.

6. Actually the representative power is found separate from the creative, though both presuppose the presence of a non-representative power of spontaneous action, known as the vital instinct, or life.

7. Essentially the representative power consists in sensation, or the interpretation of neural impulses transmitted from real being through special organic adaptations, into terms of agreeableness or disagreeableness, probably through the arithmetical proportions of vibrations.

8. The representation is joined to a nervous and muscular response, which in its lowest form is merely an organic adaptation for the continuance of an agreeable sensation, or the cessation of a disagreeable one. As the type of perfection increases in degree, the re-

sponse becomes more complex and spatially extended, and is classified either as an instinct (reflex is our term) if single and rigid, or as passion if complex and rigid, or finally as instinct (in our sense) if flexible in its arrangement of reflex-pattern groups. In its highest form, animality, it is accompanied by a second representative reaction, imagination, or recognition of the stimulating cause.

9. The specific perfection of this degree is the stimulation and response to the representations and their realization in spontaneous movements conducive to the well-being of the individual, and to the totality of reality.

b. Rosmini's theory of mind.

1. The representative power achieves its specific completeness, when its actuating principle is intellective in addition to its sensitive nature, which condition occurs in man.

2. In consequence of this added element, the principle is directly intuitional with regard to indeterminate ideal being, and dependent on ontological union with it for sustentation in existence, or immortal.

3. Functionally, the sensitive element of the principle interprets the sensation as on the lower order, but in addition perceives it as an individualization of pure being in pure space. At the same time the intellective element recognizes and identifies the cause and its neural effect as a perception.

4. Added to the cognitional activity described, its activity is integrated, first, by an interpretative appreciation of its term, or object, in terms of satisfaction and rest in consequence of the discovered realization of ideal being, and second, by an ontological adherence and affection for the object, in consequence of the proportion of realization so discovered, and third, by its power of objectifying former experiences in any one of these three orders for further repetitions of these processes (reflexive cognition).

5. The human representative power is, therefore, equally ideological as concerned with cognitions, dynamillogical as concerned with feelings and appreciations and their realization objectively, and agathological as concerned with attitudes toward, and limitations of, reality. Under the first aspect it is concerned with the relations between the ideal and the real orders, or with truth. Under the second it is concerned with the relations within any one of the orders individually, or with beauty. Under the third aspect it is concerned with the measure of participation of real beings in complete real being, or good (moral). These are treated of in the sciences of logic, callology and ethics, respectively, whose joint supreme law is: recognize being (in its order).

6. On the initiation of the representative activity and its accompanying nervous and muscular response, the sensitive-intellective principle sets up a "second act", or diffusive reaction, which arouses all the cog-

nitional and neural centres to a receptivity of impulses from itself for the production of their characteristic functions, so that the resultant coordination in the reception of further sensations and cognitions is attributable to the close union between the principle and its sensitive dependencies, from which we have the concept of unity of activity which we call "will". This is the unified control, direction and continuance of the reactive phenomena.

c. Rosmini's theory of the learning process.

1. The machinery involved in the learning process is the combination of the powers of perception, reaction and representation in the following outline:

<u>animal</u>	<u>man</u>
	Intelligence
	reasoning
	reflection
	perception
	Representation
	sensitivity
	imagination
	Reaction
	habits
	instincts
	bare rationalized
	reflexes
Sensual Instincts	
propensity	
aversion	
spontaneity	
Neural Vibration	
(Vital Instinct).	

2. The diffusive reaction, or "second act", is limited early in the series of perceptions and reactions by the nature of the perceptions, according to the terms of the following general psychological laws:

A. The Cosmological Laws of the Zoetic Course.

a. A neural excitation from without is necessary for the beginning of a psychological series of activity.

b. Once aroused, the activity tends to continue spontaneously after the arousal of the intellectual element of the principle, whose command is more absolute the higher in the machinery series the original impulse is inaugurated.

c. The climax of the activity is to produce an intellectual representation of the cause, a concept to match the perception.

d. The psychological reaction set up by the perception is first realized on the three levels of the intellectual, and the diffusive reaction or "second act" is governed by the following laws.

B. The Esthetic Laws of Harmony.

a. The neural and organic activity deals in terms of proportion only, most probably in vibrations of greater or lesser agreeableness, expressible in arithmetical ratios, and the intellectual is interpretative of them.

b. The diffusive tendency of the reaction is not blind but governed by the interpretative cognitional value

assigned it by the force of the original stimulus and its vibrational components, and is directed downward in the case of requiring a "practical response", or one requiring physical action according to a definite pattern.

c. Where the preponderance of the response is downward, new vibration patterns (or their neural equivalent) produce spontaneous but coordinated actions.

d. Where the preponderance of the response is theoretical, (confined to the three-fold intellectual function), the neural and perceptual activity resulting is of the type commonly grouped as thought.

e. The violence of the external impulse is the direct measure of the reaction and control of diffusion, and is expressed in terms of spontaneous attention, though this may be intensified or diminished by the interpretative action of the theoretic functions.

3. When the preponderance of the diffusive reaction is toward the assimilation of new perceptions of a representative nature, we have a learning situation, though in some degree every stimulus has an element of learning in it.

4. The essence of the learning situation for the sensitive element of the life-principle is the perception; for the intellectual element, where it exists, it is the objectification of a percept so as to make it the source of new perceptions. This activity is called reflexive cognition, and, though occurring in all three fields of the ideological, the appreciative and the evaluative, is generally described in terms of the first.

5. There is in time a definite order in which the intellect develops, known as the "orders of cognition". Good order in reasoning is only the successive activation of these orders in all thought processes in the sequence in which they originally made their appearance, and, in the case of the growing mind, (formal education) in the avoidance of expecting activity in orders not yet in existence.

6. The orders of cognition are grouped under the following chief heads: a) perceptions, b) partial reflections, c) total reflections, d) reflections by principles. The first of these is ordinarily developed fully by the end of the first year of life, the second by the eighth year, the third by approximately the age of puberty and the last near the attainment of adulthood. Within each group the actual development takes place by the successive appearance of an analytic, synthetic, credential and creative mental process, the first being a discovery of the components of a percept and their mutual relations, the second a decomposition and recomposition of them according to felt gaps and personal needs, the third an extension of the relations to foreign perceptions in the same or contiguous orders, while the fourth is tool-use of hypothetical relations for a more complete accumulation of analytical or synthetical perceptions and for their disposal in the judgment-series of which the mind-content is made up.

7. Of the four groups, perceptions are original cognitions produced by external stimulation in the three-

fold mental activities of recognition, appreciation and adherence. Partial reflections are so called because the new knowledge is confined to the perception itself and the relations discovered, first between individual sensible qualities, and later, to similarities and differences within the perceptions of the same order. Their accumulation is the cause of the "apperceptive masses" or thought-units built up around a fundamental perception.

8. The appreciative function is generally active from the beginning of mental life, and draws its satisfaction from the contemplation of the amount of being recognized as existing in a perception, but the adhesional function ordinarily does not begin to function fully till the limitations of being in the involved real being can be evaluated from the data in the apperceptive mass in the mind at a given time, and the total amount of satisfaction, both perceptual and sensual, can be foreseen from the comparison of the relations. The realization of this relation is the origin of the moral order in life.

9. The stage of total reflection arises with the direct recognition and identification of the processes constituting partial reflection, with the identification of which real abstraction (as opposed to mere generalizations of sensible and inferable qualities) becomes habitual, and "the age of reason" sets in. Its prevailing characteristic is that the component analyses and syntheses of the object tend to comparisons with ideal being (ontological perfection) rather than with other reals.

10. The stage of reflection by principles sets in with the objectification of the direct recognitions, and is directed by the cognitional, appreciational or adhesional (affective) abstractions from entire apperceptive masses or even groups of such masses, toward the realization of ever more general relationships in all three orders of being, or even of all reality.

11. "The orders of cognitions." In the order of time the three-fold activities of the theoretical level develop in the following sequence: 1) perceptions of determinate being, 2) partial reflections improperly so called: a) analysis of sensible qualities, b) analytical judgments of sensible qualities; 3) synthetical partial reflections (sentence sense): a) synthetic judgments, b) practical judgments, c) partial sensible comparisons; 4) total reflections improperly so called: a) comparisons between perceptions, b) intellectual analyses (as opposed to analyses of sensible qualities only), c) decomposition of perceptions, d) abstractions properly so called, e) the ego concept, f) consciousness of attention; 5) reasoning: a) conscious analytic and synthetic judgments, b) hypothetical partial comparisons; 6) mental manipulation of entire apperceptive masses, b) hypothetical complete analyses, syntheses, decompositions and comparisons, c) directed reflexive activity; 7) reflection on the basis of principles: a) metaphysical abstractions of universalization, idealization, selectivity, and transcendental unity.

12. Consciousness is the objectification of the

perceptual reaction with the preponderant impulse toward the theoretical level. It is to be distinguished from attention, and from the perceptions of physical and neural activity which are reflexively conscious.

13. The individual's total mental content at any given time consists of the ideological, appreciational and adhesional results of all original perceptions as far as subjected to the series of reflexive activities listed as the orders of cognition, and is called the apperceptive masses. The perfection of each mass is measured by the exhaustion of all possible relationships of a lower order before the beginning of a systematic activity on the next higher. In educational procedure this forms the fundamental law of scientific method. The complexity of the involved processes required for the complete and perfect communication of being in all three forms is the underlying reason for the subjective necessity of formal education.

d. Rosmini's theories on the place and function of education.

1. Education is a philosophy, an art and a science.

2. As a philosophy it has an ideal perfection or archetype, the complete, exact and orderly communication of being in its three forms of truth, beauty and good, which are the three kinds of man's relations to reality by which he realizes his destiny.

3. The end of education, therefore, is the pro

duction of "the full and complete man of thought and action", able to react to the representations of reality intellectually, socially and physically, through an ordered process of realization governed by the principles of the science of his specific perfectibility, asceticism, in the light of the sensitive-intellective principle's immortality and innate tendency to an intuitional, appreciative and moral assimilation to all being, including the Ideal-Real, God.

4. Education is, therefore, first individual in purpose, and only indirectly social, economic, physical or religious, in as much as it is an attempt to assure contacts with the necessary determinations of being for the achievement of the mentioned perfectibility, toward which the social, economic, physical and religious bear only the relation of means to an end, in as far as the first determines the relations and conditions of his most effective environment and opportunities for his moral and reactive activity, the second prepares the basis in existence, on which his perfectible tendencies may be supported, the third assists to a more prompt and efficient cooperation on the part of his physical nature, and the last guarantees the objective correctness and completeness of his overview of reality and its relations, especially on the moral level.

5. As an art, education is the direction of the principles of asceticism to the achievement of the perfectibility of one's fellow-men. As an obligation of nature it rests on parents, as a positive decree of God it

is the prerogative of the church as complementary to its end of making known and assisting in the realization of man's supernatural destiny; as a professional activity, either from economic or philanthropic motives, it is the prerogative of all competent persons either singly or socially organized; conditioned on the defection of these, and subject to the natural rights of the affected subject, it is an obligation of the body politic as a measure of public safety.

6. Professionally practised as an art, education accepts from ontology and theology the end of its activity, rest and satisfaction in realized perfectibility; from ideology, logic, callology and ethics and politics, its means of perfection, knowledge, appreciations and morality; and from psychology and anthropology, its knowledge of the manner of action of the faculties of its subjects.

7. As an art, education has for its immediate purpose the selection and evaluation of the scientific, esthetic and moral means of perfection individually, and their arrangement for an orderly, extended and intimate application to a subject for the achievement of its remote end in him. The complexity of the factors involved in these processes is the justification for the professional practise of the art.

8. As an art, education is governed by the following rules of achieving its major end: a) unity of purpose, by correlation of the scientific, esthetic and evaluative material to the individual, social and physical develop-

ment of the subject; b) unity of means, by the coordination of the efforts of the school, family, society church and community to the contacts adapted to the threefold development of the subject; c) unity of method, by adherence to the laws of method by which mastery of the material is governed.

9. The material used by the art of education in its formal aspect, is the aggregate of informational, inspirational and critical productions of the past and present, intellectual and physical, whose acquaintance and mastery will most effectively achieve the immediate and final ends of education.

10. Method is an objective science, and that part of logic which treats of the discovery and understanding of the psychological laws underlying an orderly and economical presentation or representative cognition of the perceptions constituting an educational situation. Educational, or learning, situations are either cognitive, embracing demonstrative, inductive or inductive-perceptive (Baconian) types, or presentational, embracing expository (didactic), critical or polemical types.

11. The profession of education is the union of the art and science of education for the direction of the educational processes of a subject or group of subjects, according to the genetic and functional laws of psychology and physiology, to a graduated and proportioned acquaintance with the material of the curriculum, and its profitable use.

e. Rosmini's concept of the function of the curriculum.

1. A curriculum is a selected group of informational, inspirational and critical material, consciously and scientifically adapted to the active and actual performance by a learning subject, of intellectual, appreciative, affectionate, or physical activities according to an order dictated by the ends of education and the laws of method

2. A scientific curriculum is distinguished by the selective inclusion of the material most apt to achieve the major end of education in a given common social, religious, environmental and economic order, according to the subject's individual informational, esthetic, moral and physical needs, and disposed to meet those needs in the order of their occurrence.

3. The traditional curriculum, whose content is the racial and national heritage of the arts and sciences now known and in use, when modified according to the requirements given above, and if arranged to proceed from early and common perceptions to a final and logical and complete mastery of and reaction to the curricular and environmental content, is such a scientific curriculum.

4. The content of the curriculum is divided between the fields of the natural sciences, the fine and useful arts, and the social sciences, and presupposes for their mastery the command of the tools of communication. The order of the curriculum is divided by the predominance of memory stimuli, imaginative (or partially reflective) stimuli or rational stimuli in its larger

content groups, and corresponds with the administrative division of elementary, secondary and college (in Europe, language, rhetoric and philosophy) levels.

The basis of both divisions is methodological

5. The principles governing the selection of material into a curriculum, in the order of their importance are: a) their immediate use value, b) their informational, appreciational and evaluative content, c) their content from the moral, social, environmental, economic and physical point of view, d) the value from the point of view of complete mental outlook on reality, and for the formulation of an individual life-purpose in an accepted order of reality, e) their mediate use values, in correlation horizontally or vertically, and in transferred uses.

6. The principles governing the placing of the material in a curriculum according to its field and level divisions, in the order of their importance, are: a) its conformity to the mental stage arrived at in the order of cognitions by the subject, b) the immediacy of its fulfilling the needs of the individual subject in the mental, social and physical orders, c) its preponderant dependence on perception (memory), partial reflection (reasoning sequences from the "what" to the "how" to the "why"), d) its adaptability to correlation into increasingly larger and more unified groups tending to formal and logical summations.

7. The more important changes required at present in the traditional curriculum are that

a) religion be specifically given a place where it will stabilize the moral and adhesional to being influences through principle rather than impulse,

b) social science be regrouped so that the dependence of the present on the past becomes more clear than at present, and the relation of contemporary social problems to similar conditions and events shed light on their solution,

c) civics have a definite major aim in the substitution of objectively based judgment of needs and problems in democracy for passion and selfishness,

d) mathematics be rearranged to provide a more graduated approach to its algebraic summations,

e) three languages be learned from the lowest grades on, for their social advantages,

f) the classics and history be correlated for emphasis on the unity of mankind, the cultural heritage from the past as a tradition to be carried on to the future, the universality of genius,

g) the concept of philosophy be broadened to begin in the elementary grades, with formal attention to the appreciative, and be by college years as adequate summation of the "progress of the human spirit" and a means of liberalizing the scientific spirit.

c. Rosmini's concept of method.

The fundamental law of method is the observance of the psychological order in the presentation of ideas.

1. It is satisfactorily observed in the re-arrange-

ment of the content according to the sequence of perception, reflection and reasoning, by which the older cognitions become the means to the acquisition of the new.

2. The law is correctly paraphrased by the phrases, "from the known to the unknown" and "from the easy to the difficult", because psychological recall of the familiar, the mastered and the clear is a simpler method of enlisting the aid of the cosmological law of psychological spontaneity than the presentation of the new, the strange, the challenging and the confused.

3. But the paraphrase "from the general to the particular" is only partially true, as is also its converse, according to the nature and extent of the original perception, which determines the direction of the succeeding step. The paraphrase "from the whole to the parts" is true only to the extent that the teacher has ascertained the existence of the wider percept in the mind to correspond to the use of the more general term; when the learning processes are still on the level of "partial reflections", the rule should rather be restricted to the phrase "from the general to the specific".

When new perceptions are to be used for the formation of apperceptive masses, the order of perceptions presentation should be from the easily observable (the concrete, the pleasurable, the novel, the marvellous) to the less easily observable (the abstract, the uninteresting, the trite and the ordinary).

5. Memorization of educational material is to be

avoided. Things must be presented before words, and all material must be adapted to the child's perceptual and reflectional capacities.

6. In the presentation of connected material, the teacher must be clear and exact in the selection of words, in the use of frequent sub-divisions and summations, and must review constantly.

7. Method in the larger sense is achieved by the maintenance of a pervading unity of aims and content over larger groups of connected material and longer ranges of time.

8. External aids to good method are restricted to proper use of the innate instinctive stimuli, correct correlation of content material, and adequate motivation.

9. The innate instinctive stimuli assist in the arousal of the antecedent interest of the pupil, so as to assure initiative and participation in the appreciative and adhesional aspects of the matter, as opposed to the passive acceptance of the final ideological portion only and its verbal assimilation, which prevent the full realization of the diffusive reactional possibilities as integral parts of the apperceptive mass.

10. The correct use of elucidative knowledge from other fields and branches of previous knowledge has the two-fold purpose of assisting in the fuller and more rounded out appreciation of, and adherence to, the matter offered, by the reciprocal illumination of the relations found in real being, and of preserving the orders

of cognition by the discovery of the relations between apparently unconnected apperceptive masses.

11. Motivation is the direct appeal to the affectionate element of the cognitional principle. Motives may be incidental, natural or induced. Incidental motives have value only for short periods of activity, and depend on the appeal of the instincts and of the more recent interests of the subject's experience. Natural motives are those whose connection with the matter taught is a direct result of the activity of the appreciational and affectionate in the cognitional process. Induced motives are stimuli not connected with the matter, but which provoke attitudes toward it, and are divided between primary and secondary; to be effective the latter must never be invoked without the cognitional presence of the former, which are reducible to response from moral principles, namely, the ontological beauty and reasonableness of the adduced motive. The secondary motives are the incidental motives whose cogency is derived from adherence to the primary, and may be positive or negative.

12. The use of rewards and punishments must be restricted to their clearly discernible invocation as secondary induced motives, as against incidental, and a competitive spirit in to be avoided because of the intrinsic difficulty of preserving this distinction. The under-principle in the use of motives is the preservation of a purity of intention, according to which the relative value of motives is determined by the following order:

immediate natural, remote natural, induced and incidental. By immediate natural motives are understood those connected with the content material actually being presented, by remote natural motives are understood the general and permanent values of the larger divisions of the school subjects.

We are now in a position to take up the second of our final tasks by making a systematic comparison between Rosmini and those of his contemporaries who have exerted the most influence on the modern development of education. One can not but be impressed with the similarity of much of Rosmini's educational theory with what was being thought and said in his day beyond the Alps. Outstanding, as we remember, among these leaders of thought were Pestalozzi, Froebel and Herbart.

This comparison is in order because one can not but remark, throughout this study, the close resemblance between these men, so much so that Rosmini actually unites to an extent the views of Pestalozzi and Herbart to his own, but without the exaggerated naturalism of the former or the philosophical artificiality of the latter, and organized a system that consulted the natural development of the child and the social character of his environment in a manner strikingly reminiscent of Froebel in his first impressions.

As regards Pestalozzi, Rosmini unconsciously echoed the organized routine of the Swiss, as not only an economy but a necessity, if education is to be scientif-

ic in its methods. Like him also, he not only insisted on the increase of the historical and scientific content, but even added literature as an appreciation-study, and went much farther in his introduction of three languages instead of the vernacular alone, as the vehicle of expression and appreciation.

Pestalozzi is admitted to have had a keen insight into human nature, but it is doubtful whether the Italian's evaluation of the instincts, capacities and powers is not only more thorough, but also more systematic. Pestalozzi estimated the educational situations in childhood years correctly, as is shown by his insistence on the predominance of instinct as the directive force of activity. Consequently, his insistence on observation and experimentation as a necessary prelude to the reasoning processes. In this there is particularly close agreement between the two, though possibly Rosmini would have doubted the complete validity of the principle for the ages before reasoning could follow the process or control the direction of the experiment. Rosmini would, in consequence, have insisted on a distinction between sense-perceptions and observation, in view of his regarding the law of psychological development as a single whole, affecting the entire period to adolescence. His method of unity of purpose and means was projected to hold good to maturity, and to this extent Pestalozzi's "reasoned self-direction" fits in appearance less logically into a scheme that has its primary emphasis on the pre-reason age and still has the social aim upper-

most, when compared with an aim, consciously prepared beforehand, of keeping the individual's importance in the foreground, and still able to set him fully equipped in society, where his useful service as a "full and complete man" follows as a complement of his adult "reasoned self-direction".

The fundamental difference between the two is, then, that the sage of Burgdorf stresses the social importance of the school as a training place in moral and civic character for life in an organized society, while the sage of Rovereto stresses the educational importance of the individual as a potentially perfect appreciative and active personality with an intrinsic worth irrespective of social implications. Pestalozzi was thinking in terms of his orphanage, Rosmini in terms of children in normal and placid surroundings. Hence, the naturalistic social end, with no place for religion on the one side, and the religious element as the key to the full understanding of the humanistic and racially precious on the other. Hence, too, the Pestalozzian introduction of separate teachers for the different subjects, and the insistence on the introduction of the new subjects for their own sake, as contrasted with the Rosminian all-pervading plea for unity and the subordination of the newly-necessary to a permanent and general cultural scheme.

Herbart, on the other hand, has our attention in this connection by sharing with Rosmini the trained keenness of the psychologist, that starts out to formulate and prove a theory. In both case, the theory is

derived from education as a science, or method. The German sees interest in the familiar as the drive to new mental acquisitions, the Italian sees increasing familiarity with old interests as the drive to continuing the growth of the number and size of the apperceptive masses. The former stresses the necessity of a process, the latter the need of rigid adherence to the content in the order of cognitions, and the dangers involved in a too early application of the inductive principle in "integration" and "reasoning", so that the two unite to bring out the resemblance of the principle of the "successive awakening of the faculties" with the Herbartian five-steps.

There is, however, sufficient variation to show that the suspicion of borrowing is extremely remote, entirely aside from Rosmini's actual ignorance of Herbart's educational position. The five steps are a general tactical rule for all knowledge items. They are presented as a teaching device, and they do not, except indirectly, affect the immediate content under discussion. Rosmini's point of departure in the formulation of his principle is based primarily on the content, his immediate purpose is its fitting into the total of information and attitudes in their state of completion at the time of presentation, much as a building mechanic fits his stone into an arch according to a plan, confident that the arch will naturally perform its function by the presence in position of the

component stones, according to the building plan. This does not mean that Rosmini implicitly trusted the automatic efficacy of the matter poured into the mind, we have already stressed the necessity of concrete and specific attention to the functions of imagination and "practical" reason. But he did espouse the position that the mind grows only by what it feeds on, and that the dubious assurance of "automatic transfer" does not absolve the teacher from the necessity of teaching the pupil through the content, with special care for the sense of direction in its further use. As we saw, any equivalent of behaviorism is distinctly without standing in Rosmini's psychology, and his regard for the essential and decisive influence of the will on the functioning of the practical reason was based on the results of the satisfied judgment of the centuries on the tangible results of the traditional curriculum in the hands of those who held sympathetic ideas and ideals toward the unity he had been advocating, no matter how awkward might have been their style.

Consequently, his "aims" were not the almost arbitrarily selected type that Herbart meant in his outline, so much as the common attitude of all those coming into contact with the individual growing mind in question; and the brunt of the labor involved was the creation of a consciousness in the pupil that all these exertions fitted into a grand harmony that he himself was the most interested participant in, and that the teacher really had

the minor rôle in the completion of the arches we referred to, and assisted only because his knowledge and experience was wider. The teacher's position rather reduced itself to that of having the greatest and most intimate familiarity with the blue-print of the building operations we mentioned above, while the pupil caught only occasional glances. In other words, the Herbartian five steps of presentation of matter allow for a less rigid selection of the content of the lesson, which is dictated by a freely chosen "aim" in the mind of the teacher. But Rosmini maintained that the succession of aims is governed by the pupil's progress along a rigidly marked out program of studies which is selected on the basis of its content values, and of which each item automatically requires its own aim, according to the next required addition to the pupil's apperceptive-volitional-appreciative masses.

The difference between the two men does not consist so much in an insistence on attention to details of better presentation as a better knowledge of the concrete appearance, so to say, of the child mind. Herbart gave his attention exclusively to method in its detailed manipulation of matter, Rosmini, thinking in terms of larger units of matter, presented it for its contact value on its material side, and its psychological drill matter on its formal side, as we saw in our description of the psychological laws of thought, and as pointed out in the activity of the "practical reason" interacting with the speculative.

Because the social element of education is a by-product that appears in its own good time, Rosmini, incidentally, was able to maintain that no exceptions need occur in the use of his method, but Herbart was not quite so fortunate, having to admit, first, that interest must at times be forced, and second, that, in spite of careful organization of material, some committing to memory of certain necessary facts does occur in temporary isolation, in view of the almost free choice of aims he insists on for the teacher. To an extent this concession mars the admitted contribution of Herbart to the science of education, but the general agreement of the two authors is a demonstration of the worth of their unwittingly, almost joint contribution.

As a consequence of the surface similarity between the two we must go back a step to their respective philosophies to find the real differences separating these two. The aims of education as set down by Pestalozzi appeared too democratic to the Koenigsberg professor, so he modified the social purpose to personal character instead of civic character, and to social immorality instead of social usefulness. Being a philosophical realist he also rejected Pestalozzi's "faculty-psychology" for a mental unity, with what results we shall see later. The ends of education he conceived to be purely environmental, sense impressions and social contacts. To achieve the first he adopted Pestalozzi's object-method, with which Rosmini substantially agrees.

But to achieve the second Herbart stressed the social sciences as social rather than political. As a consequence, he minimized the conventional in as far as appreciational and cultural, so that the individual became, as in Pestalozzi's case, a means to a social end, and his development was from without instead of from within. The total result is the insistence on many-sided interests revealing to man his place in the social whole, as against Rosmini's "unified multiplicity" of the ideal, real and moral.

Our third comparison, naturally, is with Friedrich Froebel, whose outstanding contribution is the kindergarten. In the matter of content and method, Rosmini has much less in common than with either of the other two, most probably on account of the average Italian conception of family life and the demonstratively affectionate bond between parent and child, which precludes the extension of the artificiality of school life downward into infancy. The kindergarten is, in fact, not popular in Italy even today, and has made its appearance for the most part only under the stress of modern economic conditions.

The idea of the educational value of play is the fundamental principle of the kindergarten, and in the correctness of this much Rosmini agrees in his exposition of the first three stages of his orders of cognitions. But on account of the disconnected nature of childhood activities, it is a question whether he would have accepted the permanent value of the handwork that Froebel advocates for its stimulus to self-activity. For some

reason there is practically no mention of music in Rosmini's scheme of education, and its appearance here would probably be a surprise, but in view of his principles it would seem to be necessarily agreeable. Certainly, it has an appreciational value that would stand Rosmini's psychology in good stead, the more so as he could hardly advance against it his argument that, as the most the child can do at this age is to manipulate cognitions of the lower orders only, and as most of its activity is purely perceptual, interest and desire, as the desirable outcomes of self-activity and observation, as long as the emphasis is on childhood for its own sake, can hardly be conducive to more than immediately educational ends.

The gifts and occupations would similarly have an appeal to Rosmini as "crutches", or as anticipations of an appreciational and moral development far before its time and as offending against the orders of cognitions both on the score of poor method and lack of permanency and, therefore, at least in theory, in conflict with the valid concept of self-activity and play as developmental of the neural and "sensual" element of the child. Fortunately, Froebel, though emphasizing early childhood, also accepted the general principles of Pestalozzi, and to this extent Rosmini's argument from unity would have less force, as a corrective agent would in practise appear as the child advanced in school. But on the possibility of a continuation of the major ends of education throughout the range of school life as predominantly social and moral, Rosmini would, as a matter

of principle, have remained sceptical in as far as his concept of the social aspects of the educational material is of necessity deferred till the foundation of individuality has been firmly laid, even though, indirectly, the social contacts that do occur earlier may contain perceptions and elementary reflections and appreciative-volitional elements.

Rosmini agrees with Froebel that the root of this genuinely educational activity is in the instinctive and natural make-up of the educand, and that the course of development is to be found in the mental and moral nature of the subject, but he disagreed with him in insisting that only by the presentation of the material by nature herself and in the order in which nature presented it, could a "natural" development take place. Froebel's "co-operative living" was an induced and a possibly sentimental thing, Rosmini's unified living was a natural goal that could only be missed by officious impatience on the part of a teacher who tried to anticipate nature by short-cuts. In the fear that nature might be thwarted Rosmini was entirely content to be patient till nature had provided a "reasoned" basis for social co-operation, so that its tangible results might fit into the "unity" that his "complete life" dictated.

But, both Rosmini and Froebel agreed, as against Herbart, that Spencer's educated man was directed by his nature to a sphere that was removed by the whole width of creation from a "complete" living which could almost be described by crossing out "satisfaction" and writing in "social efficiency".

The similarity of these four men has been regularly stressed by all writers on pedagogical history, if Rosmini has entered into the discussion at all. The three from north of the Alps are acknowledged to agree in the emphasis they put on the social instead of the personal when explaining the nature and the purposes of education. In the means necessary to this new end, all three advocated new matter to be added to the curriculum, but Rosmini was content with minor modifications, joined to a revaluation toward a more extended use of the possibilities latent in such slightly modified traditional matter.

Rosmini, therefore, least resembles Herbart on the fundamental position each adopted, at least, and this is in spite of the at first apparent greatest similarity, which in fine is found to be methodological only. The greatest resemblance, therefore, would appear to be between Rosmini and Pestalozzi, as his insistence on the social in contrast with the individual is much less glaring. In fact, a casual visitor to an imaginary school conducted side by side by these two, would with difficulty distinguish between them, unless his attention were consciously directed to the social implications of the activities of the Swiss group, and the careful and halting use of new matter by the teacher of the Italians. Beyond this, only the religious atmosphere of Rosmini's school would separate it from that of Pestalozzi.

Repeating the experiment as between Rosmini and

Froebel, we would naturally expect to find the former in the high school grades and the latter in the kindergarten. Though in fact Froebel conducted school, and had a definite idea regarding it as a unit, he is unalterably identified with the schooling of infancy, and his theories touch the beginnings of formal education rather than its continuance, and to this extent his influence in the upper reaches of childhood is negligible, on the very level, therefore, where his social and moral aims should show a sense of direction. In this failure to impress at the point where the theory he advocated has its greatest effectiveness, there is an ironical resemblance between the two men that does not escape the attentive student.

Beyond this, Rosmini's greatest resemblance to Froebel seems rather to be in the fact of both founding their educational systems on a philosophical theory, which, on account of its exotic flavor, has been discarded as fantastic, while the practical superstructure raised on it, has been admitted as of genuine effectiveness.

There is, then, a serious misconception as to the general theoretical resemblance of these authors. It has been illustrated in one form by the quotation we saw in Graves' comparison that Rosmini

"emphasizes Pestalozzianism on the emotional side, as do Herbart and Froebel on the

cognitional and volitional, respectively".

This beautifully devided tripartite evolution of Pestalozzi's principles of organic development is too speciously rhetorical to appear the truth, and as far as Rosmini is concerned, is the direct opposite of the facts. Rosmini's "fundamental feeling" is possibly poorly named, but it is nothing is not cognitional and intellectual. Graves was deceived by the terminology, and by a misunderstanding of Rosmini's underlying philosophy and its ingenuous resumé in psychology. The same misapprehension is apparent in the reference to Herbart and Froebel. The former was a psychological realist only in his opposition to Hegel, and stressed the idea's struggle for self-maintenance as against the "eternal becoming" of that philosopher. But his source of ideas was the outside world, or, in other words, he was a disciple of Locke as regards the origin of ideas, and his acceptance of Pestalozzi's educational principles is restricted to the economic and orderly amassing of knowledge-items to a point where there is no place left for the direction and guidance that according to Pestalozzi, comes from the growth and development within the growing mind. Only to this extent can Herbart be called a development of Pestalozzi, while the contrary is true of Froebel, who did stress the emotional as the basis of the volitional activity of the child.

Neither Herbart nor Pestalozzi were known to Rosmini; there is not a single reference to the former in the entire "Psicologia", nor to the latter at any place of his writings, or, at least,

of his writings, so, at most, the Italian's contributions can be called a resemblance to that of the Swiss educator, in as far as they find method to depend on the psychological laws operating in the child mind.

But, with regard to Herbart there is the closest resemblance within the province of the cognitive, and that in spite of the opposition between their philosophies. In fact, so closely do they approach that a reading of the two almost suggests that the German, in his "steps" merely drew the conclusions for pedagogical practise to which Rosmini definitely led up in his psychology. And this despite the fact that, as Graves says, Herbart developed his psychology expressly as a basis for his already formed pedagogy, for Rosmini's perception and reflection explain the growth of the apperceptive masses far more simply and naturally than Herbart's accidental attainment of the conscious level in the course of a hypothetical struggle for preservation on the part of the idea.

In view of all this, it hardly seems to be a correct summary of the evidence, both historical and logical, to regard Rosmini as dependent on any of the three whose educational descendant he is commonly described as being. The similarity that we find is more probably to be attributed to the similarity of the times whose conditions they estimated in their writings and were affected by in their outlook. The problems each faced were fundamentally the same. But Rosmini's theoretical position differs vitally from the solutions pro-

posed by any of the others, and that on the most characteristic point, the social as dominating the individual.

Historically, the difference is still greater, and that on two counts. First, the other three are known to have been consciously dependent on each other for their approach to their problem, and were more or less in close contact in their work. But there is no evidence whatever that Rosmini even knew of the existence of either Pestalozzi or Froebel, and of Herbart there is not the slightest indication of a reference in the educational field, though there is some passing bow of acknowledgement to the anti-Hegelian realist. The second point of difference is the absence of a vogue and a following abroad in Rosmini's case, such as the others were favored with by the accidents of fate. Rosmini's influence was confined to Italy only, and it is worth noting that till the day of M. Montessori, no other name of that nation attracted attention even at home, and no foreigner supplanted him, so that a reciprocal unfavorable condition prevented him and them from receiving regard abroad or in Italy respectively, and testifies to the contentment with which the intervening Italian educational leaders accepted him as their master, as Munroe says (cf. also Rosm. in *Relaz. all Ped.*, G. Cottini, p. 10).

In last place there is room for a compari-

son of Rosmini with Herbert Spencer, chiefly because the latter contrasts most strikingly with the characteristic and salient features of the former. Rosmini's insistence on "the full and complete man of thought and action" is echoed in the history of education at the end of a twenty year period by Spencer's "complete living". The question involved in this view is the two-fold one of final purposes together with the more practical one of relative values in the subject matter to be selected.

With regard to the first point, Rosmini's new manner of treating the older educational material involves several things, first, the mastery of the material in building up the total of the conceptions into apperceptive-reactional masses according to the needs of the "complete man", and secondly, a rearrangement of them for efficiency in the process, and thirdly, an inclusion of the material that the immediate future of the student might invest either with a practical or cultural value not yet recognized on account of its newness. Though the first condition excludes tampering with the content for the sake of mere innovation, still the third condition demands modifications to be made in the light of changing social surroundings. Thus, in his time, modern languages had become more necessary than the formerly universal Latin, social sciences were becoming more imperative in the increasingly complex welter of nationalistically minded modern Europe, science was entering every-day life, and the school would have been

unfaithful to its trust if it did not reflect these changes by including them in the things on which the pupil was to learn to think by thinking.

Rosmini, then, did not lose sight of his chief problem in his endeavors to meet the newly arising conditions facing education as a philosophy, and was still able to show that it did not deserve the revolutionary treatment later advocated by Spencer. His ideal of the complete man affords Rosmini the opportunity to be most impressive, exalted and philosophical, and as soon as he attacked the problem in the concrete, he is, in spite of his adherence to his original position, efficient, calculating and scientific. His decision for a rearranged content is merely an added argument for his fundamental attitude toward the whole of the curriculum problem.

The point to be kept in mind, then, is that as a principle to be used to investigate the values of content as well as of ends, the importance of unity is the deciding factor in the determination of the relative worth of the school subjects, and can give the best solution in meeting the genuine needs of the trend of the times, and that this was the policy along which Rosmini proceeded; but he fluently maintained that his contention involved giving education a directive impulse toward self-examination that today warrants the conviction that he was not only fully alive to the exigencies of the situation, but that his anticipations and suggestions are, unfortunately, not well enough known to produce the effect that, in view of their appropriateness and their pertinence, is

their due in any speculation on the problems he forecast.

The Englishman caught the ear of the English speaking world when he insisted that man does live by bread alone, and unceremoniously pitched out the classics and all that had been connoted by the "cultural" purposes of the "gentlemanly" "public" school education of his youth. Spencer is generally thought to have been influenced by the scientific spirit of the age, but the fact is he confused science with its by-product, industrialism, and its concomitant, rational utilitarianism, and his advocacy sounds ironical today when we recall that he had every possibility of seeing the social results of its logical consequences, but he actually regards industrialism as the necessary basis of the reconstructed social organization of the future. He wrote "Education: Intellectual, Moral and Physical" (note the identity of the words occurring regularly in Rosmini) to show that this newer social organization would not attain its highest form till the activities of man could be exercised for the sake of the satisfaction they afforded, rather than for obtaining the means of subsistence. This gives away his whole case, for his other work reduced the purposes of education to mere training for the daily duties of life.

Rosmini, on the other hand, had placed the perfection of the educational process in the cultivation of the non-economic elements of man's possibilities, and had measured the degree of perfection attained by the submerg-

ence of the bread-and-butter aspects of life.

It would seem, then, that Rosmini is not to be classified as an educator without distinguishing carefully between various portions of his work.

From the evidence he would seem to deserve attention for his attempt to provide for the systematization of the work of the teacher and the conscious preparation for it on a scientific basis. He tells us that his "Principio Supremo" was his attempt to solve a problem whose urgency was a common topic, the discovery of an efficient and permanent method. On the other extreme, he clearly lays down the basic requirement of clear and acknowledged remote and immediate ends, and from them deduces the means, giving for this last first an explanation of the working nature of the educand's mind. For the knowledge of the remote ends of education we are referred to the remote ends of life itself, ideal truth, beauty and good, and to the sciences that bring these down from the ideal to the concrete and realizable. The immediate ends of education are similarly referred to the social nature of man and the social bodies in which he has his being. For an understanding of the means of education, the teacher is then directed to the study of the nature of the child whose activities he must arouse and direct, to the organs and the tendencies whose impressions, operations, ideas and affections are realized by the influence of his environment and by the manner in which these influences are exercised. In short, we have a blend of the humanist and the utilitarian, an

insistence on the metaphysical and philosophical together with the non-economic and scientific.

CHAPTER XIII.

CRITICISM FOR VALIDITY AND ORIGINALITY.

We have, then, as our next task, to review the total of these contributions for their value. This will most probably appear from a consideration of their validity, their originality and their completeness. We shall take them in that order, and measure them under the heads of principles, psychological contributions and details of method and content.

The most important part of Rosmini's contribution is his explanation of the nature, destiny and capacity of the mind and its operations, its subjection to the definite laws of reality, both in action and in development, and in its relations to the general functions of education. These are the contributions, which, while they give objectivity to the entire educational process, force into the foreground of teaching and learning consciousness, the definition of an archetype toward whose realization in the individual education must tend, while its very ideality counsels despair of ultimate attainment. His fundamental educational philosophy is the time-honored and staid religious-humanistic conception of pre-scientific ages, and his method of attaining his ideal is the scientifically cold and mechanical discipline of vocational training. Ideals and sentiment are our goal, and pure intellectuality is the only way thither. The

educational value of out-of-school contacts is the sine qua non of rounded-out fulness, and the exalted leisure of the schole of Athenian origin is its habitat.

The three-fold nature of the educand, with its underlying unity, is the answer to the contradictions. The individual's ends and endowments, likes and dislikes, in their origin were determined fixedly by the constitution of their intrinsic nature. And this nature is not only the antithesis of Rousseauism, but is fixed rather in first place, by the aspirations, the physical limitations and endowments of its make-up, second by the social environment into which he is born with the upward tendency to complete realization of his potentialities, and third, by the innate resistance of his personality to submergence in the human mass.

The consequences of this complex of conditions, we have seen, is that we have really three questions in education, one flowing from man's intellectual nature, one from his animality, and the third from his social or moral character. There is possibly a temptation to say that, as a result, Rosmini is a humanist in considering the ends of education, a psychologist in the mechanics, and a sociologist in selecting the content. But that formula is not adequate appears at once, first, in the fact that he placed education among the "social sciences" as regards its end, second, in that his psychology dictates the end of mental satisfaction, and third, in that content is a means as much as his psychological method is. His vision was broad enough to em-

brace content, means and ends, his method is only psychological to the extent of advocating passage with the stream instead of against it in school life, and his real concern was to assure us that content served its purpose, both as an end and as a psychologically selected means to the final end of the entire educational process.

It would seem that Rosmini's place, then, in the history of education is both that of an almost reactionary conservative, and at the same time, of a most radical progressive. His conservatism consists in his unwillingness to dispose of what had proved its worth, no matter whether it appeared in the rôle of end or of means, both in discussing pedagogy as an art and as a science. The current curriculum was substantially what had made the past great, it had proven its worth, so it was to be retained as the racial heritage that represented almost a conscious effort of antiquity to enrich posterity. Besides this, the present and the future are so dependent on the past that a violent separation is not only inadvisable but actually an impossibility.

At first sight, therefore, it would appear that Rosmini is an advocate of the traditional curriculum, and at least partially on the basis of its intrinsic training value. To an extent it must be conceded. That he saw no reasons for a change we are not able to say, as he never formally broached the subject, and our only proof of his position is his assiduous use of it. But we must remember that his advocacy of its training value was

on the two points of utility and economy. Utility means that man can not think unless he has something to think about, and economy means that he may as well under the circumstances think the things most worth while. The classical curriculum of a century and more ago seemed to serve the purpose on both counts, and, consequently, there the matter rested till a further consideration would demonstrate the need of a change.

On first impulse one would, therefore, set him aside as a reactionary and out of harmony with modern theories, as he insists on the fundamental basis of a unity resulting from adherence to tradition, while more recently the child has been made the centre and formal object of all the activity that follows from the psychological activity now going on for the direct benefit of the class-room. But we are brought back sharply to the question in point by the large amount of psychological data that Rosmini himself has left us and we realize that this shifting of interest back to the child can not be the last word in educational objective. The shift merely shows that a misdirected tendency has set in somewhere along the course, and that a reaction took place as a consequence of its discovery. The continued emphasis on the direction of this new aspect of needs, therefore, as soon as it had served its purpose, demands a return to another modification, so that the new course becomes rather a direction determined by the strength of the concomitant forces. But its continuance as the main centre of interest for the educator showed Rosmini that the shift had come in his

day to be synonymous with a loss of a sense of direction and objective, that had occurred somewhere along the course of historical development, in its turn, and for which the child had been substituted.

According to him, modern education could not be sure of itself just what it wished to do with the child, which had therefore become for the science the point of beginning of its activity with the point of arrival not so sure; he insisted that we must be able to declare the child's destiny definitely before we are able to formulate a clear-cut program with regard to the child.

In short, in the casual and easily predictable placing of religion in the centre of the major objectives and as the key to his plea for content unity, is the vital and important point of Rosmini's educational system. Religion is not brought into the discussion as the natural hobby of a fervent Catholic writing on education, and expressing the traditional attitude of his church with professional air. Had he been a Mohammedan, he must have similarly declared himself for Islamism at the apex of the matter through which education achieves its end. The real point of the discussion and the heart of the Rosminian position is that the autonomy of education which it is demanding for itself, can not be granted. Education may become scientific, and perhaps should, but can not become a science and will not, as long as its uses of the child are the nucleus of its attempts. Science deals in general laws as its object, but the moral relation is an individual matter that is continually escaping from

the generality that mere law would surround it with, and precisely because individuality can not be submerged in the group-childhood without disappearing as even a possible object of formal attention. In other words, education is bound to deal most with the aspect-attitudes that provide the foundations on which every genuine science must be built up, and which furnish the unity that assures its permanence, but they themselves can not be a part of the science itself. This is philosophy.

Rosmini then, definitely lays down his "sane educational philosophy", which regards man's development as a means to an end which must be accepted from without to assure that unity, and places it in the destiny of the individual as revealed through the postulates of human nature and its manifesting elements. What these elements are we have seen as grouped under the three-fold division of education Rosmini refers to throughout his writings. But the fact must not be lost sight of that the physical among them is a means to the intellectual, and this again to the moral. When, then, the question of the intrinsic unity of the science arises, his answer is a curt denial of the possibility of the child as such serving as that bond. The same teacher may be in charge of the three processes, but the intellectual and moral of themselves must remain separate in treatment, by the very demand for respect that personality insists on. It is for this reason that intellectual training is psychological in its nature, both as to data and methods, while moral training can be nothing but ethical, and the distinction is necessary

equally in both fields of data and method also. We need only recall the place assigned to education in the scheme of the sciences outlined in Rosmini's philosophy, it follows ethics in its "doctrine of means", -- in short it is a type of ascetics directed to our fellow-man's improvement instead of our own. Unity, then, is possible in education as a science only in so far as the view-point and methods of these two can be reconciled and reduced to unity, and this is possible only by the subordination of the one to the other. The application of the data and methods can be achieved successfully only by the art of education, as opposed to the science, and art is distinguished from science by the element of choice of means that it involves, and Rosmini has declared himself at the outset as unequivocally on the side of the subordination of the intellectual to the moral.

With this decision, the parts of Rosmini's "sane educational philosophy" fall into their natural place at once. The autonomy of pedagogy must go, the study of the child in the light of his destiny must take the place of a study of the child for his own sake. All encouragement and assistance are to be extended to the science of ethics and psychology, on which education depends, for they are the tools whose need of efficiency is of the highest possible degree, for they have found their place in the service of the art of education. The support and conscious assistance of the out-of-school agencies is to be openly sought. But more important than any of these is the re-enlistment of ethics and morality for the purpose of unit-

ing the two sciences under the direction of the demands of the moral destiny of man. Moral education must assume again its suzerainty over the purely intellectual half of instruction, and still more over the psychological methods and view-point which the latter has become imbued with.

Such, then, is Rosmini's position regarding the essential unity of education. It is possibly his most important contribution and it is certainly his most characteristic. Incidentally, it shows his reasoned insistence on the hegemony of the "mother of sciences" over all the fields of human activity, it explains his interest in his original contributions to the speculative sciences, and furnishes his justification of this activity in the then building science of psychology.

But it does not follow that Rosmini was an advocate of the "faculty-training" theory in the common meaning of that term. This opinion is based on the quotations we have seen regarding content-manipulation and re-arrangement according to the "orders of cognitions". Transfer is possible if matter is taken up at the transferable points in the course of study. But all thought is uniform in as much as it is a nucleus for an apperceptive mass about which are gathered the analyzed and ordered data, with appreciative and volitional layers in their proper places. The conveyance of these components to the mass, and the convergence of the mass to a common good, which is the "complete man of thought and action" we have already noted.

Now the "man of thought and action" seems at first sight to mean the traditionally educated men. The idea

of democracy as Rosmini knew it, was limited and politically restricted. On the other hand, his only ex-professo writing on the school as a technical thing concerned the elementary pupil, and the content spoken of in it is exclusively that portion of the traditional curriculum with which even our most radical innovators would not tamper. And his treatment of it is from the beginning in the terms of the ideality that forms so essentially a plea for educational "completeness" in the sense of the "Unitá".

"Our system begins with the divine, and ends with God. When it is asked what is the first principle which accompanies man's steps on the path of virtue, there can be no other answer but that it is the light of reason, the divine element abiding in us. It is a moral principle that drives him onward, forces him to unite to all of being" (Crit. Sist. Mor. 6).

".....Teachers adapt their lessons to the minds of their pupils, and lead them, as it were, by the hand from the lower to the higher by a pleasant and gently inclined ascent until they reach the lofty regions of rarer atmosphere and perpetual light" (Princ. Supr. 13).

In substance there was no distinction in Rosmini's mind between culture and utility, both were subordinate means to a final and exalted end that is intrinsic to the matter studied. Now, even down to our own day there al-

ways has been much less of a tendency on the Continent to eliminate the "less practical" parts of the "cultural" programs of all the schools, and Rosmini likewise saw a very practical educational value in the necessary contacts.

His point of departure was rather that the wealth of matter was not being rightly used, and inveighed against the mere loading of the mind with ill-digested matter, that had no worth because it never got beyond the "second order of cognitions", due to an absence of method rather than to poor method. As he says in the introduction to the "Principio Supremo", even the "expository method belongs to thinking" (9), and this is his real contribution to the controversy. So for his purpose the older material would serve provided it were used in the new way.

Now, the new manner of treating the educational material involves several things, first, the mastery of the material in building up the total of the apperceptive-reactional masses according to the needs of the "complete man", and secondly, a pedagogical rearrangement for efficiency in the process. The first excluded tampering for the sake of mere innovation, but demanded modification to suit changing conditions. For instance, languages were more necessary than the formerly universal Latin, therefore, put them into the curriculum for formal study. Social sciences were becoming more necessary, science was entering every-day life, and all these facts were necessarily to be reflected by the type of material the school gave youth as the things on which he was to

learn to think by thinking. So there seems no reason for accusing Rosmini of being an advocate of a closed and sacred amount of content material, though his ideal of an education based on unity did make him conservative as to the exclusion of matter that entered into the formation of apperceptual-reactional items that had stood a test, even though they might be obliged to surrender the monopoly that was their former lot.

But the ideal of the complete man, affords our author his opportunity as soon as he attaches the problem in the concrete, in spite of his adherence to the material of his enthusiasm, to become clear and emphatic as to his fundamental position. His decision for a pedagogical rearrangement of the content leads him through the entire task of founding a new science, that not only shows the underlying reason for the unity of man and its psychological nature, but brings him down to facing the tangible problem that in consequence besets the class-room workers. His attempted solution of his second consequence we saw in his psychology.

This first of the two things involved, however, as we said, was contact for mastery with tried and proved informational-appreciational-volitional masses, in spite of the fact that the tendency of his day was away from an acknowledgement that an autonomy of education rapidly becoming scientific, was a relinquishment of an essential that was most vital for a society, that, stable but not static, was in fact a unit by virtue of the common intel-

lectual treasure that held it together. He was anxious enough to make use of the improvements in method that the science of education was working out, but he was unwilling to follow in a subscription to the apparent trend of the times, if it would strip education of the one grand and central objective that had made it great, the production of "western Christian civilization". He recognized that the "moral intellectualism" of his times was confusing education and instruction, and that the improving of the latter was the obscuring of the art in education. So he resisted the inference that the improvements in the science could ever invalidate the occupation of its field by the art, in as much as man by his nature is impelled to find out the ultimate and philosophical "why" of every contact he made, and could not rest in a mere psychologically automatic set of conduct responses, scientifically and well injected, if you will, but unsatisfactory in their disregard of the individual, whose intellectuality is only a medium to complete living.

One would imagine, almost, that Rosmini was a writer of our own day, instead of early in the last century in taking up this argument of his system. That this necessity of reorientation should shape itself into the restoration of a single overwhelming purpose in the rapidly increasing complexity of the modern scientific age, as long as a century ago, seems a rather startling commentary, the more so as the problem has not been solved, and, in fact, in as far as it approaches being an assumed princi-

ple, has been almost ignored. The education that our forefathers knew was an art whose rules were perhaps for the most part poorly applied, but the necessity of keeping ends and means separate, according to Rosmini was clearly understood. During the passage of time, education has become a science in ever increasing measure, but the ends to which they should be used have become more and more a riddle, or, at least, a pragmatic convention, till the "practical" consideration of an overloaded curriculum in our own day, brings it back to conscious attention. The borrowing from science, then, was done in an unsystematic way, so that today we find ourselves with a complete equipment of tools, under the weight of which the broad principles of marshalling and evaluating, of subordinating or advancing the parts of the total content for a deep and final noble purpose are being obscured, and is the explanation of how Rosmini could anticipate Spencer in propounding the question of the relative values of knowledge "for complete living" by more than twenty years.

To the extent, then, that Rosmini still prefers the classics as mental "external material" as adequate preparation to complete living, he differs from the Spencerian radicals, and, at first glance, is merely continuing the older traditions. And to the extent that he was satisfied to stay close to the traditional elementary and secondary curriculum of his day, he differs from the exaggerated submergence of the individual in the

social, and by as much seems to be merely a last link in the long chain that goes back to the Renaissance and beyond. But a lack of originality must not be presumed. In the first place, his general principle involves a radical rearrangement of the content already on the elementary level, his "perceptive" faculty as a point of beginning in building up every perceptive nucleus reinforces the view. Then, too, on the secondary level we recall the continued emphasis on the necessity of attention to the transferable in the classics, and the tripartite division of the curriculum into languages, sciences (with mathematics) and social sciences, so that the difference between present-day practise and our own times is not as divergent as appears at first, the more so as the natural sciences do come into their own to a great extent even on the more conservative schedules, and as Latin in Italy stands in much the same relation to the vernacular as Chaucer does to our modern English.

Rosmini, then, refused to accept all the strictures current regarding the traditional curriculum, not so much because he felt that they were not justified, but rather because he felt that the attack on it was only a misdirected expenditure of energy in as much as the point of the difficulty lay elsewhere, namely, in a confusion with regard to the underlying principles that affected the manner of its uses. This is shown by his scheme of the systematization of human knowledge, as given at the beginning of his philosophy, where the relations existing

between the divisions of human knowledge are brought out on the basis of the social in its relation to the individual values of our cognitional heritage and its employment in the arts.

This connection is found in the implications of philosophical values in general, and in his more direct suggestions as to the necessary nature of the teacher's preparation in the face of the philosophies demanding recognition in his day. We may recall the high moral character, the exalted nature with which he invested education as a profession, and the devotion and even religious consecration to which it could consequently aspire. And we also recall the deep responsibility that he stressed as its underlying professionalism. Hence, it need not cause surprize that we should also have from him a description of the immediate preparation professionally necessary for it, and it is a requisite angle of consideration in the complete understanding of his views on educational ends. In content this preparation is in harmony with his general position, a definite outline of pedagogical training embracing philosophy, sociology, nature (biology) and anthropology (psychology), and presupposing a knowledge of the matters to be taught, thorough enough to assure the manipulation required by the rearranged curriculum and the understood gaps in the pupils' orders of cognitions. That this type of curriculum for teachers is scientific can hardly be denied, that its basis in what we now call psychology

is a definite and possibly original advance also seems certain, at least as it occurs of his own initiative. In fact, the statement of Munroe regarding the great influence of Rosmini on education is verified in the place that the "Saggio", the "Rinnovamento", the "Legica", the "Antropologia" and the "Psicologia" hold as not only pointing out a need but fulfilling it, in providing the means for definite didactic improvement to an astonishing degree, and along strictly scientific lines. And still, the remote end toward which this educator must direct all his efforts is the humanist ideal, both in himself and in his pupil.

In short, then, the problem had been reduced, at the time that he and his contemporaries wrote, to one of educational principles confronting the curriculum. The difficulty lies in the inability to definitely isolate the factors and assign them stable values. The trans-Alpine theorists found the answer in the social aspects that formed the principle-factors, Rosmini was more hesitant in assuming the need of new values at all, and felt that a restatement of the problem in terms of the older values assigned the factors would sooner give a solution.

His position, in sum was that, according to the original theory, the necessary and traditional components of the curriculum were invested in good practise with the power of bringing about the complete individual devel-

opment of the pupil, and in this development the economic and the social naturally emerged in their good time, as indirect and remotely produced, but intended by-products. But, historically, with time their emergence became a matter of chance, partly in consequence of poor method, and partly of exaggerated adherence to traditions of exclusiveness under changing social conditions. His answer is obvious.

The answer of the other group differed from his because of the historical fact that, when the economic and social by-products were needed most in society, they were not appearing at all. The new emphasis on their need tended, however, to obscure the final and intended product, the educated individual, and the consequences were that the point of the problem was misinterpreted into considering the economic and social as the final product. And the difficulty was made worse by the monopoly of necessity and indispensibility, which large sections of the average curriculum have of their nature.

As this content retained its insuperable rigidity, the emphasis was placed on the aims and objectives, and the solution which finally prevailed, at least north of the Alps, was interpreted as achieving its ends by a radical reshaping of educational objectives by giving the economic and social the dignity of final objectives, and at the same time the immediacy of means, meanwhile permitting the older means, the traditional elements in the curriculum, to fall into the background.

It was this solution of the problem that was unsatisfactory to Rosmini. His contention was that the excessive early emphasis on the economic and social was not the heart of the problem, but the disappearance of the individual from his dignity as the final objective. Consequently, the permanent results to follow from an evaluation of subject-matter in the light of the newer radical point of view must be conservatively rated to be correct. Much more promise of a final answer was to be found by a restatement of the problem, which, correctly put is: to keep the individual consciously in view as the final product of the educational activity, and to see clearly the place of the economic and social as components of that individual only, and finally to use in that activity the material most effective to the task regarded as a whole.

To summarize, then, what seems the validity of the educational principles Rosmini has left us:

There is reason to hope, in the light of the successes and failures of the past, that the major purposes and ends of education as given can be successfully met if two conditions are observed; the first is that a curriculum of tried and scientifically arranged matter, kept socially up to date, be used consciously for its training values on all three aspects of the subject's present and future life, and the second is that training value be measured by the subordination of remote and immediate ends, by the co-ordinated effort of school and out-of-school agencies, according to a scale embracing the religiously-moral,

the intellectual, the social and the physical in the order named.

So there is room for the feeling, at least, that Rosmini's adherence to the older, and, on the Continent, still accepted grouping of subjects does not preclude a reasoned attitude on his part and a formal decision as to their appropriateness in as far as they embody a principle of unity that can lend itself easily to the most improved type of method. But whether the ultimate principle of purpose will be concurred in by the reader is impossible to answer. To the degree that any philosophy is to an extent a subjective product, variations, and even radical disagreements, are to be expected, and in this country in particular, where the bonds with the past of the race are considered at times tenuous, an unwillingness to subscribe to the importance of individual personality as compared with the social mass, can be understood even if not accepted. A separation of old curriculum matter and new under such a condition would be also a subjectively directed process, according to the greater or lesser emphasis put on the utilitarian, and the doubtfulness expressed as to the nature of mental development. But, even if, in the light of these attitudes, the point must ultimately be conceded that he was the last of the old tradition and claimed to find much that was still of most worth, his principle of unity still makes a keen defense possible in as much as the treasures contained in the best that all past times have bequeathed to our day, are an "external material" that can be satis-

factorily arranged to give memory, imagination and reason all the play and exercise needed to develop the type of educated personality he had in mind, and develop it in accordance with a plan that in his own mind was definite, clear and "natural", and that, though possibly not original in detail did assume a logical defensibility that his own section of the Western world has not been inclined to regard (in harmony with Spencer) as a failure.

Originality then must apparently be attributed to Rosmini as an educational philosopher in so far as his principle of unity of education implies a concerted activity of consciously selected means and purposes toward a similar end. It required vision to recognize that what had grown up as the residue of centuries of training for definite and often prosaic tasks, was, in fact, for competence in social and economic contacts, the unconscious evolution of a means by which the individual is brought to a state of sensitive responsiveness to his environment on a plane that realized his best possibilities. An analysis of this practise indicated to him that, therefore, there was not only an ideal running through the entire history of the activity that had not been before recognized and named, but that as a consequence, the objectives, the means and the processes naturally fell into a grouping and a consistent relationship that justified the use of the word "unity".

But what takes the edge of newness off the formu-

lation is the fact that he appeared to be satisfied that little or even, in places, no modification was necessary to realize the "archetype" in full, since the race had been working out its destiny in this regard so unconsciously close to that which it had been groping for throughout. A not overly radical change of the order of presenting the mental pabulum, a serious selection here and a judicious culling out there, and a prepared mental "set" in approaching situations and "subjects" were enough to guarantee a unity in the means, and a perfection of operation that would not fail; a thoroughly worked out sense of the relative values of the components of man's human nature and an uncompromising adherence to the dictates of the resulting principles of activity, according to Rosmini, theoretically assured a ponderable and definitely assignable task to each single item in an enormous but orderly and tested series of facts, sentiments, recollections, "instincts" and "reasons", all directed toward an equally definite unity of immediate and remote objectives, and governed in turn by a unity of co-operation in which all agencies, whether directly or indirectly educational, whether mute, active or social, whether natural or artificial, contributed to bringing each individual to the highest point of complete activity and responsiveness of which he was capable. In fact, so simple as to be impossible, because no mind or group of minds could agree on the assigned values involved, no world

could wait till the infinite multiplicity of assignments were tagged and reduced to usefulness, no socially organized group of individuals, no matter how small, could furnish the co-operation needed, nor guarantee the similarity and the recurrence of the learning situations and phenomena required. And still, one single attempt to realize the theory has been made --- and it is the history of the world to date.

In a sense, then, the question of originality is impossible of answer; no man could take a complete system out of his imagination and participation in the world's activity and still call it his own. And if he does so, and if he points out that in substance the system described by him is the very one that the world has been trying to realize all along, the acclaim of originality and sufficiency is, in the same sense, the only one possible.

The next part of our problem now is to apply the same tests of validity, originality and completeness to Rosmini's psychological and methodological contributions. This task should not prove as difficult as in the case of principles, in so far as the questions are less subjective. Much as Rosmini devoted his attention to the content of education as the first of the two necessary factors in the educational reformation he worked for, his emphasis on it, and the need for a re-

organized and still traditional curriculum, created only limited interest. It is far other wise with regard to the second factor, the function and foundation of genetic psychology. Far and away the best, most extensive and important of all his contributions are those that reflect his study of the material subject of education, the human mind. We have been definitely able to recount the following items in this field as original and constructive: first, the classification of the powers of the mind and their functions, second, the connection and harmony between them, and third, the laws according to which they produce their effects.

We do not think it necessary to do more than recapitulate what he offers the world under this first and second heading. He took the three-fold divisions of life, vegetative, sensitive and intellective, and professed to find in them a unity that is due to the singleness and simplicity of its directing principle, at least in its perfect development in man. Rectifying his terminology as we go along, we would say that the vegetative functions in a psychologically governed organism consist of the reflex powers of nutrition, excitation, diffusion and flexible organization (the four "faculties of Rosmini's vital instinct). If the degree of organization is highly enough developed, the sensual instinct (reflex power) that is a development of the last of those four, gives a flexibility of response, that permits the reaction spontaneously to respond to the stimuli

that impinge on it from without instead of be means of a rigid pattern only, so that the following reaction is free, either toward or away from the agent, according to the effect it produces, pleasurable or otherwise. At the upper end of this organized group of responses is a set known as instincts (in the true sense), which are more complicated and prompt in response, but more rigid in the mode of it. Where organization is so perfect that the impinging agent produces an "extended feeling", we have the highest form of instinctive response, sensitivity, the characteristic of complete animality, or combined interaction of the vital and sensual instincts in their full specificity.

The next higher form of sensitivity is that of intellective, which translates all sensations or "extended feelings" into cognitions, which are interpretative representations that are capable of being perceived like the original sensitive cognition, and become the term of a second and reflex perception. Where this power exists, the principle is triplex, perceptive, appreciative and volitional, not only as an animating principle, but also as an intellective one, so that the subject in which it resides has a complete intellectual life, parallel to, but independent of, the animal and sensitive, which are also complete, and make the compound, man.

Now, the law of perception demands a stimulus from without, but the intellective principle not only

can take over the spontaneity aroused by the stimulus, but can direct it on both the sensitive and intellective sides of its activating nature, separately or together. On the animal side, it does not differ from the cognitional we saw above, but on the intellective it can rise above the individual to reflection and reasoning on the abstractions it draws from the sensitive.

The growth of the neural machinery is a necessary precedent condition for the realization of this two-sided power, but, given the growth, we have in time a complete development of a series of cognitions climaxing in a potential union with the highest forms of being. This is cognition in its perfect specific form and completeness, and is the psychological, as understood by the rational psychologists of the earlier history of the science, who disregarded the neural machinery for an investigation of the final and complete products only. The laws most important in the government of the production of these cognitions, and their development in time and in individual instance are, first, the modified stimulus-response law, with its corollaries of upward tendency, habit and memory formation, apperceptive-appreciational-volitional mass growth with association of the ideas into unities, second, the laws of esthetic harmony, with its corollaries, subjective-objective reliability, reflection as systematic analysis, synthesis, integration and creation, proportioned vibration as basis of pleasure, harmony and abstraction, re-

action-speed; third, the law of genetic and operative orders of cognitions. This skeleton outline gives the basis of the demand of content treatment according to the plan we saw above.

The final impression all these items create is, that if Rosmini betrayed conservatism in his faith in content values, he showed far more willingness to uproot radically what could be improved by the consequences of these psychological discoveries. This is the reason for the statement that as an educator Rosmini stands or falls by his psychology. There are comparatively few of his writings that refer extensively to education, though, had he lived, he would probably have given posterity much more. The writings that he has left us represent the academic aspects of it rather than the technical, even the "Principio Supremo". With the exception of this one work, the reputation he has earned as a psychological explorer seems well earned. All that we have mentioned, except the kernel of the stimulus-response is undoubtedly his own, and to this extent it is that we pass final judgment on him.

In taking up the validity of these offerings, we face a peculiar situation. We may find it necessary to differ with their author as to certain speculative positions he has taken, and still use and accept the practical conclusions he has drawn from them for his "science of method". For instance, there seems a fundamental

fallacy in restricting cognition to the conscious processes of the intellect. This is possibly a matter of definition to the average reader, though its basis is actually in his philosophy, and merely causes a mental modification as to the limits he sets to the subconscious. But it is a source of dissatisfaction to those who desire the exactness that he himself demands elsewhere. Similarly, we find it hard to agree with him that the "fundamental feeling", in spite of its name, is something intellectual in the sense in which we use that word, because in his discussions based on it, sensation becomes a kind of will-of-the-wisp. The difficulty goes back to his philosophical reactions against the overly sensistic theories with which he came in contact in his day, and on the experimental side does not materially affect his observations of sensations, nor their validity. But his system would be the better for a different philosophical basis than the idealistic realism on which it is based, which increases the mental beings of the psychological order, that all go to produce the phenomena he has seized so happily and made into such a serviceable tool of educational method.

But, once past these difficulties, we find that his philosophical speculations in no way interfere with his keenness of observation and shrewdness of inference, so that his "Psicologia" is indeed an original contribution to our method problems, and may even prove the way

out of our present difficulties, where we need the ontological basis not at all, but the earnest and correct analysis of what actually takes place in the cognitive and sensitive processes.

Easily the most outstanding of his offerings in this field is the "order of cognitions". Without going again into their enumeration, it is necessary to point out the radical character and the apparent justice of his claims that the operations are conducted on three levels of thought and divide into four general types of activity. The consequences for school purposes are obvious. This is already shown by the fact that it has unconsciously served as the basis of our divisions of the elementary, secondary and collegiate types of education for centuries without being expressed till he did so, by his mention of the educational emphasis on meaning, imagination and reasoning as the designating influence of the divisions. The statement must, of course, be taken within limits. No one supposes that on the primary level only memoriter work can be expected of a child, as we know that remarkably logical thought occurs at a very early age,

But we can see now just where the limits of the possibilities are, when the child does surprize us with an exhibition, because a further analysis of the nature of the thought will show the "imaginal" or "full-specific" type, and prevents us from making the conclusion that, as a consequence of the isolated action,

he must have attained to "the use of reason", and that he is capable of dealing as successfully with the abstractions and the "total" masses of knowledge of which he has only the barest skeleton. Conversely, as we have pointed out, no matter how late in life a thought series may begin, it must begin with the original perception and is added to by acts which are repetitions of the types of mental activity which are exclusive in early childhood, before even "imaginative" processes can begin, and the same realizations are necessary for the transition from the stage of imagination to that of reasoning.

The originality of the consequences Rosmini has drawn from this law and its corollaries for school purposes is also obvious. It is in fact the statement of a general law of method, with the emphasis on the stages of cognitions by groups instead of individually. As such it is an explanation of much of the unsatisfactory work that is prevalent in the school, as the tendency now is to expect "thought" and "research" on the lower levels, and the disappointment that occurs seems to be just at the points where most is demanded by the nature of the work, such as in summaries and reviews, and in the applications of recently learned principles to new matter. Where this is the case, it now seems a logical deduction that the unsuccessful effort with the child shows the enthusiastic impatience that confuses

sensitive analysis with reflexive abstraction, as all goes well till the child is asked to repeat on the upper level what he succeeded in doing on the lower, with the consequence that he fails because, in the type method of lesson, for example, the most important part of the process, the analysis, synthesis and integration, has perforce been impatiently omitted, and the necessary relations can not be found in the absence of an appropriate mass or abundance of "imperfect full-specific" ideas, among which the processes may be carried on to the discovery of the underlying similarity that binds them into a unity. This may be the real reason for the "snap judgments" so often given by pupils in the development type of lesson in particular, where the temptation to jump from the concrete to the abstract too soon is especially great, and is not recognized as a step from "the order of memory" to that of "imagination". The answer, according to Rosmini, is a correction of method by a willingness to wait for the synthesis till the pupil has gathered the necessary information and experience to fill the gap that constitutes the intervening steps. The danger of this faulty procedure is still greater on the secondary level, because in theory "conscious reflex knowledge" is supposed to function here, and the danger is two-fold, first, because the pupil will be supposed to have brought all his thought-groupings to this stage, which will hardly be the case, and second, because the teacher may think that this conscious reflex knowledge is the same as "clear ab-

stract notions", which is Rosmini's designation of college work. Is it not, then, just possible that the complaint so much voiced in education that "the college blames the high school, the high school blames the grades, and the grades the primary" for the unprepared condition of the pupils, has its basis in this tendency? These units are thought of as characterized by the type of work which is not perfected till their upper limits are reached, and the source of the unsatisfactory work may possibly be the impatience that refuses to let the child actually work on the level at which he has arrived toward the goal that should be emphasized not as the means but the final achievement of his labors.

The next question that calls for consideration as to its validity is Rosmini's doctrines on content manipulation, as it implies an essential distinction between the upper and lower animals. This position is of ancient origin, and has its background the immortality of the soul as a philosophical proposition. His approach to the difficulty is a broad and sustained effort at a systematization of the sensual and lower animal functions, and an ordered combination of them in man with the intellectual in a way that was calculated to save the existence, the spirituality and the freedom and purposive activity of the "sensitive-intellectual principle". Candidly, his first attempt was a failure. It was, as we remember, a gratuitous assertion to the effect that the first act of the principle, and the

means of its existence, is its intuitive union with ideal being, of which no trace can be found in the most searching introspective operations. It was probably suggested by its analogy with the theological doctrine of grace, just as we know that as a religious man of deep convictions he had in reserve still another proof in the clear and definite position of his church, which, however, had no proving value in that part of ontology to which this question belongs.

Consequently, he was thrown back on another mental relation he felt he had discovered in his psychological researches, namely, the parallel between the intellectual and the appreciative-volitional on each of the steps of the cognitional ladder. We have stated all along that Rosmini has claimed for the "sentient principle" an intellectuality that is apt to cause confusion unless the distinction is kept sharply in mind. Each stage in the "Principio Supremo" is described as to its properly proportioned content, and the next chapter then gives us the "corresponding moral instruction" for each period. This procedure is in harmony with the parallel development of the cognitional and "appreciative-volitional" in the sequence of the "orders". In consequence, every apperceptive mass in its growth takes on new additions from both sources in almost equal proportions. As soon as the initial perception has taken place there follows an instinctive affection, and as

soon as the second period sets in, the emphasis actually will be rather on the feelings and volitions (p. 76), even though, on account of the paucity of analysis, the results are apt to be disconnected (p. 78). But as soon as the third period sets in, when judgment and the synthesis of sensible qualities become the work of cognition, the tendency to appraise and value follows at once, and this is the time for the teacher to begin her most effective work in presenting the objects and considerations that govern desire, appreciation and ideals (p. 107), so that when the era of comparative reflection and integration sets in, the "moral sense" (with the broader and general meaning given in our explanation of the unity of education) may have its required material ready at hand in all the apperceptive masses the child has by then built up for itself.

Now the strictly Rosminian claim regarding the "appreciative-volitional elements" is that they are intellectual and cognitional and are to be kept distinct from the "sensitive" that is due to the "corporeal sensations". In other words, the mind builds up its own series of values independently of the instincts and reflexes, and that even though we must use approximately the same terms to describe both the series is complete and parallel through the entire range of cognitional masses, In fact the mark of the good teacher is shown as much by the care given to the building up of the "intellectual feelings" as to the mere acquisition of information (cf. "Unità" p. 114 sqq). For educational purposes the bare instincts have no place

in Rosmini's philosophy. As soon as they appear above the surface of the subconscious they are perceived and identified as mere neural or organic activity and their intellectual equivalent must supersede as soon as it appears, because they are blind whereas man is by nature intellectual (psych. II, 1070), so that all movement of the instincts (and of the reflexes) in the educated subject ends in a cognition that is connected with those apperceptive-volitional masses whose formation and predominance in life are the end of education (ib. 1002).

The mention of the instincts here points out the fact that a large proportion of Rosmini's psychology is concerned with what has since been named the sub-conscious. In essence, consciousness is determined by the existence of the intellectual order and its power of reflection (Psi. 1161). Rosmini himself never uses the term, but that he recognized the existence of the thing is shown by the reference (ib. II, 409 sqq.) to the types of activity that belong in this classification. These are, first, acts of reasoning of which we have no consciousness, and second, acts of feeling above the level of reflexes that do not become the object of a consciously reflexive act. In order to place these properly in order, we must recall the three kinds of intellectual activity possible, first and highest, conscious reflexion, second direct reflexion, and third perception. Now, the last, in a sense, embraces all three, with this exception, that the second is governed by the law that every act of the mind is unknown to itself and re-

quires another act (reflection) to be revealed to us, this second act thus moving the perception up to the second class.

Now, if we reflect on the reflection of the perception, we become conscious of the reflection and through it of the original content perception. The sub-conscious then becomes a matter of definition. We rule out at once the highest class. The second class of thoughts is likewise hardly to be called sub-conscious in as far as it constitutes the bulk of our mental activity, so that we are able to give an account of our thoughts, to notice errors in speech, to break off ill-adapted actions and, in general, to show in many ways that we are aware of our mental activity without making it the immediate object of our attention.

Now, while the last type of activity is going on, there occurs what has since been named a "marginal" activity; in virtue of this we, for instance, see or perceive thought-suggestions that are not pertinent to our reasoning process and pass them by, we select and reject phrases and words to make our meanings clearer, we add gestures to our talk, while our attention is continuously on the other main activity, so that we perceive but are not aware of our attention. On the feeling side, our position, our adjustment to light in reading from our notes or manuscript, our sensitiveness to drafts, the mental "feel" of our audience, are all making their impressions on the respective senses and also constitute the second class that Rosmini includes

in the unconscious.

Now, the question is whether this second group is the subconscious or whether we must go farther down in the scale to find them. In the more restricted sense of the word "sub-conscious" it would seem to be the case that these are the proper forms of mental activity to group under this heading. They are at least permissively under control, they can and often are shifted from the "margin" to the centre of attention, and we recognize that under them there is a third group of activities that fit less accurately under the general heading and seem more properly to deserve the denomination of "unconscious".

That this third group exists, a moment's shifting of the attention will prove. To return to our fancied speaking situation again for an example, we point out that only the most inexperienced speaker gives even a moment's thought to the amount of volume to put into his voice, either before or during his talking, while for the "old hand" it is not even that much of an occasion for attention. When the draft strikes his neck, he pulls his coat more closely about him, and soon after discovers that he has actually buttoned it. His last action we can probably attribute to habit, which has become so firmly rooted that it is a reflex "set off" by his touching both lapels at once. But suppose that he is interrupted in his talk by a question -- on his subject, but to which he does not know the exact answer. He may stop for a moment, or go on with the ques-

tion soon dropping out of consciousness, and with the resumption of his discourse out of the sub-conscious of the kind here given. Suddenly the answer springs out at him, ready for delivery. We often note the adage "to sleep over a question" as a case in point, and Rosmini cites the case of "estimating unknown masses" with the eye. His explanation of "compendious" or "synthetic reasoning" or the use of "mediate standards" (Psicol. II, 1680) merely means that there is in the reasoning principle a tendency to remain spontaneously active on the purely intellectual level, exactly as the reflex and instinctive activities are spontaneously responsive on their respective levels, and that, if no interference by the attention or disapproval by the cognitive appreciation takes place, the act continues uncontrolled, in consequence of the law of spontaneity.

Now, which is the sub-conscious in the narrower sense? By analogy with the actions of the instincts, it could be the type that is without attention. But there is danger in analogies. Thus, man's division into animality, sensitivity and rationality is misleading as suggesting a parallel arrangement of the three orders, mentally making three columns of faculties standing side by side, and as having each upward step in the lists of faculties paralleled by a similar activity in the other two columns. But the truer picture would seem to demand that the picture be reconstructed so that these similar faculties be listed not as parallel, but rather as presenting an upward tendency,

left to right, so that the vital instinct its highest manifestation have beside it a sensitive activity which stands on a lower rank in its own column and class. Certainly an acquired habit, be it ever so firmly established as reflex seems to rank higher than a "sensual instinct", no matter how organized it be, because of its origin in conscious attention to its formation and of its flexibility of pattern and object during its formative period. Then too, there is the added fact that as soon as the reflexes and instincts rise above their unconscious level, their work and direction is taken over by the intellective, and in their perfection they shift their place from the first or second column to the third, while the spontaneous mental activities of either class are in the third column throughout.

By general consent it would seem that a final answer is impossible, as the question is ultimately one of definition, though the absence of possible deliberation in the lower classes, as opposed to, at least, possible control in the upper would seem to argue for a restriction of the term "unconscious" to the former, and of "sub-sonscious" to the latter. In spite of his attention to the problem in a general way, as given here, Rosmini has left us this question in an unanswered state, and, as we noted, has not specifically broached it as one of choice and classification between the sub-sonscious and unconscious. All that we have which might indicate how he would have answered the question, had it been posed in its present-day form, is his inclusion of the element of attention. "Usually", he tells us,

"the word is employed to signify the free or

elective intellectual activity of which we are wont to be cognizant, and which is concentrated on a determinate object, "

but he uses it generally to mean that force ("faculty") of the spirit which is applied even without any special concentration, and even instinctively to any object (Psych. II, 1023).

Between the intellectual or strictly mental, and the non-mental, there is a confusing parallelism that we have already pointed out as not to go unchallenged. The modern tendency to disregard as psychological what Rosmini calls the "spiritual" (those purposive and directional impulses that arise in the highest "faculties" of the principle and work downward to control, modify and suppress lower and sensitive activities) had not yet taken its present form in his day, but even aside from any prepossessions in favor of an assumption of the "soul" from non-psychological sources, the continued reference to the existence of that soul from its effects (unity, consciousness, organization, etc.) must have already struck the reader. On the basis of the inclusion of the appreciative and volitional, it would seem that Rosmini was justified in making such an entity an integral part of the psychological machinery, for much of the phenomena that he described is incapable of explanation without it. On the other hand, the inclusion of the purely vegetative functions and chemical aspects of nutrition have been since also dropped from the ambitions of modern psychology, though he had included them. The question of the true field of the new science is, therefore, of incidental interest as likewise a part of the heritage he has left us. It would appear

that he would not have been willing to fall in with this modern policy of reducing ambitions to the extent that psychologists have been doing recently. His definition is limited by the extent of the sphere of influence of the actuating principle in its widest dimensions, and to this degree we can see the inference of his decision to make psychology indeed an observational science, but to maintain that observation without ratiocination is unscientifically truncated (Psic. I, 17 sqq). Ideals and appreciations are inexplicable without such inclusion, and so it would not seem valid, at least to him, to invoke the law of parcimony against him,, the more so since he has provided for its observance in the inclusion of the "practical reason" as the source of the deliberately motor, which is merely an extension upward of the synthetic animal force of the reflex and instinctive levels. Whether his explanation of the phenomena will meet with general approval is, of course, doubtful, but that his acceptance of the purely mechanical theory on the levels to which he has extended the existence of psychological phenomena, as adequate, would not be forthcoming, is certain.

The question of originality in this instance is likewise involved. It hardly seems justified to regard the entire organization of the learning machinery as his discovery, though possibly the terminology is new. But, though some of the facts seem to have been known and even general property, the later discoveries of the action of the neural apparatus were at his writing not known. The stimulus-re-

response pattern is an example. Wundt, Fechner and Weber had certainly determined the nature of this fundamental method of action of the cognitional machinery, but in no part of Rosmini's works is there the slightest indication of his awareness of the studies these men had made. The evidence is, of course, negative, but in view of his unwillingness to accept from others without due credit, it would seem that his knowledge of the facts was a subjectively original discovery with him. This conclusion is strengthened by his phraseology, which differs from the current, and the by added fact that his approach is from the angle of cognition and philosophy and not of mechanics. This is shown by his "cosmological law" series, where the emphasis is entirely on the inclusion of the intellective representation in the process, and the addition of the control of the reactions on the upper levels to save the freedom of the will by the "unity" of the activity through a purpose reduced to psychological equivalents.

On the other hand, the inferences made from his premises on a number of points seem cogent. Thus, the "upward tendency" of the response, the three-fold content, ideological, appreciational and adhesional, of the cognitional response, the entire division and nature of the order of cognitions, their four constituent activities, are all very alluring by their approach to a satisfactory explanation of the phenomena. His effort to create a bond between the subjective and objective, between psychology and ontology, by his "law of esthetic harmony", even if in fact only a theory, is also worthy of mention in this connection. His services to

the "science of method" by the importance of the consequences of his psychological doctrines we already saw.

Unfortunately, we cannot be as fulsome in our appreciation of his offerings on the score of completeness. The first question that arise is that of the "law" of esthetic harmony, which we just mentioned, both on the basis of its psychology and physiology. That there is some physico-chemical change in the neural system on the occurrence of a stimulus is well known, but its nature is still undetermined. By what argument ^Hosmini persuaded himself of his final position we cannot say, but it hardly seems that he could have considered the introspective evidence, the only kind he had so far as we can see, as conclusive. But the "Psicologia" describes the "proportions in just that tone, and follows that line of reasoning exclusively, and the inference is that there is no other evidence for the position he took. The result is unfortunate, alone in view of the importance the theory assumes as an explanation, though the descriptions of the supported phenomena are correct enough. But some of the uses he puts it to, take too much for granted, such as the non-blind nature of the diffusive attentional reaction, the neural basis of agreeableness and its opposite, the law of readiness (since explained by other in the same way), the law of use and disuse, of memory and habit-formation, reaction-speed, and even the objective basis of taste and enjoyment on both the appreciational and adhesional levels. It is a pity that all these would have been credited to him on the basis of the law here mentioned, had he made the foundation secure, but now the

validity and completeness is affected by their dependence on this single point of unfinished research. The condition is the more unfortunate, as more that is baffling in the science even today, depends on the solution of this problem, since, together with the objective foundation for the canons of art and taste, there will follow most probably a satisfactory explanation of such things as simultaneous reactions, figures of speech and rhetorical analogies from measure and proportion, the mental birth of appreciational and adhesional ideals and principles and abstractions, the nature of genius, etc., all of which Rosmini was content to explain by a supposedly finer tuning of the neural vibrational receptivity, than is physically conceivable.

Another item of imperfect description that belongs in this place is the incompleteness of the orders of cognitions at the upper end of the scale, accounted for by the unfinished nature of the "Principio Supremo".

Of greater interest and importance is the omission of the appearance of the new powers that distinguish the lower, upper and middle orders. His implication do not suggest "faculties", which for him are only types of acts grouped by similarity of products, and his conception of the soul as a principle is too general to serve, since it is only remotely responsible for all activity of the lower sensitive level, and directly and immediately for the "will", or unity that selects one group of connected psychological activities by preference. Beyond this government of the

whole, his use of "abstract" labels is not at the expense of psychological integrity. On the cognitive side for instance we remarked how the successive stages within the infant stage, sensible abstraction, comparisons of qualities and judgment are natural consequences of the increasing number of perceptions and their juxtaposition in attention. The same rule holds good on the level of "imagination" after deliberate reflection has set in.

But what is missing is the transition from the stage of infancy to that of childhood, and still more from childhood to puberty, and from puberty to adulthood as far as the cognitive processes are concerned. There has of course since Rosmini's day been devised a theory that tries to explain the phenomenon by the gradual completion of the growth of the cortex fibres of the nervous system. It is doubtful whether Rosmini would have subscribed to this theory, at least to the extent of admitting this complete growth as the cause, though he would certainly not have been able from his premises to deny that it would be a necessary condition. His own distinction for instance, between the imperfect abstraction (withdrawal of attention from a general to concentrate it on a particular in "partial" reflection) and true abstraction (cognition of essences) will not serve as explanation, since the exact nature of the physiological change that intervenes between the two is the point at issue. But we have already seen that the soul as an intellectual principle performs acts on either level that, though varying in the complexity of the apperceptive-appreciational mass, is specifically the same. In other words,

we have occasion here to mention again the "synthetic force" of the intellectual principle. We will recall that each sensation is able to arouse in the subject a "felt-extended" that is not always the same though aroused by the same object, because every new impression that is made, every new note that is perceived and analyzed, is at once aggregated to the entire mass formerly the possession of the intellectual principle. Now this union of the new element to the old would seem to continue to a point where the masses have so grown as to hardly bear any longer a resemblance to their earlier conformation, and it is not a new idea in psychology to confuse the reflections in the second instance, as compared to the first, with "growth of intelligence". Rosmini himself recognized this fact and points out (Psych. II, 1474) how this amassing of more and more complex masses, the apparent intelligence becomes so acute as to simulate the thought processes of man.

Rosmini however rejects this as a possible solution of our problem. He points out that "practical reason" as well as speculative reason are not concerned with the representations of being that are registered in the intellectual and sentient principle of the soul (Psych. II, 1181 sqq). These two pertain to the nature of the soul but not its essence, and so are shared by less perfect animating principles and man. But the rational process has a monopoly on the third group of the "orders of cognition" and this we recall is only influenced in its own operations indirectly, that is, through the other two principles and the essential difference between perception and reflection on the one hand and reason on the other is the generic separation

of these functions. The difference is in the fact that ideal being from which real being is derived by the influx of the intellectual and sentient terms, though identically present to all three principles does not accompany and assist the lower, but remains, as it were in the rational principle while the other two are functioning, and the pure essence of being does not lend its influence to the lower "orders of cognition" with the same degree of intensity that it does to the higher. Twice, therefore (Psych. II, 1181 sqq, and Nuovo Saggio I, 470 sqq) Rosmini seemed on the verge of bringing up this question for solution and each time he stopped short of broaching it. It is really a pity that we have no suggestions from him as to just what it is that makes the essential features of judgment, reflection, imaginative processes and reasoning.

There is however a practical contribution at this point that deserves mention. An examination of the steps would seem to satisfy the reader as to at least the substantial correctness of the aggregate. We know that the observations on which Rosmini based his conclusions were made on a very small number of subjects, and that a great deal of introspection went into the determination of present array of the orders. There is, of course, room for a repetition of the process in an attempt to verify and possibly even to refine the series, for by admission it is incomplete at least at its upper end, where the enormous number of already well developed and relatively large apperceptive masses are the equipment of even the most backward scholar. It is, in order to remark that the real problem for the teacher

has been localized and made concrete but has not been solved in detail. Granted some agreement among teaching leaders as to the relative value of the groups of matter, and granted the possibility of a great economy in the time now used in school life by eliminating or discouraging the complete growth of certain items of this type of knowledge as indicated by the changing conditions of modern social life, there remains for the teacher a definite and complete evaluation of all the things she is expected to teach in relation to the best time to begin the implanting of the nucleus of a new mass, and to the relative time required by the pupils to master and complete each of the steps that Rosmini has described here as the normal development of it. In this way the proper grading of material by grades in school life, the "proper placing" of subjects and their divisions could be worked out and a standardization would seem to be the next "practical" problem that presents itself to the school. Any suggestion of the details of this sort of "follow-up" are of course, out of the question in a paper of this kind, especially in view of the enormous amount of details that would have to be brought out from the beginning of the third order on, when "synthetic judgments" and analysis begin. It is worth while to point out in passing however, that there should seem to be very much in order a new orientation in the construction of standardized tests based on the informational matter that the average child should have acquired at any given age. It has been pointed out by theorists and practitioners both that the principal handicap under which the standardized test labors at the present time is the inability of a concordance as to proper grading of the fact-knowledge that a child

should have at stated points in his school progress. Consequently the test has been confined for its outstanding success to its insistence on drill matter. Now, if the development of the "faculties" of the mind, that is the possibility of performing certain types of thinking processes with matter learned earlier in life is true, as Rosmini definitely states in his outline, an attack on the division of object-knowledge according to the "orders of thought" should prove a way out of this limitation under which the test-movement has been functioning till now. This method of approach would eliminate the difficulty now found that a uniform order of presentation of new matter has not been entirely worked out, and that the textbooks vary so much that such uniformity of an information-background seems an impossibility. With tests of this type the stress would not be so much on the matter as on the use that is made of the original and gradually growing apperceptive nucleus and on the natural increments that the succeeding processes of reflection indicate as proper to a definite state of mental development. In this way the stress in measuring mental ability would be taken off the drill and experience factors of the matter that must now be used in test-construction, and would be put on constructive thought in a gradually more difficult series of synthetic, analytic, disjunctive, and comparative judgments arranged in a series involving always more complex and abstract material. Neither psychology nor education were, of course, far enough advanced in Rosmini's time to permit such a suggestion, but that he was at least not out of line with the historical de-

velopment of the science named, follows from the actual existence of the standardized test as we know it today. This opinion is based on the fact that Rosmini actually took up the problem from that very angle, as we saw in our description of the laws of thought, and in the interaction of the speculative, the reflective and the "practical" faculties. The one question that refuses to fit entirely within the frame of the picture is the necessity of the development of statistics, so that, granted the historical fact that occurred in the intervening years, the only question remaining would be the willingness of Rosmini to acquiesce in the position that such things as appreciation and adhesion would lend themselves to arithmetical terms. There would seem to be no difficulty whatever with regard to the admission of the underlying differences of ability among individuals.

Next in order is the application of the same criteria of validity, originality and completeness to his teachings on method. In so far as they are a continuation of his psychology, the problem is not difficult, but we also noted above that, though he gave some attention to the mechanics of methodology as such, his treatment left room for much more detail. Practical rules of method are few, and can be reduced to the familiar phrases on the direction of thought processes we saw in our summary, such keeping ideas and sequences clear and distinct, using known words and situations, summarizing regularly, and observing

the orders of cognition with patience. The question, therefore, is not entirely out of order, how far he would have been in sympathy with our modern emphasis on this earnestly scientific angle of the question. His interpretation is that all grievous errors are ultimately reducible to the one mistake of anticipating the "functional arrival" of the age of reason, as he understands that phrase, and of neglecting its variability in what we now refer to as individual differences. In substance this means the assumption of reflective thought on insufficient evidence. But as to the mechanics, he speaks at one time (Unità, p. 111) of the fact that "method can not be learned", and if this is correct, individual ingenuity would seem to be the last word on the point, as far as artistic work in the manipulation of the means at hand is a criterion.

But, according to him, this aspect of the question is incidental. His division of the purposes of method is according to the four-fold perfectibility of the student which he there enumerates for us. These four items are, first knowledge of the truth, second, contemplation of beauty, third, appreciative adhesion, and fourth, realization of these three in action. Now, only one of these is intellectual, as we understand the term, and even Rosmini's assimilation of the other three "sentimental" items to an intellectual basis does not make the matter of efficiency of measuring their successful teaching any easier. If we grant his premisses, there is no criterion for methodology, except possibly on the level of informational mastery, and this has negligible value. The other three items he mentions, then, can only be judged and evaluated out of school, except in a minor

way, and he reinforces this opinion by the other statement that the successful teacher can only be judged by the intangibles, "fulness, freshness of outlook, purpose and sympathy", the pupil shows in later life (ib.). United to his exalted theory on the "esthetic law of psychological harmony" he advances, he could probably defend his position as laid down in the "Unità", but his defense of the same position on the basis of the "Psicologia" would be more difficult, in so far as it is based on the admission that there is a tangible foundation and a law according to which the mind works, even in the higher regions to which education as an art must ultimately conduct the pupil. So, as a tangible guide for the teacher on the elementary level, for instance, this Rosminian "secret of method" would not avail much.

This is the more remarkable in as much as we saw that Rosmini could be as coldly scientific as the most modern theorist when he treated certain phases of the problem. His distinction between the bare instincts and their association with "intellective elements" is a case in point. By a law as mechanical as that of concomitant forces, he builds up on this observation all the sentimental values in life, and this fact furnishes Graves his reason for classifying Rosmini as we saw at the beginning of this paper. But the rigid intellectual basis of the union and the fitting of the associations into the "orders of cognitions", points which escaped Graves, show how calculatingly the explanation was reasoned out and established on the observations.

So, too, we might cite as another example, the laws of

learning, as given by our author. The first of these we shall remember as the law of mental motion, the strictly reactive manner in which the attention is aroused and continues about its direction and stabilization of the successive steps of the reflective process. The second law, as given is the denial of "trial and error" in our imaginative manipulation of the apperceptive masses in favor of a rigid systematic order, which, if finally established as certain at any future time, will overthrow a large part of what is now accepted in psychology.

Methodology in the mechanical sense apparently, then, does not cause Rosmini much concern. What he offers and finds of substantial value is the few items we have seen, and these are suggestions rather than principles. Principles seem to reduce themselves almost to the rigid adherence to the psychological order of cognitions, and the meticulous weighing of the components of the curriculum in order to place them carefully in an order dictated by the child's mental growth. Farther than that he apparently did not feel it necessary to go, and in fact, in the closing pages of his "Unità", he actually states that he could not go farther, as rules for mechanical procedure are ruled out by the very nature of the teaching process. This position must, of course, be understood in the light of its context, which was concerned with the broader aspects of the final years of the secondary school and the beginnings of college study, where the highest type of "reflection" is beginning to function habitually, at least in the classroom. Otherwise, the definitely minute rules of special method he gave us in the introduction to the "Principio Supremo" would be a contradiction, and the book shows that this can hardly be so, on the elementary level at least.

level at least.

Of the out-of-school mental activities we have very little beyond the common psychological element we have already seen. Of the five methods whose purposes are extra-scholastic, or at least limited to college and research work, we found that Rosmini hardly more than mentioned them. It is necessary to a complete statement, however, to point out that essentially the demonstrative method does not differ from the didactic, except that, according to the definition (Prin. Sup. I, 1, 6), no place is left for the development of the appreciative element, and that the polemical method (defense of truth), the critical method (separation of truth and falsehood) and the inductive method (search for unknown truth) all are merely adaptations of that highest type of conscious reflection on principles and universal laws that make up the seventh order of cognitions. The perceptive-inductive method, finally, is described (ib.) as the "discovery of wholly new data through the perception of new phenomena, skillfully produced and made apparent to our senses", a conscious return to the first order of cognition and a retracing of the series by the practical reason. None of these other methods are described or commented on, but it is necessary to add here that Rosmini did succeed in laying down a few principles for two of them, namely, the critical and the perceptive-inductive (Log. V, 1, 46; Nuov. Sag. II, 4, 16).

The first of these two is recognized as really a restatement of the "four principles of the Cartesian method", and is concerned for the most part to restraining affirma-

tions within their "modes", so as to prevent any unproven or unjustified elements being accepted. This applies particularly to the necessity of examining the apodictic and authoritarian, and the proper control of experience and observation.

The second method is really the experimental method, described in general terms. Rosmini not only defends it as a valid means of attaining certitude and truth, but stresses its peculiar advantages in external perception on account of the very necessity of beginning at the first order of thought and arriving only finally at the formulation of the new knowledge in general terms. Its place in the physical sciences is especially to be noted (see also footnote, Prin. Sup., p. 4), but it does not seem a fair supposition that he fully recognized its value as a school method, the more so, since, as we already said (Chap. 7), the necessity of its purposeful direction is paramount, which would seem to restrict it considerably there.

This aspect of Rosmini's methodology makes it of interest to attempt an evaluation of the extra-scholastic educational opportunities life presents. He had no occasion to attack the problem formally, as the school in his opinion was a social organization with a special purpose, that of preparation for life. But that he distinguished between the immediate purposes of the school as a place for a concentrated attack on the cultural, the mental and the tool-mastering processes that are required for successful living, as contrasted with the incidental informational possibilities

of casual contacts we already saw. But he went a step farther and separated the education of the school and that of the family, the church, the community and the race. Obviously, then, school for him was not life, it was a preparation for life only, and these other agencies were just as important, even if their contributions were not as systematically prepared for the learner as the school situation was able to provide. The chief difference lies in the greater insistence on the non-intellectual, on the sentiments, the feelings and the means for activity that home-life and neighborhood contacts offer.

The difficulty with regard to this type of learning we all understand as due to two causes, first, the inability to control its content, and secondly, the irregular and desultory fashion in which it is learned. In cases, too, we must question the desirability to an extent. But this last was a remote consideration with Rosmini. The general atmosphere of family life in Italy has always been healthy, the place of the child, in particular, as the purpose of the home has often been the occasion for fine comment on the part of those who have discovered the relation, ~~has~~ the intimacy and demonstrativeness of the family bond is of a high order. To this must be added a far less observable appearance of what we know as the "gang-spirit. All these are features that place a much different value on the factors of the problem of childhood and adolescence than is the case with us. So the other two factors, the nature and the amount of the perceptions remain the big questions in the problem. Both are admittedly serious even

under the circumstances that we have described here, and it is to be doubted that Rosmini did not recognize the school as in a measure a corrective for them. The "Principio Supremo", it will be remembered, is occupied to an extent with informational and appreciative-volitional reactions that are not restricted to the school, and the suggestion offers itself that the intimacy and co-operation of the two were, as they are today, the real solution of the problem and were recognized as such. The higher the pupil advances in school the stronger becomes its influence, and the proportion is direct. It would seem a fair inference, then, that Rosmini on this point was contentedly the traditionalist, and felt that the real good of the school was best realized in proportion to the insistence it put on the academic and the formal work for which it was originally begun.

The secret of the good school is after all in the influence of the teacher. Rosmini stresses this point repeatedly and in a letter (Epist. 723), he tells us that there are some things in education that are beyond system and that can be properly assured only by the zeal and prudence of a teacher who recognizes the limitations under which the school exists in this relation. This does not mean, however, that he did not appreciate the meaning and the value of self-education. What we have said so far shows that he had no conception of education as a pouring-in process. The emphasis on the necessity of an actual mastery of the informational content alone is enough to prove this point. And when it is remembered that the appreciative and volitional, as integral parts of the mass, are

mentioned continuously as the more important ingredients, we can see how far he was from that position, as a moment's thought will show the impossibility of such "pouring-in" in this case. His position, stated several times explicitly, is that the teacher, aside from his wider knowledge and experience, is after all only a guide and a helper.

There is, however, a short section of his "Logica" (868), which shows that Rosmini also had an appreciation of self-education in the less technical sense, use of private initiative without relation to a teacher.

"To load the mind with a large number of confused cognitions, which often do not deserve that name, is not to learn. Still less is it to fill the mind with errors and false persuasions. These only produce presumption and rashness, which show their presence in loquacity, disregard of others.....Learning has as its purpose to make man acquire, first, true, clear and precise ideas, free from mistakes, important and not frivolous, ordered and interconnected..... second, deep convictions, and not mere doubts, and third, the ability to control and apply the acquired knowledge....."

The art of learning is the art of educating one's self, the art of using one's intellectual and moral faculties".

It shows not so much that Rosmini was an advocate of

learning without a teacher, so much as the fact that what we actively master can alone be our own, whether it happens in a school under the eyes of a teacher, or alone, and that as a consequence, the school has as much its task the development of an attitude toward all perceptions in any learning-situation as the mere contact with a formal body of knowledge.

It should not be necessary to take up again the points brought in by Rosmini in his remarks on the content proper. His only advance beyond contemporary practise was his greater insistence on social science, and the recognition of the moral and practical values it contains. In this connection there is an interesting letter on history proper (to A. Piantoni, Epist. 8,38) in which he stresses the lamentable absence of impartiality among modern writers, the ignorance of the questions at issue, the custom of using excerpts and compendia, and the neglect of the many opportunities for critical study, for estimation of causes and factors in the chains of events.

From the same source we find evidence of a desire to have a reorientation in "philosophy" by making logic "rhetoric) more practical and giving relatively more attention to moral (ethics).

"In support of this contention, as in all other good, it is expedient to find the way to arouse in the pupil a deep religious sentiment. The strength of a man is in his sentiments. If we succeed in instilling in the young an esteem

for the divine and a persuasion that nothing is comparable in greatness, beauty or wisdom to the foundation in the soul of those sentimental appreciations that can not be destroyed in the worst storms of the soul" (ib.730).

The grouping of the social sciences and "philosophy", then, is around the moral concept that we saw in the "Unità", and the cultural backgrounds that those contacts build up. Now, it would appear from this that the entire theory of method is really a restatement of what we saw as his idea of immediate aims. His position as an approach to the Herbartian five steps is different by just the absence of a flexible choice of direction for its determination by the content. This subordination, we might almost say elimination, of aims, remains almost the striking element in as much, as, if we accept as correct the suggestion, we are face to face with the problem of complete reorientation of educational methods. Now, the history of education is that method had no place till modern psychology brought it into prominence. Hence, Rosmini is to be considered either as an innovator who is insisting on a return to an older and since abandoned attitude toward the whole problem, or as a conservative who failed to note the change in the teaching field shortly before this time. The latter seems at first sight the more plausible choice in view of his contentment with the past. On the other hand, there is the fact of his formal mention of method in various parts of his writings, and his own radical rearrangement of psychology to fit the older position. In view of the development that

has taken place in the field of method as divorced from content, there is still an interesting question, namely, what position he would have taken today. It is by no means certain that he would have accepted the newer refinements as essential, and our final decision regarding his place in educational development will naturally be colored by our sympathies in this regard.

But it does not follow that he must in consequence be listed with the opposition. There is still quite a difference of opinion among educators, as distinguished from educationists (not in a disparaging sense at all) as to the exact status of the methodological contributions of the last century, and the phrase "alleged science of education", which all of us have heard in one guise or another, would hardly be countenanced by him as correct, or exact. Of course, he would hardly have tried to assign this science a rank higher than one of the large unnamed series that he makes a place for in his deontology. But his dilemma in the light of his premises is between content and the child as the object of that science, and as long as the two could not be reduced to a unity, which by the nature of the case is impossible, his position logically must be on the side of the matter as the more important, and the mental aspect of the child as decisive in the formulation of the rules that govern education as an art.

In as far as science is rigid and has no place for choice, this division between the two aspects of education is in harmony with his point of departure. Our aims are

those we choose according as we agree or disagree with the principles set down in the "Unità", and our content is chosen in as far as the aims of life are distributed over the economic, cultural and appreciative in life. The essentials of the art, then, consist in the proper evaluation of the desirable in those fields, and our choice of content may vary and will vary as those aims are judged as reflecting the needs of life. But the choice once made, the manner of its treatment in the learning process is defined by the matter chosen and its effects when put into contact with the learning mind. Here the scientific holds sway absolutely. Our success is measurable in definite figures of registered or unregistered sequences, of mastered or unmastered matter, of successful or unsuccessful apperceptions and efficient or inefficient psychical reactions. But the appropriateness of the apperceptions and their results in action, the desirability of the reaction will not submit to such measurement, and to this extent the aim of education is subjective, is individual, and, if successful, artistic.

The final impression created by this picture of what Rosmini conceived education ought to be in its outlook, its approach to its problems and its manner of achieving its purposes is naturally varied. That there is much of value in his writings must be apparent. We have discussed his principal suggestions as to their validity,

and came to the conclusion that most of them were positive. His principles, of course, have a great deal of the subjective in them, but once granted his premises, there is no doubt of the cogency of his conclusions. His originality is also vindicated to the extent that at least parts of his works can not be called manuals of accepted canons for the tyro in the field. His most staid impression is in the field of content, where his plea for a tenacious attitude toward the heirlooms of the race's passage to modern civilization is powerful in its sentimental appeal, while its innate value as a practical tool is not unacknowledged. But his argument for its practical values is the key to his more characteristic position and his place in educational history, as it is the underlying reason for his eager search through the mazes of the human mind for the best means to restore to man his original place as the centre and the reason for the social life about him.

In a sense it seems a pity that his pleas were not accorded a more sympathetic hearing. Had his principles become better known on their first enunciation, there is no way of telling how far he may have influenced the course of history, and have assured him the eminence outside his own country and given him the place now occupied by Froebel, Pestalozzi and Herbart as the outstanding characters in the change of education to its present day scientific nature. Less than this was sufficient for Rousseau, and surely there is much more of the constructive and fundamental in

Rosmini than in the Frenchman, much as his offerings may be the occasion for similar differences of opinion. The point hardest to explain in Rosmini is that, though his efforts seem to require either a warm reception or a violent disagreement, they have been left in an obscurity that seems undeserved.

CHAPTER XIV.

CONCLUSION.

It remains, therefore, only for us to try to give a final answer to the three questions proposed at the beginning of our dissertation. The first question regarded the warrant of evidence for the statements made by the average writer on educational history concerning Rosmini, and the obscure place generally assigned him in the history of education. The first of these writers we cited was Graves, and him we see to have been entirely under a false impression regarding the stress on the emotional element in Rosmini as a one-sided interpretation of Pestalozzi. The error is due to a mistaken idea of what Rosmini called the appreciative, which we have seen to be a purely intellectual product, originating in the "principle" as opposed to the "fundamental feeling". If anything, his was the cognitional contribution, instead of Herbart's, both on account of his emphasis on the place of content in education and on account of the complete cognitional psychology he worked out with so much detail that not only does his content methodology fit it exactly, but his every mental product, whether informational, appreciative or volitional is reduced to a form of sensitivity that is described entirely in terms of more or less perfectly evolved examples of intellectuality.

The same error appears when Graves states that "natural development (is) toward moral perfection through obedience to law, human and divine. . . .", in as much as man's perfection is due to "the purely intellectual recognition of being in its orders". A statement more at variance with the facts than Graves' can scarcely be conceived in view of Rosmini's subordination of both the human and divine law to a place of remote logical dependence on his ontological-psychological conception of the cosmos, and his emphasis on a striving toward idealistic completeness from principles and "recognition of being", rather than from subjective or transient motives. It is true that actual conformity will occupy a large place in practical life, but this is a consequence of sensitivity of conscious response to the dictates of reason. But, if there is one thing that Rosmini has tried to make plain, it is that the volitional is a final product of the intellectualized impulses of the reflexes and instincts, and that in the "complete man", oftener than not, the directive impulse to action comes from the dictates of the "actuating principle", consciously and deliberately aroused by intellectual perception as opposed to "sensitive".

Graves' comparison of Rosmini with Froebel's "ordered evolution" is less inexact only to the extent that Froebel, adopting Pestalozzi's "natural implicit unity" which makes education a process of making explicit

what is already implicit at birth, was able to stress unity and self-activity. But the conception of these two major objectives by Rosmini is so different that it hardly seems a justifiable measure to call them by the same name. Rosmini's unity was imposed from without, through exactness in reproducing the world to oneself psychologically under the repeated blows of sensation and experience. So the unity was merely a coordination of man's highest powers to the realization of his ideal, real and moral contacts with being to assure a full life as the final result. Froebel's fullness was the exuberance of childhood showing itself in physical activity and play, and the mental was purely the chance stimulation that "expression" brought the occasions for, so that where Froebel's system is educational, Rosmini's is recreational, and vice versa. Rosmini tolerates physical activity because it is natural and conducive to growth and health, and incidentally may afford opportunities for educational activity, but its values remain dubious as long as there is but little or nothing to express.

His ordered evolution is, then, primarily mental, and consists in the planting of the nuclei from which the apperceptive masses are to grow, so that not only is early childhood distinctly of informally educative value, but in addition gives more opportunity for

really progressive work with the child, than does Froebel's too early direction to the future.

Far more apposite, then, is Graves' reference to Herbart's apperception, which is, in fact, given a prominent place in Rosmini's system, though the term is not used by him. But here, too, there is a big difference between the two. Herbart, according to Graves himself, devised a philosophy to fit his methodology, while Rosmini used his philosophy to give him the key to methodology. Incidentally, Herbart based his philosophy on a multiplicity of realities, based on Kant and Leibniz, while Rosmini took the opposite extreme and reduced all multiplicity to modes of a single infinitely realizable being. A second difference, is, that while Herbart introduced the "culture-epoch" theory as a content guide in the practical selections needed in his method, Rosmini was satisfied to let the ordinary sequence of perception-contacts furnish the matter-sequence and become the apperceptive mass of many-sided interests, gradually shaping to a cultural-practical unity in the formally educative matter of school-life, scientifically rearranged to meet the growing capacity of the reflective powers of the mind. So, in spite of Herbart's isolation of the method from the matter of thought, the resemblance as given by Graves, is on the one point of method only, substantially correct.

Graves further fails to note that while Rosmini's metaphysical foundation is extremely subtle, it appears to offer no gap in the passage to methodology, while Herbart's conception of ideas as the soul's "acts of preservation of self" is just as metaphysically subtle, and in addition is an encumbrance in an attempt to explain thought, because perception is not an act of self-preservation of soul-reality, but a sympathetic and peaceful, sensitive and representative union, instead of an opposition. Nor are Rosmini's "categories" of intellectual processes so much a sign of scholastic efforts at reduction, as a listing of observed species of mental and sensitive activity that definitely vary among themselves in their immediate objects and modes of action. The distinction is generally recognized today as valid, between the vegetative, the reflex, the instinctive, the cognitive, the representative and the abstract, and while the question of their distinction as separate "faculties" or more apparently differing products of a single faculty has its academic interest, the real question today as a practical one is rather that of the legitimate limits of the field of psychology among the ascending series of products here given. Graves' mention of Herbart is particularly unfortunate in this connection, because Herbart's reduction of all mental operations to

one faculty, perception, is the origin of Fechner's mechanistic interpretation of the data of modern psychology, which has been obliged since to attempt to disregard or deny all phenomena that will not conveniently fit under that explanation, So Herbart actually was a harmful influence on the growth of psychology on those very points where Rosmini shows by his psychology how wide and embracing he thinks its legitimate field could be, namely, the whole width of what is under the influence of his "intellective-sensitive principle", as he conceived it and watched its activity.

Munroe, in his sketch, on the other hand, represents the concept of unity as the outstanding contribution Rosmini made to education, and places his importance in the determination of the "goal of all life". This is substantially correct, if we take into consideration the deontological dependence of pedagogy on life as summed up in Rosmini's philosophy. He is also correct in stating the big task of the science of education as the "finding of the invariable law of the progress of the human mind and the natural scale of thought by which it ascends". But his description is incomplete on the central point of not giving us an inkling of what that law is, and omitting that the degrees of cognition are to be understood as having been discovered to be specific types of thought. His third statement, like Graves', also mentions

Froebel together with Herbart, which is not in accord with its implications. In saying that Rosmini "in form, at least, anticipates modern genetic psychology", the effect is, it seems, a damaging under-statement, in view of what Rosmini actually contributed to the field he was, at least partially, responsible for blocking out.

Our third quotation was from the Catholic Encyclopedia. The statement of a natural and necessary order of human thought as the basic law of psychology and consequently of method, is correct, and is marred only by the inclusion of the clause, "the mind of the child must be led from the general to the particular", which we saw to be an exaggeration of what he was willing to concede on the point. The law, as quoted from the "Principio Supremo", is also without an explanation of what constitutes an "order" of cognition. The final statement, that in his general theory of adapting education to the needs of the growing mind, the importance is attached to "instinct, feeling and play", seems to require some modification; the first part is a paraphrase that is unobjectionable, but the last is decidedly misleading, at least with regard to play, which, except as a natural part of the information-appreciation-volition composition of the apperceptive masses, has received almost no attention in the extant portions of his system. A word on the separation of "instincts" into reflexes and instincts proper on

on the sensitive level, and into "faculties" or specifically different activities on the intellectual level, would also seem to have been in order in view of the present conception of these terms

This examination would seem to have answered our second and third questions as to omissions and corrections also. For a complete picture of Rosmini's educational system, it would appear, ~~only just however,~~ to add that he has proposed, described and named, at least on the lower levels, a complete list of the types of thought of which the orders of cognition are composed, and that its completion on the levels that follow the onset of puberty represents an incompleated task whose successful termination would be of inestimable service for the teacher whose biggest problems today are, first, selection of matter that will challenge but not anticipate the powers of the growing mind, second, the presentation of this matter, in an order, possibly spiral, that will correspond to what Rosmini would have called "cognition-age", third, the appreciation and volition ingredients proper to an apperceptive mass at any given time (this last incidentally seeming to be the key to the question as to why democracy in practise tends to level downward), and fourth, the attainment of increased informational and reflective efficiency on the secondary level (where Rosmini has placed the full development of the reflective "faculty" with which the far largest percentage of our thinking in life is according to experienced observation done). These items, which are not exhaustive, point to values still possibly concealed in the

"orders of cognitions".

The list of suggestions also points out that for completeness, there ought next be mentioned the aim of unity of outlook, content, principle, sympathy and method that Rosmini felt was the best feature of his entire system, in as much as it was his means for assuring the necessary cooperation which successful education must establish between content and method. This hope he based on the intrinsic relation and organic connection in an apprehensive "crystallization" of knowledge and of "the sentiments by which men are ruled" (Unità, 84). In last place, we must mention the original formulation of the modified stimulus-response law and its hypothetical explanation in the "law of esthetic harmony", the attempted cataloguing of the blind and directed instincts, and the consistent, if speculative, fitting into his psychological system of the spiritual soul.

It only remains, then, to recall that in spite of the valuable and definite help which the science of education received from his excursion into that field, that Rosmini himself would have considered all these definite contributions secondary to his insistence on education as an art. It would seem that it is hard to find an author who since his day has added as much of value to the deeper questions that can not be answered by an appeal to tables and laboratory schools. Education as an art has a different technique than that of the science, because it maintains the right of selecting its objectives, both remote and immediate, and these call for discussion and accep-

tance on grounds that are answered by "whether" rather than by "how". Only when the art aspect of education has been agreed on, does any importance attach to the science of method. Rosmini, therefore, can be supposed to have preferred the deeper questions above those of technique, and his confession of philosophy implies that, as a review of the outline attests. And, though that is not intended to be exhaustive, it still indicates that the technical questions were remote from his thought at the time he expressed himself, and that the wider meaning of education was as fully present to his conscience as the universal ideas through which he ranged with such sweeping comprehension. He, of course, was fully aware of the school as one means to education, and as the place where the science as opposed to the art, makes its best contributions. But he also understood that the artificiality of the school was the source of the technique that characterizes mass education, as contrasted with the actual growth of the mind and the understanding that is its purely individual angle and, in final analysis, the great object of all the work done with that young mind.

In fact, it would appear that, if we read his philosophy aright, the out-of-school education assumes the greater importance precisely because the dignity of mankind arises from the three-fold unity of human nature, rather than from the results of a contact with texts and methods. It is this angle of the questions we have discussed that, more than any of the others, accounts for the

comparative obscurity and inattention into which he and his contributions have fallen. The speculative integrations we have found it necessary to make only show that, though we may have common content, class uniformity and mass methods, that there is something underlying and involved, that protects our individuality, and, in spite of our common human nature, assures us the differences that make us after formal education what we are. It is not our psychological similarity for that can be expressed in something general, in laws; it is not the common content with which we become acquainted, as its description shows, it is the development of the individual and moral, the formation of a personality, the thing for which Rosmini pleaded and worked.

Bibliography.

1. Books by Rosmini.

(Anthropology) Antropologia in Servizio della Scienza Morale
4 vols., Milano, 1838.

English translation
4 vols., London, 1888.

Compendio di Etica, 1 vol., Roma, 1907.

Critica dei Sistemi Morali
1^o vol., Milano, 1837.

Dell' Educazione Cristiana,
1 vol., Roma, 1900.

Epistolario, edito da A. Pagani, (excerpts)
3 vols. Roma, 1913.

Ideologia e Logica, 4 vols., Naples, 1842.

Della Libertà dell' Insegnamento,
1 vol., Roma, 1912.

Nuovo Saggio sull' Origine dell' Idee,
1 vol., Naples, 1843.

Opuscoli Filosofici
(includes Filosofia della Politica)
1 vol., Casale, 1850.

Pedagogia e Metodologia,
(Principio Supremo della Metodica),
1 vol., Torino, 1857.

English translation by Mrs Wm. Gray,
1 vol., Boston, 1903.

Prose Ecclesiastiche,
includes "Catechismo disposto secondo l'Origine delle Idee",
"Istruzione Catechistica",
"DE Catechizandis Rudibus"
"Regole della Dottrina Cristiana",
"Sul Cristiano Insegnamento".
(reprint of Milan edition of 1837)
3 vols., Naples, 1841.

- Psicologia, 3 vol., Milano, 1857.
English translation,
3 vols., London, 1888.
- Rinnovamento della Filosofia,
1 vol., Naples, 1843.
- Tre Lettere sull' Educazione
paper, Novara, 1902.
- Unità dell' Educazione, 1 vol., Roma, 1913.

2. General Bibliography.

- Cantù's Storia Universale,
(German translation by G.G. Biberbach,
3 vols., Ratisbon, 1879.
- Brief Sketch of Life of Antonio Rosmini-Serbati,
(Anon., translation from an Italian version
attributed to A. Pagani),
paper, Cardiff.
- Caviglione, C.--
Bibliografia delle Opere di A. R.-S.
paper, Torino, 1925.
- Cottini, Carlo,--
Antonio Rosmini, 1 vol., Milano, 1897.
- Davidson, Thos.,
Philosophical System of Antonio Rosmini,
1 vol., London, 1882.
- de Nardi, P.,
Pedagogica Generale
1 vol., Lucca, 1883.
- Dyreff, A.R.
Rosmini 1 vol., Leipsig, 1906.
- Gajoli, A.
Carlo Uttini e la sua Pedagogica,
1 vol., Intra (It.) 1914.
- (Pagani, L.)
La Vita di Antonio Rosmini-Serbati, scritto
da un sacerdote del Istituto della Carità,
2 vols., Torino, 1897.
- Paoli, F.,
Della Vita di Antonio Rosmini-Serbati,
2 vols., Torino, 1880.
- Sunto di Pedagogica,
1 vol., Rovereto, 1890.

- Pachories, R.
Rosmini 1 vol., Paris, 1908.
- Pusineri, G.
Anthologia Pedagogica,
1 vol., Rovereto, 1928.
- Stoeckl, A.,
Lehrbuch der Philosophie,
2 vols., Mayence, 1872.
- Hickey, J.S.,
Summula Philosophiae Scholasticae,
3 vols., Dublin, 1910.
- Turner, Wm.
History of Philosophy,
1 vol., Boston, 1903.
- Ueberweg, H.,
Grundriss der Geschichte der Philosophie,
3 vols., Berlin.
- Ward, Wilfred,
Men and Matters, 1 vol., New York.

3. Periodicals.

- Deutsche Rundschau, v. 54, 1888, p. 331
v. 55, 1888, pp. 49, 218, 354.
Werner, K.A., Rosminis Stellung in der Phil.
- Mind, v. 8, 1883, p. 438
v.10, 1885, p. 271
Kraus, F.X., Rosmini.
- Rivista Rosminiana, v. 6, 1912, p. 233, 281.
v.20, 1926,
Gray, Legende di A. R.-S.
- School and Society, v. 53.
? , Article on Mme. de Necker de Saussure.