

THE PERSONAL FACTOR IN THE EDUCATIVE PROCESS

Doctoral Thesis

Sorbonne 1932

PADMANABHAN NATARAJAN

Translation: Elisabeth Heitzmann

*The faculty does not intend to give any approbation
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INTRODUCTION

(Page 5) The history of the progress of educative thought, especially during these last two centuries (1), shows us how² psychologists and philosophers have continually prevented practitioners from reaching a dead end. The stages of this progress bring to light the growing knowledge of the fact that the nature of the child is becoming increasingly important. For daring to interfere with the spontaneous enrichment of the nature of the child and influence it, now we recognize that educators must not be guided by preconceived ideas regardless of what they are, religious, economical, commercial, or by other theories about community life, but by the very tendencies of the child; that these tendencies ought to be discovered, and their laws applied in educative practice. The aspects of child's life, considered so far outside the field of the educator, are gradually annexed to it and we begin to understand that no aspect of child's life, at school or at home, as future member of a community or as individual, can be neglected in a scientific discussion on educative issues. It is to a comparatively subjective and synthetic aspect of child's life, looked at from a "private" or individual point of view, that we are going to limit ourselves in this study. Our goal is still more limited by our specific object of managing to deal, in the last part of this study, with the bipolar nature and with the dynamical characters of educative relationships.

(1) « The Thoughts About Education » of Locke have been published in 1693 and with him have begun the new trends about educational theory. Then we pass to Rousseau in 1792. We notice the same trends continued in Kant and Herbart. After 1850 the names of Stanley Hall, William James and John Dewey are some of the psychologists who have greatly contributed to form the modern educative theory.

Each child, as soon as we judge it “educable”, is bound to play a two-fold role: on one side to be in the midst of many children, on the other to be the “darling” of its mother. That these two roles are incompatible, this is sufficiently demonstrated by the tendency of children of all countries and of all ages to play “truant”. (Page 6) We can say that the concern of the mother for the child goes to individual and personal aspects while the future role of the child only takes impersonal aspects in account. The study of the child can be considered from the one or the other of these points of view, either in the interest of the mother who, in her dealings with the child, turns to a past event, either in the interest of the future community to which the child shall belong. In no phase of the life both these aspects disappear from the educative process, but each of them grows or changes at the expenses of the other.

The study of educative problems has dealt most of the time with the future of the child rather than with the past or “private” aspects of the child.

There is confusion between the a priori and a posteriori succession of educative thought (1); this is what has earned us all this literature which, in the form of advice given to educators by thinkers, men of science and philosophers, represents the various permutations and combinations thanks to which basic principles can be mixed with ordinary experience. It follows that it is not possible to obtain an acceptable definition of the purest educative aim. Let us admit that we have set an ideal in education, let us also admit that the “educande” (2) is a neutral strength in the educative process, there are still three strengths acting on the “educande”:

- 1° The interests of the mother or the private and personal interests of the child;
- 2° The interests of the community or of the State which aim at making it a citizen;
- 3° The desires of the educator itself controlled by the healthiest possible theory of education.

If we examine them further, we will clearly see that the principles of each of these strengths are so multiple that it becomes almost impossible to conceive something worthy of being named educative process in what is thought of as such in ordinary life.

(Page 7) An educative process has to be conceived in terms of bipolar phenomenon between educator and educande, either be there a personal educator, or several, or either be it nature herself which we consider as educational strength. This means that the relationships between educator and educande need to be as straightforward as possible.

- (1) For example, according to the philosophy of Locke, the child begins its life with a “blank slate”, on which subsequent – hence a posteriori - experiences leave educational feelings, while according to Rousseau there are innate tendencies which could carry out the work of education by nature itself. Kant also belongs to this school.
- (2) Word used by Sir John Adams (Cf. Educational Theories, Benn, London)

Once bipolar conditions secured, it is necessary, if we want to get good results, that this state of bipolarity be kept as intact as possible through the process. We must move away from it all factors which could alter the purity of these relationships and provide changes of the educator and the “educande”. When every precaution is taken and when there is promise to get good results, it is good to strengthen relationships as much as possible. Since the product of a good education is not only an individual flawless in public life, but also an individual whose private life is spotless, it is absolutely imperative to ensure that educative conditions are as comprehensive as possible, that they do not aim only at a superficial education. Alone, a strengthening of relationships between educator and educande shall enable to reach the subjective seat of the behavior, factor capable of establishing continuous relationships with something external. Achieving these bipolar conditions required for an efficient educative process thanks to the knowledge of what we will refer under the term of “person”, of which we will make a distinct concept in education, and achieving them by the establishment of personal relationships, such is the subject of the present thesis.

On educative matters we have always stressed the role which devolves on the personality of the teacher, on the “atmosphere” of a class, etc...; writers, mainly at the end of their discussions, have invariably devoted a paragraph on this subject. However, the veil of mystery which surrounds this problem of personality has not been sufficiently drawn aside. Some recent indications even show that we tend to avoid facing it. (Dr W. H. Kilpatrick, for example, in his work “Foundations of Method” (p. 58), disapproves of the use of terms such as the one of personality in the discussion of educational problems).

Is the introduction of such a concept opposite to a rigorous scientific discipline? This question demands an answer here. It is by means of the wording of physical sciences, which deal with aspects very little different from a state of natural balance, that we can better do an exact scientific reasoning, in the most orthodox sense, physics dealing with natural events and phenomena of simple nature and of duration easy to measure. (Page 8) When the process of objective research stepped forward and when phenomena such as “molecular attraction”, inertia and other properties of matter required to be explained, orthodox rigor became reduced. Design of positive and negative electrical charges prevails although electricity is one and the same power. Thanks to the analytical method of scientific research, now we have reached a point which allows us to speak of matter itself as being non-material. If we follow the course of exact thought in the synthetic direction of its development, we will see that the study of nature which was formerly assumed as a subject of literature has broken away from it and constitutes now the domain of science strictly speaking. However natural science had to give up geometrical accuracy and the concept of an organism having its own specificities and life cycle has become familiar to us. In the concepts of modern astronomy and in the theory of relativity we see the former rigidity of scientific categories totally collapse. Scientific thought endorses concepts such as the one of “void” reached by objective analysis and the one of “space-time” produced by synthesis, by

a synthesis which we could almost consider as metaphysical. Each scientific specialty draws its own tangent from a suitable point of this field of thought, for the use of its own exact thinking: it is in this way that an electrician measures with his own unit instead of measuring in terms of electrons: the geologist prospector works by means of megascopic characters, while the laboratory geologist uses a different method. Each field has thus the freedom of choosing its own starting point and the direction of its researches. There is nothing, a priori, which allows to determine the straight line of analytical or synthetic research, of objective or subjective interpretation, of scope or intensity of the field of study which a thinker has to follow if not the laws which dominates the studied matter. By judging the scientific validity of the discussion which is going to follow, the most important fact is to see whether the concepts will be helpful or not to the education practitioner.

As for the inferences which we suggest drawing in the following pages, let us remember that there are some specific features to the matter of our subject which will reduce the clarity of our inferences comparatively to those of pure sciences: (page 9) in the first place, the element of timing; in the educative process, this one has to be measured on the scale of a generation, at the very least. The results of a good education can not be proved in a laboratory. Astronomical analogies, in this matter, are closer to educational science than analogies of physics. The second factor that will contribute to making our deductions less defined comes from the fact that the educational laws observed at present are applicable to normal conditions of human life following the natural lines of evolution (1); which means that if, for example, an educator obtains, by special methods, some results in a comparatively short time, this one will only shed little light on the educative process, while a result obtained in more natural living conditions, with the likelihood of repeating itself in the future, shall be an experience of more value. The more a process deserves to be named "educative", the more it becomes difficult to prove it experimentally. It is in the most natural and the most normal conditions that an educative process can be observed at best. The more the aspects of a process can be proved in a striking manner, the less they are interesting for education in the most pure meaning of the word. There is therefore a lot of room for skepticism about educative outcomes, so much so that even the educability of "the educande" is a point of contention. Modern methods of "behaviorists" do not seem to improve the situation as it is demonstrated by a challenge given by M. Madison Bently of Cornell University:

- (1) It has often been said that education was a "preparation for life", meaning by that a preparation of a nature more or less continuous and general so that this preparation shall be felt during the whole life, and not only in situations which involve a specific ability of an individual or an aspect of its personality. In other words, instead of preparing such or such an individual to become a good mechanic, a good soldier or a good priest, education will rather be a general initiation to the art of living intelligently through the various stages and conditions of existence. To highlight better what we mean we are going to use a comparison taken in medical science: medicine has to deal with pathological states or conditions of life and with their eliminating. Most often these conditions are of a transitory nature, which means that treatment and diagnostic are of comparatively short duration. The results obtained are also more easily measured than those resulting from a poor adjustment of the personality from the educational point of view. The subjective nature and the slowness of the changes due to education make pedagogy a field of theoretic speculation.

(page 10) “You may be tempted to assert, he says, that a child is so neutral in its reactions that the educator, creator of conditions, can do what he wants with it. But as long as this statement will not be confirmed by at least a dozen children, brought up according to an educational plan published at the birth of these neutral individuals, I shall remain skeptical on the so-called powers of the “*behaviorist*” creator. However, such difficulties ought not to deprive educative theories based on true experiments from their scientific value.

All the sciences, it is said, begin with measurements. However, there are all kinds of measurements. Also, we have to decide on the unit of measurement before measuring. On education scientific measurements can not be taken according to a bar of platinum set somewhere. In this case, only an acceptable concept regarding human person can serve as bar of measurement.

In the first part of our study, we will try to fix as clearly as possible the limits and the characteristics of the notion of *person* as first concept of educators, and in the second part we will try to show the relationship between this concept and the educative process. Likewise, we will consider the principles which govern the personal relationships as well as those which rule the relationships between master and pupils and which are the basis of this bipolar educative process.

In passing we will seize the opportunity of linking our subject to some of the important concepts of Hindu tradition, which have been tacitly accepted in India during centuries and which are still accepted nowadays, in order to create a link, whatever small it may be, between the educational thought of India and the one of Europe.

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Each object exists only through a compromise between the analytical and synthetic tendencies of our intelligence. A cloth, for example, is seen and considered for what it is by fixing on it analytical faculties, which only see mere thread, and synthetic tendencies which made us aware of a piece of material only. The personal factor that we will treat has to be first and foremost understood as being an entity resulting from a similar compromise. (Page 11) That is the everyday necessity meeting specific aspects of human being which oblige us to clarify the popular concept of “*person*” so as to help educational theory and practice.

Starting from “*homo sapiens*” as the most generalized concept that can relate to man, it is possible to find a whole series of other terms tending to become more and more specific. Ethnology, anthropology and other sciences of the same kind suggest a step forward

towards a scientific conception of the individual. But these concepts are not particularly useful for education which relates chiefly to intelligence, whereas these sciences are based on bodily differences between individuals. The quality of individuality is attributed to man when we refer to a distinction of behavior or mentality. When we consider more deeply subjective characteristics which qualify further individuality, we reach the concept of *personality* (1). If this quality is related to others which persist beyond death, we can say that we see personality from the point of view of metaphysical research. This is one of the furthest points of the meaning of the term "person". When we insist on the metaphysical aspect although confining ourselves within the limits of present life and when we think that nervous diseases, abnormalities will reveal the nature of hidden qualities, we come to the concept of "persona" which is used by psychoanalysts. Poesy, mysticism and pseudo-sciences are using the word personality to name the various combinations of objective and subjective elements, combinations too vague and too numerous to be classified. The other branches with more empirical tendencies trace back the origin of personality to endocrine glands; we can say about all of them that they incline too much either on the side of mind or on the side of body, and are therefore inadequate for educational requirements. The educative process is sometimes defined as being the process of the harmonious development of mind and body, in other words of mind-body. (Page 12) Thus the conception of the person in education brings together mind and body in a combination compatible with this harmonious development. As we have already noticed, this concept has to refer to this kind of combination of mind and body, elements which become operational only under normal conditions, thus bringing back their meaning very close to the one of common sense. So, we see that the person whom we discuss forms the basis of the ordinary relations between individuals.

And even when we limit ourselves to the ordinary relations of life, there is room for fluctuations in the exact meaning of the word "person" which can be considered as having also occurred between a tendency to extend and a tendency to specify. Two intimate persons do not see each other as if they were generalized entities but in the opposite, the more intimate they are, the more their relationships tend to specify themselves towards defined sub-concepts such as paternal, maternal, fraternal, filial, relationships etc... An individual being part of a group does not have the same personal significance: a soldier of the infantry, a prisoner, ordinary number of the jail, tend to have generalized relationships which acknowledge only a specific, average or common aspect of what constitutes the individual. Each specific case of personal relationships has behind it its own principles which govern the generalization and the particularization resulting from various generic and sub-generic concepts of the person.

- (1) The distinction between the terms personality and individuality has been shown by Sir John Adams (The Evolution of Educational Theory p. 113-14) quoted by Rusk (Phil. Bas. Of Ed. P. 45) from which we extract what follows: "When it applies to human beings, the term *individuality* however carries within it something more than a biological sense...The term *personality* almost always includes an allusion to the way in which the individual reacts on other individuals".

In the world of educational relationships, the concept of person is separate. Educational relationships can also be considered from the point of view of generalization and particularization. The relationships between master and pupils in a day-school only consider a partial aspect of the person. In the schools where a particular interest is given to pupils, relationships are more founded on the subjective element of what constitutes the individual. As an example of relationships such as there are in modern educational life, we can take the extreme case of an American school of more than thousand pupils of both genders, aged between six and twenty. It is only a negligible fraction of the totality of the pupil that the master can affect in his collective teaching; therefore, relationships tend to become impersonal. Let us take now the case of a child of the master, pupil of the same school. It is difficult for this child, in the classroom, to establish normal relationships with the master, his father; while at home this one will take an absolutely different interest to the child, trying to use his personal influence to help it in every way. (Page 13) These last relationships tend to be more personal. Such is the case, for example, of the personal relationships which are involved in a study group, or according to the Dalton plan are separate from others; a drill sergeant do not wish to enter into intimate relationships with those whom he instructs: a relationship purely "physical" in nature is sufficient in this case. On the other hand, for the professor who tries to explain the differences between art designs according to Aristotle and according to Plato, a deep liking must be established between it and the students. That is why we can conceive of many types of educational relationships, the ones being more convenient than the others according to the specific educational purpose.

The very nature of the individual has got possibilities to adjust to the nature and the intensity of personal relationships. We can say that in every individual there is a complex mass of dynamic, genetic, functional, phylogenetic etc. principles which give some intensity and diversities to personal relationships, the ones being more desirable and more appropriate than others. This methodologic basis of personal relationships may be called "The personal factor in education ".

In the following pages, our task will consist in rebuilding a scheme of this personal factor in education, scheme that can be used as a basis for the discussion of educational experiments which will form the last part of our study. We have not for purpose to present a new point of view neither to overhaul completely individual psychology, what we intend to accomplish is to make a selection and a methodologic arrangement among facts already more or less accepted by physiologists, "behaviorists" and psychologists in order to arrive at a schematic theory of the personal factor in education. To avoid discussions which would take us too far away from our central theme, we shall rely freely on quotations from recognized authors, while leaving aside details. About this scheme, it is still important to remember that it shall not be taken in a too realistic sense, its object being mainly to facilitate the overview of psychological factors which can serve as a basis for further discussions rather than substantializing the personality or giving to such a picture the false appearance of a reality which it does not have.

FIRST PART

CHAPTER FIRST

PRELIMINARY OUTLINE OF THE "PERSONAL FACTOR"

(Page 15) There are three attributes of the personal factor at which we must arrive by *a priori* reasoning:

- 1° it is alive,
- 2° it has an objective attribute: the body,
- 3° it is capable of a characteristic behavior in relation with the outside world.

We can say that conscience is the principle which unites these attributes in a central experience.

We will shortly examine these three attributes the one after the other. From time immemorial nature of life has been the subject of an unceasing search on the part of humanity. Poets allude to it and one of the accepted definition of poetry is that it is "a critic of life" (Matthew Arnold). Philosophy tries to explain it by the use of logic. Religion, on the other hand, is based on a more emotional than intellectual interpretation. Science wants to study its phenomena from an objective point of view. Each rapprochement towards the explanation of the nature of life has its own limitations. But education is limited by none of these points of view; it addresses the problem of life in the most comprehensive sense. Thus, the conception of life in the educator must be done in a very free way, by using the data of these various points of view without stopping at any. It is a philosophy which belongs at once to all the branches of exact thought on which the educator must build the edifice of his theory. Among modern philosophers there is a new (1) tendency of considering

- (1) Up to the time of Descartes (1596-1650), we have kept to the custom of building philosophical edifices on axioms such as "Cogito ergo sum". The ultra-positive tendencies, derived from the triumph of science, despise such constructions. (Page 16) Thence the temptation for modern science to do without, for a while, every postulate going beyond empirical experience so as to be confined to strict materialism or mechanism until progress of biological thought gives it a new impulse. Questions such as the one of origin of species in biological field showcased the taste for generalizations concerning life. Human psychology and philosophical thought itself benefited from this tendency, either by direct

generalizations, either by analogies with animal life, thus giving a more concrete basis for abstract thought. As a result, philosophy could take a more “open”, more available, character, in short it became a more rational discipline.

The theory of recapitulation attributed to Haeckel is a very clear example of the influence of analogies on philosophical and psychological thought. In the following words Will Durant plots for us this biological tendency which has began to move the mechanical point of view of Spenserian school: “The rapid obsolescence of his (Spencer’s) philosophy is due largely to the replacement of the physical by the biological standpoint in recent thought; by the growing disposition to the essence and secret of the world in the movement of life rather than in the inertia of things... It was Schopenhauer who first, in modern thought, emphasized the possibility of making the concept of life more fundamental and inclusive than that of force; it is Bergson who in our own generation has taken up this idea, and has almost converted a skeptical world to it by the force of his sincerity and his eloquence”. (P. 488 *The Story of Philosophy*. New York).

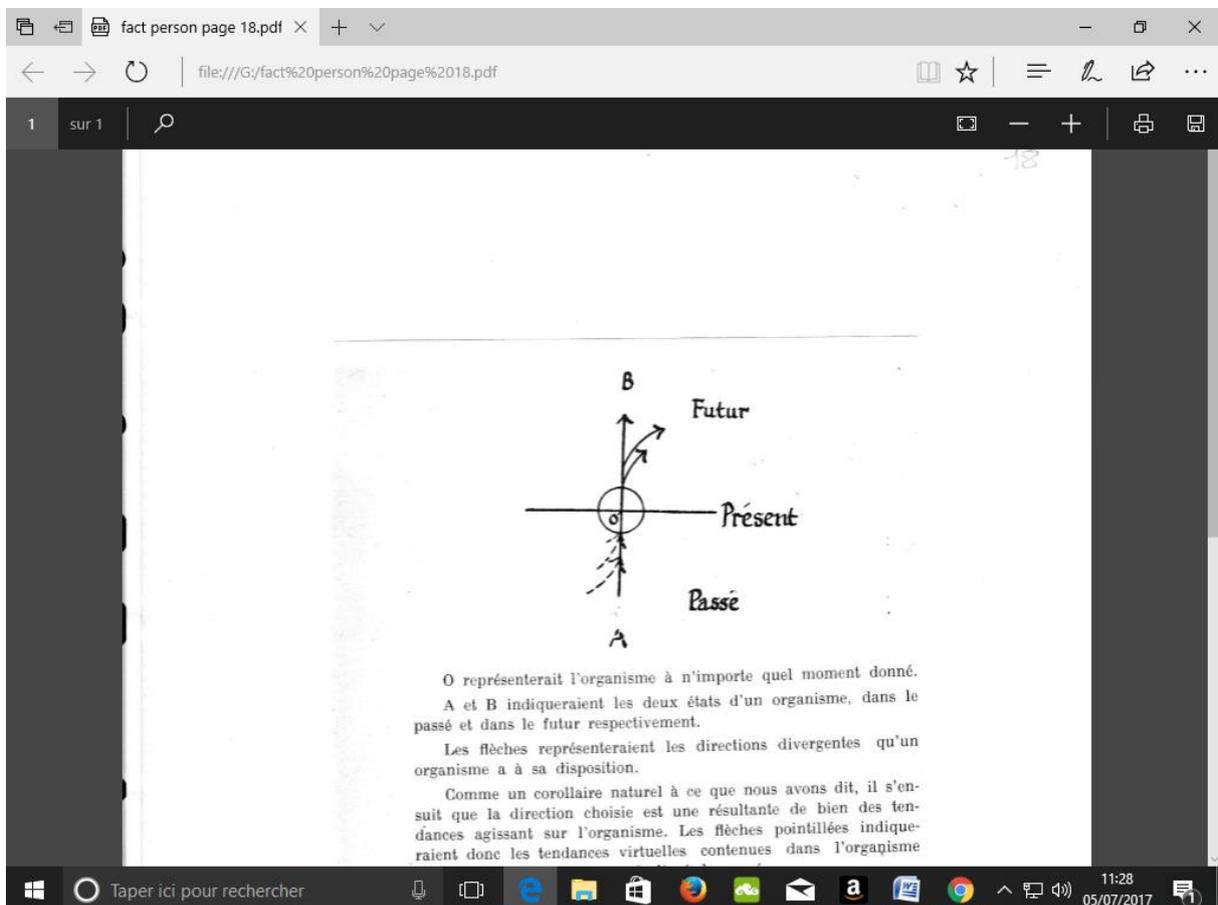
philosophical abstraction side by side with biological analogy, thus trying to make a synthesis of the methods and the conclusions of logic and biology. So, philosophers of this kind are the most reliable guides to arrive at a conception of life, that can be used for our study which does not claim to enter itself into a detailed discussion of this problem. It is not a purely symbolic conception which could help us in our study regarding the personal factor. The nature of our subject requires a conception of life neither too abstract, neither too symbolic, neither too concrete, since, as we said, in education we must deal with pupils who not only are living beings in the biological sense but personal entities also. The purpose of our effort is to reconstruct a conception which, while being based on biological facts, meets our need to conceive more clearly what individuality, character and personality are. We said that the philosophical conception of Monsieur Bergson is very close to satisfying this need. That is why, to avoid a metaphysical discussion which would take us too far away from our subject, we are going to extract the following paragraph from *Creative Evolution* (p. 109):

After stating that growth and division are the expression of the most elementary life observed in protoplasm, he goes on: (page 17) “The true and deep causes of division were those which life carried in itself. For life is tendency, and the essence of a tendency is to grow in the shape of germ creating, by the mere fact of its growth, diverging divisions between which its momentum will be shared. This is what we observe about ourselves in the evolution of this special tendency which we call our character. Each of us, by having a retrospective look at its story, will observe that its childhood personality, although indivisible, gathered in itself persons who could remain together because they were in a nascent state: this indecisiveness full of promise is even one of the greatest charms of childhood. But the personalities which penetrate one another become incompatible while growing, and, since each one of us lives only one life, it is forced to make a choice. Actually, in facts we continually choose, and continually also we give up many things. The road which we cover over time is strewn with everything we started to be, with everything we could have become. But nature, which has a countless number of lives, is not at all compelled to such sacrifices. It keeps the various tendencies which have branched off while growing. It creates, with them, series of diverging species which will evolve separately”.

Let us not get hung up on discussing the scientific bases of this picture: this would remove us too far from our subject. We shall content ourselves with admitting the general truths of it, with gleaning there the mentioned points and with underlining them in keeping with our study.

Life is a tendency; it expresses itself through growth and division. The last stages of life are characterized by diverging tendencies, while the first are characterized by converging tendencies. Time is the basis on which life traces its course. Its essential features can be represented graphically in the figure bellow.

(Page 18)



O should represent the organism at any given time.

A and B should mark both the states of an organism, in the past and in the future respectively.

The arrows should represent the diverging directions an organism has at its disposal.

As a natural corollary to what we have said, it follows that the chosen direction is a resultant of many tendencies acting on the organism. Thus, the dotted arrows would mark the virtual tendencies contained in the organism in the form of tendencies resulting from the past.

This conception of life has its own limitations; it can not reach particular cases or concrete aspects of life expression of the person. So, the concrete basis of individual life is the body, which brings us to the second attribute of the personal factor.

To estimate properly the place occupied by life or physical functioning in relation with the personal factor, we have to discuss here the relations between physiological life and psychological life. M. E. H. Starling, of London University, in his treatise "Principles of Physiology" (p. 486, 3rd edition), writes on this subject:

"How physiological processes existing in nerve fibers, with their concomitant chemical and electrical phenomenon, are capable, on arrival at the brain, of exciting a conscious sensation, we can not determine or even discuss it because we have to do with processes of different orders. (Page 19) We would never get close to the solution of this problem even if we were capable of following all the events occurring in human body as being the result of any stimulus given to the surface.... No sensation is the immediate and unique produce of a stimulus given at the peripheral end of the nerve fiber, but the simplest sensation includes a judgment, that is to say complex neural activities resulting from countless past and present currents caused by peripheral events, and which are poured into the central nervous system.... As we have seen already, the primitive function of nervous system is reaction. The neural life of animal consists of a series of reactions, the ones simple, the others complex and becoming more and more complicated as we ascend the evolutionary animal scale. The first reactions of a baby are those by which it is getting food and satisfying a need; even the very first one at the awakening of its consciousness will not be a sensation of sweetness or color, but of a thing capable of satisfying its needs... An elementary unit, in psychic life as in neural life, must be a complete reaction. It is from reaction and not from sensation that a constructive psychology will have to rise".

Keeping for later a more detailed consideration on the nature of these reactions, we will notice here only some of the preliminary facts from the above excerpt:

1° external stimulus and sensation belong to two different orders;

2° the simplest sensation includes complex neural activities which are the resultants of countless past and present currents caused by peripheral events and poured into the central nervous system;

3° a complete reaction (1), resulting from a judgment and not only from a stimulus, is at the basis of the expression of life; this reaction, which invariably satisfies a biological need, affects the future at the same time as it is determined in its character by the past habits of the system.

So we can summarize by saying in more general terms that the conversion of a past habit, by a present judgment, in order to meet a future biological need, is the central function of neural life. We see in this way that the examination of the concrete aspects of physical life brings us towards the same essential features which are at the basis of the "personal factor".

(Page 20) From physiological function to conduct or behavior, there is a natural transition. What is the relation between behavior and the individual? This is the question now. In this regard, the new "behaviorist" theories of Dr JB Watson take a special meaning. "Behaviorists" do not think that it is necessary to assume the existence of thought as opposed to speech or behavior. This belief is only the natural result of another important approach of the "behaviorist": the most certain facts are those which are public and can be confirmed by the testimony of several observers (2).

A careful examination of this point of view would reveal that "behaviorist" diminishes the importance of the effects of past reactions which persist in the current behavior, and assign it in form of what Bertrand Russell calls "mnestic effects" which are the basis of the memory (Outline of Philosophy, p. 306). Emotions and subtle feelings should be excluded if we were to limit ourselves to the strict point of view of "behaviorist". Education, as the word itself indicates, as to do in the first place with memory and with natural capacities (2). The "Personal Factor" in education thus relates more to "mnestic effects" of the past than to present conditions. Even the knowledge of the law of "learnt reactions" or even the explanation given in terms of "conditional reflexes" can penetrate only superficially into the characters of the "personal factor". The "behaviorists" are doubtless right in wanting to give a stricter scientific basis to pedagogical research. While accepting the disciplinary value of psychological thought, we must admit that the educational practitioner needs a complete conception of the individual for his daily work. (Page 21) When M. J. B. Watson goes so far

- (1) The exact relation between a complete reaction and a simple sensation is not easy to determine. Although it is true that reactions are the results of sensations or simple stimuli, such stimuli should not be considered as the sole and direct cause of the reaction. The biologically-directed complete reaction is in relation with the innate nature of the nerve system, and its primitive functioning; each time there is a partial stimulation, there is a tendency to produce complete responses.
- (2) Doctor Adolphe Ferrière explains in this way the function of education and the origin of the word "education": "Then what can do the educator? He must, I have said, begin with what is and not with what should be..."
"To educate will consist to start from what is, to lead (ex-ducere) towards what is better...", p. 50-51 of "L'Ecole Active" Ed. Forum, Genève 1926.

as to say that “behaviorists” think” that there is nothing innate to develop” (cf. p. 41, Psychological Care of Infant and Child, Norton, New York, 1928), the educator who seeks a practical basis for his conception of the individual, is obliged to get away from him, because such a position implies that we look at the child as a kind of mechanism “stimulus-response” which, as we have seen above, leaves *ipso-facto* aside the whole question of conscience without which any conception of the individual remains incomplete and inadequate for educational purposes.

M. Watson himself, in his book “Psychology from the Standpoint of a Behaviorist”, gives us rather decisive indications on the limitations and the unique quality of his standpoint. His very starting point is a limitation of the field of the psychological horizon. He writes in the preface: “Until psychology discards everything which cannot be stated in the universal terms of science, she does not deserve a place in the sun”. The limitations of the “behaviorist” standpoint appear to us more clearly as we examine more closely how “behaviorist” considers phenomena such as dreams and emotions. Does M. Watson not write about dreams “that they belong to the whole of the reactions of a person...; that they are “word reactions”, but that they do not have the isolated reactions of the kind which produces a simple muscular contraction... That the study of dreams, because of the symbolical nature of their language, requires persons specially trained in this field”, etc... (p. 209, Psychology from the Standpoint of a Behaviorist). Such confessions and indications are sufficient to demonstrate to an unprejudiced person, that “behaviorists” mainly seek a new direction of psychological thought to place it on a firmer scientific basis, rather than a revision of our psychological ideas. Now the limitations of the “behaviorist” standpoint appear to us more clearly, but it goes without saying that the pedagogue, freed from the preoccupations of pure psychology, must have the freedom to formulate his methods and his principles without having to bother considering the special standpoint taken by any school of psychology. Thus, from the “behaviorist” position which denies subjective thought, we are obliged to come back to a more simple position, according to which we will relate the behavior not only to the conditions of an external world, but also to subjective processes of mental nature.

(Page 22) It is to these mental processes that we have already alluded in speaking of the physiological aspect of the personal factor, and we have noticed that the satisfaction of a need is the key to neural life. The same rule, in a more extended sense, can be used to explain the behavior of living beings, including man. Need and satisfaction will give us basis on which we will be able to analyze behavior in its component parts. Each behavior contains subjective phases and objective phases, and each unit of action has its own character according to a predominance of subjectivity or objectivity. If we follow the succession of activities in the chain of natural behavior, we discover that each action subjectively originates from innate dispositions acquired in the past.

Thus, beginning with innate dispositions of the past in its first phase, it is headed for an object or for the idea of an object in the space pertaining to sensation or perception. When this object is out of reach of the senses, the animal substitutes, by memory, the desired object in the space; when activity brings back the animal within the reach of the object, substitution ceases to be necessary. A sensory image coincides with the substituted image:

at this moment finishes the first half of the chain of activities. This is when the second phase begins, the phase of satisfaction by cessation of “appetite” for objective realities. Animals keep on being aware of the object in a very different way; the image no longer represents the future but the past event in relation with the object (1). What was once idea of an external object becomes feeling of an object. This feeling, which is still related to “virtual space” (2), becomes more and more confused leading to subtle instinctive and emotive states. And, when the animal is at rest, we can say that it is again absorbed in subjective consciousness.

(Page 23) All natural behavior can be considered as having the following characteristics:

1° they have a subjective origin; the first phase is related to the future and tends to become objective;

2° they have a phase related to the immediate future where the objective and the subjective alternate in an imperceptible succession, being in physical or mental contact with current objects which satisfy a need;

3° they have a phase related to the past which leads back to instinctive or emotional subjective states, thus completing a cycle of activities (3).

As we have already said, we feel life within ourselves in consciousness. The nature of consciousness in relation with the “personal factor”: that is what we are briefly going to discuss now.

Sensible doubts have arisen as to the existence of consciousness itself. William James was one of the first to deny its existence and to specify that it was a function and not an entity. Bertrand Russell agrees with him when he says: “No mental occurrence, in its own intrinsic nature, has this kind of relational character that was involved in the opposition of the object and the subject or of the connoisseur and the known” (Outl. Of Phi., p. 225).

- (1) The natural order of such a succession of subjective and objective phases of innate knowledge in its natural use is indicated by Bergson as follows: “We find that this knowledge concerns, in the first case, things, and in the second case relations”. (L’EvolutionCréatrice, p. 161).
- (2) In the chapter on existence and vacuum, Bergson discuss in detail the idea contained here: “The representation of void is always a full representation which resorts to the analyze in two distinct positive elements: the distinct or confuse idea of a substitution and the feeling, experienced or imagined, of a desire or a regret”. (L’EvolutionCréatrice, p. 307). See also p. 42 of this work.
- (3) Again, we find in William MC Dougall (Psychology H. U. L. p. 104): “The primitive cycle of purposive or mental activity seems to be cognition, evoking feeling and conation, which conation, issuing in bodily activity, brings a feeling about a new cognition that in turn brings a feeling of satisfaction and terminates the conation”.

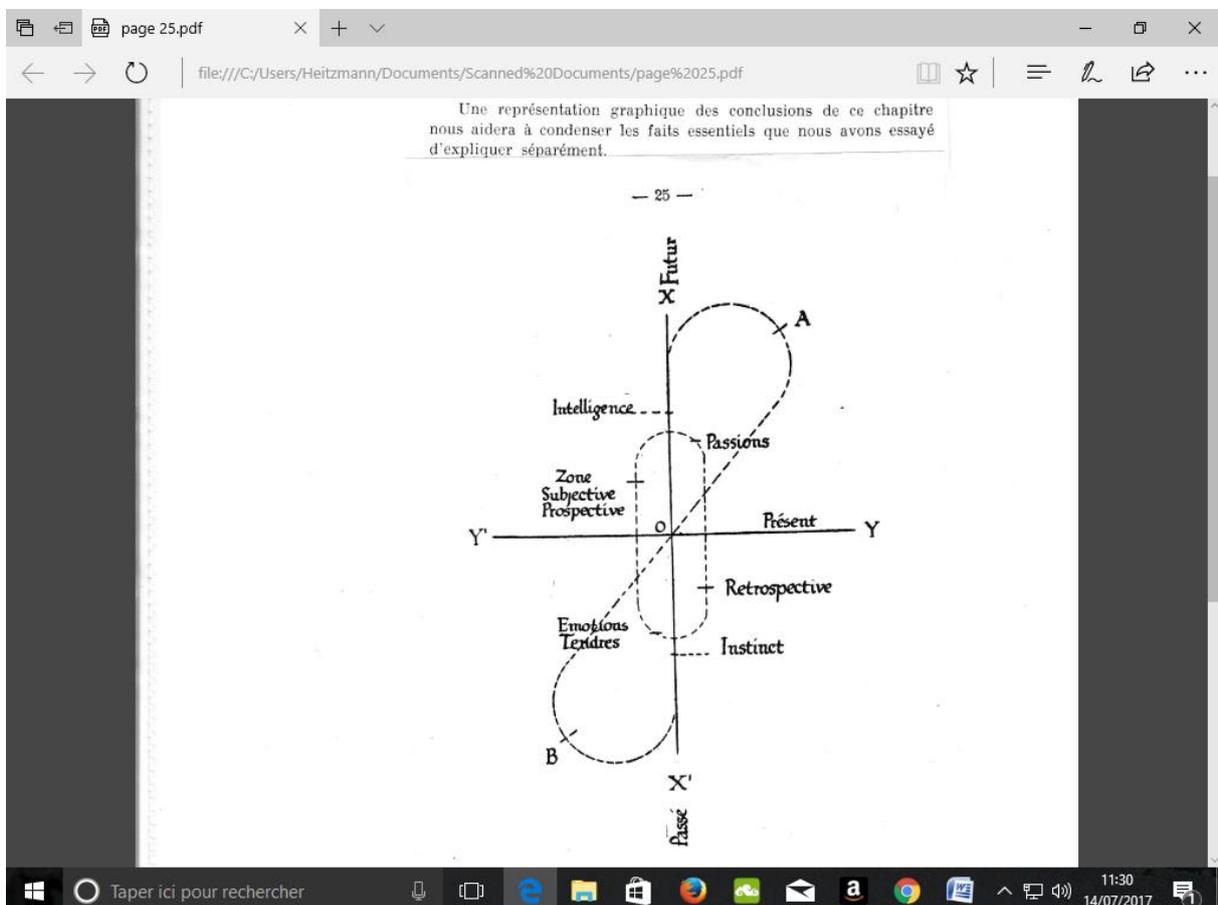
When we concede, as these philosophers say, that according to the strict logic consciousness does not exist, even then, the word consciousness still means something that every person can experience. While empirical logic may be a non-entity from the point of view of an idealist or a rationalist, it may be regarded as the only thing that exists. Between these two extremes it is necessary to achieve a compromise on which we will be able to base practical active principles. A definition of consciousness, combining in itself the stand points of rationalism and empiricism, is still found in Bergson. He writes: "The consciousness of the living being would be defined as an arithmetical difference between virtual action and real action. It measures the gap between representation and action". (*L'Evolution Créatrice* p. 157).

(Page 24) Whether this definition is correct or not in all its aspects, it nevertheless shows us the essential nature of consciousness, and we can extract from it the following points:

1° consciousness depends on the activity of the living being;

2° this activity takes on subjective and objective aspects: subjective which are related to past, objective which are related to present or future.

A graphical representation of the conclusions of this chapter will help us to condense the essential facts that we have tried to explain separately (page 25).



In the figure above, $X'OX$ would represent subjective consciousness, $Y'OY$ subjective axes belonging to the stimuli and to their responses in the present. Those elements of consciousness that relate to the past, from O to X' , would indicate "the background of consciousness" and elements from O to X would indicate consciousness in relation to volition. O would represent any given moment of the center of consciousness. A distance from a point on the Y axis would represent the degree of objectivity of an event in personal consciousness; the curve $OA0B0$ would show us a complete chain of natural behavior.

[See below for a detailed justification of this plan].

CHAPTER II

THE PERSONAL TENDENCIES STUDIED IN THE PHYSICAL ZONE

In the previous chapter we have only attempted to give a preliminary outline of the "personal factor" in order to form a nucleus for further elaboration and examination. From the beginning, we can make two divisions: First, the personal factor revealed by the behavior of the person in his relations with objects outside the limits of the body, and secondly its aspect revealed within the limits of the body itself. In this chapter, we shall confine ourselves to the second of these subdivisions, and see if any peculiarities of the functioning or tendencies to action of the different organs, their relations between them, and such other fact, may help us in any way to perceive the fundamental principle at the basis of the concept of the person.

Even in proposing this line of investigation, we may be accused of tacitly establishing a psycho-physical relation. But this accusation can not be reasonably sustained if we recall that by "personal factor" we mean neither the body nor the mind. We refer only to tendencies, to behavior or to functioning, tendencies which are neither mental nor material. It is not possible here to enter into a detailed discussion on the philosophy which is at the basis of such a position. We shall content ourselves with a quotation from Bertrand Russell to show that the position we have taken is in accordance with the notions of modern philosophy. He concludes his recent philosophical work in these terms: "The opinion I have advanced is that mind and matter are both structures composed of something more primitive which is neither mental nor material. This philosophy is called the *Neutral Monism*". This stand point being admitted, it is no longer necessary to assume a psycho-physic interaction or parallelism. It becomes useless to take the side either of physical monism or of psychic monism.

(Page 26) If we examine any unicellular or multicellular organism, we see that whereas what concerns peripheral parts expresses adjustments to the environment of a temporary nature, what concerns the more centrally located organs expresses changes affecting more intimately the total life cycle of the body in question. In the amoeba, for example, the protoplasm may change, or even be reached, without the life of the animal really being affected. Any peripheral impulse must reach the central nervous system in multicellular animals, and blood arrive at the heart, thus revealing the principle of *centralization* (1).

(1) See p. 532, "Traité de Psycho". Dumas, Félix Alcan, Paris, T. II.

The skin receives impulses from the outside world, but only an impulse from the center to the periphery can allow the organism to adapt. These adjustments, which are more permanent and belong to the innate part of the organism, take place as "internal organizations". In other words, the adjustment aspect of an organism is located at the periphery, while the organization aspect tends to remain central (1).

Is centralization physical or psychic? Here is the question that arises again. The answer will be the same as we gave earlier. That there is a kind of physical fusion, that is sufficiently indicated by the meeting of nervous impulses at the center in the gray matter (2). Psychical centralization belongs to a completely different order.

Just as the shape of the magnet is not directly related to the magnetic effects and as the light of the electric lamp is not directly connected to the arrangements of the wires, in the same way it is possible to conceive of physical centralization as belonging to an order distinct from psychic centralization. Nevertheless, it can be said that at the basis of physical and psychic "fusion" lies the same fundamental principle of centralization.

(Page 27) The functioning is characterized by another feature which, as we have already mentioned, is of greater importance in connection with this study, and this is what we shall call the phenomenon of *polarization*. Although this polarization is fairly well recognized in the psychological field, theoretically above all, under the name of "ambivalence" (3) of which we shall speak shortly, this conception is far from being included in the practical effect of physiological phenomena. It is difficult in this study, which is mainly of a pedagogical nature, to enter a detailed discussion of this question of the polarization of the tendencies revealed in physiological functioning (4). We shall therefore content ourselves with referring only to one or two facts which seem to support this idea.

This is a well recognized fact and writers have often used the concept of a rhythm in the functioning of organs. But the study of this rhythm is still in an early stage. However, it is a conception of this rhythmic alternation that will help us to see the phenomenon of polarization in physical functioning. For example, if one of the halves of the rhythmic cycle of

(1) To avoid a detailed discussion on the two principles mentioned above, see Starling "Principles of Physiology", p. 46. See also Dumas, "Traité de Psy." P. 578: "Biologists nowadays distinguish two kinds of variation: Some are due to the influence of external circumstances: these are *fluctuations*; we have demonstrated recently that there was another kind of variation, independent from the influence of the environment..., etc...".

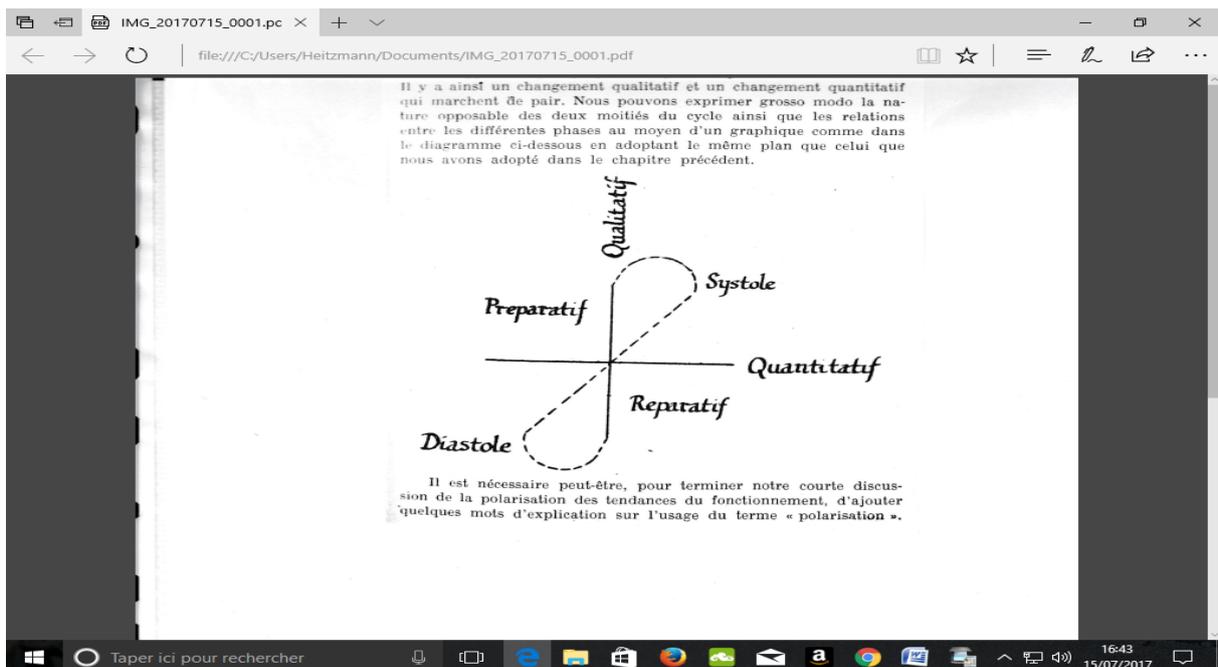
(2) DF Harris "Nerves" The Home University Library 1928 p. 127. "The conception of the nervous system we should have is that of myriads of ingoing neurons incessantly carrying *inwards* and *upwards* multitudes of impulses from the periphery, and pouring them upon thousands of cell bodies, or centers, in the grey matter. These centers thus roused to activity discharge *outwards*, streams of impulses destined for the innervation of muscles, blood vessels, heart, glands and other tissues".

(3) Cf. p. 200. "Analytical Psychology" by Jung. BaillièreTindall and Cox, London.

(4) Cf. article of the author in the magazine "Action et Pensée" ("Action and Thought"), (book. 8 January 32), entitled: "Some biological facts that support "ambivalence".

the functioning is opposed to the other half, it will be possible for us to observe that at the basis of this opposition there are tendencies which are also opposed. This observation will form the concrete basis that will reveal the principle of polarization. But it is not just a question of observing this opposition in the functioning of an organ or a system, we must still discover a new acceptable mode of grouping the systems, mode which will help us in our scientific study of the polarization. Only then will a generalization be justified. But not going so far, we will only try to study one of the functionings, the one of the heart, which, for the moment, will represent for us, in a general way, the model of all the operations. (Several writers have already established this comparison. For example, Dr. L. Berman, in his book "The Glands Regulating Personality", speaks of the rhythm that characterizes the functioning of the chains of sexual glands, and uses the term "sex-diastole of the whole organism" after a phase of activity, thus using the metaphor of the functioning of the heart.

(Page 28) The cyclic character and the rhythmic alternation are clearly marked in the functioning of the heart. One of the halves of this cycle is characterized by active contraction, while the other is characterized by passive dilatation. In many respects, the active phase (systole) is opposed to the passive phase (diastole). Each of these phases occupies half of the total duration of the cycle. In the period of rest, the first phase is related to the repair, the recovery of losses; the second is related to the positive preparation for a future action. There is thus a qualitative change and a quantitative change that go hand in hand. We can express roughly the opposable nature of the two halves of the cycle, as well as the relations between the different phases, by means of a graph like the diagram below, adopting the same plan as that adopted in the previous chapter.



It may be necessary, to conclude our short discussion on the polarization of the tendencies of the functioning, to add a few words of explanation on the use of the term "polarization".

(Page 29) In the first place, this term implies that there are, belonging to the same order of tendencies, two aspects which are distinct. This distinction is not only a difference but represents, a reciprocal difference belonging to two phases of the same action, as we have seen in the functioning of the heart. This difference often presents (although not always) a clearly opposable character. But this opposition is not absolute, and we can consider it as diphasic, compensatory or reciprocal. This relation can be made clearer by the analogy of the magnet, the positive pole of which is opposed to the negative pole, not in an absolute sense, but in a reciprocal or relative sense.

In the following chapters we will have the opportunity to refer to this concept of polarization. This idea assumes that the "personal factor" must be conceived in terms of vital activities or tendencies, and that these tendencies, manifested in any zone of the person, are capable, in their most natural expression, to be connected to each other by chains or cycles including distinct phases. Our task will therefore be to see to what extent the relations between the different phases will reveal the principle of polarization. It is important to remember, however, that the relation or reciprocity revealed between two phases of personal activity in a certain zone may belong to a very different order from reciprocity in another zone. So although the same principle has to be sought in the cases of each of the different zones, we are far from attempting to establish a direct relationship between the different modes of manifestation of this phenomenon.

CHAPITRE III

THE PERSONAL TENDENCIES STUDIED IN RELATION TO BEHAVIOR

(Page 30) Starting from the consideration of the functional relations and tendencies contained within the limits of the body, we are now going to proceed to the study of the behavioral tendencies which we have already considered in our preliminary study of the "personal factor"; and as we have also considered the foundations of polarization in the corporeal zone, we are in a better position to remove a certain obscurity which covered our first remarks, and to try to make a clearer and more complete outline of them.

Is it possible to divide the chain of behavior into two opposable parts? That is what requires a closer examination. The first point to remember is that all action is directed towards a useful and desired object. When the object is got, the behavior in relation to this object reaches a state of tranquility that is only visible. Dissatisfaction, which was the main ruling strength in the first phase, gives way to the gradual establishment of satisfaction. Bergson is alluding to both these phases when he says (p. 321 of *l'Evolution Créatrice*): "It is indisputable that any human action has its starting point in a dissatisfaction and, thereby, in a feeling of absence". One would not act if one did not propose one goal, and one seeks a thing only because one feels the privation of it. Our action thus proceeds from "nothing" to "something". Thus, if we observe cows grazing in a field, we will see that the animal, after having browsed a moment (which involves motor sensory activities), invariably lies in the middle of the herd. The object which had hitherto been the motive of its behavior no longer exists for the senses, but the emotional aspect of its existence continues to exert its influence on behavior. The animal begins to ruminate. This second phase of action suffers from any diversion brought about by the senses. (Page 31) Although it is true that the object is no longer present as a reality of the senses, we may say that it is present in a negative sense, that is, as a purely subjective representation. It is not necessary that this negation be a non-reality, just as it is not necessary that it be less objective in comparison with the reality of the senses. On this point again, we can return to Bergson who writes: "Once the negation is formulated, it presents a symmetrical aspect of that of the affirmation. Then it seems to us that, if the latter asserts an objective reality, it must assert a non-reality that is equally objective and, so to speak, equally real " (p. 319, *Evol. Cr.*) Thus, logically and philosophically, it is sensible to think that, even after the disappearance of the desired external object, action continues in the opposite sense, connecting itself, we can say, only to the affective aspect of the object in question. The passive state affects the inner zones and can cause emotions of satisfaction and bring undefined memories. This state may be followed by a deeper rest, or sleep, in which circulation is reduced in the brain. The so well-known theory of James-Language is in favor of the idea that the viscera are the seat of

emotions. Setting aside for a later time (ch. VI) the examination of the truth of this theory, for the moment it will suffice for us to observe that the effects of polarization can be discerned even in the chains of behavior, and that there is in presence, in the relations of the behavior with an external object, two symmetrically opposable phases, both of which are equally objective as well as real.

These two elements of behavior in relation to an external object combining in different ways, will produce in different animal's species different kinds of chains of natural behavior. We will examine some of these chains in order to help us imagine how animal individuality can be expressed by these varied behaviors; we will also do it in order to show that whatever the type of behavior, simple as in ruminants, more objective and with sudden changes in carnivores, or more complicated and with subtle variations as in animals placed higher on the evolutionary scale, we can always distinguish the two main phases: one directed to the desired object, the other to the instinctive or emotional stages. It is therefore important to grasp this principle of alternation to understand the different phases of the life of a schoolboy and the true nature of the compensatory and complementary activities of which we shall speak in a later chapter. (Page 32) In the previously mentioned case of a cow grazing in a field, we have noticed that the act of browsing is a slow and gradual act, without a critical situation. In intelligent and aggressive animals, such as carnivores that hunt, watch and kill their prey, we can clearly distinguish critical moments in the chain of their behavior. The psychic quality of these chains, compared to those of ruminants, shows a kind of different variations. The same principles are to be found in the behavior of domestic animals; in that of the dog for example it is very easy to observe variations in quality. On the carpet near the fireplace, a dog rests lying on its paws. Any foreign sound wakes him up: its senses come into play. Fear or waiting makes him active, he begins to bark. Its barking becomes stronger when the object enters the visual field. The olfactory sense then awakens up when the object approaches closer. Then the dog checks the object by mean of the touch and even licks it if necessary; the animal, which seems to have stopped worrying, ceases then to bark. The stranger going away, the barking resumes until he has retired far from the successive circles of smell, sight and sound. A little later, before it calms down completely, the animal will perhaps bark to purely imaginary noises that can be retrospective or prospective. This familiar sequence is typical in animals placed at the higher levels of the evolutionary scale, where many smaller cycles of affective, volitive states, etc. occur.

The same cycles are found in the behavior of the small child. The child awakens, and the senses come into play. The muscular activity follows which causes the appetite. The child starts eating. Even in the process of taking food, senses fall into a certain torpor. The caressing sounds of the mother's voice lull the child: they form, so to speak, the medium of "relation" between this one and that one. This relation continues until satisfaction is converted into instinctive states of rest or sleep, and it is with the utmost precaution that the mother moves away from the cradle. The first and the last phase of this series of activities clearly show opposition. Natural behavior thus presents two alternating and opposable phases. We thus arrive at an important characteristic of behavioral activities in general: we thus arrive at an important characteristic of the activities of behavior in general: that of *alternation*. (Page 33) Coming from different sources, we can gather other evidences which confirm this phenomenon. The study of the expression in a baby who begins to open

eyes to what is going on around it will show us a curious phenomenon: the child recognizes you and smiles at you; then if you go on observing it, you will see that the expression of joy is gradually transformed into an expression of sadness. The child will have the same reactions to unknown faces or new objects.

Modern psychology sufficiently recognizes that even simple vital activities, such as sensation and perception, include alternating subjective and objective aspects. The idea of "pure sensation" begins to be considered a myth belonging to a school of "academic psychology" that has fallen into disuse. Professor Edouard Claparède, during a psychology conference, mentions the alternation we experience when we press the hand on the table. For a while we feel the presence of the table, for a while the presence of the hand. We can, in fact, note this alternation in each form of natural activity, from the simple sensation to the chains of continuous behavior, such as the one we have just studied.

The fact that all the psychologists, in their theories on the succession of activities, recognize the phenomenon of alternation confirms it, as we shall see from the examination of the following table established by Professor Ed. Claparède (Witterterg Symposium on Feelings And emotions, Clark University Press, p. 133):

Classical theory: Perceptions - emotions - organic reactions.

James-Lange theory: perceptions - organic reactions - emotions.

Modified peripheral theory: perception - attitude of escape - sense of danger - organic reactions - emotion.

Escape without emotion: perception - attitude (of escape) - feeling (of danger) - escape.

Thus, we see that observations, as well as theoretical considerations, lead us to the idea that any chain of natural behavior can be divided into two opposable halves: one in relation to the positive pole, the other in relation to the negative pole.

CHAPITRE IV

THE PERSONAL TENDENCIES IN RELATION TO SPECIAL CASES OF BEHAVIOR

(Page 34) Until now, we have limited ourselves to normal functioning and normal behavior in relation to an object of natural interest. We have tried to go back to the basic principles that are the basis of functioning and behavior. But, we must admit, our outline asks to be enlightened on several points. The obscurity above all covers what we have tried to distinguish as the background of the person, which includes the instinctive or virtual activities belonging to the "mnemonic" effects of the past. As it is necessary to dig the earth to expose the roots of a tree, we are obliged, to make this aspect a little clearer, to study the functioning and the behavior in relation to special objects or in special relations with objects.

The following phenomenon of behavior is mentioned by Payot in his "Education de la Volonté", p. 38:

"Before dawn, I found myself traversing a rapid névé whose bottom disappeared in the darkness. I slipped away. I did not lose my head for a moment. I was aware of my critical situation and I had a clear view of the danger. I managed, while thinking that I was going to kill myself, to slow down, then to stop my race a hundred meters below. Very calm, I slowly crossed the névé by using my alpenstock, and once in safety in the rocks, definitely saved, I was (perhaps a cause of exhaustion provoked by excessive efforts) taken by a violent shiver. My heart beat, my body covered itself with a cold sweat, and *only then* I felt a fear, an extreme terror. In a moment *the sight of danger became feeling of danger*". This, and many other examples of special behavior, shed light on the nature of the phenomenon of polarization and alternation that we have studied in the preceding chapters.

The study of the special states of satisfaction and repose of the organism will show us more clearly the nature of the activities connected with the affective aspects of psychic life. (Page 35) Let us take, for example, the case of the satisfaction following the absorption of a special "food" such as alcohol and opium. Alcohol not only satisfies the appetite but provides a sense of comfort to the person who takes it. McDougall talks about alcohol and its almost universal "attraction", that is, the feeling of carefree well-being or "physical and mental comfort" it provides. Thus, we are led to think that certain kinds of food not only are capable of producing satisfaction, but are also capable of stimulating the feeling of comfort and, what is more, the virtual activities. These activities are also objective in that they depend on an object (alcohol, for example, in the food-related canal). Thus, we can observe, in the behavior of an intoxicated person, the nature of the virtual activities of which we have

already spoken. In the case of alcohol these activities grow, but their nature remains the same as we see in the instinctive states of rest following the meal.

These instinctive states of rest reveal to us more clearly the true nature of virtual activities, especially when we study the nature of deeper rest states such as sleep. The first of the facts we can bring out on the nature of sleep is that far from being a state of inactivity, it really represents a "positive" activity. Rivers, for example, complains that psychologists "fail to recognize that sleep is more than the negation of psychological activity and that, apart from the production of dreams, sleep has a character of a positive kind "(1). Although the senses become indifferent, the general sensitivity continues to function as a pleasant temperature, especially spreading in the lower limbs, is important for bringing about sleep. The relaxation of the muscles follows as the sleep settles. And during sleep, the emotional or relational aspect of personal activity continues as shown by the study of the nature of the waking stimuli. Rivers quotes the case of a doctor who is awakened by the movement of the bell cord that precedes the sound, and that of the mother responding to the slightest noise of her child, and draws attention on the fact that the stimuli of the awakening seem to be especially effective when they come into close relation with the state of the sleeping person. (Page 36) He concludes by saying that "sleep, in fact, is an instinct related to the instinct of immobility" (2). It is also recognized that the state of sleep is related to hypnotism, to the process of suggestion. Dr. Claparède says that "it is not because we are intoxicated or exhausted that we sleep, but we sleep so as not to be so" (3). When sleep is accompanied by representative activities, dreams and nightmares, the symmetrical opposition between the "open act" and the activity of sleep appears more clearly, especially in the light of the studies of Dr. Horton who attributes to the kinesthetic and visceral sensations a great influence on dreams. By plotting the behavior curve as we did at the end of Chapter I, we were thus right to place the chain of virtual behavior in a symmetrical opposition to the chain of open or current behavior (4). The symmetry becomes more pronounced when we recognize with Professor Claparède that "sleep is the consequence of a functional activity which is continuous in nature and which requires, to be induced, a more considerable energy than for going on once the impulse given...". If, in real activity the crest is marked by the effort to reach an object, the bottom of the crest is marked by the virtual effort which tends to bring the state of rest.

(1) H. Rivers "Instinct and Unconscious". Cambridge, 1929, p. 111.

(2) H. Rivers "Instinct and Unconscious". Cambridge, 1929, p. 116

(3) « Esquissée d'une théorie du sommeil ». Arch. De Psychol. IV (Genève 1905) quoted by MC. Dougall in "Outline of Abnormal Psychology", p. 68.

(4) V. Dumas, Treaty of Psych., book I p. 112. "When sleep," writes Gley, "is completely and deeply established, the subject is comparable to the animal whom the physiologist has just deprived from its cerebral hemispheres. " "Sleep does not occur abruptly, at first it is announced by a need to sleep . . . this sensation is comparable to that of hunger and thirst ".

We have tried, in different parts of our discussion, to make our curve of behavior clear (end of chapter I, page 25). What the curve indicates requires a decisive explanation which we try to give here. Each point of the curve represents only the psychic activity of the activity. We must distinguish two elements when we speak of movement. This distinction, Bergson highlights it when he says: "there are two elements to be distinguished in movement": The space covered and the act by which it is covered, the successive positions and the synthesis of these positions; The first of these elements is an homogeneous quantity; the second is real in our consciousness only; it is as we want it to be, a quality or an intensity ". (Bergson. Reflexions, Paris, p. 18). The last quality is the one we will consider. This psychic quality can be analyzed more fully as being determined by the three pairs of opposable elements below:

actuality	virtuality
objectivity	subjectivity
prospective nature	retrospective nature

Such psychic qualities are the basis of the conception of tendencies and have been recognized as such by psychologists. On this subject, see the following description of Ribot (*Traité de Psychologie*, Georges Dumas, book I, Félix Alcan, 1923, p. 429):

So, what is a tendency?"The only idea that we can get of tendencies is," says Ribot (172), "to consider them as movements (or stopping of actual motions in their nascent state),... a need, an inclination, a desire always implying motor innervation to some degree ". Then he adds to make this definition clearer:"The carnivore who has seized its prey with its teeth and its claws has reached its goal and satisfied its tendencies by means of a considerable spending of movement. If we suppose that it does not yet hold its victim, but that it sees and watches it, its whole organism is in a state of extreme tension, ready to act; the movements are not yet carried out, but the slightest impulse makes them take action. To a lesser extent, the animal roams, looking around and smelling for some catching which chance will bring to it; it is a state of half-tension; the motor innervation is much less strong and loosely adapted. Finally, to a still lesser degree, it is at rest in its den; the vague image of a prey, that is to say, of those which it has devoured, occurs to it; the driving force is very little intensive, in the nascent state, and it does not express itself by any visible movement. It is certain that there is continuity between these four degrees, and that there is always at play a driving element, with a difference from the most to the least ". Our curve represents only such cycles of change in the personal tendency.

Sleep is a state of subjective absorption in which behavior is limited to zones of the body. But even here studies and experiments have brought to light a movement, an oscillation between the two psychic poles which we have put forward. Experiments have shown that healthy people sleep soundly during the first two hours or so; then the sleep becomes lighter for a time and, again, becomes heavier. (Page 38) The first sleep is different in psychic quality from the last sleep or morning sleep. An emotional color prevails in the former whereas in the last one the dreams tend to be clearer. Towards morning, sensory impressions have the effect of waking the sleeping person more easily. In the middle sleep is without dreams. All these facts show us that, in subjective states like sleep, there is a reciprocating between the two poles.

The hypnotic state is related to sleep, which is why the study of hypnotism will help us to see more clearly the opposition between both the poles of psychic life. Rivers says (1): "We assume with some confidence that sleep is a state allied to the one of hypnotism and that it has some analogy with the process of suggestion". Mc. Dougall concludes by saying (2): "One can say that a typical deep hypnotic state is a sleep modified by the relation established between the patient and the operator". Relying on experiences made on himself, he mentions a degree of hypnotism "in which comes forward a certain division of personality, a conflict between one party and the other: the muscles of a group obeying a part, the conscious and willing subject; the antagonist muscles obeying to some other part which understands and favors the commands and suggestions of the operator ". The part subject to the influence of suggestion is essentially opposed by nature to the part subject to the will. This is confirmed by the phenomenon of what are called "negative hallucinations" (3), hallucinations which manifest themselves in the deepest degree of hypnotism. The background of the personality is thus definitively opposed in any case to the field of the prospective intelligence of the personality. If we call the first one positive, it follows that the second one is negative. Thus, psychological and physiological evidences lead us to conclude that activities are the results of centralized opposable tendencies.

(1) Rivers "Instinct and Unconscious", p. 110. Cambridge, 1922.

(2) "An Outline of Abnormal Psychology", p. 82, Mc. Dougall.

(3) Op. cit., p. 92.

CHAPTER V

THE PLACE OF EMOTIONS IN THE SCHEME OF THE "PERSONAL FACTOR"

(Page 39) Personal life is determined by emotional states and reflective thought always introduces an emotional side. The conception of the personal factor would therefore be incomplete if we did not consider the place of emotions in the scheme of personal life. Emotional states belong to subjective states which express themselves very little in external behavior. We thus reach a zone of the personal factor in which the experimental methods have not yet much value, and even where the experiments made so far are susceptible of different interpretations. In dealing with the question of emotions, with regard to their nature and especially to their *modus operandi*, we are therefore obliged to base ourselves on the opinions of experienced psychologists. We shall, therefore, content ourselves with examining the general tendency of the opinions of modern psychologists to throw some light upon the emotional attributes of the personal factor.

This question brings us to the well-known theory of James Lange, which, since it was formulated, has caused such storms in public opinion and still gives rise to many controversies. James summarizes his views in this way: "Bodily changes directly follow the perception of the exciting fact, and the feeling of these same changes, as they occur, is emotion". The investigations which have been made since this theory was formulated have not changed the original position in a radical way. Furthermore, Cannon has discovered, through the use of X-rays, that fear, or anger are accompanied by a sudden discontinuation of the stomach movement, as well as by a stopping of gastric juice secretion. Woodworth tends to the same point of view, and he alludes to "the most curious series of facts which physiologists have lately added to our knowledge on emotional state, facts which concern the participation of two small glands adjoint to the sympathetic system, the adrenal glands ". More recent theories and facts have accumulated, and at the opening of the psychology conference devoted to the discussion of the question of "feelings" and "emotions", Professor Bentley gives us a summary of our present position with respect to the question of emotions. (Page 40) He says: "Emotions are subject to discussion . . . As physiological functions, they are related to the various forms of action. They have a beginning, a duration, an end. They should be described in terms of beginning, successive states and results..." For another psychologist, emotions mean glandular products and visceral instincts; for a third, they will mean an autonomous action of the nervous system, or a kind of physical activity or behavior, or the pleasant or unpleasant reaction induced by events or by a "mental state".

Emotions can be defined in another way still, as being the quality of excitation which accompanies the operation of an instinct, or of a kind of push which stimulates the organism and makes it active; or as a certain kind of response to a certain kind of stimuli "(1).

Among other opinions expressed at this conference, and which have a special value in connection with our subject, here is that of Dr. E. Claparède: "The emotion is the consciousness of a global attitude of the organism . . . the consciousness of a form, of a Gestalt".

It would appear from all these theories that although many have taken part in the imaginary funerals of the James-Lange theory, its principal aspects remain intact: that is to say, emotions are related more to the viscera than to any other part of the human body. In the light of the phenomenon of polarization which we have discussed and of the general direction of the above opinions, it is easy for us to see that emotions would belong to a pole different from that of intelligence, a pole which would even be opposable to it.

An examination of the different perspectives allows us to glean, for the benefit of our study, the following features of emotional life:

1. *Emotions represent a global or synthetic aspect of the activity of the personal factor. They are related to instinctive states (2).*
2. *Emotional activity tends to separate itself from volition and to relate itself to the opposite pole. That is why it would have a detrimental effect on the proper functioning of intelligence.* (Page 41) Ribot says it in his "Essais sur les Passions" (p. 28): "It has been noticed that depressing feelings, such as sadness and tender emotion, produce a slowing down of the associative process and an increase of the time required so that it occurs ". Even in passions, which Ribot distinguishes from emotions, and which belong more to the intellectual pole, he recognizes independence towards reasoning. Taking the case of love as a typical example, he says (Essai, p. 40): "Reasoning is external to passion; it is at its command at the service of desire which is its essential element; it is an auxiliary, non-integrated, factor of passionate state. It is a superstructure". Even the fixed idea that Ribot considers as one of the fundamental features of passion is thought to have its origins in a "lesion of the will" (cf. footnote p. 23 Essai). Since instincts are closely related to emotional states, the opposition between instincts and intelligence would also show the opposition between emotions and intelligence. This opposition is strikingly remarked by Bergson (p. 164, l'Evolution Créatrice): "There are things which only intelligence is capable of seeking, but which it will never find by itself. These things, only instinct would find them; but it will never seek them". Ribot also recognizes this opposition when he writes (Essai, p. 38):

(1) See "Wittemburg Symposium on Feelings and Emotions" Clark University Press, page 21

(2) "Any object that awakens an instinct awakens at the same time an emotion," wrote William James.

“In the logic of feelings, which proceeds against rational logic, the conclusion (the end) is given beforehand; it determines the value of judgments instead of being determined by them”. Thus, we see that the phenomenon of polarization is also true for this subjective zone of the "personal factor".

3. *Even within the strict, or more subjective, limits of the domain of emotional life, there are on the one hand pure and tender emotions and, on the other hand, passions between which Ribot recognizes an opposition.* Passions, according to him, are "an extended and intellectual emotion". On the other hand, tender emotions belong to the instinctive pole rather than to the intellectual pole. The same emotion may have, at a given moment, a phase which is more intellectualized, and by completing its cycle of natural duration it may at another moment be more closely related to the instinctive pole. McDougall mentions the example of the emotion of hope: "Hope," he says, "is the name given to the complex feelings that arise when any desire works in us and when we anticipate its success; (page 42) if new difficulties arise, hope gives room to anxiety or despair, but it can not be said, under any circumstances, that it is mixed with despair or that it causes anxiety; rather, as circumstances are less favorable, the feeling rooted in our desires, by imperceptible gradations, changes from hope to anxiety, then to despair". (Wittemberg Symposium on the Feelings and Emotions, p. 204). McDougall sees the possibility of classifying all feelings into two groups: prospective feelings and retrospective feelings. "These complex feelings, he writes, are known in ordinary speech as emotions. Adopting the terminology proposed by Shand, I have already discussed it elsewhere under the general title of 'prospective and retrospective emotion derived from desire' ". We see that even in the zone of subjective personal activity which consists of global attitudes, we observe the phenomenon of polarization.

In the thought we reach the most subjective zone of the personal factor activity. Since the time of Plato, writers have recognized the distinction between the world of realities and the world of ideas, the world of particular and the world of universal. The deductive and inductive processes, the rationalist and empiricist points of view that have been subject to philosophical controversies for centuries, contain a tacit assumption of the existence of two aspects in the process of thinking. Herbartian "apperception" contains the same implication. John Dewey in "How we think" (p. 79 Heath, New York) presents the double movement of reflective thought in the following way: "There is thus a double movement in all reflection: a movement of a partial and confused datum, a suggested, complete and comprehensive (or inclusive) situation; and then coming back from that suggested whole - which, as it is suggested, is a meaning, an idea - a movement back to particular facts in order to relate them to one another, and to link them to additional facts on which the suggestion had drawn attention. In a general way, the first of these movements is inductive, the second deductive. A complete act of thinking includes both movements, that is, an effective interaction of observed (or remembered) particular facts with suggested and general meanings".

So, what "this double movement" means, is that even in the process of thinking there is an alternation and an opposition which have been recognized by thinkers and philosophers. Plato refers specifically to the seat of desires as being separated from the seat of knowledge which he places in the head, while he places the first in the kidneys (see *Story of Philosophy*, W. Durant, New York). (Page 43) For Kant, the inner senses are distinct from the external senses. Bergson goes further and emphasizes the opposition that is the basis of instinct and of intelligence. Modern psycho-analysts express the same idea by the word "ambivalence" attributed to Bleuler (cf. p. 161 and 163 "The Psycho-analytic Method", O. Pfister, London, Kegan Paul). Pfister says on this subject: "It is worth noticing that in case of inhibition of one of these ambivalent instinctive tendencies, the other undergoes an increase". D'Wallon writes (p. 285 of "Pour l'Ere Nouvelle", nov. 29): "At the sight of his brother, a character of Tolstoy is struck by gestures and manners that bring him back to the memory of their common childhood and which, while remaining common to them, have taken in one and the other a sense as opposed as what has become their regime and their ideal of life. Sometimes it happens that certain provisions are capable of giving opposite effects . . . These ambivalent events are often the psychic substance of some sudden conversions. Their existence is not without influence on the formation of the character for *ambivalence* is far from being solved with neutrality".

Before closing these chapters in which we have directed our attention step by step towards the notion of polarization, it may be necessary to summarize our position. At present it must be sufficiently clear that by the term "polarization" we have tried to bring under a general term the ambivalent character of tendencies either in the physiological field, or in the "behaviorist", emotional or mental fields. We found that terms such as "ambivalence" were used in the specialized branches of psychology; hence the necessity of a specific term. The distinction we have made between the positive half of a chain of natural activity and the more instinctive, retrospective or negative half of the same chain, the distinction between tender emotions and passions, the one which still exists, between deductive and inductive movements of a reflective process of thinking, are all examples of this phenomenon of polarization. The "open", positive, analytical, intelligent side is forward-looking, and at the same time this side responds to the public aspect of the personal factor. The opposite side which is negative, and rather individual, is related to instinct and to retrospective emotions. Its function is to seize the overall appearance. This side is related to the past of an individual and represents the anti-social or "private" aspect.

CHAPITRE VI

THE "PERSONAL FACTOR" IN RELATION TO INDIVIDUAL AND TYPES

We have now reached the stage of discussion where we can not only consider the general aspect of the "personal factor" as we have done so far, but also try to see on which elements a conception of the Individual with its specific attributes (or characters) can be based. Moving from the general and permanent aspects of the "personal factor" to its particular and temporary aspects, not only do we proceed to the discussion on types of psychology, but we shall also encounter a series of stages and various states of the same individual corresponding to these types. In this regard, Dr. Wallon writes: "The type often becomes confused with the stage because the development of functions is to a certain extent successive, and although they are closely controlling one another while none of them can be isolate, they can nonetheless mark degrees and progressive contributions in the total plan of activity. » ("Pour l'Ere Nouvelle", nov. 1926, p. 256).

Types, as well as states and degrees, are variations in two divergent directions. We have already spoken of representing these divergent directions graphically by means of two coordinate lines intersecting at right angles. Dr. Beatrice Hinkle (Cf. "The Recreation of the Individual") has already recognized this possibility and here are the two lines she proposes: one representing the extraversion-introversion scale and the other the objective-subjective scale. In this case the difficulty is that extraversion and introversion already imply objectivity and the subjectivity of tendencies (see page 50). As a result of our previous discussion, it would doubtless be more accurate, in order to indicate the opposition in the pair of tendencies, to use the following and already mentioned table:

subjective	objective
prospective	retrospective
virtual	actual

(Page 45) The scale of objective and subjective variations would be represented by the horizontal axis. We place prospective and retrospective variations on the vertical scale. The qualities, which we distinguish as virtual and actual, belong to both these scales, the negative being virtual and the positive being actual. One can say that personal consciousness, in its most nucleal form, consists of two movements: a movement enclosed in pure consciousness which can be indicated by the events contained in the sentence: "This is knowledge"; the other is a movement which can be indicated by the sentence: "This is a

table". We distinguish 'that one' as being "vertical", 'this one' as being "lateral". The word "this" in both cases represents what we have called the virtual entity: it belongs to the world of universals (1) while "knowledge" and "table" are individuals belonging to two different ranges. It may be said that the innermost zone of consciousness is made up of the activities of these ranges. We can conceive of several concentric circles, intersecting the axes at different points, which would represent the successive zones of personal activity. Just as it is important to recognize the divergent directions of the tendencies, so it is necessary, starting from personal reactivity, to conceive the successive zones as distinct from each other, because there is in each zone a different range of expression of personal life. Variations between different individuals, arising from the predominance of centrifugal activity or centripetal activity, are variations in extensity and in intensity of personal life in these successive zones. Along the horizontal axis we indicate those qualities of personal activity which we could distinguish according to Bergson as belonging to space. (Page 46) On the other hand, we can indicate the qualities belonging to time as being variations in the vertical scale. It is not possible, in the present state of our knowledge of the different zones, to speak of them accurately. But however, we can show in a general way the nature of the individual variations in relation to the two different directions which we have pointed out. The two groups of tendencies could be distinguished according to the aspect of the environment towards which the tendencies are oriented. These two aspects of the environment are indicated by Rusk as follows (p. 96 Phil. Base of Ed.): "The obvious analysis of the environment of the human being shows two main divisions which we can characterize respectively as belonging to the matter and the culture of the mind, or in other words the physical and the mental. There is a natural environment as there is also a psycho-social environment, the world of things and the world of man. «He quotes the words of Bosanquet: "For life the environment is the surface of the earth, for the spirit, it is the universe". The tendencies which are directed towards matter, we call them "horizontal" because they are opposed to the others which we call "vertical". The essential opposition at the base of these two groups of tendencies is recognized by Rousseau's prophetic vision. Here is what he writes: "While I was meditating on the nature of man, it seemed to me to discover in it two distinct principles; one of them raised him to the study of eternal truths, to the love of justice and true morality, to the regions of the world of thought which the sage loves to contemplate; the other lowered him, rendered him a slave of the senses, of the passions which are their instruments, and thus opposed all that the first principle suggested

- (1) It is hardly possible to enter here into a philosophical discussion to bring out what we mean by the world of *universals* and the world of *individuals*. It is a distinction that philosophy has recognized since the time of Plato, and Plato's theory of ideas is nothing more than a recognition of the existence of this world of universals. Bertrand Russell devotes a whole chapter to an examination of this question of the universals and the individuals in his work "The Problem of Philosophy" (H. U. L page 142). He explains: (*Ibid.*, p. 145) "The word "idea" has acquired, in the course of time, many associations which are quite misleading when applied to Plato's "ideas". We shall therefore use the word "universal" instead of "idea" to describe what Plato meant. The essence of the sort of entity that Plato meant is that it is opposed to the particular things that are given in sensation. We speak of whatever is given in sensation, or is of the same nature as things given in sensation, as a *particular*; by opposition to this, a *universal* will be anything which may be shared by many particulars, and has those characteristics which as we saw, distinguish justice and whiteness from just acts and white things".

to him. " (Contrat Social, Rusk, p. 159). This distinction lies at the root of all philosophical thought. The opposition between rationalism and empiricism, (1) idealism and realism, pure reason and practical reason (Kant), the opposition between the ethical principles of Rousseau and those of Nietzsche and many others reveal us the same vision at the basis of any philosophical examination. (Pages 47 et 48) Bertrand Russell insists on the recognition of the differences which exist between perceptual species and physical species (Outline of Philosophy, p. 144). In his book "Comment Diagnostiquer les Aptitudes chez les Ecoliers" (p. 233), le D^r Claparède gives a list of pairs containing the same opposition:

Binet	*Subjective.....Objective
Jung	*Introversion.....Extraversion
James	*Ideologist..... Positivist
Ostwald	*Classics.....Romantic
De Maday	*Workers..... Fighters
Nietzsche	*Apollonian..... Dionysian
Schiller	Sentimentalist..... Naïve
Poincaré	Logic (analyst).....Intuitive (geometrician)
Lipman	Gnostic..... Technical
Rignano	Analytic.....Synthetic
Pascal	Spirit of geometry.... Spirit of sharpness
Duheim	*Abstract..... Specific

Having to take into account so many points of view, it is not possible for us to talk about them with accuracy: we are therefore obliged to keep the picture formed by two lines intersecting at right angles, which we have elaborated so far. The personal factor, as we have said, consists of successive zones more or less related either to one, or to the other, of these two axes. The most subjective attitudes of the tendencies would refer to the vertical axis; the most objective ones would refer to the horizontal axis. Using this figure, it will be easy for us to locate each of the above terms used by different philosophers and thinkers.

(1) It will be impossible within the limits of this study to enter a complete discussion of a correlation scheme of the various pairs of philosophical expressions employed here. We shall merely point out in the list below that the first of each pair refers to subjectivity, while the second is objective. An examination of the opposition between "the rationalist" and the "empiricist" is well shown by Bertrand Russell (Cf. "Problems of Philosophy" H. U. L., page 114) who said: "One of the great historic controversies in philosophy is the controversy between the two schools called respectively "Empiricists" and "Rationalists". The Empiricists – who are best represented by the British philosophers Locke, Berkeley and Hume – maintained that all our knowledge is derived from experience; the Rationalists – who were represented by the continental philosophers of the seventeenth century, especially Descartes and Leibnitz, maintained that, in addition to what we know by experience there are certain "innate ideas" and "innate principles" which we know independently of experiences".

*It will be easy to see in the above list that there is the same kind of opposition which we have mentioned above, at least in the cases marked by an asterisk.

The study of personal attitudes in more general terms brings us to the ethical and religious life of man. By means of this very figure we can show the opposition between pure or religious virtues and strictly social virtues. (Page 49) We can say that Rousseau's idealist ethics is a vertical expression while Nietzsche's "will to power" would be a horizontal expression. Anything that would lead to rivalry (horizontal) would be opposed to co-operation (vertical) (1). Words such as character, individuality, personality, behavior and mood must be conceived in terms of a kind of symmetry or asymmetry in the harmonization of the different elements of the attitudes and tendencies that come into play in personal life. These words merely denote different ways of speaking about the different aspects of personal life. Some are more supportive of certain aspects of life when they speak of *character*. Ribot, for example, would exclude intelligence when it speaks of character. Goethe, on the other hand, relies on the main point when he writes: "Character consists of a man perseveringly pursuing the things of which he feels capable." Kant also underlines the same point: "A man," he said, "may have a good heart, but no character, when he depends on his impulses, and does not act according to maxims." (Page 50) The continuity of attitudes thus constitutes the character. The word *behavior* applies to an activity which is continuous, but which is however of shorter duration. The word *mood* refers to a state of even shorter duration. Individuality and personality do not mean the same thing: *Individuality* does not necessarily designate what we have called the vertical aspects, whereas *personality* considers the highest human attributes. In this regard John Adams says among other things: "The term individuality . . . when applied to human beings carries within it something more than a biological meaning". He points out that one of the members of a class of society may have an individuality while another may have a striking personality, so that both belong to entirely different categories . . . So, we can say that individuality considers the horizontal aspects while personality considers the vertical aspects.

- (1) It is not easy to state in the form of a precise definition what we mean by the expressions "horizontal" and "vertical" of the personality. Aspects of this distinction explained according to the context shall be found elsewhere in this study. This way of distinguishing is not new, but it has been recognized by scholars, especially among those who study personality. We choose only one example, that of Professor Gilbert Murray in his book "Euripides and his Age" (H. U. L. pages 191-195) from which we took the following sentence: "He who most loves the ideal natural man seldom agrees with the majority of his neighbours" (page 196).

The simplest way, in which this distinction between "vertical" and "horizontal" could be made, would be to treat them as referring to space (horizontal) and to time (vertical) according to Bergson's method. Such an image, or figure, which represents two aspects of life intersecting at right angles, is not a new fanciful new start of fashions in the current thinking of education. Even a known writer such as John Dewey uses terms similar to the one we have used here regarding American psychology based on "stimulus-response" (S-R). He writes: "Particular S-R connections interpreted on the basis of isolated reflexes are viewed as static *cross-sections*, and the factor most important in Education, namely, the *longitudinal* the temporal span of growth and change is neglected". P. 67-68 "The Sources of a Science of Education" Horace Liveright, New-York, 1929.

Cf. "The Story of Philosophy by Will Durant, "What is good? . . . To be brave is good", "What is good? . . . All that increases the feeling of power, the will to power, power itself in man". (Extracts quoted from Nietzsche writings). "If there is any cure for this social evil, it is to be found in the substitution of law for individual; in arming the general will with a real strength beyond the power of any individual will". From Rousseau, cited in Rusk "Phil. Bases of Ed."

When we talk about types, we must remember the distinction we made between personality and individuality. Most psychologists, in their attempts to determine types, are mainly guided by the variations in aspects represented by the horizontal axis (1).

Jungian school is one of the main schools suggesting types of psychology. For determining these types, it takes into account the subject-to-object relations. On the nature of extraversion and introversion Jung writes: "We will say that there is extraversion wherever it is to the external world, to the object, that the individual grants his fundamental interest . . . There is introversion, on the contrary, when the objective world undergoes a kind of denigration or disrepute for the benefit of the very subject . . . This focus on thought, that is on the inner world, is none other than introversion». (Cf. p. 232 "Comment Diagnostiquer les Aptitudes." Claparède). He still says on extraversion: "By this concept, I denote a manifest relation between the subject and the object in the sense of a positive movement of subjective interests directed towards the object". When this subject-to-object relation is lasting in the individual, we call him, as the case may be, extrovert or introverted. So far Jung only recognizes what we would call horizontal variables, but he also mentions four different types. (Page 51) The first which he calls the "Denktypus" brings a new factor determining the variable, and he opposes it to the "Gefühltypus". These two "rational" types belong, in our view, to the vertical scale. The other two, called "irrational" types, which he calls "sensorial" (Empfindungstypus) and "intuitive" (Intuitionstypus) are clearly variations on the horizontal axis: the intuitive being negative, the sensorial being positive on the horizontal scale. Hinkle, Max Freyd and Jaspers nearly follow Jung on his principles of extrovert and introvert. Both types of Kretschmer, the "schizothymic" and the "cyclothymic", correspond respectively to the introvert and extrovert types, the only differences being, as McDougall has pointed out, "that they are closer to the disordered patient. . . but that Kretschmer's cycloid is undoubtedly a special form of the extrovert of Jung, and that his schizoid is a special variety of Jung's introvert " (Abn. Psycho. McDougall, p. 440). We could say that Kretschmer, when he talks about types, get closer to the bodily zones of the personal factor while recognizing Jung's principles.

The conception of "personal reactivity" (R), which gives the "structure" of character, results from the simultaneous operation of certain tendencies towards what Klages calls "Triebkraft" (T) and of other tendencies towards resistance and inhibition which he calls "Widerstand" (W). The idea of two compensatory and opposite tendencies is therefore, also according to Klages, the basis of the determination of types.

(1) The following discussion on psychological types follows the lines of the article on "Recent work of psychological Types" by H. Klüyer (Journal of Nervous and Mental Diseases) n°6 book 62, 1925.

Dr. Nicola Pende, in his conception of the "psychic biotype", is more concerned with the body zone. The character, according to him, is the result of the predominance of one of the two "neuro-harmonic constellations", opposite and compensatory; he distinguishes them by calling them "excito-catabolic" and "excito-anabolic". He calls "tachypsychic" the type resulting from the predominance of the first constellation, and "bradypsychic" the type resulting from the predominance of the other constellation.

In Klages and Pende we thus find a conception of the character independent from the subjective-objective relation, and for the first time we see a conception of types based on variations on the vertical scale, though always enclosed in the physical zone.

Dr. H. Wallon, who traces the neurological components of character, recognizes the "ambivalence" which "plays in the behavior the role of stimulus or reagent". He also recognizes the principle of compensation or "overcompensation", a factor which will more or less interfere in the behavior of the subject (Pour l'Ere Nouvelle, n° 52 nov. 29).

(Page 52) The distinction of H. Rorschach between the type Fb. and the type B is the result of diagnostic experiments based on the phenomenon of apperception. His experiments show that some groups of functions are strongly developed in the Fb type, while a group of other functions predominates in type B: that is to say that these types only show a difference. H. Klüver writes in connection to this: "In trying to determine differences, Rorschach finds that the psychic functions of the Fb type are virtually identical to the functions of the extrovert type; and that the functions of the B type are identical to those of the introvert type". Thus, Rorschach, observing differences in functioning, presupposes the existence of the Jungian types.

Thus, we see that recent researches in the field of types of psychology show us that they all imply an opposition between two groups of tendencies, and that the types and the individual character result from the predominance of one or the other of these groups. They show that the subject-to-object relation is not the only cause of variations. The difference between the type of the thinker (Denktypus) and the "Gefülstypus" of Jung, for example, does not concern the variations of the strictly subjective-objective scale. In our view, it would be a variation on the vertical scale that is expressed in a completely different way in each area of personal life.

So, many features enter into account for determining the individuality or the character or the type to which the individual belongs, and each of them is of such a nature that by itself it can produce many gradations and varieties which render their classification difficult. Dr. O. Decroly writes on this: "The combinations of physical features are indeed so numerous that there are very few marked types and a multitude of intermediate types" (p. 259, "Pour l'Ere Nouvelle" Nov. 29). It is only by a detailed description of each type that we will arrive at a true conception of the individual for a practical purpose. Only an experimented psychologist can give in a substantial way the details of the character of the individual. And even when a writer tries to describe types by means of technical terms, he is obliged to give an arbitrary description coming out of his own experiences. Jung and Rorschach invariably refer to "their many years of experiences". (Page 53) A description was attempted by Mc Dougall who studies two brothers, one he considers a typical extrovert (E), the other a typical introvert (I).

Here are some excerpts from this description showing us the kind of details which he has to give to bring out the type he conceived:

". . . 'I' like long solitary hikes while 'E' never walks alone . . . In poetry, 'E' puts Keats in first place and sees nothing in Wordsworth . . . 'E' does not seem to have any ambition or plan of life; he takes life as it is and fully enjoys every moment without thinking about the future. 'I' is very concerned: "What should he do? What should he become?"

From this description it is clear that some of these differences can not be attributed to a position on the intro-extravert scale. The difference mentioned last in the above quotation is clearly related to the intuition of time rather than to the intuition of space, that is to say that it belongs more to the vertical axis than to the horizontal axis. Psychologists tacitly recognize the other scale of variations that we have called vertical. D^r. AD. Ferrière (Types Psych. Geneva p. 30) shows us the nature of the variations between individuals along this scale in the following terms:

"According to his own rhythm, each individual is carried sometimes forward, towards the future, sometimes backward, towards the past with which it is necessary to maintain contact. The future often represents effort and risk, in any case the unknown. The past generally appears as rest and safety, the known world where we lived and from where we left. Some children like taking risks and their nature strives for progress; some others, sickly, hereditarily weakened, or merely endowed with a less vitality, remain infantile and take refuge, so to speak, in the past: it is said of these children that they are tied to their mother's apron strings. The majority, however, oscillates between both poles, the efforts to build the future being followed by periods of rest when infantilism again prevails. This is normal. We must not be surprised, provided one phase does not predominate too long over the other, for the over-stretched effort leads to overwork and rupture with the healthy elements of the past, and the too much extended infantilism generates stagnation and misoneism ".

Character is the result of a more or less permanent balance of the different tendencies; it must not be attributed to any faculty or special intelligence of the individual. Even a simple aptitude which characterizes an individual "is never something that can be isolated", as H. Piéron says. (Page 54) Aptitude, he says, is a practical quality of mental functioning and even of general organic functioning. " (See "Pour l'Ere Nouvelle", juillet-août 29). W. Stern also found that "there is no partial reaction. " It therefore follows, that in speaking of character we are obliged, if we wish to be correct, to use the most general terms indicating only an asymmetry in the overall state of the individual's tendencies.

Thus, we can say that there are two main types of individuals, one according to the predominance of the development of the tendencies which we have called horizontal, or the other according to the predominance of the development of tendencies which we have called vertical. Each of them can be divided into two types according to the predominance of the positive character or according to the predominance of the negative character. A horizontal-positive type would be a man of action; a horizontal-negative type would be a dreamer, building castles in the air. The contrast that Nietzsche makes between the mind of the Apollonian and the one of the Dionysian represents a kind of contrast between

introversion and extraversion involving a variation on the horizontal scale (V. p. 295 Jung Anal. Psycho. London). On the vertical scale, we can distinguish the vertical-positive type who is the active thinker with a bright intelligence directed towards future, and the vertical-negative type who is the retrospective minded individual giving great importance to traditions and relationships to the past. When these characteristics are not clearly marked, we find many intermediate types presenting multiple variations, so numerous that they make any classification impossible.

SECOND PART

CHAPTER FIRST

THE EDUCATIVE PROCESS AND ITS ASPECTS LINKED TO THE DEVELOPMENT AND THE ADAPTABILITY OF PERSONAL TENDENCIES

Any education is meant to bring about changes in the individual, in one way or another. It is a continuous process which has to leave a permanent mark in the individual. We will examine what, in the most general terms, is the nature of this process so that we can conceive what has to be the personal educator's contribution.

Sir John Adams writes in his book "Educational Theory" (Benn London): "It will generally be admitted, to begin with, that education is a bipolar process". And he continues by saying that it is not only between the educator and "the educande" (1) that this bipolar character shows itself, but that this bipolarity can exist in the experience of a single individual ". Here is how he explains the nature of this bipolarity: "When we say that education is bipolar, we mean that it is a process which includes necessarily an objective aspect and a subjective aspect, although it does not include necessarily two people". Writers have used various languages to indicate the same bipolarity. Dr. Paul Monroe in his "History of Education" (Text Book, p. 4) speaks of the education of the primitive man as consisting of " these two processes; the first being the training necessary to satisfy the practical necessities of life . . . , the second being the teaching of elaborate processes or of forms of worship . . . ". The first would refer to the objective aspect, the second to the subjective aspect. "What was true on primitive education, Monroe continues, is also true on modern conception of education. (Page 56) The sense of education, as it is conceived today, rest on the attempt to combine and to balance these two elements of individual rights and social duties, of personal development and social service". After reviewing other definitions of education, Monroe concludes: "Whatever the considered purpose, whether practical or theoretical, whatever the line of inquiry, the significance of the problem of education is given in terms of this harmonization of social and individual factors".

(1) Cf. footnote page 3.

It is easy to see that both aspects of the process closely correspond to the two aspects of the personal factor that we have studied. The positive and negative aspects of the process could be described in the following table:

Negative	positive
Subjective	objective
Individual	social
Cultural	utilitarian
Religious duties	practical duties

It is therefore obvious that education aims at the development of two distinct aspects.

Educators and philosophers also recognize the essential opposition at the basis of both aspects. Bergson recognizes it when he writes (p. 166 of *Evolution Créatrice*): "The capital error, which, transmitted since Aristotle, has vitiated most of the philosophies of nature, is to see in vegetative life, in instinctive life and in reasonable life, three successive degrees of a same tendency which develops, whereas these are three divergent directions of an activity that has split up while growing". Kant, likewise, sees the necessity of the struggle of each against all as necessarily accompanying progress, recognizing thus the conflict between both aspects of the personal factor (see Will Durant, *The Story of Philosophy*, p. 307). Rousseau shows us this opposition strikingly: "Forced to fight nature or social institutions, one must choose between making a man or a citizen: because we can not do both at the same time" (*Emile*, book I). Pestalozzi and Fröbel both recognize a similar distinction between the innate nature and the social or ethical nature of man. Pestalozzi, for example, sees three distinct aspects in the same individual: the animal man, the social man, the moral man. "Animal man," he writes, "is restless under the control of social man. . . . Moral man is not the work of society, but of himself (1)". Herbart's favorite analogy of "grafting shoots of value on wild plants" and his concepts "apperceptive", or of fusion of the former idea with the new idea, also indicate the bipolarity of the above-mentioned process. Bipolarity and conflicts are therefore two characteristics well recognized by theorists. This is how W. H. Rivers writes (p. 258, *The Instincts and the Unconscious*, Cambridge, 1992): "The life of the child is a long conflict between the instinctive tendencies and the forces of older people who come to oppose these tendencies, and many persons begin to believe that character is largely determined by the strategy and the tactics applied in this conflict ". (Page 57) The work of an educator will thus be to ensure that the conflicts in the child's development process follow one another in a continuous way. He has to ensure that this succession proceeds in a progressive or positive direction or, better still, that the development is harmonious or natural. This means that neither the positive nor the negative of both groups of tendencies we have studied must dominate too much at any stage of the process. Pestalozzi explains this natural development in the following way: "A healthy education appears to me as symbolized by a tree planted near fertilizing waters. A small seed, containing the pattern of the tree, is placed in the ground. The whole tree is only an uninterrupted chain of organic

(1) Translator's note: Sorry, but I lost this footnote while photocopying the thesis...

parts, the scheme of which already prefigured in the seed and in the root. Man is like the tree. In the newborn are concealed those faculties that will blossom during life . . . "(1). The art of the educator is to ensure that all aspects of the child's personal life develop harmoniously and in a natural order. But for interfering thus in the life of the child the educator must rely on some guiding principles.

These guiding principles can all be derived from the examination of one of the first stages of the child's development, namely the weaning. When the mother refuses to feed the child with her own milk, she gives rise to a *conflict* which is the first step in the process of weaning and which can be characterized as *negative*. This negation produces a kind of dissatisfaction that requires emotional compensation. The positive stage of the process begins when the mother tries to arouse in the child new interests in relation to its needs. (Page 58) The mother helps the child to eliminate and choose between several objects of satisfaction and gives it a general direction until, by a continuous habit, it begins to follow a new and more extensive *orbit of interest*.

We shall observe that the process of education definitively presents two distinct sides, the negative one related to the negative pole of the personal factor, the other one positive in which intelligence comes into play. The extension of the *knowledge of things* which accompanies this process is a development of those aspects which we have distinguished as being horizontal. In comparison, the other aspect of the process is independent from this one because it is more subjective, and thus, according to our terminology, it belongs to the vertical axis. Plato recognizes this distinction between both aspects of education when he writes that the education of a philosopher "does not consist in a mere extension of knowledge, in a more extended development of experiments, but that it requires a comprehensive reversal of attitude or a new direction of the mind ". (V. Rusk Phil. Bases of Edc. P. 134). Modern writers increasingly recognize the conflict resulting from the contact of the child's nature with social forces. (V. Rusk Phil. Bases of Edc. P. 121).

Thus, we can speak of four stages in the educative process:

In relation to the vertical aspects of the development, we find the stages:

- 1° negative-subjective, strictly related to instincts and emotions,
- 2° positive-subjective, in relation to the development of intelligence and whose functions are selection and judgment.

In relation to horizontal aspects of the development, we find the stages:

- 1° negative-objective, in relation with the world of the universals of the objective level,
- 2° positive-objective, related to the particular and the factual.

(1) Idem, (see footnote n° 1 page 57).

The function of the educator has often been compared to that of the gardener. The nature of his interventions in the child's development can be studied by means of a comparison with the action of a gardener who transplants a young plant. His first care will be to protect the plant against the sun and then, in various ways, to help the root to settle and feed. (Page 59) This example clearly shows what we have tried to explain as being the negative aspect of the educative process. It is in this one that personal intervention is the most necessary and the most justified. Each positive impulsion, at each degree of the process, must have negative compensations. These negative compensations involve the establishment of close personal relations between the educator and the pupil. They require careful adjustment at each moment. The educator, even in the positive aspect of the child's development, serves as a model for it, as representing its future. No system of mechanical rules can replace the personal judgment required by the need to balance constantly opposed strengths.

We thus see that the personal educator is an essential and even important factor in a process of education worthy of the name.

CHAPTER II

PRELIMINARY DISCUSSION OF SOME EDUCATIONAL CONCEPTS IN RELATION TO THE "PERSONAL FACTOR"

(Page 60) So far, we have merely focused our attention on the nature of the personal tendencies and on the fundamental character of the educative process, without specially alluding to the everyday educational problems as they appear daily to the educator. We are now going to bring into discussion the personal experiences of the author himself.

It may be necessary to give a few words of explanation about the nature of these experiences and these observations which have been collected over a period of more than ten years in different schools in Europe and in India. They are the result of an intimate knowledge of children of both sexes, from three to eighteen years old, from rich and poor families. In most cases I had the opportunity to live in the same house with the children or, knowing the parents, I had special facilitations to obtain information on their public and private living conditions. These experiments and observations have been such as to confirm some of the educational doctrines belonging to the Hindu traditions which, for many centuries, were tacitly accepted and which are now thoroughly revised in the light of philosophical and educational ideas coming from the West. It must also be remembered in connection with these experiences and observations, that they are not to be taken for evidences in the strict sense belonging to the purer branches of exact knowledge, but that each of them merely has the value of ascertainment of any recorded experience. It is above all in the fact that the experience of the author himself agrees with the experience of the educators of ancient India and that, on the other hand, it is justified by modern concepts of psychology that resides the value of this series of experiments.

(Page 61) In this chapter, we will limit ourselves to discussing some of the preliminary concepts of pedagogy based on our exposition of the personal factor. These concepts have been emphasized in different ways and on several occasions in my work. By treating them separately now, it will help us later to make clearer and more defined a general discussion on the educative process.

The background of the personality

One of the most important concepts is what we might call *the background or the fundamental aspect* of the pupils' personality. Previously we have tried to justify the conception of a retrospective, emotional, instinctive and subjective pole of the personal factor. And this pole, as we have seen, has more to do with synthesis than with analysis; it seeks to understand things as a whole and its main function is to grasp the relational aspect of a fact rather than the real and objective aspect of reality. It refers more to the global

aspect or "gestalt" than to the separate analysis of features, and belongs more to the sphere of feeling than to that of reason. Furthermore, we shall say that the characteristic of rest or relaxation also concerns this fundamental aspect, and that its psychic quality is what we have tried to distinguish as being negative.

Suggestibility and extreme receptivity are other characteristics of the fundamental aspect of personality, so inactivity and relaxation are other attributes.

This aspect has appeared to me many times in my work with children. That children learn better when their attention is not forced: this is one of the first experiences that educators have. I have often become aware of that in a class of little children, composed of boys and girls of five to seven years of age. It often happened that children were taking care of other things while I talked to them and, as a result, seemed distracted. But this distraction was in reality only apparent, as the questions I asked them showed it to me. On the contrary, if I forced their attention, their mind soon fell asleep and they began to yawn. And if by misfortune I shouted at them: "look here", it became worse still. Indeed, they forced themselves to listen but did not memorize anything I told them and did not even understand. At times like this they could make the most elementary mistakes (1). (Page 62) This experience, as well as others, requires us to believe that what we called the fundamental aspect is a big part of the educative process. I noticed that this was particularly true of the child below eight. It is the generalized aspect of any teaching that is the most natural nourishment of the child's intelligence rather than its logical or analytical aspect.

Let's take a concrete example. Once I tried to teach some basic scientific facts, especially how the water returned to its level, I showed the children a little experiment made by means of a rubber tube and a glass tube, and then I tried to give them some explanations. But all these explanations seemed lost. The children took no interest in the logical nature of the thing. Only one boy was an exception, and seemed to take pleasure in abstracting and seeking the law of individual facts. For the rest of the group, it was impossible. However, by closely observing them, I realized that they too had understood, but in a general and vague manner, and that they did not seek, or could not express their thoughts explicitly. I repeated the experiment by means of another apparatus and obtained from the children an exact answer which revealed that the knowledge had entered the child but that it did not find a form of expression there. This fact has already been recognized by psychologists when they say that impression precedes expression (2). But the most important fact is that there is often impression without expression, and that the facts seem to get stored in the subconscious; this receptacle of informations should reach a certain degree of fullness before the organization of knowledge takes place.

(1) The same phenomenon is noted in the novel by Ch. Dickens "David Copperfield" about the education of young David.

(2) See William James.

This is only one of the manners by which the fundamental aspect showed itself to me. Again, I will take as an example the case of a young pupil of my Hindu school of Fernhill. He was a sickly little boy. For the first few months following his arrival, I let him get out of trouble on his own, demanding no work from him, somehow neglecting his studies in order to spare him any fatigue. While I taught English to others, he was busy looking at pictures or listening to the reading of his classmates. (Page 63) I had, however, handed him a study book on the English language, of which, after some time, he was incapable of reading the first word. No progress was yet felt. Nevertheless, I kept leaving him on his own, quiet and listening to what was being said in the classroom. And now, after a period of about five months, suddenly there came to him the desire to express himself. He began to learn, made rapid progress, and made up so well for lost time that it was possible for him to finish his first book at the same time as others.

Both these cases, as well as many others that I have observed, force me to think that it is possible for children to accumulate unorganized knowledge in the subconscious without there being for a long time any outward manifestation, and that it is only at the moment when the subconscious receptacle has reached a certain degree of fullness that the organization of acquired knowledge begins; and this one, once begun, is done quickly. Sometimes it also happens that, for lack of everyday practice, knowledges which had assumed a form of expression fall back below the conscious level into the fundamental plane of the child's intelligence. Here is, for example, to illustrate this phenomenon, the case of a seven-year-old girl who lived in England and spoke English fluently. She left this country and seemed to forget its language completely. Later, she was admitted to an international school where English was the official language. The influence of the new environment had the effect of bringing out all the expressions that were buried in the subconscious, and the girl began to make use of them with surprising ease. The suddenness of this phenomenon is a sufficient proof to enable us to assert that these knowledges had never ceased to exist in the child, but that they were there in a potential or latent form in what we have called the fundamental aspect of the personal factor. The child herself recognized this fact and expressed surprise at the abrupt revelation of this phenomenon. Influenced by the new atmosphere, the stored knowledges took an important step and, breaking free from inhibiting forces, found themselves ready to be employed.

A similar case occurs in a four-year-old boy who, although having an English father, spoke only French at home. He was taken to an English school where he was surrounded by English-speaking children and grown-ups. At the end of the first year, he was still speaking only in French. I was absent during the two summer months, and on my return, I was surprised to find that he spoke English fluently and naturally, and that he possessed a vocabulary large enough to express all the things of ordinary life. (Page 64) The passage from one language to another had been so sudden that it could not pass unnoticed, and that many people noticed it. Obviously, the process had been gradual, but all he had learnt, the child had kept it without showing anything outwardly until his personal level of inhibition had been crossed.

The first phase, the one of accumulation of knowledge, takes place below a certain defined level and may be compared with the piling-up of materials below the water level that will

allow raising a building. The heap of material will go unnoticed until the surface of the water is reached. What we need to recognize is that a certain personal psychic level must be attained before is made the natural conversion of a receptive disposition into an expressive disposition. And more importantly, it is that this level varies according to the kind of individual, and that each individual has a quite personal way of learning before arriving at the stage of speaking in public. The above observation can deeply influence teaching methods by leading us to believe that, in the first phase of understanding a subject, no real need arises to present it in a methodical or logical manner. Already, in its principles, pragmatic education (of which we shall speak later) rises up against the impersonal or logical method (1). Let the pedagogue leave aside the logical aspect and instead of being guided by the logical order of the facts presented, let him rather be guided by the personal preferences of the pupils. This experience, I did it when I taught English to my pupils in my Hindu school. I realized that an artificially or logically conceived method prevented children from progressing even though they were benefiting from words or materials freely presented. This method can be compared to the one used by the engineer who builds a construction in the sea. It is only when the blocks of cement thrown without order will have reached the surface of the water that he will begin to build in a methodical way. (Page 65) The way in which knowledge is absorbed in the early stages of education depends first and foremost on the personality of the pupil.

The quantitative aspect of the foundation of knowledge also depends on the person. A child whose activities are limited will begin to speak a new language with all the more confidence, whereas an older and more cultured person, whose interests are necessarily more extended, will naturally take longer to manage to express itself. In the case of the Anglo-Swiss little boy mentioned above, we would quickly realize by observing him that the English knowledge which he possesses is not very extensive quantitatively. The slightest expression change confuses him. He had begun speaking without having at his disposal a wide selection of words. To another person of my acquaintance, it took much longer before it had enough confidence to try to express itself, not because it had a background of expressions poorer than the little boy, but on the contrary because its basic content was bigger. Among my pupils, too, I have known several who differed from one another by the quantitative capacity of this base. Especially two of them were utterly opposite: two young Americans of sixteen, a young girl and a young boy. The girl H., very skilful in learning a new language, began to speak French after two months of study. Very good in grammar, she liked to conjugate the main verbs and could give correct examples. Such was not the case with the young boy M.. He found no interest in grammar and refused to work in class, so that after one year he was almost unable to compose a sentence correctly. And yet he, too, had a great desire to learn French and, in reality, he learned it in his own way, reading and listening, but did not feel self-confident enough to try to express himself.

(1) CF. p. 13 "The Child and the Curriculum" by John Dewey University of Chicago press. "Subject-matter never can be got into the child from without... it involves organic assimilation starting from within."

A more attentive examination would have revealed us that the girl whose progress was so fast was provided with few expressions only. A superficial imitator, her knowledge was quickly defeated when the subject of the conversation was out of the ordinary.

M., however, continued to read in French without yet wanting to try to speak. It was only after one year, that during a walk we had both in the country, at last he decided to express himself in French; the step was taken. (Page 66) Since then I often heard him speaking in the new language and was quite amazed at the ease with which he expressed himself. His vocabulary was much richer than that of H. and he was more responsive to French turns and pronunciation. According to our classification in Chapter VI, the girl would be of a positive-objective type while the boy would rather comply with the negative-subjective type. The quality and quantity of the fundamental aspect would be bigger in the young man than in the girl.

It is in this way that we can conceive in intelligence a basic or background aspect as being distinct and of a different level from a first plane, and which would both have their definite capacity and would vary according to the individuals.

The personal reaction levels

The very marked distinction between an individual reaction and a collective reaction, that is, between a private reaction and a public reaction, reveals a difference of the kind we have already studied between the basic aspect and the aspect of pure intelligence. Both confirm the conception of polarization of tendencies which we have already noticed. A pedagogue has only to observe the daily reactions of his pupils to recognize that there are distinct levels of reaction. A child, who reacts naturally and easily when he is alone, will react in a totally different way in company. And the larger the group, the more difficult it will be for the child to free himself from the inhibiting forces. This is what can be observed in the classroom where we see that intelligent children have more difficulty than others in using their abilities because they have more than them the feeling of collective responsibility. This phenomenon of difference between levels of reaction is also commonly recognized in what is commonly referred to as "funk". It often happens that a child who has conscientiously prepared a recitation at home is unable to say it in class when he sees himself in front of his classmates group: knowledge then seems to be drowning in the subconscious or, if preferred, at the very basis of personality, because the level of collective reaction is higher or more positive than that of individual reaction. A music teacher told me the experience she had made in teaching the music scales to a group of children. (Page 67) During the first five days of the week, she used to give a separate lesson to each of the children, and then on the sixth day, she brought them all together for a collective lesson. After a year of work, she observed, on the basis of the obtained results, that what the child knew well in the private lesson he knew

it not as well in the collective lesson, and that on the whole the level of perfection was lowered in the latter. This experience shows us the nature of personal levels in a conclusive manner because the exercise was very simple and because the mistress was present in both cases. It is therefore not to the presence of the teacher that the difference in reaction can be attributed but rather to the number of pupils.

The younger the child, the more it is natural for it to remain within the limits of the private level of personality. And, although it often happens to it to be in touch with several people, its reactions can not then be considered as purely childish. It is only in some children that we can observe the childish reaction in its primitive state. I observed it in a three-year-old girl. She looked around her with this gaze of toddlers who let perceive their soul. At the approach of a foreign person, she showed a complete lack of will, refusing even to smile or to express the slightest surprise, to start babbling like another child as soon as she found herself alone with her mother; and like that of another child, her expression was then normal, relaxed, fully rested. Here, contrary to the case of this little girl, is that of a little American girl, also aged three, but apparently more advanced. She talks a lot and makes use of difficult words. She seems to be in touch with several people. And yet, on closer examination, this case does not differ very much from the preceding one. We realize that the fact of relating to several people is only seeming, and that while she speaks to those around her, she is in reality related to one person only. If the latter prepares to leave, she feels it immediately and shows discontent. By her babbling, she is only imitating her mother who is constantly with her. Her words are not related to external events but are only reflections of a subjective feeling without special relation to the external world; as a kind of poetry, they are the mere products of her imagination. Any examination of child behavior reveals the same features of extreme negativity, of subjectivity and of lack of personal relation with several people at the same time.

(Page 68) Some special situations have also confirmed this same feature of the child personality, namely that it is out of the nature of children to get in touch with several people at a time. When, for example, circumstances force them to get related to a group, they protest in their own way, showing their discontent. A four-year-old American girl, in the presence of all the members of her school, dropped a pair of scissors. At the sound, all eyes turned to her. The little girl, although it was not her habit, began to cry, not as we might think, because the noise had frightened her, but only because she was angry and refused to be the object of attention of so many people. She left the room as a sign of protest. Here again, confirming our view, is the case of a four years old boy, of the same school as the little American girl. It was during the morning meeting. The person who chaired the meeting, for whatever reason, came to mention her name. Nothing more was needed for the boy, feeling others looking at him, began to weep. Another time, the same child was in a room where some other boys were playing together. The game consisted of jumping over a rope moved by one of them each time it passed within range. Our four-year-old boy wanted to try to do

like the others, but without succeeding. Succeeding or not was generally equal to him. But on this particular occasion it was otherwise. And because he felt he was becoming the center of attention, he was so disconcerted that he began to cry and ran to the mistress who was taking care of him. Ashamed, he hid his head in the welcoming arms and sobbed as if he were never to console himself.

We find the same difference in the older age groups; there are children whose nature makes them capable of acting in a group, while others find all collective activity difficult. Thus, we see that this capacity depends on the type of individual concerned as well as on the age of the pupil. For a child of the type we have called the negative-subjective type, an adjustment to the public will be more difficult than for a child of the positive-objective type. This is one of the facts which have a great repercussion in the pedagogical art. If we want that every pupil occupies its place on the scale of variation of personal adjustment, it must be given the environment that will allow it to have natural reactions. To one, the pedagogue must give a rather individual treatment, to another one a rather collective treatment, in order to delay or speed up the process of positive adjustment of tendencies. (Page 69) Of course, the way of being of the pedagogue will depend on the goal towards which he directs the growth of the child's personality. Incidentally, this relation between the educational goal and the adjustment of personal tendencies will be the subject of another chapter.

The personal rhythm of the progressive adjustment.

The concept of a progressive rhythm of adjustment in the educative process is closely linked to the concept of levels of personal reaction.

All parents know that their children are making progress in very clear and well-marked steps. Even the first stage of expressive development of the child's faculties appears suddenly. Rousseau writes: "The first developments of childhood are almost done all at once. The child learns to speak, to eat, to walk around the same time "(1). What is true of the first stage of growth is also true of the stages that follow. This fact is well recognized by modern psychology. In this connection, Claparède writes as follows: "What is particularly interesting from our point of view, in this evolution of the growth, is the abruptness of these sudden movements, crises and sudden ascents, which often follow a period of perfect calm. Each abrupt ascent of the curve is preceded by a flat surface which seems to be the witness of the effort that the organism is going to make or has just made. Before the crisis, a period of rest: It is as if the organism steps back, huddles up to better jump; then comes the leap, the explosion, it seems that some mysterious blow of blowtorch has burned all the vital forces: finally, afterwards, the exhaustion phase: out of breath, the body as conscious of its effort, affords a well-deserved rest " (2).

The diurnal alternation of emotional states

In order to regulate his method of teaching, the pedagogue will have to take into account another kind of rhythm; the rhythm of the state of emotive tendencies, more easily observed than that of the progressive adjustment of which we have just spoken thanks to the short duration of the cycle which constitutes it. It is therefore with the alternation of diurnal emotive states that we shall now be concerned.

(1) Emile, first book, p. 53.

(2) Psychologie de l'Enfant, p. 417.

(Page 70) From the intimate knowledge of the emotive life of several pupils, I can conclude that there is a marked contrast in the child between the morning mood and the evening mood, as well as between the one of the day and the one of the night. A few cases I have observed will support what I say: here is the case of F., a tall and strong seven-year-old boy whose precision of expression was astonishing for his age. Of German speaking Swiss parents, the shortage of very happy family life may have acted on his nature in a manner detrimental to his emotional and mental growth. Soon after his admission in a boarding school, he was taken by an outburst of nostalgia. He began to cry without any apparent cause. When questioned, he told us he was bored of one of his aunts. The state of depression was so marked that, once the fit of tears was over, the child began to laugh at himself with some touch of humor: "Here we are, the disease is over now". He was then so self-controlled that he could make fun of his weakness and counterfeit it. After a few days, the bouts of nostalgia decreased over time to reappear only under certain conditions. During the morning he was perfectly normal. These bouts of nostalgia only took him after lunch when he was in a state of rest and relaxation, and most often in the evening. I caught this state of depression once in the afternoon, never in the morning.

The preferences of a child in its activities reveal us its emotional state. Our young F. enjoyed in the morning playing and fighting with the other children. It changed in the afternoon. In the evening he showed a marked preference for the stories: the emotional state shifted from the prospective phase to the retrospective or regret phase. This change of state of mind was clearly marked in the behavior of the child. He noticed that he preferred to be told stories when he was already in bed saying: "he loved listening to them before he slept". He also demanded sad, tragic or cruel stories, such as that of Bluebeard.

I also observed a young English girl of sixteen, in whom the change of emotional state was abrupt, and the states of depression and elation were very marked. Strongly attached to one

of the mistresses of the boarding school, the manifestations of her affection turned against the mistress and often took the form of bouts of a sadistic or masochistic character which could sometimes be very violent and which, even under a softened form, showed the same tendencies. (Page 71) The emotional excitement began in the afternoon and usually lasted until late in the evening. If, unexpectedly, this hyperemotional state manifested itself in the morning, it was easy for me to attribute it to the tiredness and the sleep deprivation of the preceding night. The favorable period for this emotional excitement was assuredly in the afternoon. The change was very easy to notice: while the girl was very active, very bright and sensible in the morning, early after lunch, her emotional state was getting worse and worse until bedtime. This alternation of rhythm was regularly repeated. I observed it for two years.

Apart from these somewhat abnormal cases, I observed in different groups of children the same phenomenon of diurnal alternation of emotional states. I was struck by the preferences of the pupils in the choice of subjects and by their activities at different times of the day. Thus, a grammar lesson or a new chapter in mathematics will be more easily learned early in the morning when the brain is cool. In my experimental school at Fernhill, I have often allowed the children to set themselves the subjects of study in relation to the hours, and I saw that they chose preferably for the early hours of the morning the difficult lessons which required reasoning. I tried to satisfy their request and realized that the difficult lessons were indeed more appreciated at that time of the day than in the afternoon. On the contrary, my experiences in an evening school which I conducted for three years in the city of Madras brought me the complementary truth of this fact. I had great difficulties in teaching my pupils the exact or analytical knowledge. They were rather inclined to relax after stress. Stories, tales and poetry: such were the favorite subjects.

The existence of a kind of alternation of rhythm in the progress of the educative process is a truth that must be recognized by the pedagogue. That is to say, he will have to choose carefully the right moment for his teaching according to whether he wishes merely to make an impression on the pupil's mind, or on the contrary to require from it to express itself. This will require a close relation between the teacher and the student, and moreover a certain flexibility in the rules of the school. Relations between professor and pupils must also be of a truly "personal" character as opposed to official, commercial or collective relations. (Page 72) That is to say that these relations will have to fulfill the bi-polarity conditions already mentioned in as strict a sense as possible.

What we have said about the alternation of emotional states during the day is a fact that many writers have recognized as well as the popular traditions of various countries. A mother, after having put her child to bed, puts it to sleep by a song or a story characterized by their negative and retrospective quality, which will often be a reminiscence of the primitive history of the race. But on the contrary, the sportsman will prefer the morning hours to go hunting: It is the natural time for adventure, for action prospective or positive. A

student will work better at preparing an exam early in the morning because it is then the right time for any intellectual as well as physical effort. This is the right time for any activity involving stress, a mindful and volitional activity. It is also recognized that the physical and intellectual well-being is greater when one wakes up early in the morning and goes to bed early in the evening. By proverbs such as "burning the candle at both ends", popular traditions recognize the sequence or series of natural states of mind at different times of the day.

Apart from popular tradition there is also medical science which recognizes an alternating rhythm of physiological states. The increase and decrease of blood circulation during the day and the lowering of the body temperature towards the night are fairly well-known facts.

Among the psychologists we shall only quote Jules Payot, who in his work "L'Education de la Volonté" (1) speaks of the striving and laziness of the morning: the rest period in bed should not, however, be exaggerated for two reasons: it is that being usually extended beyond the necessary time, time which is variable with each one, sleep "thickens the blood." The whole morning is spoiled: one is gloomy, lazy and sad. We are easily cold, we are squeamish. But this is not at all the worst disadvantage of dormancy. It can be stated as an absolute rule, without exception, that every student who is idle in bed very late, who remains there long after waking up, invincibly sinks into exhausting habits. Tell me at what time you get up and I will tell you if you are lecherous. "

In the Hindu tradition this alternation is also recognized from very remote times. Even in Vedic scriptures we speak of a Brahmachari (or religious student) who must strictly observe the rule of getting up very early. This is the best time for an intellectual work. According to Vedic terminology the first hours of the early morning are distinguished under the name "Brahmamûhurta". We shall also notice in ancient Hindu writings several other details which corroborate the same alternation of states between morning and evening. For example, a subtle distinction has to be made between the postures for prayer in mornings and in evenings. The "Brahmachari" must remain standing in the morning and is allowed to sit in the evening (Cf. Keay, Ancient Indian Education, Oxford, p. 33). From all this we can conclude that in education we should recognize that there are two distinct phases in the personal states of a single day, and this will not only influence the decisions and rules, but also the natural development of the personalities of pupils who have to follow their own rhythm by wisely modifying the succession of daily activities. I was able to observe, from my own experience for several years in my experimental school at Fernhill, that the rule of waking up early had an indisputably healthy and salutary effect on the growth and development of the boys' personality; and this is especially true for adolescent boys.

(1) Félix Alcan, Paris, p. 166-177.

Not only I had the opportunity to compare the periods in which this rule was observed with other periods, but I was able to make the same comparisons with another group of children who lived almost in the same conditions. I notice that this habit sustained for several months had some fairly objective effects. The faces of the students lighted up, and their blood circulation and general health improved. Mind too became sharper. This difference has been once recorded with regard to a group of my pupils in an official inspection report from the Department of Education. It was possible, through the continuation of this habit, to influence and modify the pupils' growth of personality.

The need for a comprehensive response

The need for a comprehensive response in the education process is one of the other preliminary questions that we should consider before undertaking the study of personal relations. (Page 74) It is through an understanding of the nature of the complementary and compensatory actions which give to a reaction its global character, that we can see the true role of a personal educator; because both, the thirst of the child for overall responses and its desire for personal relationships, are expressions of the same need that lies at the basis of the child's growth.

We found in our examination of personal tendencies that we were justified in considering a natural action as related to one or the other of the two poles that we have postulated. The activity of one pole is compensated by the activity of the other, which is its natural counterpart. This rule applies not only to the parts, or aspects, of the chains of natural activity, or distinct phases of functioning, but also to simpler phenomena such as the one of perception that have an emotional side. In the pupil, an intellectual effort is followed by instinctive states, the analytic functioning is followed by a synthesis, a state of physical or psychic stress is followed by a state of relaxation. At the basis of this compensation there is always the principle of ambivalence which we have discussed above. Thus, the total activity of a person must be conceived as consisting of two groups of compensatory and complementary actions which operate simultaneously.

This fact is of great importance in education and will help to solve problems of method in general. In order to canalize a spontaneous interest, to focus attention on any subject, to arise the best effort of the pupils for a given work, the most essential condition is to facilitate a reaction in a situation as comprehensive as possible; and this will be done not only by bringing to the forefront of thought the object to which the reaction will be directed, but also by creating at the same time a great number of superimposed associations which enrich the background of thought. This requires that the educator not only be someone who explains a subject in a scientific way, but also that, as a poet or an artist, he is capable of

representing it somehow with a body, a form, to refer to it in an environment, or with a background, which will always remain linked by their nature to a specific situation, to a relationship that will have been created between the educator and his pupils. Without this background the subject would only remain as a phantasm of reality, and the reactivity would only be partial, which is one of the causes of all kinds of detrimental happenings in teaching. (Page 75) There is nothing that disturbs and torments a child more than a partial presentation of a thought.

The first plan will consist in the logical or analytical aspect of a theme, and the background will rather be related to reminiscences, memories and personal emotions. Even a reality, or a concrete theme, belonging to the physical world, can be looked at from both these points of view. There is in it a synthetic, global, mystical or poetic side and a logical, analytical or scientific side (1).

It must, however, be admitted that it is not always easy to find clearly a means of compensation or complementation to a given reaction. It is one thing to recognize this principle of compensation in theory, and quite another thing to establish a rule for the application of this principle in daily teaching, because the number of possible variants is infinite. But it is possible for us to speak of a very general way. This is what some philosophers and writers have already pointed out. The German school of "*Gestalt-Psychologie*" has recognized the role played by form or structure in the act of perception (2).

The form can be considered as complementing the pure (or abstract) idea. This conception of a complementary relation between the idea and the form of a thing gives us the single basis of any classification determining the compensatory aspects of which we have spoken. Kant makes the same distinction between a given fact *a priori*, namely the "phenomenon" (or object), and a given aspect *aposteriori* which he calls the "matter" of this phenomenon. These two aspects are related to each other with the same "phenomenon" which is the basis

(1) The English scholar A. S. Eddington "The Nature of the Physical World" (Cambridge 1928), in his recent work, has critically examined the two aspects of a physical phenomenon. He takes as an example the question of the "generation of waves by the wind" and contrasts the mode of a scientific treatise with that of a poem. Both, he said, can equally be eligible to truth. On the nature of the poetic or mystical point of view he writes in particular: "...*The critical faculty was lulled. We ceased to analyze and were conscious only of the impression as a whole... associations emerging from their storehouse grew bolder... quite illogically we were glad; though what there can possibly be to be glad about in a set of ethereal vibrations no sensible person can explain. A mood of quiet joy suffused the whole impression*" (p. 318).

(2) Cf. p. 71 "An Outline of Philosophy" by Bertrand Russell.

of the empirical aspect of an object (1). (Page 76) Hindu philosophy also has the same classification of world phenomena aspects. These two categorizations are: *Nâma* Name, and *Rûpâ* or Form. Creation is the result of *Nâma-Rûpâ*. It is not important to discuss here whether there is a strict correspondence between the different terms of the different schools of thought. It will suffice for us to recognize that there are two different aspects which relate to the same phenomenon. Our relation to the phenomenon, and consequently our reaction to it, thus happen to be double-sided: one side in relation to our instincts and emotions, and the other side intellectual or scientific strictly speaking. A comprehensive reaction should consider both aspects in a natural or harmonious way, and this is the main role of a personal educator.

We only have to observe the activities of groups of children to be convinced that they are always looking for complementary activities such as those we have mentioned. In sports, in the activities of a dynamic school and in the brain works which interest them, an observing educator can find a thousand different ways in which children can combine, according to their own personality, the two types of action we have mentioned. We can see these two types represented in all the sports that are in favor among children. On the one hand, there will be purely physical activities which satisfy the instincts of competition or fight, and on the other hand there will be abstract or brain works which find their satisfaction in sometimes very complicated races. The general interest in a sport depends on both kinds of action in equal parts. The best sports involve not only an open activity, but also exercise memory, abstract intelligence, etc... There are rivalries that come into play with the need for co-operation; it may be that some individual capacities are exercised along with the desire to conform to a rule, which at the same time causes very different levels of personality to act. It is found that it is almost impossible to distinguish by a straight line the limit of one kind of interest on the other. It is almost impossible to delimit in a precise manner the limit which separates one kind of interest from another. (Page 77) As D^r. Ed. Claparède writes about the theory of complementary exercise (or compensation): "It is true that in some particular cases it is difficult to distinguish perfecting by reinforcing old habits and perfecting by spreading new capacities . . . These two processes, the one gymnastic and the other genetic, intermingle their effects, and we are most often ignorant of what belongs to the one and what belongs to the other. It can not be denied, however, that they belong to two radically different spheres, each of which tends towards opposite points, constituting as the two

(1) Cf. p. 21 "Critic of Pure Reason", translated in English by T. M. D. Meiklejohn, Willey Book C°, New York. "The undetermined object of an empirical intuition is called phenomenon. That which in the phenomenon corresponds to the sensation I term it matter. But that which effects that the content of the phenomenon can be arranged under certain relations I call it form. But that in which our sensations are merely arranged, and by which susceptible of assuming a certain form must lie ready a priori for them in the mind, and consequently can be regarded separately from all sensation".

poles between which the activity of living beings oscillates: the sphere of automatism, of mechanization, of habit, the principle of which is *the repetition of the old*; and the sphere of plasticity, of adjustment, whose principle is *the creation of the new*, the variation, the flowering of new potentialities " (p. 441-442, *Psychologie de l'Enfant*). As for the ordinary tasks, I had the opportunity, in a boarding school, to make continuous observations on the group of children who was in charge of washing dishes. I can make a general comment about the pupils' behavior. They were never satisfied with their mechanical and monotonous occupations. They were obliged to sing, to speak, to make mistakes of all kinds to find a way to compensate for this one-sided activity. They were easily willing to sing. The same need arose in the general meetings of the school, which took place for half an hour each morning. It was impossible for children to feel at ease when they found no other activity than to see or listen. The question of tranquility in a general meeting was then discussed, and it resulted from this discussion that the majority of them really felt the need for subsidiary activity. Since then it was allowed to children to do something else while they were listening. Some, especially girls, brought their knitting. The smallest children, who did not understand much of what was going on in the meetings, were allowed to play with pencils and a piece of paper. By this means the difficulty was solved: Instead of distracting the attention of children, on the contrary such activities improved it, making children more attentive than before. The alternation and division of activities were more natural for them, and thus they had the result of putting them at ease while giving better performances. For the teaching in a class-room this principle of comprehensive responses gains a quite great prominence. (Page 78) If we examine the method and art employed by a teacher to render his instruction appealing for pupils, we shall find in most cases that the principle of global responses is at the basis of all these methods. Handicrafts are placed side by side with brain-works. We find it necessary to avail of emotions and spontaneous interests. The public aspects of an issue are combined with the private or personal aspects. The public aspects of an issue are combined with the private or personal aspects. In the treatment of a subject the concrete aspects alternate with the abstract aspects, and any partial reference is connected to others in order to show the whole. Even in a piece of music or a dramatic composition we try to make the answers as global as possible. The secret for arousing interest lies in the successful mixture of these various elements by the author. What is true in art is also true in the art of education. It is in the creative work of a teacher that his personality comes into play.

As is already recognized in Herbart's theory of pedagogy, it is by means of a correct union or fusion of past ideas with newly introduced ideas that apperceptions are produced. The subject treated expands not only in the immediate present but also in the past and the future. Concerning knowledge somewhat far away in past and future, the educator plays the

role of an intermediary. It is part of his art, in fact, to know how to insert the past, the present and the future in comprehensive and personal images or depictions.

Personification

The real way by which the intelligence of the child works, when it needs to learn even a thing fairly objective, is to put itself instead of the object. There is undoubtedly identification at the basis of all intellectual sympathy, and this identification is the means by which the child seeks to have comprehensive responses which are the most important for it to find a natural interest. This identification of the child with the object it tries to understand is the basis of the instinct of imitation almost universal in children. Identification and imitation find a natural support in *personification* of things which is also a very widespread feature among children. (Page 79) This fact is quite clearly established by Auguste Lemaître (1). Let us briefly examine this phenomenon of personification and its role in teaching, to show how the need for personification and the need for personal relationships relate to the need for comprehensive responses.

It is not unnecessary to recall here that this phenomenon of personification is something quite common, among the adults themselves, in our species. Even in the civilized world there is a persistent need for a form of personified God. Not only the Church, but also the State uses this instinct of personification. The homeland is often personified as a female person. Seasons are often represented by personified images. Even an inanimate object, such as a mountain or river, is easily represented in the popular language as a person. This tendency is observed more frequently in certain nations or peoples than in others. Among the Hindus, for example, this tendency is so exaggerated that one can say that it is one of the national traits of character. Each mountain, every river is for a Hindu a personified god or goddess. Even for a French or Swiss peasant it is a quite natural thing to see human forms on the edge of Mont Blanc. It is not only popular collective thought that employs mental personification, but also individuals when they have been for a long time deprived of personal relationship. An elderly lady, who lives alone, often personifies the things with which she is in constant contact. This is a fairly widespread case. It is above all in literature that this primitive need for personification finds its rightful place. We have only to consider the great place given to this mode of figurative expression, which is represented (directly or indirectly) by poetry or fable, to be convinced of the great role that personification plays in the thought of people and especially in the one of children.

However, this means of making a subject attractive must be used intelligently for instructive purposes. If the use of this means in a particular lesson is justified with children of a certain age or at a certain personal level, it may be regarded as an old-fashioned means or procedure by others. (Page 80) The more the thought is positively adjusted the less the need to use this procedure is great. Here again it is a question of finding and establishing a median between the natural interest and the effort, which vary according to each actual case. The rule to know before using this method is that it must be employed when there is a

(1) Aug. Lemaître : "Audition colorée et phénomènes connexes, observés chez les écoliers", Félix Alcan, Paris.

real need to retain in a comprehensive form responses which have been produced by the teaching. We are going to consider some typical cases of the use of personification. The need for the use of personification is felt to a higher degree in the processing of abstract subjects. We can conveniently use personification in a grammar lesson. While explaining the difference between noun and pronoun it may be said that pronouns are persons who replace the names when they are absent. In a lesson of chemistry, while explaining relations or affinities between elements to young children we can hardly avoid the use of personification. Oxygen is a gas always ready to make new friends, while nitrogen is an indifferent and lazy gas. In the teaching of mathematics, the direct use of this means is more limited. Auguste Lemaitre, in his above-mentioned work, gives examples of pupils who personify simple arithmetical quantities. This shows that, even in the teaching of abstract numbers, many children feel a natural need for personification. Moreover, it is at the level of arithmetical problems that the use of personification is most felt. But here the personification is applied by the child in a more indirect and somewhat more complicated form, the nature of which we are going to consider right now.

When, in a situation to be understood or a problem to be solved there is a series of simple events or things, again personification is naturally used by the pupils. In this case it is the central person, who unites events and things into an organic system, that the pupils figure out so as to find a comprehensive response. Here they are looking for a personified center of interest. If the first category of personification corresponds to words, it can be said that this personification corresponds to sentences or series of sentences whose elements are united by an imaginary person. It is no longer a personification in the literal sense, but rather a personification for fulfilling a child's psychological need (need for united and global responses). To obtain and give continuity to a narrative, the different concepts must be linked to a central image. (Page 81) The events of an arithmetic problem, for example, need to be clearly visualized before we can expect children to understand it with enough realism so as to begin solving it. The whole problem must be easy to consider, and in this respect, there is nothing that helps more the child to visualize events than to gather them around some kind of character. A child recognizes the difference when a teacher tells him: "The prices of the following items are so or so", instead of saying: "Yesterday I was at the market and I bought such an amount of a thing at such and such a price, etc . . . ». The last form is what we describe as personified narrative in which the person of the educator is the center. During my work I often found children unable to think of the depiction of a subject in an impersonal way. It was only the impossibility of putting together the different aspects of a subject that prevented them from understanding, and this difficulty was easily overcome when I used my character as a synthetic factor to facilitate the child's thinking. In arithmetical problems such as those we have described, I found it quite useless to focus on the things mentioned. The things are not the most difficult to visualize: it is the actions and relations connected to the problem which, for the child, are difficult to visualize. We can finally say that when actions and relations are linked to a person already familiar with the children, they find it easy to put their own person in the place of this familiar character and thus it follows, in their imagination, a succession of short experiments which are the equivalent of their own experiences. Understanding is thus facilitated by using transfer from one person to another.

In the teaching of history and geography, this need for a personified "mediation" becomes more true than ever. Right now, let us consider geography. It often happens that school children take only an indirect or weak interest in things or countries that are very far from them. It is true that images and the geographical map or the collection of postage stamps can indirectly facilitate the awakening of an interest in children for a distant country, but these means do not have as much effect as a person who would personify for them the spirit of travel or adventure or exploration. If they have traveled extensively themselves this will be the best approach. (Page 82) The same principle is true in history: Instead of focusing on objects or tools such as images of ruins or archaeological remains, instruction should revolve around a historical personality for each epoch. It is true that visiting a place of historical importance will often facilitate and stimulate among pupils an interest for a situation of a past time period, but the facts that leave an indelible impression on the brain of children are in personal stories. The image of a Nero playing his instrument when Rome was in flames, or the private life of Henry VIII of England, aroused much more interest than a more general or impersonal subject. This interest in a person needs to be mixed with impersonal facts in a proportion that will be different for each pupil. It is in this work that the personal mediation of an educator, who intimately knows his pupils, becomes necessary; it is a natural condition of teaching.

Once, I found myself in the company of young students of art and architecture who traveled in Italy to come into direct contact with the specimens of art or architecture they were studying. When they were interested in the personality of an artist, such as Leonardo da Vinci or Palladio, then, and only then, I found that they took a real interest in his works and that they naturally tried to inform themselves. The image of a past epoch became more real and lively for them by means of a personality, and I found that the anecdotes relating to the private life of the characters had in this sense a role at least as important as the historical facts themselves. The remarks they made and the evidences of interest they showed were convincing in this regard. By the questions asked we could also observe that it was around the characters themselves that they associated the works, and that it was these characters who allowed them to memorize them.

In the study of literature this need to have a personal image in mind is more true than is assumed. In poetry, for example, one seeks to obtain the least detail of the personal life of an author. Details, such as the house he lived in, the feathers he held, become very interesting and are used for all kinds of deductions. The style of an author is such a personal thing, and so well reflects the soul of the writer that an unknown and indefinable interest is attached to it. (Page 83) The picture of an author, his face, the look in his eyes are things which are especially described in literary biographies. The eagerness with which people seek an interview with a poet or an author is in itself a rather convincing fact to show how the need for personal knowledge of a renowned writer is felt by everyone. For each period we teach literature by means of finding a typical author around whom other more theoretical information will be focused. It is a way of teaching literature in which the image of a person is significant. Even in literary subjects we have to recognize the prominent position occupied by personal characteristics. Drama, fiction, poetry, fables and stories are full of personal

portraits. They are the keystones of our interest in literature. Even in fables and narratives that make use of subhuman characteristics, personification is often used as a means of drawing attention, and this shows us that it is unavoidable to draw attention on a person if we want to arouse any intimate interest for these literary works. These principles are often applied in contemporary children's books. The intelligent use of this principle of personification to make comprehensive responses and to give a concrete image, so as to fulfill the objectives of regular education, is one of the first means of naturally attracting interest on a subject, and, as we have already said, to draw a sustained attention. In this way we can help stimulate interest and imagination. Several professors of my knowledge use this method without being aware of it. I have often used this means, either in the form of simple personification or in the form of a more complex personification (as in the cases quoted above), and I have always found it very useful. It may even be very helpful in scientific matters. For example, instead of speaking of the qualities of a gas, we can use an imaginary or personal narrative in which scientific facts naturally find their place without being mere enumerations in logical order. We may relate a story in which a man kills himself, asphyxiated by carbonic acid, instead of saying, as is often the case, that it does not sustain life. The true secret to arousing interest is to ensure that personal experience, which belongs to the past of an individual, is felt by another individual through its intermediary. (Page 84) For the child it is easier to understand when we put it in a position where it can put itself in the place of a more experienced person. This is the principle of identification already known by writers such as John Dewey (1). In order to execute tasks thus conceived, we can use comprehensive responses (with basic or background images) obtained by direct or indirect personification, which is the most useful and the most natural support for children.

All teaching implies that we assume that the teacher pictures the experience which has to be taught to the pupils, but it goes without saying that the master, even the most learned or the most skilful, can not represent all possible experiments. Thus, he needs to rely on the experience of others to complement his own experience, and by applying the experimentations of others, indirectly, he makes by himself an experience. The purpose of education is to convey a set of such experiments to a less experimented person. Without such a transfer of experience, the child shall waste a lot of its efforts before being able to reach the same level as others who have been helped by the experiences of adults. In addition, it will be confronted with the tremendous quantity of experiments contained in the environment, and shall be lost in a vastness without order and without system; the acquisition of so disparate experiences, will inevitably induce several difficulties and errors. This is how the need for an educator naturally arises. Being related to the educator and his personality, every experience *ipso facto* brings in a scheme, a sequence, and a rule of some kind or another. The condition of a bi-polar educational relation being thus fulfilled, then a

- (1) John Dewey, "Interest and Effort" (Boston, p. 7-14): "The genuine principle of interest is the principle of recognised identity of the fact to be learned or the action proposed with the growing self... Let this condition of identification once be secured and we have neither to appeal to sheer strength of will nor to occupy ourselves with making things interesting".

gradual exchange of experiments from one pole to the other begins. Thus, in the transmission of experience, the personality of the educator enables a process of osmosis (1).

We see how important it becomes, even in daily teaching within a classroom, that an intimate relationship is established between the teacher and the pupil. (Page 85) It is this intimate relation which has to be the means of communication between both poles. In my work I have always tried to keep my relations with my pupils as close and personal as possible; by this means the task of teaching became much easier than before. The secret was to keep on relating the whole matter of teaching to my person. I have detailed my feelings and personal thoughts at every step, and I have brought out their own. Thus, the lessons became genuine for the children, and there was an equal pleasure for both parties.

What a teacher can do for his pupils is to make continual use of his own personality in order to materialize the abstract ideas he wants to convey to them. In his own person he has the means of putting his own past in relation to the possible future of his pupils, and thus of forming in their minds a natural synthesis of the evolution of life. Such a synthesis is methodical. Besides it is adaptable to the needs of pupils of different ages. To take a very simple example, let us suppose we want to teach a child to read the time on a watch. A theoretical and mathematical description, although very simple, would have the disadvantage of not enabling the child to experience the events right away. Even though the separate positions are individually known, though the mechanism of the watch is understood, as well as, for example, the relation between the hour hand and that of the minutes, the problem of reading the time remains often unsolved for the child. There is still the question of what a watch can have to do with morning and evening, etc ... According to my own experience, the easiest and most direct method of explaining this relation to children was to stimulate the children's imagination by an informal influence of the teacher himself. Tell them a little personal incident in which you create a living relationship between yourself, the simple events of a day you have experienced, and the appearance of the clock face. We can see that the difficulty is easily overcome thanks to the interposition of the teacher's person, factor that has the most helped the child to understand.

(1) Several authors have already used these identifications for educational relationships. Cf. "Tostoï, Educateur", by Charles Baudouin, Geneva.

This case is representative. It is for this reason that an institutor, not specially endowed with a great intellectual capacity, sometimes has more success with his pupils than a more brilliant one. (Page 86) If we can say to a pupil that we had the same difficulties as it has to solve certain problems of mathematics and that we found such or such effective means of solving them, it will not only help it in a friendly way, but also in a way that one might call methodological.

The function of the teacher with his pupils is thus to enable a methodical exchange of thought, an exchange born from friendship. Perhaps the most important factor in teaching is this friendly vibration between pupil and teacher; besides this vibration is the result of setting natural relations between them: The primeval relationships as they exist between animals and their young, between the child and the mother who unconsciously opens the mouth to teach it to eat. The phenomenon of imitation, so pronounced in children, is another aspect of these friendly natural relations between people of different ages.

In the ancient education of India, the necessity of obtaining this close friendship was well understood, and publicly acknowledged by rituals between master and pupil, preliminary to the educative process. In spite of its unscientific language, the following quotation from a writer of the year 500 before Jesus Christ reflects the importance of this element in education:

"Shaking the left hand of the master with his right hand, while leaving his thumb free, the pupil will address his teacher by saying: 'Honored Master, I beg you to teach me'. He will focus his eyes and his mind on the master. He will touch with the 'kusha' grass the master's seat of the senses. He will hold his breath for a period of fifteen seconds. And he will sit on 'kusha' grass whose leaves are oriented towards East... Every morning he will have kiss the master's feet; he will also do it at the beginning and at the end of a lesson on Veda ... ", etc
...

Transfer of personal behaviour.

In these preliminary discussions mention must be made of another aspect of child's life. It is the fact that children, by their very nature, more easily assimilate the overall and personal

elements of a thought than its intellectual character. Children are mainly imitators. The young ones imitate the older, even more in their attitudes than in their actions. There is a continual transfer between children themselves and especially between adults and children. (Page 87) A doctor said that children resemble sponges in their ability to assimilate physical influences around them, and this is much more true regarding intellectual moral and spiritual influences. Anyone who reads this study, especially if it has to do with young people, will have innumerable examples of this phenomenon in mind. I myself would like to quote two or three that struck me especially. I remember a seven-year-old girl imitating the attitudes of a boy who was a little older than her, and who squinted. Another girl, eight years old, imitated the pronunciation and the slightest movements and attitudes of a female companion three years older than her. A boy of twelve years of my acquaintance admired as a hero a boy of sixteen. After a year in the boarding school the older boy left school. The young friend automatically filled the vacuum created. The older was responsible for blowing the bugle and ringing the bell at the beginning and the end of the lessons; after his departure the young boy resumed and carried on these duties with the same accuracy, and above all in the same way as his friend. But this precision which characterized all the activities in which the younger imitated the elder was entirely missing in his other acts. His imitation of the elder was also found in curious practices like the following: Playing "football", the older boy used, when he had missed the ball, to fall to the ground to express his disappointment; the younger adopted this custom and continued it for more than one year after the elder had left the boarding school.

This imitation of an attitude has a very marked effect on the acquisition of a language in children. They first learn the words and phrases that express the emotions of these attitudes. For example, a child who learns English will start with sentences like: "I don't care" or "Get away". A little Dutch girl who was trying to speak English had a range of sentences like "I don't have to", "I don't like", and others of the same kind.

One of the biggest impediments to teaching children in a classroom is that the teacher and his pupils are forced to take opposite positions: the one of teaching and the one of learning. This opposition gets added to the artificial enough conditions of the classroom. In my experimental school in Fernhill (India), I used to spend several hours a day studying in the same room as the children. Everyone rigorously observed silence and naturally took care to study as well. (Page 88) When I had been well absorbed in my task, I always found, while emerging from concentration, that all the others were in a similar concentration.

The possibilities of giving by himself such examples so that pupils imitate them unconsciously are a great potential strength for education in the hands of the master who recognizes and employs them. In this way, we did not only impart to the children a concrete image so as to support an idea, but rather a psychological state that may be even more important than that by contributing to the stability of the pupils' progress in their intellectual and spiritual growth. It is also a factor on the physical plane. The female cat teaches her kittens to hunt mice by practicing it in front of them. Hunting dogs let themselves be led by a leading dog. A child would like to become gardener, chimney-sweeper or shoemaker, according to the last acquaintance which attracted his admiration; and this admiration is often rather won by certain traits in the way of being than by important deeds. I remember one of my pupils in India who imitated a habit I had of holding my neck with my left hand. In handwriting also, the imitation of teachers was really noticeable among many of my pupils. As for moral behaviours, I have observed that we can often predict what a child will do under such or such influence when we know what its teacher would do under similar conditions; it goes without saying that such personal behaviours remain a long time in pupils and constitute a very effective means in education.

Personal relationships in education.

When in the process of understanding the depictions of an idea are provided by the same person, we observe the beginning of personal relationships in education. Personal relationships will become truly effective, pedagogically, only when we shall be able to recognize in them the three conditions that rule them. The first condition is the one of the *continuity* about which we have just spoken. The other two are the concentration or *unity* of relationships, and the principle of *substitution* which they imply. The latter is the most important of the three.

The one of these conditions whose necessity is most evident is the one of unity. Children, especially the very young, prefer to be intimately found of a person and to be guided solely by this one, than by several of them (page 89). As we have already seen in a previous paragraph, children can not relate to a large group of people, even in normal intellectual relationships. This tendency is even more accentuated when it comes to the emotional life of the child. Just as nature provides the child with a father or mother as a guide, so the best

plan for educative relationships is to imitate it, and to have the child mainly lead by one person.

T. was a three-year-old girl who was taken to school. Her mother lived near the school and came to stay with her. Sometimes the mother left the child for a longer or shorter period. The child rebelled against these absences and begged her, with tears in her eyes, to remain next to her. Once the mother had to leave her without telling, and this hurt the feelings of the child to such an extent that she was inconsolable and would not reconcile in this matter. It was extremely difficult to build a relationship with her while the mother was present. By constraint she seemed to submit to her fate, often with inconsolable tears. She then chose a favorite person to whom she became somewhat accustomed. Subconsciously the figure of that person dominated all the others. She wanted to hold her hand, even when she was playing with other children. When the person moved away from her sight, the child cried and called her. At lessons time the child often had to change mistress. At first, as she always wanted to remain with the same person, it was a kind of trial for her. But soon she realized that it was an everyday habit to change mistress for some time and then return to the usual person; she began to consider this change as a sort of game. She was very aware of every moment of change. When the bell rang for the change of class, she was already near the teacher of the next lesson.

She was no longer missing the first person of whom she had become fond, but she naturally approached her new teacher. What was most interesting was the fact that, even there, the child looked at the adult in charge of the class with complete confidence and excluded all others during that time. At that time the first person was forgotten, and its place in the child's mind was totally occupied by the new person. This became very clearly evident considering the value the child herself gave to the fact of passing from one hand to another, as well as considering her subsequent behaviour. (Page 90) The natural consequence of such intimacy is a certain exclusivity towards others. A child who is caressed by a person with whom it has relations of intimacy often shows repulsion towards others, especially towards other children. The two friends create a world of intimacy between them in which there is no room for others. This kind of reaction is observed very frequently in young children who are in the hands of a person dear to them. Often, they look with disapproval at the persons who pretend to approach, asking them to go away, or sometimes hitting them, in a feeling which seems to be jealousy. Yet this is not true jealousy but merely an exclusivity resulting from satisfaction or satiety. This occurrence is often in opposition to the whole of the relationships that constitute the school life of a child, and when the mind of a child is overwhelmed by a person who is not responsible for its education, the problem becomes difficult for the educator. Authority becomes against nature and relations

increasingly tense. I have seen several instances in the boarding-schools which I visited, where the intimacy between a teacher and a pupil resulted in a kind of favoritism which made the child have tense relations with the others with whom her school life brought her into contact. Thus, while acknowledging that a child at school naturally wishes the company and friendship of one person at a time, care must be taken to ensure that the person chosen for such exclusive intimacy is at the same time qualified to take responsibility for most of the growth of the child's education.

We have already alluded to the fact that, in the case of young children, there is room for only one person at a time. This leads us to consider in more detail what we mean by "substitution", which is another principle regulating the relations of education. This conception is based on the fact that, in its relations with others, the child always tries as far as possible to stick to its natural habits. When the child is deprived of its family life, it naturally turns to other people who will represent its parental relationships. The child reacts to these people as if they were its natural parents. This phenomenon implies assuming that there are specific relational behaviours that are natural to children of a certain age, and that they are projected onto those who are in contact with them, and especially on those who act with them as parents. (Page 91) This process of substitution is so common among children that it does not need special examination. However, we shall mention a few examples which have experimental value in this matter.

Sometimes this process of substitution is observed in a very simple relational situation, such as having stranger gentleman and lady beside the child during a walk. In its childish innocence, it will often say that one is its father and the other its mother. Here is an experimental situation even more favorable for the observation of the phenomenon of simple substitution: when one of its real parents is present and the other is absent since long and that the child misses it. In this case it is almost certain that the child will react to the situation by making up its relational pattern and calling the stranger by the name of the absent parent. This can be seen even in older children, aged 6-7 years.

Children separated from their parents try to keep their relations with their parents alive for some time, but later when they remain in the care of others, they project their relational behaviour on these strangers. In other words, the child constantly fills the accidental voids by substituting a substitute for the actual person. In a boarding school this reaction is more easily observed than in a day school where relations are more partial. For example, with a particular person putting it to bed or exercising personal authority over it in one way or another, the child will have more natural reactions than with others. This is true even for

babies under the age of three years. My investigations at a children's hospital in Lausanne confirmed this point of view; the sisters who told me about their experiences agreed that children had a better behaviour and loved more the sisters who seemed to speak to them with authority than those who were "good" for them. We shall return later to this question of the kind of authority to be employed. For the moment it is enough to insist on the fact that it is natural for children to make substitutions and that there are specially favorable conditions for doing so.

In educational relationships, especially those aimed at producing profound changes in character or at helping personal tendencies to develop, this substitution is a powerful instrument in the hands of the educator.

(Page 92) An experimental situation that I attended seemed to shed more light on the details of the nature of substitution. It was little A (Anglo-Switzerland, 7 years). This boy had been separated from his mother for almost two years. The image of the mother had been completely erased from his mind. He lived at school where a lady was taking care of him. The child had become attached to her and reacted to her as to a mother. The substitution seemed complete. One day, however, the mother arrived unexpectedly. He vaguely recognized some familiar traits of his mother's face and looked at her with an ecstatic interest for some time; meanwhile his face showed extreme confusion. Finally, he approached his actual mother and for the rest of the day when his mother was present, he completely forgot the presence of his adoptive mother. This was all the more striking than he used to do nothing without the help of the latter. Now his whole attitude was changed. The mother seemed to occupy full attention. This shows how one relationship removes the other and how it is impossible for a child to have identical relationships with two people at the same time. After the mother's departure, the child returned naturally to the person who took care of him. Let us mention one more thing about this case: the mother had brought the boy's sister to school, a little girl he had not seen for a very long time. The boy took great interest in his sister. Once his mother and sister had gone, he told his adoptive mother that he loved them. It was the first time he was seen worrying about someone else. At table, when his little sister had dropped something, he stopped, seriously preoccupied by this event, whereas on another occasion he would have merely laughed. It is clear from these observations that natural relationships have a salutary effect on children and that, when they are meaningful, they reach a deeper subjective level in the individual life of children; in the absence of natural objects of affection, they try their best to make a substitution.

During my work I often observed emotional reactions of children. Most of the time they are missing their family, or they are really hungry. I have experienced it very clearly, for example,

in the case of orphan children over the age of thirteen or fourteen. It is enough to get in touch with an orphan boy in any boarding school and to show him personal interest. (Page 93) When you speak to them sympathetically their eyes sometimes fill with tears, and they invariably enter into closer intimacy with you, like a cat or some other animal whom you would flatter or pet. This is a natural tendency in them. The same phenomenon can be observed in non-orphaned children, but to a lesser extent. When they have been separated from their parents for a long time and are not expecting to see them soon, the conditions are most favorable for them to establish good educational relations with their masters. In the daily life of the boarding schools where I have been, I have heard the younger and older ones expressing that urge for relationships that would satisfy their innate needs. The intensity of this need is observed in the nature of its expression; and this intensity demonstrates how important it is for a straight progression in their period of growth to satisfy these primary needs in children; it also demonstrates how powerful are the forces that the true educator can handle and rule.

I often had to supervise the game of very little children, as part of their afternoon program. It was the first class in some boarding school; most children were under five, only one or two had six. Sometimes they organized their own games. Sometimes I proposed them the game of managing a family home; at other times I left them to themselves. A particular game always came back: it consisted of playing father and child, or more often, mother and child. It seemed so spontaneous to these children left in school, and this seemed to satisfy them so obviously that we clearly had a feeling of the absence of some relational satisfactions natural to children. In some extreme cases, I have even observed in the spontaneous and free play of children that their search for affection assumes a form analogous to marital relationships. It is somewhat pathetic to see a little boy pushed to the extreme limits of his need for emotional compensation and who takes refuge in the arms of another child to seek consolation. Such a sentimental comradeship with children of the same age is not entirely natural in children under the age of seven or eight; and it was only in one or two cases that I was able to observe this way of expressing a need for relationships. Once children have grown up and, as it were, have become accustomed to relational interactions with strangers, this need for emotional relationships always persists, but in the form of more subjective feelings. (Page 94) I used to take a few children from the age of nine to ten years for walks of nature study. They were boys and girls; their conversations often showed that they missed their families. To give just one example, there was a ten-year-old girl whose parents were away. A teacher at the school was very good to her and treated her as her own daughter; the child in return had learned to look at the stranger with affection. That day, she saw a plane passing by, she looked at it and suddenly said that her father and mother were inside. It was pure imagination and she was well aware of it, but she liked to "pretend" - to use her own expression - that they were really on the plane. Several times she called them

"Daddy, Mummy," etc. with an obvious satisfaction. After some time, she had to leave school to go back to her parents, and on that occasion, she explicitly admitted that she was as attached to school as to her family. One of the teachers of the school had become a true second mother to her, and she was very eager to find a way to lose neither of them. Thus, this is a case where the substitution has become as strong as the biological link.

From these examples two facts emerge: firstly, that there is a marked necessity in children for relationships which will bring in their emotional life the necessary compensations; and secondly, that it is always by means of substituting personal relationships with a stranger that this need is satisfied.

The third condition for good educational relationships is, as we have said, the *continuity* or "time" aspect of these relations; and it goes without saying that the longer the opportunity given to the educator to study its pupil, and to the child to accustom itself to its master, the better it will be for the educational result. Substitution and focussing of relationships (of authority or dependence, as the case may be) of which we have spoken above, is completed by this continuity in time.

At first, children naturally expect a continuity of relationships. In some of the cases quoted above we have seen children naturally revolting against frequently repeated changes of relationships, especially against the frequent passing from the authority of one person to that of another. (Page 95) In many of the boarding schools I visited I had the opportunity to hear the views of the children on this subject. This was particularly true of a school in Europe where the majority of children, American and English, stayed for a short time to learn the language of the country, while parents traveled in Europe for a few months or for a few weeks. After their stay, the children were brought back to their usual schools. Teachers as well as pupils felt the extreme disadvantage of these temporary relationships. The perpetually felt that a particular task or effort in any direction at school was not going to last long and was likely to be interrupted sooner or later. The teachers, on the other hand, thought that the child would not be available for a long time for their pedagogical effort, and that the tendencies which they would cultivate in it would be likely to be completely reversed into the hands of another educator who might undertake its task with a different approach. During the three or four weeks preceding the departure of the child I have often noticed a decrease of effort, I also heard the teachers express their dissatisfaction on account of the short duration of the pupil's stay. Since the philosophy of pedagogy varies considerably from one nation to another, from one institution to another, and even from one individual educator to another, it will be understood that such a change in education

does not tend to produce sustainable results. Conversely, I have experienced many times that the very fact of being aware that an education relationship will last affects the character of this relationship in such a way that it serves education. Then, the relationship begins to resemble a natural parental relationship, and thus becomes intimately personal. Opportunities for reciprocal observation and influence are multiplied. Relationships become automatically more reliable and conducive to continuous effort until a result is obtained. The duration of relationships will help to extend their field in intellectual and emotional levels of personality. Continuous action and reaction tend to produce a reciprocal influence for good, which completes the relations of education.

The three principles to which we have alluded in the preceding paragraphs have been sufficiently recognized by educators like Rousseau. Regarding the necessity of concentration (oneness) of authority, he writes in his *Emile*: "To be properly led the child must follow only one guide" (*Emile*, p. 26, Bibl. Larousse). (Page 96) The other conditions of relations in education have also been clearly described by Rousseau. As regards, for example, the principle of substitution, we read (p. 38): "Emile is an orphan. It does not matter if he has his father and his mother. Entrusted with their duties I succeed to all their rights. He has to know his parents but me only he has to obey. It is my first or rather my only condition.

"To this I have to add another one, which is only a follow-up of the first one, that nobody ever will separate us except by mutual consent. This clause is essential, and I even would like that the disciple and the governor would consider themselves so much inseparable as to look upon the charm of their days as a common object between them. As soon as they envisage their future separation, as soon they anticipate the moment which has to make them strangers to each other, from that moment itself they become so; each one creates his own little system separately for himself; and both of them occupied with the time when they will no more be together, remain together only against their wishes. The disciple regards his master only as the emblem and the curse of childhood, the master regards his disciple only as the heavy burden from which he is impatient to be delivered; together they are looking forward to the moment that they will be delivered (separated) from each other; and as there never exists a real attachment between them, the one has to have little or no vigilance and the other little or no readiness to learn.

"But, when they consider each other as having to spend their days together, it is important of loving each other mutually, and even by that they become dear to each other. The pupil is not in the least ashamed to follow in his childhood the friend who he has to have while grown up; the tutor (governor) takes an interest in the cares from which he has to reap the benefits, and all the excellence which he imparts to his pupil is a capital invested from which he will benefit in his old age."

In the ancient Hindu pedagogy, relationships of this kind were placed in the front row of the conditions of a genuine education.

Firstly, there was much emphasis on the import of making the right choice of the master or Guru. In the ancient Hindu scriptures, we read that students travel from country to country in search of a person suitable for instructing them. At the time of the Buddha the choice of the master was formalized by a ceremony that related both parties for all their life from the moment of this free choice, as in the case of a marriage. In Brahmanic education, which is of still earlier origin, there was a similar relation between the life of the master and the life of the student. Sometimes the students left their master after one, two, or even three decades, but even once this period of instruction discontinued they still considered themselves more or less in the same guru-s'ishya relation. (Page 97) Often we applied for the "function" of disciple, which sometimes gave rise to an initiation ceremony; otherwise the formalities were limited to entering the house of the Guru with a bundle of fire-wood for the fire of his household. This was seen as a symbol of the life of service that the student was ready to lead with his Guru (1).

Life as a member of the Guru's family or household was very long and uninterrupted. From the time of this reciprocal adoption, the pupil had to consider his master with affection and filial respect, and the master had to consider his pupil as one of his sons. This is how we accept the principle of substitution in former times. In the upanishads, we read here and there (for example in Khandogya Upanishad, Khanda 10) the story of a student who served his master for decades without obtaining his grace. The Kadambari by Bâna and the Uttara Rama Charita by Bhavabhooti contain detailed references about life in such institutes or home-schools of ancient India; they reveal that undergoing prolonged austerities and being submitted to rigorous discipline for years before obtaining instruction is a recognized practice. Keay (*Ibid.*, p. 31) speaks of Megasthenes, a Greck who visited India around the year 300 before Christ, and who bears witness to the fact that it was a habit among Hindu students to spend 37 years studying. Vedas and Upanishads contain many references to this aspect of life in the education of ancient India (Cf. Sacred Books of the East, edited by F. Max Muller, Vols. 1, 2, 12, 14, 15, 25). The student life in the Guru's house was named:

- (1) Cf Keay: Ancient Indian Education, p. 23. When a student wished to become the disciple of a master, the usual way of applying was to approach him with a bundle in his hands; it was the sign that the student desired to serve him and to help him maintaining the sacred fire. In this respect we read that, among other conditions, in the time of the Buddha the pupil was enjoined to consider his master as his father, and the master was enjoined to consider his pupil as his son (*Ibid.* p. 90).

Gurukulavâsa, and it was an uninterrupted time which sometimes reached one or several decades. This was why, once the master had been chosen, it was insisted on the necessity of maintaining relations with him.

We can see to what extent the relations between Guru and S'ishya were comprehensive given the Guru's absolute authority over the public and private life of his pupil, as well as all the minute details of personal intervention available for him as a master. (Page 98) We see how, under such an intimate regim, the student was naturally led to comply more and more with the point of view of his master. To illustrate the authority to which a pupil was subjected, we can read the story of Upamanyu's student lifetaken from the Mahâbharata. For several years Upamanyu had grazed the cattle of his master's house. When he was hungry, he begged his food in a neighboring village. At nightfall, he used to return to his master to tell him everything he had done during the day. He greeted the Guru and stood beside him. The Guru was not satisfied and told him one day that it was not well to beg his food in the village because he thus became a competitor for those who followed the profession of beggar before him. The next day, when the poor boy was hungry, out of respect for the master's words he refrained from begging his food, but began to milk one of the cows of his herd and thus satisfied his hunger. When he returned to his master at nightfall, the latter rebuked him again, saying that the milk of the cow belonged to the calf and not to him. The next day the boy came back at nightfall, saying that he had drunk the foam falling from the calf sucking his milk. This was forbidden to him, and the story goes that out of desperation the hungry boy ate the leaves of a poisonous plant. It made him blind and he could not go back to the Guru that night. At nightfall he was still trying to lead the herd back home, and while groping his way, he fell into an old well from which he could not go. The Guru, who had purposely put to test the devotion of his pupil, hastened to the pasture while calling anxiously and loudly the name of his disciple. The boy answered from the bottom of his pit. Finally, the Guru was convinced by this boy perseverant devotion and, with the help of God, he succeeded in restoring his sight; he blessed him with the gift of direct knowledge, without having needed to instructe him formally. "Let philosophy and morality be revealed to you," he said, and they were revealed to him, and thus he was able to finish his educational career thanks to this sole quality of devotion to the master. Through exaggerations and mythical ornaments of stories like these, we can get an idea of public opinion on the good relations between pupil and master in these ancient times. (Page 99) Regarding this relationship, Keya explains this: "The exaltation of the master, up to the point of becoming an object of adoration for his pupil, was one of the developments of the relation between master and pupil that we have already outlined" (p. 50).

The substitution principle is sufficiently described in these ancient writings to attest that it was recognized. In the early orthodox Hindu education, it often happened that master and father were the same person. When this was not the case, the master considered his pupil as

his son. He invariably called him his son. Keay mentions, for example, that the master should not only love him as his own son, but that he also had to give him full attention in the teaching of the sacred science, without concealing from him any part of it. On the other hand, the rules of conduct of the pupil towards his master created also an intimacy as complete as the one towards his parents. We read the following rules (op. cit. p. 33): "A strict obedience was enjoined. In no case should the pupil contradict the master; he has always to occupy a lower bed than that of his master. It was his duty to get up in the morning before his master, and to retire in the evening only after him", etc..., etc,... all this sheds an interesting light on the very complete intimacy of the personal relationships which existed between master and pupil. It was in Buddhist education, where the masters were monks and not heads of household, that this principle of substitution of relations was most clearly emphasized. Keay quotes (op. cit. p. 90) Mahāvagga (I. 25), where the Buddha decrees: "I prescribe, O Bhikkus, that the young bhikkus choose an Upajjhāya (or preceptor). The Upajjhāya, O Bhikkus, shall regard the Saddhivihārika (or pupil) as his son; le Saddhivihārika shall regard the Upajjhāya as his father".

We see, then, that the principles governing educative relationships have been recognized by philosophers, like Rousseau, as well as in ancient Hindu scriptures.

Beside these concepts concerning the individuality and the principles of educative relationships, there are a few others that belong solely to the dynamic aspects of the educative process. Thus, before concluding this chapter, we shall deal with some of the principles affecting educative influences.

The first and most important of these principles is that of the balance to be maintained throughout the period of the educative process of an individual. In the preceding chapter we have already alluded to the concepts of compensation and harmonious development. We propose this new designation, which includes both. (Page 100) Indeed, the main function of bi-polar relations in the educative process can be seen as the constant maintaining of balance between the positive and negative aspects of the development of the individual.

Maintaining balance in education.

Maintaining balance between positive and negative influences during growth is a matter of major importance in education. A simple analogy may shed light on this point of view. Botanists and farmers recognize the fact that in plant life, beyond the early stages of

development of the young tree, it is not good for the seeds of a tree to be over protected by the shadow and proximity of the parent tree. If we try to grow a plant in a greenhouse by giving it too much food and protection, we find that the plant does not grow normally. Though the first leaves are thick and dark in color, the following leaves become smaller, and the flowers and fruits are tiny and degenerated, whereas a wild plant having less food and protection thrives much better. The same is true in child's life. If we give the child excessive protection and food, the child will weaken. At each stage of life, the child needs to overcome natural resistances; because it is by overcoming natural resistances that oppose its growth that a road to a free, full and independent life is being built. Thus, in the process just discussed, the two factors of *protection* and *resistance* could be considered as poles between which it is necessary to maintain *equilibrium*.

No other principle is more important in the first cares to be given to children than this principle of equilibrium of influences, and Rousseau, who recognized the importance of personal relationships in the fulfilment of this function, writes:

“No mother, no child. Between them duties are reciprocal, and if they are badly filled on one side they will be neglected on the other. The child must love its mother before knowing it has to. If the voice of the blood is not strengthened by habit and care, it is extinguished in the first years, and the heart dies, so to speak, before it is born (Page 101).

“Still nature is left by an opposite road, when instead of neglecting, the motherly cares, a mother bears them in excess; when she makes an idol of her own child, when she increases and nourishes his weakness in order to prevent him from feeling it himself, and that hoping to withdraw him from the laws of nature she keeps him away from all painful blows, without knowing how much, except for few inconveniences only against which she protects him a while, she is accumulating future accidents and dangers on his head, and how much a cruel precaution it is of prolonging the childhood weakness in comparison to the fatigue of a grown up man. According to the story, Thetis, in order to make her son invulnerable, plunged him in the waters of the Styx. This allegory is beautiful and obvious. The cruel mothers of whom I speak act differently; by plunging their children in softness they prepare them for suffering; they make them vulnerable to every sort of ill, of which they will not fail to be the prey when grown-up.

“Observe nature, and follow the road which she traces for you...” (p. 32). At another place in the *Emile*, Rousseau makes this principle of equilibrium still clearer by writing (p. 60):

“There is an excess of rigor and an excess of indulgence, both equally to be avoided. If you allow the children to suffer, you make them miserable now; if you spare them with too much care any kind of ill-being, you prepare great miseries for them, you make them delicate, sensitive; you take them out of their state of man in which they shall return one day in spite of yourself. in order not to expose them to some evils of nature, you are the instrument of those that it did not give them . . . ”

This balance is of the utmost importance, even from the first years of the child's life. According to recent and credible studies, physicians are well aware of the lack of equilibrium in diseases such as athrepsy and atropy which, in spite of resulting both from defective nutrition, have opposite characteristics (1).

This is also true in the life of the pupil, in a broader sense. The master must feel its way through intuition, and such intuition is possible only when educative relations fulfill all the conditions we have mentioned above. (Page 102) The educative process as we have already discussed resembles the phenomenon of weaning a child, and poor weaning (2), in the educational sense of the word, can cause all sorts of retardations, precocities, anomalies and failures to adapt in education.

(1) Cf the “Précis d’Alimentation des jeunes Enfants” (« Handbook of Young Children Nutrition ») by D’ Eugène Terrien (Paris, Steinhell, Ed.), p. 198: For a long time, in France at least, atropy and athrepsy were confused in a same description . . . It is to Variot that the credit for insisting on this distinction is largely due, by opposing, as Germans had already done, the mere weight atrophy with the athrepsy of younger children”.

(2) This point of view has for proponent the doctor A. M. Hutchison, physician of the pedatric department in the Tavistock Clinic of London. We quote the following sentences from is handbook entitled “Neurosis: a group of symptoms associated with maladjustment” (reprinted in the Revue Internationale de l’Enfant, book VII, 1921): “. . . The reactions between parents and children undoubtedly provide a plethora of neurotic symptoms . . . In these children (that is to say children raised far from their parents), it is the absence of parents and the reactions to the parents triggered by this absence, which are at the basis of neurotic symptoms . . . ”. Continuous dependence on the parents (mother, father, or both) must be regarded as a very fertile cause of *lack of courage in children, constituting, according to the author, a symptom ofneurosis*. (p. 3) Author's italics. P. N.

Generally speaking, it is possible to divide all influences of educative relationships into positive influences and negative influences. These positive and negative terms are more easily explained with regard to the influence of environment on the pupil's personal tendencies than with regard to personal influences. Then, at first, we shall discuss these ones before discussing the different kinds of personal influences. One of the most general distinctions that could be made would be between the influence of the school and that of the family; in the most representative cases, these influences have opposite characteristics in relation to the growth and adaptability of the pupil's personal tendencies. Home is the proverbial place known for resting and moving away from the active world of objects. This is the place where emotions are nurtured. The personality remains there, so to speak, withdrawn and relaxed; relaxation and lack of stress or efforts characterize family life. The soldier of the fable who walks on the battle field, dreams of home as a place of rest. For centuries and in all the nations of the world, popular songs have celebrated this aspect of home and the spirit that it symbolizes. These facts have very little need of proof. Therefore, in general, we have the right to say that home has a negative influence on the child. This is where emotions take root and where the relational aspect of the personality finds its full exercise.

(Page 103) Let us imagine, as a contrast with this state of affairs, a public school composed of thousands of pupils (without taking as an example one of the "Public Schools" of England to which tradition lends a special kind of individuality). The example, which will form the best symmetrical contrast between a public school and the traditions of the home, may be one of those big external schools in America where collective life is accentuated at the expense of individual life, and where the main philosophy directing educational methods aims to make citizens or soldiers. In this case relationships tend to be impersonal and to lack the intimacy and depth that generally characterize life at home. When it comes to seeking objective values through work, the competitive spirit will have a chance to prevail. The subjective values, or, as we have called them in a previous chapter, the vertical aspects of personality, tend to be suppressed in such a collective life, and the horizontal aspects related to pragmatic realities, to objective facts and to social values, predominate at the expense of the child's individual life. Constant adjustment to public requirements necessarily entails a kind of stress which may be opposed to the relaxation of the atmosphere of the home. Exaggerated activity, excitement, speed, and stress characterize the busy life of such a community; introspection, feeling, subtle emotions, sensitivity and delicacy tend to disappear. So, that is the image of a positive environment. It tends to an exaggerated activity, and the stress produced by such a life will cause a premature development of the pupil's positive tendencies. We shall return to this subject in a later chapter, when we shall

have to discuss the different kinds of personal adjustment and development upon which the various educational systems insist.

What interests us more in this study than the question of the positive or negative environment is the fact that those who affect the development of the child may represent and symbolize one or the other of these influences. Thus, it is here that we come to the question of personal educative influences. All categories of teachers could be classified according to the degree of positive or negative influence they have on pupils.

In the center of the household there is the idea of the mother. The mother is indivisibly related to home. The connection between the mother and the child is at its maximum in the event of birth, to such an extent that the image of the mother is, for the child or the pupil, an image of reminiscence. (Page 104) It is the image of the sweet influences of kindness and consolation. The mother is for individual life what home is for public life. We may say that she represents all these aspects, these influences and these incentives, which we have identified as negative. We shall not examine here whether this influence is superior to the positive influences, we reserve this question for a later part of this study. At this point of our discussion let it be sufficient to assume that negative influences are bad.

The purpose of true education is to bring the child from the personal and individual care of the mother, through successive steps in which it will gain its own independence as a member of the family and then as a member of the community and as a citizen, up to the final stage in which it will be an individual of character who will be independent from mass and social approval or disapproval. This implies a careful gradation of the intermediate phases. A mother who claims to take charge of her child's educative responsibilities after the cradle age, that is to say after the age of five, shall often have chances of being seriously handicapped by the very nature of her relationship with the child. Every schoolmaster knows this kind of partiality from the parents of his pupils and he has to fight against it. One of the central facts in educative life is the one of a loving parent who, while saving no trouble in order to give a proper education to its child, may nevertheless act unconsciously to the detriment of that very education. On this point, Rousseau is very clear. In the specific case of his Emile, the conflict between the views of the educator and that of the mother is described with great mastery, and we only need to quote what follows to show how negative is the influence of a mother on her child: "After rather severe reproaches, she tells me that her son was delicate, that he was the sole heir of his family, that he had to be preserved at any cost, and that she did not want that he was opposed..." (Book II, p. 89). The impossibility of a mother to judge her child impartially is one of the most striking and significant phenomena. I had the opportunity to pass this remark about this fact to many mothers; but

as a drunken man would assert that he is sober, so the mother always denies her impartiality by saying that her child's case is different from that of others, that he possesses certain tendencies that no one else shares. (Page 105) I even found very cultivated and very intelligent mothers who fell into this sort of mistakes about their children. They generally complain about people's lack of sympathy. If a boy shows himself impolite at table, the mother will explain the reason by saying that he sometimes likes to entertain himself thus. If a boy is found to be lying, it is because the circumstances prompt him to do so. Such cases are too common for us to enumerate more here.

From all this we can derive an educative maxim: when the purpose of education is to make a citizen or to develop qualities useful in a large community, that is to say when it is based on a pragmatic philosophy or even on a positive idealism, the presence or the involvement of the mother will necessarily be detrimental to the development and to the adjustment of the child, especially when this child has already gone through the stages preceding adolescence. One of the first conditions which must be observed in educative relations will be to remove the child, at a given moment, from the protective influence of the mother and of the home, especially in the education which we shall call "positive". We shall not enter here into the details of these educational systems, the types of which we shall describe in the next chapter. For the time being we shall confine ourselves to the mere assumption that there is a positive education and a negative education, and that the maternal influence on the child tends, in most of cases, to be negative and thus to prevent the positive development of the child. We will set aside the concrete cases which I have experienced for a later chapter which will follow a study on the different educative methods. It will suffice for us that we succeed in conceiving that the first category of educational influences can be imagined as analogous to that of the mother; it is what we call negative influence.

The positive category can not be strictly assimilated to that of the father. It is true that the father represents something more positive in the life of the family than the mother. Rousseau draws our attention to this fact by writing: "As the true nurse is the mother, the true tutor is the father. That they agree in the order of their functions as well as in their system; that from the hands of the one the child passes into the hands of the other one . . . " (p. 34). The intellectual development of the child should not be regarded as coming from the mother, but rather from the father. (Page 106) It is the father who symbolizes the future of the boy. To become like the father when he is grown up is the natural ambition of every boy, and the simplest method consists in following the footsteps of a judicious father. The father is more able to appreciate the needs of the boy with impartiality than the mother who always tends to exaggerate the affective expressions of the boy. By his impartiality, the father is better qualified to guide his son on the path of life than the mother, and to help him

develop some of his positive qualities. If necessary, a father is able to be harsher towards the child than the mother. This means that the father can represent the "resistance" aspect in growth, an aspect to which we have already alluded.

But even there, we must not consider this distinction as absolute. There are many fathers who are more like mothers in this respect. Yet this does not invalidate the generalization we have just made. During my educational experience, I had the opportunity to meet fathers who argued in favor of a preferential treatment for their children. I found tender fathers identifying with their beloved children and siding with them against the educator who desires to be fair and impartial. The secret pact existing between parent and child is so real and so strong that it would be difficult to find a father capable of treating his own children impersonally and impartially, even if he was the wisest. Parents who are wise enough to consider their child with the same eyes as the public are very rare; and when Rousseau writes: "He will be better brought up by a judicious and narrow-minded father than by the most skilful master of the world, for zeal will supplement better talent than talent will supplement zeal", it is necessary to remember not only that the conditions of "judicious and narrow-minded" are very important, but also that it is of negative education that Rousseau speaks in this case; we shall have the opportunity to say more about this in the next chapter. Basically, when we think of education in the comprehensive sense, the father, though sometimes more qualified to guide and influence his child, will always have the same kind of limitation as the mother on this matter. Therefore, our distinction between maternal influence and paternal influence has its *raison d'être* in that it simplifies our terminology rather than as a contrast valid in real cases. The paternal influence emphasizes the "resistance" aspect of the child's growth. Effort, power, positive idealism, spirit of bold adventures: these are the qualities that one might ask a judicious father to generate in his child (page 107).

Paternal influence is also intended to carry out a rapid adjustment to public requirements and public responsibilities. We shall not discuss here whether the father's attitude is the right one or that of the mother. The answer will depend on the purpose intended by the education. For the moment, it will suffice to recall that it is possible to classify all educative influences, whether they come from a person or from an environment, on a scale which includes the two extremes that we have just distinguished. The maternal influence naturally constitutes one of these limits, the paternal influence the other; the concept of the father being extended to that of head of family, of tribe, or of nation, and representing, so to speak, the future of the whole race and of its course towards general happiness; symbolizing finally the qualities inherited from the past and extending into the future. Such a racial father is called in the Hindu mythology the *Kula Pati* or *Kula Guru*. All personal educative influences would find their place on this scale; and the influence of some educator may be

referred to as more maternal or negative than that of some other tending towards the paternal or positive pole.

These terms of positive, prospective or paternal influence on the one hand, and negative, reminiscent or maternal on the other, apply not only to the sum of the tendencies in general, but also to the phenomena and methods observed in the school classes.

Finding different types of master is a familiar fact in our schools. Some seek to interest children by addressing their primitive instincts and taking into account their individual or private peculiarities. They take pleasure in pushing the children forward, so to speak, from behind. There are others who might be interesting but who refuse to be so, because they think it is better to compel pupils to adapt positively as quickly as possible. Those will use stricter methods and insist on public values. Those will use stricter methods and insist on public values. We may classify all the masters according to the relation which they settle thus between interest and effort. By their temperament some individuals are more apt to treat their pupils in one way or the other; certain subjects, and the mental discipline they imply, will sometimes require the dominance of either interest or effort. (Page 108) Thus, in the teaching of physics, the necessity of acquiring a rigorous scientific discipline will require a more serious effort than in the case of literature or languages. A person who is having pupils doing gymnastic exercises would be justified in treating them as a whole; whereas in order to establish a subtle distinction between two works of art, it should appeal to the individual capacities of its pupils, and to the ideas previously speculated by each of them.

Due to the existence of these different levels of personal relations, somehow there arises a maxim of great importance for coordinating the work of the different school masters: it is not advisable that in the same school the different masters employ methods which address very different levels of the children's personality. My experience has shown me how often this kind of variation makes pedagogical work less effective. To mention only one concrete case, let us mention that of a peculiar class to which I taught sciences; the children were coming out of their literature class, in which the professor had tried to make the lessons as interesting as possible; he insisted on the spectacular aspect of the events. The children made puppets and animated puppet shows in class to make the story more attractive. Immediately afterwards they had their science course where they were asked, for example, to understand the principle of Archimedes. I found that the children had a real difficulty in adopting the attitude required for this mental work, more stern, after all, than the games and excitement they had had in the previous class. Therefore, by organizing and coordinating the school work it is always necessary to take into account the personal factor which plays its part in the work. Teachers should collaborate in such a way that the net result on children is sustainable and takes the form of permanent personal habits. This

personal habit shall be determined by consent and general agreement, in its convenient place between interest and effort.

Inhibition and personal relationships

One of the main functions of the educator, apart from maintaining equilibrium, is to provide for positive influences. Educative work always implies this condition; it always tends towards growth, effort, organization and preparation, rather than towards inhibition or negation. (Page 109) Whereas negativism characterizes one of the adjustment phases of individual tendencies, as we shall see in a later chapter, we must say that, if we consider the educative process as a whole, the main function of education is always to help the child overcome its inhibitions. Therefore, in this preliminary examination of certain concepts, let us try to understand the true nature of inhibition. We have to regard inhibition as a victory of negative tendencies on positive tendencies, whether in horizontal or vertical adaptability. The individual provides a certain effort by crossing the levels that separate the background from the foreground, or in other words, by transposing a reaction belonging to the retrospective pole into an "open" action. This is what we have called the conflict involved in the educative process. This phenomenon, through which a latent or virtual act gets at emerging until the "open" act is effected by means of an external force and finds, in cases where the reaction is not objective, the most natural auxiliary in the person of a master, a father, a guide or a friend. In the educative work, therefore, the function of the master is to enable the reaction that will help the child to overcome these difficulties of inhibition.

Nothing is more common in a school class than to meet a child who firmly believes that he can not perform a task. For example, ask a child to reproduce the drawing of a pitcher which has been drawn on the blackboard, and it will answer you (when the child does not feel uncomfortable to express its way of thinking) that it does not know how to do it. Then the Professor approaches: "Come on, we must try before saying that it is impossible," he said. I know you can do it if you try. I do not expect a perfect drawing. When I was a child, I also imagined that I could not succeed in doing things. But I tried and little by little I succeeded, you also have to try. Well, start like this . . . "etc., etc.. . In examining all these encouragements, we will find at their base a common idea: that of establishing likability between the master and the pupil. It is in the fact of establishing an empathy that lies the key to success in teaching. The master tries to substitute its own image as a sort of ladder thanks to which the pupil overcomes its tendencies to inhibition; and it is obvious that this artifice is employed all the more easily because the natural relations already established between the teacher and the pupil are more intimate.

(Page 110) I know the cases of several children whose inhibitions have been overcome when they found a master for whom they felt love and attachment. It is striking how children need someone who is present and who encourages them even for very simple activities.

I remember the case of a seven-year-old girl eating at my table in a boarding-school. The lady who was in charge of her was telling her to eat soup, etc., and was taking care that she should be served properly. But one day this lady was absent. The child found it difficult to eat in the absence of her usual encouragement. She did not want to take anything and waited for someone to tell her to eat. This fact was quite strikingly revealed when she was asked if she did not want to eat, and when she replied that no. I offered to take off her plate, but she protested that she was hungry and that she had to eat something. Similar cases have shown that even in the act of eating, some children may need someone to help them. Natural hunger is not enough, neither putting food in front of them. In their case, the true sense of food must be created by the involvement of a loved one. In short, the child naturally likes to act for someone or something. Any response must be of an intimate personal nature.

It is true that in everyday life it is difficult to isolate the role that personal encouragement plays in instinctive activities such as eating, but the more the activity is distant from the instinctive level, the more the possibility of personal influence is great. This is increasingly evident as we rise from lower instinctive levels of learning towards high positive levels of intellectual reactions. The role of the personal educator is therefore more important in the activities and education of adults than in the education of children, where nature itself fulfills this role to a great extent.

A few additional cases will make the kind of intervention possible for the educator clearer. S. , is a Malaysian girl of twelve years; far from her parents she is educated in a boarding school in Europe. Often nostalgic, excitable and subject to emotional crises, her work in class suffers much from her inhibition. Some of her masters complained of her lack of enthusiasm and regarded her as a retarded child. (Page 111) It was said that she doubted herself and that she found that all that was asked of her was impossible. She repeated to herself a formula according to which she could not do anything. On the stage she was not able to speak properly. She could not write neatly. In mathematics she was so obsessed with her inhibiting tendencies that she did not even try to solve her problems. In botany when asked to draw a leaf, she whispered that it was difficult, that she did not know how to do it, and that moreover it was not worth it. She was of the opinion that sciences were not useful to her because she did not want to make them her profession. In spite of all these general inhibitions, she excelled in certain branches of her work; thus, when she had a special empathy for a teacher, she worked very hard for it, and she often obtained a very good result. Her geography teacher, for example, showed her an intimate interest, and the child

was good in this subject. Once a new English teacher arrived at the school; the girl became intimate with her, and the teacher showed interest in her: Substantial progress was made in these matters, and the child was able to overcome her inhibition tendencies to a large extent. She also showed a lot of enthusiasm for cooking and household work, work that she performed as well as an adult. Thus, this is a case where a child refrains from any action, except from those of immediate use, or from those that may please someone it loves. So that the child overcomes the inhibition potencies which oppose responses without immediate utility, the intervention and the help of a personal educator become necessary.

The third case is that of a fourteen-year-old Hindu boy who was very good at singing. He was studying music well, but he was suffering from a negative autosuggestion which made him think that certain rather high-pitched notes could not be reached by his voice. Yet his music teacher had noticed that he reached even higher notes when he was unconsciously led to use them in the middle of a song. But when asked to raise his voice in a conscious way, he shook his head and refused to try; he said and believed it was impossible. At one point, a lot of personal suggestion was needed to make him think he was capable of it. Once the music teacher urged him by strongly suggesting that it was possible, he tried and overcame inhibition once and for all. (Page 112) The drawing and painting teachers are certainly the most familiar with these examples. In her very interesting book entitled "Our enemy, the child", Miss Agnes de Lima tells how a drawing teacher of her acquaintance helped her pupils to overcome inhibition potencies. This narrative is a good example of how the teacher can intervene effectively in the development of the child ability: "Mrs. Cane does not use any of these amazing teaching methods. Children have no models or any kind of instruction or guidance. The instructions of Mrs. Cane are limited to mere technical issues, such as the care for brushes, etc . . . She never works on a child's picture, and unless she is asked, she never offers any suggestion whatsoever. In the usual way of teaching, the child is prevented from advancing freely by some internal inhibition. "

Fear of failure is the most frequent inhibition. She quotes the case of a little girl who, having painted her first painting (a rather conventional subject: the study of a vase of flowers), was sitting looking at her blank canvas; she wanted to do something of her creation, but she was afraid to start. "I do not know how to paint! » she cried after a while. "What would you paint," Mrs. Cane asked her, "if you knew very well how to paint?" Obviously an idea came to her like a flash, for, writes Mrs. Cane "her face lit up and she began to depict a scene that had impressed her. A sea and a gray sky, a sandy beach and a small old woman in black lonely on this beach and looking at the sea. The description was so clear, and it was steeped in such an intense feeling that the impression must have been very strong. I told her: "Well, where would you put . . . your beach? "Her hand briefly depicted a line. "And where would it meet the sky?" Another line was briefly drawn. "And the old woman?" I asked. She stopped and said: "I do not know how to draw an old woman with a shawl. "So, I offered to

pose. I pulled a pullover over my head and shoulders like a shawl and turned my back. She drew it quickly and thanked me. I left her, and she finished the painting without further help; it was a very good work, with a real sense of the sea, a gray atmosphere, and the whole was full of beauty. It was only her second painting, but the feeling of having lived this scene had made her overcome the problems that had presented themselves. She had forgotten her fears. " (Page 113) The honesty and scrutiny of this description add value to this typical case, which allows us to study the factors that can help to overcome inhibition. In the first part of the narrative we observe that the mistress appeals to the child's feeling and gives her the opportunity to revive her memory. She removed from the mind of the child the barriers that stood there because of the difficulties inherent in the task, by leaving them aside, and by giving to the child's imagination the necessary impetus. Hitherto she had transposed the potencies of the child from the past incident to the future possibility. She then continued by fragmenting the task, and by proposing objectives, which, taken separately, would be within the limits of the capacity of the child's mind. Once the task is completed, the immense weight of the inhibition is overcome.

Such subtle methods are at the basis of the impact of an efficient teaching, and it is only in the personality of the master that reside all the possibilities of giving the impetus from the past to the future, and of overcoming the apprehension caused by the enormity of the task. As other familiar cases of a similar influence, we could quote the example of Sanderson of Oundle (Cf. H. G. Wells: "The Story of a Great Schoolmaster", New-York, Macmillan, ed.), by Bakule, who has formed one of the most famous children choir in the world (Cf. Ad. Ferrière: "Bakule et Son Oeuvre Educatrice"). Many other examples could be added to this list; among those I have personally observed, mention must also be made of the intimate and extraordinary influence exercised by Miss Alice Descoedres on a group of mentally weak children, in Geneva. We shall postpone to a later chapter a more comprehensive discussion on the different kinds of personal influence in the various types of education; this will form the subject of the following chapter.

CHAPITRE III

THE NATURE OF PERSONAL INVOLVEMENT AND THE ADJUSTMENT OF THE PUPIL IN THE DIFFERENT TYPES OF EDUCATION AND AT THE VARIOUS STAGES OF THE PROCESS:

IN NEGATIVE EDUCATION

After having examined different aspects of our subject, we are now in a position to undertake a study of the entire educative process, and to use the concepts and terminology developed so far. In this part of our study we shall attempt to examine the whole educative process in its relation to the development of personality. In this process we will distinguish four genetic phases differently commented by four schools of pedagogical theory. We will note some typical cases of "maladjustment" for each of these phases.

It may be useful to recall here briefly the nature of the change produced in the individual through education, as reflected in our previous discussions. We have seen how we can speak of two sets of very distinct tendencies which must be considered as totally independent given the nature of the environments in which they evolve. The educative process would then consist in considering the personality as the fundamental value of these two environmental aspects. We have called *horizontal adjustment* the one which consists in developing the perception of space and which concerns the practical life without much worrying about what is not immediate. The other kind of adjustment is more subjective and refers to behaviors acquired in the past and that are generally modified with a view to future action. This adjustment, which extends in time rather than in space, we have called it *vertical adjustment*. (Page 115) The purpose of education will be to improve the efficiency of the behavior related to distant events of past and future, while maintaining close and as extended as possible relations with the present. Developing a method that cultivates this double adjustment, without violating the genetic laws of growth, is what constitutes the main problem of education. When shall we give priority to the vertical aspect of growth, and when shall we let prevail the horizontal adjustment proper to each phase? When to use means and negative influence, and when to focus on positive ones? Here are some of the questions that arise.

The main characteristic of the first period of adjustment of individual tendencies is vertical and negative. It is the period, in the child, of mental and physical internal organization and of the development of relational and *a priori* knowledge. Among all the modern educators, it is Rousseau who has the merit of having recognized the nature of this first development of the child's personality. We read in his *Emile* (book II, 67): "Thus the first education shall be purely negative", and it is to his name that negative education is always related. Freedom and natural growth are ideas on which he insists. He believed in something innate in the nature of the child, which, provided it is left alone and intact, will develop for the better. It is this attitude which has led some to believe that Rousseau was, like Herbert Spencer, a Naturalist in education; but, as we shall see later, this is far from the truth. Rousseau was essentially an idealist, while Spencer's philosophy is hedonistic. Negativism and idealism are the fundamental tones of Rousseau's educational philosophy. Thus, dealing with the educative doctrines of Rousseau when speaking of the first adjustment of the child's tendencies is justified, because these doctrines correspond to this phase of the process of personal adjustment that we call negative and vertical.

Long after weaning, when the child seems already emancipated from the need of an immediate influence of the parents in its ordinary life, the personality of the child still needs parental care; it is only to the detriment of the harmonious development of its faculties that the child can experience directly certain harsh realities, especially in modern life, so-called "civilized" and, in fact, above all artificial. (Page 116) All Rousseau's ideas on pedagogy have a discontent against the premature adjustment to artificial life as fundamental tone. By a return to nature he does not mean, like Herbert Spencer, that education aims at the study of sciences and natural phenomena for a utilitarian purpose, but that it aims to learn how to avoid society's artificialities. We only have to read the first paragraphs of the *Emile* to feel this attitude which is the basis of the doctrine; the words would bear that we repeat this quotation: "Everything that comes out of the hands of the Author of things is good; everything degenerates in the hands of man. He forces one kind of soil to yield the products of another, one tree to bear the fruits of another, he mixes and confounds the climates, the elements and the seasons; he mutilates his dog, his horse, his slave, he disrupts everything, he disfigures everything, he loves deformity, monsters; he does not want anything in the way nature has made it, not even man himself; according to him man has to be trained like a saddle-horse; he has to be shopped according to man's fashion like a tree of his garden".

This discontent is not merely a vain and empty enthusiasm for nature and its primitive conditions; by "nature," Rousseau means something that is innate to the child, and he begins to explain his idea in the following terms: "The internal development of our faculties and our organs is the education of nature" (p. 21). Negativism in education is inseparably related to

what Rousseau calls natural education. By this term he means that part of the educative process that does not depend on the master or on the things which surround the child, and explains: "Now, of these three different kinds of education, the one of nature does not depend upon us" (p. 21). It is clear that by "nature," Rousseau means something distinct, something which is the very essence of goodness or of God, something that we inherit and that any ill-timed action on our part would only be able to spoil instead of improving. He himself, in the following lines, recognizes that the term "nature" is improper to express his thought: "But perhaps this word of nature has too vague a meaning, it is necessary here to fix it.

"We are told that nature is habit only. What does that mean? Are there not habits that are acquired by discipline, and which never stifle nature? Such for example, is the habit of plants of which one disturbs the vertical direction (page 117). The plant when given back its freedom keeps the angle one has forced it to take; but the sap has not in the least changed its original direction; and, if the plant continues to grow, its prolongation becomes vertical again. It is the same with people's tendencies... Certainly education is a habit only". With this conception of education, Rousseau is very close to a terminology that we used in this study, distinguishing vertical adjustment and horizontal adjustment. True education would consist, according to him, in maintaining the primitive and subjective inclinations or aptitudes which come to us from the past. It is these inclinations which, nourished and preserved in the first years, would help the individual to persevere in the direction of progress throughout its life. Such education is individual and subjective. For such an education, Rousseau insists that the child be isolated from all contact with society and from the conventions of collective life. It is in the following terms that he protests against any intervention of society: "Thus, do you want to stimulate and nourish, in the heart of a young man, the first movements of an awakening sensitivity, and turn his character towards charity and kindness; do not at all cause to germinate in him pride, vanity and envy, by the deceiving image of the happiness of men; first of all do not expose to his eyes the pomp of courts, the splendor of palaces, the attraction of the theatres; do not bring him in high company and into brilliant assemblies, show him the exterior of high-society only after having put him into a condition of appreciating it in itself. To show him the world before he knows men, is not to discipline him, it is to corrupt him; it is not instructing him, it is deceiving him". The subjective nature of the adjustment referred to in this passage of *Emile*, and in many others, can not be ignored. Subjective and personal behaviours are more important in Rousseau's education than objective achievements. Rousseau calls on the mother to protect the child from premature contact with the common events of public life. He would like to see its early years surrounded by her protective influence. The care of a loving mother is very important at this stage of negative adjustment. It is by mentioning the negative influences that play on the child that he writes: "It is to you that I speak, tender and far-sighted mother, who knows how to remove it from the highway and to protect the new-born sapling from the impact of

the opinions of the people! Tend and water the young plant lest it dies: one day its fruits will be your delight. Erect as early as possible a wall around your child's soul; somebody else can mark the circumference, but you only have to construct the protective barrier on it". (Page 118) There should be no mistaking the negative, introspective, emotional and relational nature of primary education as envisaged by Rousseau. The analogy employed by Rousseau, with a young plant to be watered and protected, is particularly well-chosen because it symbolizes all that is important in the adjustment of tendencies at this tender age. The young plant must take root before it begins to grow, and this is the period of negative adjustment that requires the protection, isolation and intimate compensation of emotions that only the intimate relationships with the parents or the educator provide. The negative nature of this adjustment is seen better than ever in its discontent against any attempt to cultivate at this age what is called an intelligence response. "Our teaching and pedantic obsession", he writes, "is always to teach to the children that which they would learn much better by themselves, and of forgetting that which we only could have taught them" (P. 55 II). He insists that the necessary time be devoted to all attempts at development on the positive side of the child's personality [1]. He insists that the necessary time be devoted to all attempts at development on the positive side of the child's personality. He writes: "Of all the faculties of man, reason, which is so to say, only a compound of all the others, is the one which develops the most difficultly and the latest; and it is this one which one wants to use for developing the firsts! The master-piece of good education is to make a reasonable man: and we pretend bringing up the children with reason! (Page 107) It is to start with the end, it is wanting to make it the instrument for the work. If the children understood reason they would not be in need of education...Nature wants that children should be children before becoming men. If we want to pervert this order, we will produce precocious fruits, which will have neither maturity nor flavor, and will not delay in getting spoiled; we will have young doctors and old children" (P. 64-65). A premature appeal to the child's reason is not only out of the natural order but shall cause permanent harm to the subsequent adjustment of the individual.

Thus, the arguments in favor of a negative adjustment of the young child tendencies are perfectly clear in Rousseau's philosophy of education. Indeed, it is clearly at this stage of education that the negative or relational pole, as we have described it in the preceding chapters, adjust generally to the environment in the broadest sense of the term.

(Page 119) The age at which it is appropriate to quit negative education and to begin positive education is a matter for speculation. Truly speaking, the main features of negative adjustment continue up to a medial age, when the horizontal adjustment is complete. But in practice, the educator may neglect this need for negative adjustment once the critical

[1] Note of translator: I guess that the end of the original sentence was missing.

phases of adolescence have been gone through. About the relations of adolescence to independence, Stanley Hall writes in "Youth, its Education, Regimen and Hygiene", (New-York: Appleton, p. 120): "An interesting and unsuspected illustration of the growth of independence with adolescence was found in 2,411 papers from the second to eight grades on the characteristics of the best teacher as seen by children". After adolescence, children do not appreciate being helped in their studies, even though they appreciated it long before. In order to achieve a balance between the positive and negative influences undergone by the child at this stage, the positive ones must always be diverted in favor of the negative ones. In the early years, this predominance of the negative on the positive is well marked, and gradually diminishes as the child advances towards the median age. Thus, all the care and observation of a sagacious educator is necessary to discover the symptoms and beginnings of an "misadjustment" such as the preponderance of positive responses and influences on the negative ones. It depends on what we want to do with the child, and hence on the personality of the educator himself. The school organization, the rules and all that is rigid and impersonal in school life, must conform to this end to regulate the influences that affect the child. The rules must be provided with a high capability of change and adjustment for particular cases. Thus, education becomes a strictly bi-polar phenomenon between the educator and the "educande", fulfilling the conditions for the intimate and personal relation of pedagogy of which we spoke in one of the preceding chapters (p. 51). We will recall here one of the rules of the first education: that it is better for the child to remain as long as possible at the charge of the same person. Negative adjustment requires a quite stable duration in relationships, and too frequent changes can cause as much harm to the child as repeated changes of place to a growing young plant. This is especially true for the former than for the last period of the stage which falls within the field of negative education.

We have said enough to make clear what we mean by subjective negative adjustment of the personal factor. (Page 120) It remains for us to support this theoretical conception by a few concrete examples observed by the author. Some of these cases have already been described in the previous chapter concerning the preliminary examination of concepts. But let us now take a few specific cases to discuss them in detail. They could be divided into two classes: 1°) Cases where protection and negative influence have been unduly extended to the detriment of the development and adjustment of the child; 2°) Cases where horizontal or positive tendencies have been prematurely encouraged, which led to another kind of "misadjustment". We will consider the symptoms of these two series of "misadjustments" from the educational point of view and discuss their possible remedies. Since the individual's early years belong more to the field of the educator than pre-adult or adult age, we will devote greater attention to the "misadjustments" of negative education.

L. was a boy of Swiss-German origin aged 11 years. He was physically strong; his neck was rather short, his head rather small; his shoulders slightly leaning forward and his chest usually tucked in. His face still retained his childish features. When he spoke, he had a slight frown and never looked you in the face. His eyebrows were frowned when he was inactive.

The main characteristic of his reactions was the complete absence of calm. Every moment of his life was filled with reactions which made him a rowdy, boisterous, swaggering, and swearing boy. He was constantly making noise; in class we were always obliged to remind him to keep quiet. He abounded in stupid remarks and asked questions which did not make any sense. He rushed from one occupation to another; left alone, he did not know what to do. When he had to remain quiet, in a meeting or at any other occasion, he made jerky movements of his head, looked at everything around him and was making a fuss in every way. These responses had become chronic; punishments and class expulsions did not make the slightest impression on him. Although a punishment fairly affected him, he quickly forgot it and he was just as excited after as before. His parents were divorced; the child lived with his mother who was employed at the school. The father rarely came to see him. L. did not even respect the authority of his mother and escaped when she called him; (page 121) he had neither esteem nor kindness for her.

On analysis, we discover that these responses last for a very short time, that is to say, they are reactions that we would call horizontal. They are not linked to the past since they lack regard, emotions, friendliness, etc; nor are they linked to the future, since they are not developed for the purpose of doing good. They are neither cunning nor intelligent, but are the expression of impulses. Filling all his available time with short responses prevented him from keeping his mind on any subject, even for a short while. It was not that he was unable by nature of performing tasks requiring patience and care, but that these short-term responses prevented him from finding time to do so in the course of his daily routine.

Moreover, these horizontal actions had the characteristic of being totally premature. The boy was coward and insufficiently developed on the positive side. A girl of his age frightened him. Despite all his boasting, he was afraid of touching a soccer ball during the game if his opponent was nearby. He refused to go out alone in the darkness. In all his undertakings he suffered from what might be called a complex of inferiority, a weakness he tried to hide by a disobedient or defiant air. He was unable of thinking of the implications, even immediate, of an act; when he found himself surprised by its unpleasant consequences, he protected himself by a kind of indifference or immobility that rendered him insensitive to pain or danger. All that concerned the future, he dreaded and avoided it cowardly.

Reactions related to sexuality became evident early in his life and his education suffered in all respects. He realized that he should not behave badly, but it had become such a habit for him that he felt incapable of correcting himself without a great outside help.

Here we have a case of "misadjustment" in the growth of personality. Let us now discern the causes of such a "misadjustment".

The main fact that must not be forgotten in this case is the fact that the father and the mother live separated and that the boy was still under the influence of the mother long after weaning. (Page 122) Moreover, the child was born out of a working class and had inherited from his parents' active tendencies to a remarkable degree. He had been placed as a boarder in a school attended mainly by children from rich families. His mother, who was present throughout his stay, was always ready to take his side when he had difficulties with the other pupils. He ate, slept and lived like other children who were used to comfort and idleness, and it was in this atmosphere distorted by inactivity, luxury and welfare that his naturally positive side was decrease and oppressed. All the opportunities to develop resistance were systematically removed. Furthermore, everything that would have made him think of the future was completely missing. Besides, the school was one of those in which the protective aspect is accentuated. Thus, the negative side predominated at the same time at school, with the mother and in the educative conditions. The active temperament which the child had inherited could not at all be naturally expressed in action.

As the summer holidays approached, it was impossible for the mother to keep the child with her, and he was sent to work on the school gardener's farm. There he was always under the supervision of a single person, and he took a real pleasure in the daily occupations of the farm. Instead of his mother, there was a rigorous worker who did not accept trifling apologies and did not show him too much respect. In addition, this man symbolized for the child his own future, physically and mentally, and thus exercised an influence which it was impossible for the mother to exercise. Thus, when he had to correct him for some negligence, this man constantly alluded to the future career of the boy. When the holidays were over, the boy obtained one of the best behaviour and assiduity marks he had ever obtained. His face and eyebrows were lighted up. His face and eyebrows were shining. For the first time he was seen having regard and kindness for his younger brother and his mother, as well as for other school children to whom he brought gifts.

We must point out that the objective manifestations of the symptoms of "misadjustment" show wide variations among themselves, even when they belong to the same group of "misadjustment". The misadjustment of a more tender age manifests itself by symptoms which are apparently quite different from those of a later age belonging to the same category. Before symptoms can be classified with any accuracy, a detailed diagnostic procedure must be developed. But it is always possible to recognize the differences approximately.

Let us now consider the case of the younger brother of the boy of whom we have just spoken. The fact that these two brothers were brought up under similar conditions will allow us to easily compare the two cases of misadjustment. M. was aged 7 years. He had a pretty childish face. The shape of the head was normal, his size rather below the normal. He did not have the puckered forehead of his brother, but he had an absent and dreamy look, and made faces and uncontrolled movements of his head when he was obliged to keep quiet. His muscles were not developed, his body was frail and his neck quite weak.

His reactions were mainly characterized by an almost continuous fatigue or indolence. He was sometimes capable of making an effort, but this effort was of short duration and soon gave way to a certain lassitude. When he was weak in this way he was often seeking the caresses of his mother of whom he kept on thinking. He often found excuses during working hours to go and see her. This search for emotional satisfactions increased with the approach of night and sometimes took the form of an unreasoned need to be reassured on his mother. One had only to suggest that his mother had left to upset him. The children of the school, who had noticed this weakness, often took advantage of it to make fun of him. He was coward and was only able to weep and call his mother when someone attacked him. A girl younger than him defeated him easily. She had only to raise her hand to make him move back from fear. As for his intelligence, he was incapable of effort. Once we tried to introduce a competition element into one of his writing lessons to see if an artificial stimulant would help to awaken his abilities; but it was useless. He was an affectionate and very emotional boy, but affected by infantilism. Like his brothers his sexual impulses and other instincts were precotiously awakened. He also had difficulties to sustain his interest for long, and passed very quickly from one state to another. The same indifference towards the consequences of his actions and the same insensitivity as his brother began to manifest themselves in him. He was not as unconcerned as his older brother, but some elements of this same unconcern were revealed in his complete inability to remember what he had been told, or in his incapacity for considering anything that was related to the future.

He was not as unconcerned as his older brother, but some elements of this same unconcern were revealed in his complete inability to remember what he had been told, or in his incapacity for considering anything that was related to the future. He was not as unconcerned as his older brother, but some elements of this same unconcern were revealed in his complete inability to remember what he had been told, or in his incapacity for considering anything that was related to the future. (Page 124) His ideal was to work as a gardener or porter. The absence of a father whom he could imitate with enthusiasm prevented him from projecting himself naturally into future activities. On the other hand, he still slept in the same room as his mother and continued to undergo a negative protective influence of which he was over the age since long. It was true that he needed protection and care, but all that had to be adjusted in a different way so as to develop somewhat his positive side as well. It was a case of educative weaning failure. The child needed to overcome more resistance than what school life provided. Moreover, it was necessary to organize activities for him personally by making them as similar as possible to what he would have had at home. Confirmation of this was shown when this boy was separated from his mother for a few days. The unavailability of his mother's influence made him respond more quickly to the educative influence of the master who had taken care of him during these few days, and the master's report showed that the child was reacting better and behaving better when placed in a new environment. But soon after he had fallen back into his original environment, he recovered his usual manners. Yet these new habits would have been established in a more permanent way if the treatment had been continued long enough.

Here is now how we can compare the main differences between the symptoms of the two cases. In the first case, the emotional aspect of the personality was already beginning to weaken. This boy had no respect at all, even for his mother, and did not hesitate to disappoint her; whereas the younger brother was happy to help her and was devoted to her. In the elder, the horizontal response had already taken the form of a tendency to fight and attack aimlessly, combined with a kind of fear inspired by cowardice rather than by a need for protection. Although indifferent to the consequences of an act, he showed apprehension in situations that were in reality without danger. In the younger such horizontal adjustments did not yet occur, but they were manifested mainly by a certain laziness and by alternating states of exaltation and depression in which the emotional side predominated. Some of these emotional expressions were precocious and took the form of a certain sensuality which was particularly evident in the younger. The remedy has been sufficiently described in the observations quoted above. In fact, both boys needed their mother to be replaced by a more positive, more forward-looking person. Their life was too easy and protective and lacked purpose to be reached. (Page 125) This state of affairs was complicated by the fact that they had to adapt themselves too early to a life hitherto unknown to them, and to which they had not been accustomed by a gradual and natural

touch; and by the fact that they were mostly surrounded by many people without being influenced or guided by anyone in particular. In this case the remedy would have been isolating them and entrusting their education to a single person for an extended period; enabling them a sufficiently quiet life in nature and substituting to maternal influences others that would have ensure and develop more independence in them. We shall have occasion later to quote cases in which such a cure could be completed.

The diagnosis and the remedy which we just mentioned will be made clearer by discussing some other cases. Let us take the case of two young Americans; brothers respectively aged 6 and 8.

The elder of the two had symptoms typical of a lack of negative education at an early age. Physically he was strong, but very slight and thin. His muscles were all formed and tense, but they had too little volume, so that they looked like sticks. His head was small, his neck long, and he was full of physical energy.

His responses were excessive on the positive side. It was impossible for him to remain quiet. He fought with his neighbors, shouted, or made sudden movements without reason; in short, he was always engaged in doing one thing or the other. Even his sleep was very uneasy; and even after being lying for a while, he would sometimes jump out of bed and remain in a state of extreme stress. Stress, hyperactivity and carelessness were some of the most striking characteristics of his behavior.

His emotional life revealed a total lack of consideration for others. He showed no compassion for animals. He kicked, fought with anyone. He had no restraint in front of strangers, and trotted out rudeness from the first day. Even at mealtimes, if by chance he was excited, he forgot to eat and got up from the table still hungry. His whole psyche was overloaded with precocious positive horizontal responses, which were detrimental to his health and education. Very quick to grasp the objective and scientific facts, he was extremely weak in taught subjects requiring patience and foresight. His writing was disgraceful, and he was unable to achieve a short letter for his parents in one go.

(Page 126) A review of his history revealed a disability related to his very birth, a pre-term birth. Subsequent activities tended to exacerbate, rather than delay, his positive

developpement. As an extern he attended a large school where he was part of a large class. These conditions caused an overly positive adjustment which later made it difficult for him to react normally.

The younger brother of this boy had the same characteristics but in a less accentuated way given his younger age. He was neither too slight nor too thin; he did not suffer from as much tension as his elder brother; but the same system of emotional and mental responses occurred in him. He showed an extreme interest in the material world and liked the study of nature and physics. He was able to sustain his interest and diligence longer than his brother, and if he wished, he could achieve a letter for his parents with sustained attention. He showed more attachment and respect to those who came into contact with him, and he showed a little more, though not significantly, that timidity peculiar to his age.

Here also, the negative education of the early years should have been more comprehensive. The father was very busy, and the mother did not spend enough time with her children. In addition, these children were hereditary predisposed to an excessive activity. When they were entrusted to a single master who increased their rest periods, gave them more dairy foods in their meals, and granted them more supervised periods of tranquility, then there has been an improvement.

There are other cases with more complex symptoms. They occur mostly in children who have undergone different kinds of treatment at different times. They occur mostly in children who have undergone different kinds of treatment at different times. They occur mostly in children who have undergone different kinds of treatment at different times; in such cases the consequences are disastrous. In this connection, we can mention the case of a 10 years old (Italian) boy.

At the age of 9 this boy had been accepted into a school, as an intern.

He was quite thin and quite pale, but like the boys of the previous case he had too much muscle tension for his age. Previously, he had been in a boarding school where strict discipline had been imposed on him. (Page 127) There, his reflection had developed, and he had shown himself capable of intellectual work - the old schoolboy standard. He often spent long hours at work, but his health suffered.

Because of these health reasons, and because of certain peculiarities of his emotional life, his mother took him out of this male-type school, in order to put him in a new school in Switzerland, a school where the pupil is freer and where we take care of it individually. These emotional peculiarities consisted in this: his family life was single-sided because he did not have his father to guide him. It was the mother who was always with him. Thus, he shared his life between two diametrically opposed environments: the one very positive, and the other too intimate or negative.

Under these conditions the boy began to feel a certain deterioration of his personality, where periods of activity alternated rapidly with states of emotional depression during which he sometimes cried for no sufficient reason. The tender emotions worsened until they became an anomaly that the mother noticed and whose complications she feared.

These conditions improved greatly when the child entered this school, where he was separated from his mother. He attached himself to a few masters of the school, which generated a better balance between his tendencies. He had spent a year at the school thus separated from his mother, when she entered there as a mistress. The effect of this change was felt immediately. Immediately, suddenly, an abyss was formed between his public life and his private life. He began to spend time with his mother, seeking to obtain exclusive care from her. Thus, he separated mentally from the rest of the school; the attachment and admiration for the other models he had chosen went down. He began to complain that no one at school liked him anymore. At other times he expressed the desire to live by himself, without any relation to others. Similar sentiments had on the boy's education, effects which contrasted sharply with those of the preceding year. He began to show signs of agitation. He often repeated that he was unhappy at school, that he and his mother wanted to leave in order to live alone because the people in the school were not nice enough to him. He had a strange desire to make an exception to the rules of the school. He delighted in the feeling of being a boy apart, not one among many others, and in the feeling that no one was capable of understanding him. (Page 128) When he was accused of having done something forbidden, there was a marked difference between the version of the incident given by the mother and that given by the other masters. The tendency of the mother was to excuse his faults by giving explanations sometimes psychological, sometimes personal, but always ingenious, to excuse the behavior of her child; without being invented or false, these explanations were nonetheless expressions of her own attitude towards her child.

Thus, the relationship between this boy and the rest of the community became more and more tense. The child clearly began to show tendencies towards a more serious "misadjustment" of his development. He felt more and more unhappy. He tried to artificially draw attention to himself by initiating actions that would force others to be angry with him or to take care of him in some way or another. Some of these acts began to reveal distinctly tendencies to kleptomania (1). To cite but one example, for no special reason, he was going on hiding the letters that the others received.

The case of this boy is characterized by the absence of sufficient positive influences. His life gave him too little resistance to overcome, whereas his heredity prepared him to overcome much resistance and to make efforts; the absence of such resistances diverted his energies in wrong directions, in which he went astray, for he lacked a qualified and attentive guide. At the time he felt safe and never had the opportunity to worry about assuming his future responsibilities. Again, the remedy is already indicated by the noted observations. The best treatment for this child would have been an authority focused on the future, an authority effectively balanced according to his age. It would have been necessary to remove the child from maternal care, which was too deficient, to entrust him to the appealing authority of an educator who would have directed him more frequently towards the future, towards public life, and not exclusively towards past and individual things.

Let us consider now one or two cases of precocious positive adjustment in young children.

(Page 129) Mr., is a boy of American nationality, aged 6 years. There was a look of pain on the rather small face of this boy. His arms and neck were thin and rather small for his age, but his expression was stern and matured like that of a much older boy. He did not smile, was easily irritable, and often became angry. He had strong opinions about what he wanted

(1) In this regard we read the following paragraph in "Action et Pensée" by Charles Boudouin, oct. -déc. 1930 (7^e année):

A child who feels frustrated with the affection to which he is entitled, is willing to steal, sometimes in a very thoughtful and utilitarian way, sometimes in a very impulsive way and even when he will not derive any benefit from its theft. It is both an act of retaliation and compensation.

or did not want, and he knew how to express his view in unambiguous language. What he abhorred most of all was the eventuality of any physical pain, and when he unexpectedly hurt himself in any way, he promptly let himself go to outmost restlessness and anger. At the slightest scratch he screamed without being able to stop. He was able to reason about different things and especially about the lack of precision of the people he could not bear.

In class, he had a particularly clear pronunciation and writing for a boy of his age. He was able to write letters full of well-told facts, and did not need help in this field, although he did not at all worry about inventing a personal spelling for certain words. In short, his intelligence was extremely well organized, and it was precocious. All his thoughts were as classified and ready to be used.

On the emotional side, he expressed an evident discontent at nearly all times of the day. He was all the time excited and restless, looking for new objects of satisfaction, but he constantly seemed not to achieve the purpose. This was also the case in his relations with the people who were taking care of him. He showed extreme discontent, and seemed to be asking for more interest in him. He was happy when he had a person all his own, who was walking or chatting with him, reacting carefully to each of his desires and each of his fancies. At all hours of the day he provided enough work to occupy a nurse fully.

This constant restlessness caused him to eat less and less at meals, and his health began to suffer on the whole without there being any specific disease.

The disorders of this boy must be partly attributed to heredity. Both parents were persons with an outmost positive development. The mother was a good writer. The father had a very lively and very practical mind. They traveled a lot and the child had hardly any home life. During his early years he had been in charge of different persons, and these continual changes were the reason for his precocious tendency to a positive adjustment that caused his restlessness. (Page 130) His need for affection had been continually disappointed by the lack of close relationships with the same person over a sufficiently long period. There is another reason for his symptoms of restlessness and discontent, it is the fact that he had to adapt to community life at a too early age. This was demonstrated by the fact that he responded well to a person who showed him a genuine and lasting interest, and that he remembered such relationships for a long time. He wrote letters to the people to whom he had thus attached himself and had fond memories of them. With such persons he was likely to correct himself, and he derived considerable satisfaction from their company.

Later, the boy was taken away from this school so that he might live with his mother. But this move did not help matters much. The too precocious adjustment of the first years to a positive and horizontal life had spoiled the life of this child to such an extent that a rectification was becoming more and more difficult.

This adjustment typically positive and highly horizontal is often seen in children who do not have a home. This fact has already been recognized to some extent by authors such as Stanley Hall when he writes, for example, that "with home restraints once broken, the liabilities to every crime, especially theft are enormously increased" (op. cit. p. 125) or that to correct young criminals "the home sentiments need emphasis" (p. 137). Persons working in social services, such as Mrs Vajkai in Hungary, have pointed out the extreme intelligence of street children in their day-to-day affairs.

My own observations of these children who have no home have more than confirmed the findings of educators and social workers. During my work with the children of the Madras slums, as well as with those of the Fernhill experimental school, this phenomenon has become clearly apparent.

The ordinary boy and girl with no suitable family life tend to develop a big positive precocious adjustment, and when a true idealist education fails, such children become "misadjusted" children. They know much more than they should at their age on the daily and ordinary aspects of life, and it is quite likely that in many cases such a precocious horizontal adjustment will lead them to a life of criminality.

(Page 131) One of the symptoms commonly noticed in such children is their disposition to exhibit a precocious muscular tension. The rounded features and the soft and supple forms of the childish body yield to forms in which the muscles clearly stand out. The facial features, instead of being rounded, become precociously angular. Children become rough, cruel, in some respects brave and bold, but coward under other circumstances. The signs of adolescence, such as the breaking of the voice, seem to take place earlier. In a word, the organization of the body is completed before the size and volume of the body have had time to adapt.

The symptoms of emotional "misadjustment" are more difficult to detect. One of the most common is the absence of tender emotions like pity, etc... Responses are generally quick, lacking foresight and patience; they are of practical nature, and are most often very well adapted to the needs of the moment.

Left to itself and quickened by a life carried on under these circumstances, such a one-sided development leads children later to physical, moral and mental ruin.

For several years the author had the opportunity to observe the growth of four beggar children. This observation had been made easier by the fact that all four were giving themselves the job of making strange noises as they ran behind the trams at the corner of a street in Madras. For several years I was very regularly on this tram. The children were two brothers and two sisters. The eldest was a girl, the youngest was a boy. They did not seem to possess a home worthy of the name, since they were there at all hours of the day, and slept on the verandahs of the houses during the night. They lived on what the people in the trams were giving them.

The youngest child was normal and possessed all the normal features of a child. His face was round, and he had the innocent gaze of a child. The same was true of his older sister; but as she grew, the tone of the muscles soon changed; they began to organize themselves precociously and to adjust to the activity. Even the muscles of the chest and abdomen were taking shape. She was a stocky and strong girl with a thick neck and a voice that was breaking despite her age as young as 10 years old. Her elder brother had gone through a similar stage of development. He was neither strong nor healthy anymore and already showed indications of a delicate health. Though he was little more than 11 years old, the upper part of his body became smooth and his sturdy appearance gave way to an air of weakness. (Page 132) Finally, the eldest daughter, whom I had also seen when she was still almost normal, had passed through the other two stages and was then completely disabled. Her voice was no longer feminine; she had become wizened and unfit for maternity. For these children it was not simply a matter of feeding, for they were constantly seen eating something. It was a matter of undernutrition or over-nutrition or lack of stable life; since it is a fact that, alongside purely material factors, the calm and protection of life around a home also contribute to maintaining the child's growth equilibrium (1).

(1) These observations are confirmed by experiments and remarks such as the following, extracted from the "Teacher's Encyclopedia", p. 8, book 4, where W. H. Drummond writes this:

"Children commonly referred to as nervous children are very frequently well below average in weight and size. Such children are especially numerous in large cities. They often give the impression of suffering from poor nutrition, yet the survey reveals that, in many cases, these children have very good appetites and consume a large amount of food; but it seems that it is spent by their excessive nervous energy. It seems that life in the city has on children a hyperstimulation effect tending to develop the restlessness of which we have just spoken. "

Note of translator: extract translated from the French translation.

These conclusions have been further confirmed by my experiments with other children; I will speak of them later. The personal attention of a mother or master is the most powerful factor in regularizing and harmonizing the elements of growth; this is essential in order to ensure that the child benefits from a physically, mentally and morally, normal growth throughout its life.

G. was a little boy of 6 years old. He was picked up in one of those small villages in the cold valleys of the Nilgiri Hills. A philanthropist gentleman found him and entrusted him to me so that he could be educated at the school I had founded at Fernhill.

The history of this boy is quite interesting. In his village, his father and mother were both poor manual laborers in their village. When the father died, the child was 4 years old, and a few months later, his mother died in her turn. Since the orphan had no other relatives in this village, another laborer of the place adopted him. But, as fate would have it, this woman also died a few months later. The child, abandoned, had no one to take care of him.

(Page 133) So, very early, he had to find something to live as he could; and he succeeded in wandering through the streets. In the vicinity there was a pastry-house held by an old lady who was giving him biscuits and bread from time to time. He was spending the rest of his time playing with street children. In this way he was quite well fed, but the disadvantage was that nobody was taking care of him on an ongoing basis. Sometimes he would eat a meal in one place and then take a second meal in another. It is very easy for him to tell lies about this kind of things since he has no ongoing relationship with anyone in particular, and since no one has time to follow him to check the accuracy of his words.

At the time of his admission to school, he was a small-sized boy with an ugly face, and suffered from strabismus at one eye. He looks like a thief. His muscles were too much developed, and he was strong. He was able to express all his thoughts correctly.

After admission it was found that he had no notion at all of personal habits related to eating and excreting. He had the most irregular habits in this respect. He was a master in the art of lies and false pretexts. Some of his lies were so natural that it was difficult to discover them without a continued and minute control. He could be entrusted with commissions or small works which only older children of good families could have done.

This boy was directly entrusted to a master who carefully and continuously observed and corrected all his responses. This boy was directly entrusted to a master who carefully and continuously observed and corrected all his responses.

Gradually the boy began to conform to the new discipline, and to appreciate that someone was taking a sincere interest in his well-being. This made him particularly attached to the person who took care of him; and as this emotional grasp became more firm, it became easier for his master to correct his "misadjustments". In addition, he was isolated, and care was taken for him to get sufficient hours of rest.

He did not, however, follow a special diet, and what he ate at school was not always as nourishing as the pastries he had had before.

(Page 134) Yet these improved conditions showed no immediate results. At the beginning we even observed some disappointing results: the child began to have itching on his neck and all over his body. It was necessary to isolate him completely. Once he recovered, the boy progressed quickly until he became normal again. He resumed the rounded, natural features of childhood. His strabismus was less pronounced, almost imperceptible, except when his eyes were tired. The muscular tension disappeared completely.

A corresponding change was made from the moral and intellectual points of view. He no longer had the possibility of telling lies, and he now had too much respect for his master in order to do so, even if he had the opportunity. For some time, his intellectual work was very mediocre and he showed no signs of progress. The readjustment had to be carried out completely before any progress could be observed in the new direction. The foundations of his intelligence were being reformed, the horizontal intelligence that had developed before disappeared.

Once these foundations were laid, the progress occurred at normal speed. Although the boy no longer had the speed of response he originally had, his responses showed more discernment; he became nice, and the first ideas of kindness were seen in him.

We have here a typical case where the first education had to be directed on the negative side. A home, a private and regular life, isolation, close relationships and concentrated authority, these are the means that corrected this boy by getting him on the way of normal growth and normal development. He was saved from a precocious horizontal adjustment, and his original growth impetus, which had been stopped by an unnatural life, rebounded when the boy found himself in an environment better suited to his nature.

Concerning the positive adjustment of the personal factor in education, we would like to emphasize that this adjustment is not only necessary in special cases such as those mentioned above, but that this stage is more or less essential in the normal education of all school children, especially in modern civilized society which always tends to develop precociously the horizontal tendencies of the child. The modern child of New York or London, who begins early to go to the theater and to the cinema, and who has to live in the midst of these great artificial groups that are the buildings and schools of the big cities, this child will tend to have an horizontal development too much developed to the detriment of the development of the subjective and relational side of the personality which will not find the time necessary to gain a continued direction. (Page 135) These inconveniences of civilized life thus increase from generation to generation; and the ever-increasing number of "misadjusted" children in large cities is a clear sign that public authorities are neglecting this part of education so as to make the child a citizen before he has become a complete person in its private life. Despite the warnings of great souls like Rousseau, public authorities are far from convinced about the need for negative education for the harmonious development of the individual.

The result is that the product of modern school is an imperfect product in which the best possibilities have been stifled by early public policy requirements. Consideration of the feelings of others is something that is not included in the programs; but ample provision is made for the development of muscles in sports and gymnastics, as well as for the training of quick responses that involve no time at all for intuition. There is a systematic training to compete; and philosophical conceptions such as the struggle for life and the survival of the strongest are allowed to determine the organization and activities of the school. All this is excellent for positive development but totally neglects the negative side of the development of the individual, because this negative side requires, more than anything else, a quiet growth under the tutelage of individual and personal relationships.

The observations presented below provide us with the conclusions concerning the negative adjustment of the personality:

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- 1) The educator deals with the child as an individual and not as a member of society. At that stage, the child is unable to sustain natural relations with many people or masters at a time.
 - 2) During this period, it is the most subjective side of the personality that must adjust. Now it is likely to vary considerably from one child to another, so that the treatment adjusted to one is not necessarily good for another.
 - 3) (Page 136) The "impression" side is more important than the "expression" side.
 - 4) Attention must be paid to emotional responses and relationships with people and environment rather than to the development of the intelligence of the faculties of reasoning, analysis and logic.
 - 5) It is more important to select and grade the influences affecting the child than to multiply them at random by the thousand artificial experiments of civilized society.
 - 6) The child of this age should not be regarded as preparing itself for adult life, but as automatically adjusting itself, obeying, as it were, the life history of human race.
 - 7) The younger the child, the more negative the education must be.
 - 8) Adolescence can be seen as the age at which the child emerges from private life to public life and to the responsibilities associated with it.
 - 9) The task of the educator is to maintain the right balance between the positive and negative influences affecting the child; this is pre-eminently there, more than anywhere else, the task of the personal educator. It is in the personal relations with its master that the pupil's affective life must have its center of gravity since the emotional balance contributes so powerfully to make the first adjustments calm and harmonious. Any requirement that addresses the child's intellectual and positive strengths must be counterbalanced by the child's affinity for the personality of the master, so that the child can be driven progressively without risk of "misadjustment". At this stage, concerning personal relations between master and pupil, we must strictly observe the rules stated in a previous chapter.

It would be appropriate to speak here about some concepts belonging to Hindu pedagogy, which deal with the issue of the need to settle the negative adjustment before the positive, with the issue of a personal master, and with the issue of the faith in such a master derived from the negative adjustment nature itself.

The first of these concepts is that of *Brahmacharya*. The Brahmachari is the one who lives with his preceptor in a school in the forest, away from the contamination of precocious social influences. Hindu books often speak of the vow of Brahmacharya, meaning that the pupil leads a life of poverty, of service, and of study on the personality of the master in order to imbibe itself - by constant concentration on his person - with some general attitudes towards life, such as justice, kindness, respect for others, etc., which are represented by the master's life. (Page 137) This focus on the person of the master was called *Gurubhakti*; it involved obedience, respect and reverence for him. This Gurubhakti was essential to education, and the place it occupied and still occupies today in Hindu pedagogy is made clear in this quotation from the Khandogya Upanishad, prapathaka IV, kandha 9, which is frequently repeated elsewhere: "only knowledge which is learnt from a teacher (âcârya), leads to real good". We should remember that this aims at the knowledge of subjective and idealist values, not pragmatic or naturalistic knowledge. The need for a master in the first idealistic education is also expressed in the following dialogue between the master Nârada and Sanatkhumâra, the pupil (Khandogya Upanishad, Prapatkata VII, Khanda 16-20):

Master: 'But we must desire to know the True. '

Pupil: 'Sir, I desire to know the True. '

Master: 'This understanding, however, we must desire to understand. '

Pupil: 'Sir, I desire to understand it. '

Master: 'Only he who perceives, understands. This perception, however, we must desire to understand. '

Pupil: 'Sir, I desire to understand it. '

Master: 'When one believes, then one perceives. This belief, we must desire to understand. '

Pupil: 'Sir, I desire to understand it. '

Master: "When one attends on a tutor (spiritual guide), then one believes. 'When one attends on a tutor (spiritual guide), then one believes.'

Pupil: 'Sir, I desire to understand it.' (1)

This shows the importance that was taken by the personality of the master in the Hindu conception of idealist education. It was the one who formed, so to speak, the unifying element of the whole instruction. The concrete practising of general truth was to be found in the subjective interpretation that was represented by the master, either in his acts or in his behaviour; that representation was continuously manifested in his person.

Dans l'Inde antique, on appelait Gurukula-Vâsa, la vie de l'élève retiré des influences et distractions de la société, méditant sur la personnalité de son maître, le maître étant son seul guide, philosophe et ami, l'élève étant un membre de la famille du maître. Each student was advised to undertake such training after his fifth year; this training was covering a period of at least twelve years, sometimes more. (Page 138) We read in Apastamba (Ch. I, 1, 2 Cf. The translation of Max Müller, S. B. E. p. 6 book II): "He who has been initiated will live with his master as a religious student (Brahmachari) for a period of at least twelve years. "

(1) Khandogya Upanishad, Prapatkata VII, (16-20):

'But, he is an ativadin who declares the Highest Being to be the True (Satya). '

'Sir, may I become an ativadin by the True?'

'But we must desire to know the True. '

'Sir, I desire to know the True.

'When one understands the True, then one declares the True. One who does not understand it, does not declare the True. Only he who understands it, declares the True. This understanding, however, we must desire to understand. '

'Sir, I desire to understand it.

'When one perceives, then one understands. One who does not perceive, does not understand. Only he who perceives, understands. This perception, however, we must desire to understand. '

'Sir, I desire to understand it. '

'When one believes, then one perceives. One who does not believe, does not perceive. Only he who believes, perceives. This belief, however, we must desire to understand. '

'Sir, I desire to understand it. '

'When one attends on a tutor (spiritual guide), then one believes. One who does not attend on a tutor, does not believe. Only he who attends, believes. '

'Sir, I desire to understand it.'

We see, then, that the ancient Hindu authors recognized some of the fundamental principles related to this stage of negative-subjective adjustment. The three ancient concepts of *Brahmacharia*, *Gurubhakti* and *Gurukula-Vâsa* represent the three conditions of the first negative and idealistic education.

The same concepts apply to the more positive stages of idealist education; the same concepts apply to the more positive stages of idealist education. We therefore postpone the discussion on this subject and we will consider first natural and pragmatic educations, for in the development of the individual they have their place before idealist and positive education.

CHAPTER IV

IN NATURALIST AND PRAGMATIC EDUCATION

(Page 139) We will study at the same time naturalist education (1) and pragmatic education, which will place ourselves in the presence of pedagogical ideals that are completely different from negative or idealist ideals. The doctrines that we shall have to examine relate in fact to another stage of the adjustment of personal tendencies, and we must look at the relations between master and pupil, and at the characteristics of personal involvement in these types of education, from a completely different point of view.

Before justifying these considerations, we must clearly distinguish between the "naturalism" that is sometimes attributed to Rousseau and the one that actually belongs to authors like Herbert Spencer. R. Rusk writes about this (Philosophical Bases of Education, London University Press, p. 35)*: "Historians of pedagogical doctrines have generally attributed the origin of naturalism in education to Rousseau, because he as often repeated the maxim of "Return to Nature", but this repetition has made the authors blind to the fact that Rousseau does not oppose nature to spirit, but to social convention, and that the natural negative stage of education is only meant to prepare the moral, aesthetic and religious culture of Emile. "In reality, Rousseau is an idealist of education, while Herbert Spencer is a true naturalist. At the basis of Spencer's doctrine of education there is a hedonistic philosophy in which the greatest importance is given to the need for "preservation" and where, in the list of subjects to be dealt with by a comprehensive education, education for leisure takes the last place (2). What matters for Spencer is material success in this world, and science,

(1) Here and elsewhere, "Naturalism" means for us the education based on the philosophy of nature.

**Note of translator: I could not find the original, so this extract has been translated from French.*

(2) This list can be found p. 8 of "On Education" by Herbert Spencer, Williams & Norgate, London.

culture, and art for themselves must be considered only as means of spending one's leisure time. (Page 140) The real interests of man must not be sought in subjective life, but in objective realities, in the proper preparation of the intelligent citizen and in the use of natural resources for its well-being. As Rusk repeated (ibid. P. 39) while speaking of Spencer's naturalism: "His greatest virtue would be selfish care. "This is why Spencer exalts the value of sciences at the expense of humanities. In a word, Spencer revolts against subjective values in order to insist on applying human effort to the maximum use of natural resources, an emphasis that could have been justified by the times in which he lived. By comparing Rousseau and Spencer more closely, it is clear that they are diametrically opposed. Spencer is an empiricist while Rousseau is rather an idealist. Rusk explains this very difference as follows: "It might seem somewhat paradoxical to attribute the origin of German idealism to Rousseau, who is often classified as a "naturalist", yet his doctrine is not naturalistic in the philosophical sense of the word. He does not oppose nature to reason or to spirit, but to convention, as it manifests itself in society as he conceives it. Like contemporary naturalists, he seeks to render justice to nature and to give it its proper place in the order of things; yet he does not regard nature as the whole reality, nor as its ultimate form, but he recognizes the existence of a moral order whose reason and consciousness are the controlling factors, and of a spiritual order which embraces and explains the natural order" (ibid. p. 143).

It does not seem necessary for us to enter into a detailed examination of the pedagogical doctrines of the two theorists; it suffices to list briefly some of the differences between the two, as follows:

<i>Rousseau</i>	<i>Spencer</i>
Subjectivist idealist	Empirical realist
Opposed to collective life	Education prepares for collective life
Recognizes a moral and spiritual order, and moral and spiritual values, in education	Purely cultural education is secondary to utilitarian education
Recognizes purely ethical motives	Hedonist Ethics

(Page 141) The terminology of Pestalozzi, whom we have already had the opportunity to mention, makes it possible to clearly define the concerned differences. Rousseau is

especially concerned with the proper development in the child of those instinctive behaviours which, according to him, are necessarily good by their very nature. This would correspond to the development of the "human animal" of Pestalozzi. At Spencer, on the contrary, it would mainly be the producing of the "social man" of Pestalozzi. In reality, Rousseau's negative education refers to the first manifestations of the individuality of the child; and that of Spencer refers to the stage at which the individual prepares itself to be a citizen useful to society and turns its mind towards the objective phenomena of nature. Thus, we can say in the terminology elaborated in this study, that Spencer's pedagogical theory studies the "horizontal adjustment" of personal tendencies to their objective environment.

As regards this kind of adjustment in education according to Spencer, it should be noted that the educator exercises a neutral function. It is the doctrine of the discipline caused by the natural consequences which reveals this method of non-interference, and in this theory Spencer agrees with Rousseau. It is the doctrine of the discipline caused by the natural consequences which reveals this method of non-intervention, and in this theory Spencer agrees with Rousseau. Education is a process of natural evolution where the struggle for existence finds its place among other factors. Left to itself in a society where it shall do its best by competing with others and by overcoming natural obstacles, the individual should reach adulthood with all that would be needed for a happy life. This is the idea that underlies Spencer's education.

In the case of such an education, the intervention of the educator in the growth process of the child's faculties is the least we can do. Leave the human animal to itself in this world of competition and in an environment full of possibilities of experiments, and the very nature of animal tendencies will assert themselves in order to produce the desired result. Any attempt to isolate the pupil would have the effect of limiting its opportunities of experiencing living realities and would therefore be harmful. The more people he will have met to talk to them and exchange ideas, the better it will be for the outcome of this kind of education. If it has the opportunity to hear different masters on the same subject, this will only enrich its experience. If a number of classmates are involved with it in acquiring this kind of knowledge, there will be more opportunities for reciprocal action and reaction, which will help organize knowledge for further use. Thus, we see that for a naturalist education according to Spencer, the conditions must be different from those established for negative education (page 142).

Yet it is evident that even here the personality of the master must be regarded as important, not in relation to the actual experiences gained by the pupil, but in relation to *the selection, order and gradation* according to which these experiences must reach it. In addition, it must be taken into account that even natural interests require *initiation*. We can therefore consider the nature of the personal intervention of the educator under the following headings: *initiation* first, then *sustaining the effort*, and thirdly *regulating the experience*. To these we must add a fourth, which is the *unity* that the personality of the educator provides, and of which we have already spoken above. The personality of the educator is the most natural element of harmonization of the experiences; it is he who naturally harmonizes the disparate experiments into an organic whole, the constituent parts of which are proportioned and regulated in such a way as to produce practical results and complete responses. We shall examine each of these four headings in their relation to the pupil's experiences at this stage of its adjustment.

Interests need to be stimulated. Even a very gifted child will not necessarily have a good "naturalist" education if we leave it to itself without arousing its curiosity. By the way, similar phenomena can be observed in animals. The pussy mother will move her tail in front of her kitten to awaken or stimulate the hunting instincts in this one. Similarly, in a pack there will generally be a dog who will take the lead so as to show others the specific behaviour for hunting. In this sport, the shouts of the hunters also have the effect of exciting the interest. Children left to themselves are often prone to accept the things and events happening in their surrounding without paying attention to their *raison d'être*, as things that are self-evident. Awareness and an active interest in the things of nature always involve a part of imitation. Often the children bring a new object like a bird's nest, a caterpillar or a butterfly to the master who had already mentioned them, because they know that he is interested in these things. In such cases, it is obvious that the person of the master functioned as a stimulator of interest. It is to the idea that the master will appreciate the result that the children owe, in part or entirely, the awakening of their curiosity. So, this is how interest can be generated or activated. (Page 143) I have seen many schools where the most interesting natural phenomena occurred without being noticed, because there was no one to stimulate the corresponding interest; and I noticed a marked difference when a person was taking the initiative to stimulate it and to keep it alive.

But once natural curiosity is awakened, one must follow the phenomenon studied day after day, or season after season, as the case may be, if one wishes to derive any profit from this curiosity; in the absence of an educator who recalls the task to its pupils, it is likely that they will frequently change the subject of their interest as new ones emerge, in a way that shall fully mix up their work. This is less true for isolated and simple experiments (in chemistry and physics for example), but in the study of nature and natural phenomena the importance of this personal intervention increases considerably. In this way, the pupil's freedom to learn

whenever he wants, and what he wants, is necessarily limited. If the child wishes to study the flowers in winter and the buds in autumn, the intelligent master must have the authority to prevent it and to establish a rational program of studies, even if the child feels thus that its freedom of choice is reduced. A continuous interest throughout these different seasons presupposes a real personal influence from the master. For example, in spite of all its efforts, it shall be impossible for it to make its pupils keep a "nature diary" if they are not strongly prompted either by fear of being punished or by love and desire to please their master. The more a series of experiences will extend over time, the more a center of creative unity and a source of cheering in the form of a personal educator will be needed to sustain the effort of the pupils.

The function of regulating experience constitutes the third aspect of the master's intervention in taking advantage of the spontaneous experience of nature. In naturalist education there is a tendency to encyclopaedism which must be avoided. Even in this education, the object is not simply to fill the pupil's head with facts and erudit details, but to provide it with information that will be likely to be useful to it. We can say that the sequence of a teaching is jeopardized when, for example, a child neglects the geography of its own country - where are going its natural interests - in order to acquire a detailed knowledge of the geography and of the natural production of a continent on which it does not live, and with whom it will probably never enter into direct relations. (Page 144) Or even, mere curiosity may lead a pupil toward research that is devoid of any relation to life conditions. When a boy wants to try to make fire with a fire stone or fly with artificial wings, when he spends his time making bows and arrows, or studying alchemy, although these activities respond to cathartic necessities of the individual, they can not be regarded as positive instruction preparing for some useful job. Thus, in time and space, problems arise concerning the relations between the pupil and experience; and to some extent a judicious selection of these experiences must be made by a personal educator. The State can make this assortment and arrangement, but in a too rough and too general way to account for the variations required by infinitely varied environments and individuals. The State is compelled to place emphasize on a certain uniformity which can only step on the interest of the pupil and make it consider the simplest task as dull. Only the master itself can give the material taught a natural framework and an attractive form. Thus, we see that, even in naturalist education, the person of the master plays a very important role.

As regards pedagogical relationships, the difference between negative education and naturalist education consists in the fact that collective life and changes of masters are not harmful in the latter case, whereas in the former it is essential to avoid these conditions if tangible results are to be achieved. Naturalist education deals with objective realities, the

concrete nature of which allows an agreement between a large number of students at the same time. Collective teaching makes the reactions of pupils more and more public, and when an experiment is made in front of a class of children, which are all brought to the same conclusions simultaneously, then the experiment is all the more convincing for the individual pupil. For the young child it is the opposite, there is no objective criterion to judge the negative adjustment of its attitudes. Individual differences are subject to considerable variations between different pupils and to substantial fluctuations from one moment to the next. Taking into account these subjective factors, the educator is necessarily compelled to avoid as much as possible "mass work" to seek isolation and individual personal relations. This is why the pupil must respect its master, obey it, and seek in it a guide and a very dear friend in negative education, whereas, on the contrary, in "naturalist" education relations may be given an official character. (Page 145) The master becomes a fellow linked to the pupil by rather democratic ties; it can be replaced without inconvenience by another master provided that the new one maintains a logical consistency in the continuity of the work of its predecessor. The pupil does not need to obey the master itself provided it (the pupil) complies with the rules imposed by the educational system as such. Thus, the relationship between master and pupil is less personal in the "naturalist" education.

One of the questions raised in the preceding discussion, and which has been insufficiently examined so far, is that of how group life fosters the horizontal adjustment of tendencies rather than the vertical aspects of personality. One of the main facts of group life is that of inducing responses dealing with public values rather than with private values. Group-mind as analyzed by W. Mac Dougall and others is spontaneous and lacks foresight (1).

- (1) According to Mc Dougall, the group is characterized by several "paradoxical" characteristics: "A notorious phenomenon of the group is the violence in the *explosion* of its emotions and primary impulses. The intensity of the collective emotion of an unorganized group is increased by the fact that each member tends to lose, to some extent, the notion of its personal *identity* and *responsibility* . . . Whereas the collective conduct of an unorganized group implies a mental level well below the average of its members, thus leading to a degradation of the individuals composing it, on the opposite the organization of societies produces this paradoxical result that the collective life of a well-organized society generally reaches a higher moral and intellectual level than that peculiar to the average of individuals taken separately, thus raising many of its members to a higher level of thought and action". (Psychology H. U. L. p. 273). *This excerpt could not be found in "Psychology, the Study of Behaviour", nor in "An Introduction to Social Psychology", so it has been translated from the French translation; note of translator*. To these facts may be added the political principles of Rousseau, "Le Contrat Social," (p. 252, Garnier, Paris): There is often much difference between the will of all and the general will; the latter deals only with the common interest; the other regards the private interest, and is only a sum of particular wills: "But take away from these very wills the most and the less which destroy each other, remain as a sum differences of general will. "

The present, the concrete world and the existing order of things assume, in the eyes of the group, an exaggerated importance and value. Thus, the static aspect of intelligence is nourished at the expense of the dynamic aspect. Every change relies on forethought; all deep emotion presupposes a long memory, and it is by the projection of past experiences in the future, made by far-sighted precursors, that humanity is progressing and that the former order gives way to a new order.

(Page 146) By its very nature group life will focus on uniformity, stifling the demonstrations of individuality that take too much account of the past or of the future. It is true that we can sometimes observe a kind of collective individuality within a compact group; but when it exists it is often found that such an individuality lives only through artificial popular feelings, which are not praiseworthy in themselves. It is in this way that an army unites for action, excited by pride, or a sense of honor or bravery, emotions not far removed from the animal level. The most numerous groupings are predominantly based on competition and rivalry; they aim at extending their domination or at similar purposes belonging to material life. Immediate gain is their natural ideal. It is this truth that Rousseau expresses in the remark already quoted, on the impossibility of making, at the same time, a citizen and a man (Emile, p. 43). Writers like Bertrand Russell insist on the same idea. He writes about the State and the establishment of universal education:

"Education by the State has taken a certain direction. It teaches young people (as much as it can) to respect the existing institutions, to avoid any criticism of the powers of this world, to look at the foreign nations with suspicion and contempt. It develops national solidarity at the expense of both internationalism and individual development. The damage done to individual development is due to the exaggerated use of authority. Collective emotions are encouraged at the expense of individual emotions, and the non-acceptance of established beliefs is severely suppressed. Uniformity is desirable and convenient for the administrator who does not care much about the fact that it is obtained only at the cost of mental atrophy. The evil resulting from all this is so great that we may seriously question whether universal education has ultimately done more good or more harm. " (P. 86 of "Sceptical Essays", London, Allen and Urwin)*.

**Note of translator: this edition could not be found, the excerpt is translated from the French.*

It is easy to understand how an education based on the "naturalistic" philosophy, and applied collectively, is incapable of producing the individual who would be remembered by future generations. If such individuals have still been produced, it is rather in spite of this education that thanks to it. A development of the vertical side of the personality would imply a change in the dynamic aspect of intelligence, and not only in the uniform and statistical aspect; but this is precisely the reform that "naturalistic" education does not consider. (Page 147) Criminality, for example, is not corrected by collective education based on the "naturalist" philosophy. "Criminaloid youth," according to Stanley Hall, "is more sharply individualized than the common "good "child, who is less differentiated. Virtue is more uniform and more monotonous than sin. There is one right but there are many wrong ways, hence they need to be individually studied by every paidological method, physical and psychic"; (Youth: its Education, Regimen and hygiene, p. 136, Appleton, New-York). The "naturalistic" collective education of our time is not really effective either in correcting an existing evil in a child or in helping the individual to rise above the level of the low virtues. If, therefore, we judge the value of education by the permanent influence it exercises over the innate nature of the individual, we find that "naturalist" education, especially that applied collectively and impersonally, is not at all education in the true sense of the word. It is only a temporary and temporal adjustment of the individual to its material environment (1).

And whereas we must recognize the necessity of such an adjustment, especially for happiness and success during the median age of man, we must also admit that its permanent value in the evolution of the human race is minimal. As we shall soon see, education in its best sense is neither pragmatic, nor "naturalist," but idealistic. It is in this latter that human personality and the highest motives and values come into play; it is there that the reciprocal action and reaction between one individual and another produces the best results. It is therefore not in the "naturalist" education that we must seek the development of the higher attributes of personality.

- (1) The great American poet Walt Whitman has very well recognized this limitation of popular and general, or democratic, education by writing in his "Backward glances o'r trav'ld roads" (in the book entitled "Leaves of Grass", p. 443. Maynard, Boston; or p. 435 David Mc Kay, Philadelphia): "Welcome as are equality's and fraternity's doctrines and popular education, a certain liability accompanies them all, as we see. That primal and interior something in man, in his soul's abysses, coloring all, and, by exceptional fruitions, giving the last majesty to him" . . . that thing. . ." modern science and democracy appear to be endangering, perhaps eliminating".

(Page 148) Before examining the role played by idealist education as a factor of adjustment or of development of personal tendencies towards the general environment, we must pause for a moment to consider the role of pragmatic education in this process. This education occupies a unique place between idealist and "naturalist" or negative philosophies, since it refers to this stage of life of the individual when it must at the same time learn and live as an active member of society. Its ideal is the social man of Pestalozzi.

Pragmatism, like "naturalist" education, has its origin in the same revulsion against the humanist education of the first period with its exaggeration of the importance of subjective and theoretical studies; pragmatism also insists on the immediate and utilitarian aspects of environment, at the expense of the pure cultural aspect. The first striking difference between "naturalist" education and pragmatism is that it insists on the relation between education and personal life as a member of a society, whereas on the other, every scientific truth has an educational value. As Rusk points out (op. Cit. p. 69):

"The main criticism of pragmatism . . . is directed against the impersonal and mechanical interpretation resulting from Naturalism." Later (p. 70) he adds: "Idealism agrees with pragmatism in its desire to escape the "paralyzing horror of the naturalist interpretation of life, of the nightmare of an indifferent universe. "The main difference between the two positions is that the supporter of "naturalist" education considers objective realities in an impersonal manner, whereas in the eyes of pragmatism they gain new importance with regard to the individual and to the time and circumstances in which it lives. Whereas "naturalist" education would become easily encyclopaedic without any human reason opposing an unlimited accumulation of knowledge and information about objective phenomena, pragmatism, on the contrary, intends to limit such a tendency because it takes into account the practical needs of a given society.

Thus, pragmatism differs as much from the humanist who gives too much attention to pure theory and to purely subjective and private values, as from the "naturalist" educator who tends towards encyclopedism. Instead of wanting to produce an individual who is expert in science and in the laws of the objective world, the real purpose of the pragmatist is to produce an individual useful in practice to modern society, and qualified to contribute to its progress in any way (1).

- (1) "What the best and wisest parent wish for his own child; that must be the community want for all of its children. Any other ideal for our schools is narrow and unlovely; acted upon, it destroys our democracy; (Dewey; "The School and Society", Uni. Of Chicago Press, p. 3). The definition of character as given by Dewey implies this same pragmatic attitude; he writes: In general, "character" means power to act in society, organized capability to function socially. That means. . . social intelligence, social processing power, social interest and sense of responsibilities ".

(Page 149) the position of naturalist education is theoretical-objective, that of pragmatic education is practical-objective. Activity is the term that specifically distinguishes the latter.

As a result of this difference in attitude, the practice of pragmatic education has brought about significant changes on which it would be important to focus our attention for a moment.

First, pragmatic education diminishes the importance of the culture of inhibition. In his "Educational Essays" (Blackie p. 68), John Dewey writes that inhibition has no value (1) and that it is to the open, or public part, of an act that all importance must be attached.

Secondly, pragmatism insists that the activity of the individual must relate to utility. (Page 150) The aim of activity is not at all to be selfish in the narrow sense of the term, but to be useful to society. We find here a difference with the "naturalist" education which is centered on the development of the individual in the biological sense of the term. The individuality of pragmatism approximates what we have called "personality;" it comprises distinctly human motives that are no longer strictly biological. The social motive makes life something more than a mere struggle for existence; something more human in which more mindful forethought and human intelligence enter in order to define an appropriate course of action.

- (1) It is striking to see how far the pragmatist puts aside the negative side of the personality. Dewey writes (op. Cit p. 68): "To say that inhibition is of more value than leadership, is to say that death is worth more than life, that negation is worth more than affirmation, and sacrifice more than service. "This posture towards the negative aspects of the development of the personal factor is a natural corollary of the less personal posture of pragmatic education. Meanwhile a study of the individual as such or a study of the nervous system for example, brings us to this important conclusion that inhibition is at least as necessary as the open act. We could contrast the pragmatist position with that of Harris, for example, who concludes his study on the human nervous system by these words (Harris: Nerves, Home University Library, p. 246): "We shall increasingly recognise that breeding, fineness of temper and amenability to the influences of culture, are as much the outcome of neural molecular dispositions as they are the responses to appropriate surroundings." Page 247: "Education, working on the good "material" which hygiene has provided, will teach, above all things, inhibition. Inhibition is the art of restraining personal immediate tendencies for the good of the individual or the race, and it is best developed in the soundest nervous system. A person, no matter how highly educated otherwise, is a neural monster if he has not inhibition. The lack of inhibition is not the expression of neural strength, but the result of the neural machine having lost its governor. Inhibition is the expression of neural vigour, it is knowing when and where to stop, when not to act, not to speak."

Thirdly, pragmatic education is the first one that emphasizes the necessity of raising the child not according to the desires of a master of the Church or of the State, but according to the development of the capacities of the child itself. It is the child who occupies centre stage, and the natural activity of the child becomes the means of its education. For the first time, since the mechanistic tendencies of the realistic philosophy of Locke and Spencer, we are concerned with the personality of the child. It is granted a part of the freedom in favor of which Rousseau has argued. The emphasis on "open" action and social adjustment in the pragmatic educational method make it strive for a positive adjustment of personal tendencies. The "open" act requires active intelligence, just as adjustment to collective or social life constitutes, as we have seen, the positive level of personal adjustment.

By tending to develop personality in this way, pragmatic education determines its own limitations. First, the incentives for action recognized by the pragmatist are exclusively the incentives that society recognizes or sanctions. Though of a more general character, it is always utility which is the criterion of behaviour; it is nevertheless necessary that this utility be of a very practical character. Thus, it is sufficient that this utility relates, so to speak, to the same place and to the same time; it shall not necessarily be general and valid for all mankind. Limited in its horizontal aspect, the activity favoured by pragmatic education is still more narrowly limited in its vertical aspect. Pragmatism is not at all concerned with the future, or with the distant past (1). (Page 151) Considerations of this scope would constitute an infidelity to pragmatic philosophy. Although pragmatic education tends to develop personality through the appropriate activity of the individual, it is not concerned by further developing it far enough. Social and democratic considerations limit its scope, as in the naturalist scheme discussed above.

A more serious defect in pragmatic education is that it allows the foundation, the background of personality, to be atrophied. We have seen how a premature adjustment to public and social demands is very detrimental to the quiet negative adjustment of the child's personality. Although some pragmatist educators like John Dewey (2) recognize the need for intimacy and sociability, they only give them a secondary place in the educational scheme.

(1) Cf. P. 15 "School and Society" by John Dewey (University of Chicago Press): "The great thing to keep in mind then regarding the introduction into the school of various forms of active occupation, is that through them the active spirit of the school is renewed. It has a chance to affiliate itself with life, to become the child's habitat, where he learns through directed living, instead of being only a place to learn lessons having an abstract and remote reference to some possible living to be done in the future. It gets a chance to be a miniature community, an embryonic society".

(2) Cf. P. 10 "School and Society", Chicago.

The role of the personal educator is less meaningless in this pragmatic education scheme than it was in the "naturalist" school where the "non-interference" rule was to apply more or less strictly. Let us examine the new method of teaching called "project method", which emerges directly from the application of the pragmatic philosophy to education. Through this method, the child takes an interest in useful activities such as agriculture, carpentry, construction, spinning and weaving, etc . . . ; these are the centers around which instruction and education grow. Take for example a form of ordinary activity such as gardening. Gardening is a kind of activity where the personal impact of the gardener is taking a substantial role.

One of my earliest experiences with this work of gardening for children has been marked by the great enthusiasm which they invariably bring when we initiate this work. I have always found that a boy who begins gardening with enthusiastic interest, hopes to have a large garden at once. He will ask for a large piece of land; the appearance of his garden will be for him an important thing. He will tend to work in disjointed ways. (Page 152) At the beginning of the work he will not have the patience to wait for the propitious season, and he will expect quick results. He will return the day after having planted peas or onions to see if they have grown well. When he realizes that gardening takes time and patience, he becomes disillusioned and may even abandon his project completely, unless there is some economic, moral or personal factor exerting on him continuous action.

An accurate analysis of these failure factors in children would reveal that the child is unable to take an interest in something that is distant in time. It wants immediate results. The professional gardener has learned to adapt to the various natural laws which may vary according to plant from a few weeks to a few years, and meanwhile he will not be concerned about them. Now this patience, connected with the intuition of time, and attached to each particular form of activity, is inseparably linked to the personality of the gardener. A boy who wants to learn agriculture or gardening will unconsciously imitate this subjective attitude of the gardener. Even when, for example, the harvest is bad, the gardener will not be discouraged. He has the patience to try again, and sometimes the next crop will compensate for the loss suffered. This experience specific to the gardener can not be imparted to young people without them having a kind of faith in him. They must believe in success or inherit somehow the state of mind required to the performance of each activity. Thus, the personality of the master or instructor enters into pragmatic education according to the method known as the "project method".

This kind of personal element even enters into simpler forms of activity. Each action has its own "time" element. One can not pour a jug of molasses into another container in the same

way as a jug of water would be poured. The simplest actions such as making a meal or preparing a table imply that we have the possibility of saving time and organizing every detail in order to achieve an effective result. If it is left to itself without any economic pressure or without authority, maybe that the child shall never develop its ability of thinking in its actions; it is only in contact with a more evolved or better adjusted model that the child can learn to live intelligently. In everyday life the personal responses that produce such adjustments are so varied and come from so many different sources that we can realize how much we owe our present abilities to the personal influence of others.

(Page 153) It is when the child can not perceive the ultimate purpose and motive of a form of activity, due to its remoteness in time or in space, that the need for personal influence is mostly felt. Suppose a group of children wants to start a sports club between them. According to my experience children left to themselves do not understand the principles that must be at the root of a democratic society. I found that after a few attempts they usually despair of founding a club. The blame lies, of course, with the fact that they have not realized the functioning of a society; and thus, in order to persevere in this experience of developing a constitution of their own, they often need to be guided with sympathy by someone who has their confidence.

In a previous chapter we discussed how the educator plays a role in helping the child to free itself from the inhibitory forces acting on it.

Therefore, to a certain extent, pragmatic education is indeed relevant for the development of the pupil's personality; but it suffers from a serious limitation of scope and horizon. Here, as in other stages of education, the personal educator has an important function to fulfill. But, it must be admitted, the highest possibilities of human personality, as well as the best effects of the educator's personal influence on its pupil, are not considered by the scheme of pragmatic education as conceived by its representatives. The child raised strictly by pragmatic education is always likely to seek utility in its motives. The highest form of human personality is that which cultivates the love of knowledge for itself, as Bertrand Russell argues ("On Education", p. 192): "There are a lot of knowledge that seem to have value for themselves regardless of any service they could do . . . "*. He goes on (ibid., p. 243): "I would not like the poet, the painter, the composer or the mathematician to be concerned about some far-reaching effect that their activities might have in the practical world. Be they rather concerned with pursuing a vision, with grasping and giving a permanency to something they first glimpsed dimly, and that they loved with such eagerness that the joys of this world have faded in their eyes. "*

*n. o. t.: Translation from French

(Page 154) A pursuit of knowledge for itself with such eagerness, that is a state of mind which constitutes the most valuable heritage from one generation to another; and it is in the transmission of the cultural heritage of humanity that the highest type of personal educator finds its true vocation. It is the activity undertaken for itself that marks the difference between the two levels, the pragmatic and the idealist; it is to this that we are going to move now.

CHAPTER V

IN IDEALIST EDUCATION

(Page 155) What is idealist education? Rusk (1) will answer us: "When we recognize the primacy of the cultural surrounding that is peculiar to man, when we realize that in the transmission and in the growth of this cultural heritage due to constant recreation lies the supreme task of education, and that man possesses spiritual abilities for its task, it is then that our philosophy of education is idealist and there can be no doubt that only then it is fulfilling"*. However, this definition of idealist education has the disadvantage of being based on concepts such as "spiritual power" and "cultural surrounding", terms which are rather vague and subject to various interpretations.

Idealism, as we understand it, has these three characteristics:

- 1) Its truth is universally applicable;
- 2) Its truth is universally applicable; it remains the same through the ages;
- 3) It concerns more subjective world than objective world or, better still, it makes no distinction between the two.

To these three characteristics we can add a fourth: that idealism is the specific prerogative of man, derived from the nature of his emotions and his intellect. This prerogative specific to man consists in this: He can envision and time and space on a larger scale than the animal. If we consider what idealism is, we see that the difference between it and the position of pragmatism is neither rigid nor absolute. When a pragmatist acts for the good of humanity in general, when he is interested in its permanent well-being and is guided by subjective rather than objective values, he becomes more or less an idealist.

(1) Phil. Bases of Education, p. 126.

*n. o. t.: Translation from French.

(Page 156) Idealist education is that part of the pedagogical process that is related to the formation of Pestalozzi's "moral man". Rousseau's idealism, as we have seen, applies above all to the first stages of the process. Unlike the first, this idealism, though subjective, is positive. With it we emerge out of the utilitarian limits of pragmatism: The activity itself contains its own reward and art, literature and sciences are sought after for their intrinsic value. This idealism relates more to the intellect and is the natural result of the experience of the middle-aged man. We can say that idealist education, according to our terminology, concerns the positive and vertical adjustment of the personal factor. It follows therefore that in negative and idealistic educations, which are the first and last phase of the educative process, personal relationships must be as intense as possible and as close and intimate as possible.

The transmission from one generation to the next of the culture belonging to a nation or a community is the main function of the idealist educator.

The idealist education in this way conceived is thus an evolution of individual tendencies beyond the biological and pragmatic utilitarian sphere, towards a sphere in which the most general and abstract non-utilitarian motives determine action. This represents the final stage of the process and corresponds in essence to the phenomenon referred to by psychologists as "Sublimation".

Although this term originally used by Freud relates rather to the emancipation of infantile *libido*, there is however a more extended interpretation of it given by authors like William Mc Dougall which better justifies our use of this term in the description of the essential nature of idealist education. Mc Dougall himself explains the relation between sublimation and education, and concludes: "Sublimation, thus widely conceived, is then a process that is exemplified on the widest scale in all normal living; and the more important part of education may be said to consist in guiding the processes of moral sublimation" (1).

This sublimation is not only a generalization of incentives for actions which tends to make them more sustainable, but it also implies that we mentally look towards the future. (Page 157) It must be conceived as acting as an effort to accomplish any purpose, an effort always mingled with a kind of spirit of adventure, a certain obstinacy in overcoming obstacles. Thus, this positive adjustment is more general, more subjective, more lasting and also more oriented towards the future. In this particular case, we are speaking quite rightly of a future-oriented adjustment because, if the effort always implies a lack of satisfaction regarding the present (which, by the way, must not be mistaken for a feeling of regret for the past), the

(1) Cf. Pp. 473-475, "Outline of Abnormal Psychology", Methuen, London.

positive adjustment we are talking about at this moment is forward-looking by its very nature.

Aspiration to happiness can be described as the most universal purpose of human being; and it is with this outmost hope, which always projects itself into the future as in the form of an ideal to be achieved, that must be sought the decisive character of this higher idealist adjustment. The stages of the educative process are therefore naturally linked to this sublimation of tendencies. It is in this way that personality truly completes its training. Here, we are dealing with a part of the process that is not ordinarily considered in schoolbooks, because, strictly speaking, this stage is by its very nature beyond school age.

The pedagogical literature of our time is almost completely intended on the problem of public instruction, to such an extent that education considered from the point of view of individual development and higher adjustment is not even recognized as a separate field, or that it is left to the exclusive competence of the churches.

In some countries, such as India and China, tradition has left us with exact ideas about this higher stage which does not concern the training of citizens, but merely the training of the simple man. Popular traditions have played a great part in the transmission of these ideas and in the huge influence they have on the thinking of the present generations of these countries.

It must be said, however, that even in Western countries this science of individual development has not remained totally ignored.

Thus, in Dumas (1) we read the following outline of the means that can be used: "Physical means (isolation, diet, regular practice of physical activity); intellectual and emotional means (meditation, soul-searching, good resolutions, intellectual discipline, observance of the rules); social means (affiliation to a group whose object is spiritual culture, regular meetings, religious rites, spiritual advises, confession). (Page 158) Here, as in any method, the success of the employed means is conditional on the ingenuity and on the dedication of the artisan, that is to say on its personal qualities".

Payot, in his admirable work "L'Education de la Volonté", has emphatically underlined the same fundamental principles of personal development. Thoroughly examining the question of the development of the positive personality is not our objective now. We already got a

(1) *Traité de Psychologie*, book III, p. 605.

sense of its nature in the discussion where we tried to establish to what category of personal development it belongs. We will limit ourselves in this study to examining which personal relationships lead to an easy and harmonious adjustment of personal tendencies. And even leaving aside the examination of the technical methods employed in idealist education, we are going to study straight away the nature of personal relations in this part of the adjustment.

The first question that arises is this: Once the individual has reached or passed its twentieth year and has left the previous stage, does it still need a guide or the influence of an older person? We think that this higher idealist adjustment can not take place when we simply leave to the personality the freedom to grow. It seems to us that if it is right to consider to a certain extent a space of freedom in the first stage, this freedom must be restricted in a specific way when it is applied to idealist education. During the first years of the child's life, freedom was something inherent in its very nature, and in this case, it was reduced to a kind of *laissez faire*; the function of the master was nothing more than a kind of viewing, the object of which was to guide the child.

In this last stage, on the contrary, the pupil must not lose sight of the need to make an effort. Such a task implies the need for rigorous leadership and for discipline because the pupil left to itself will hardly be able to achieve this ultimate adjustment by itself. That is why, against the fatalism that can support this false idea of freedom with respect to this positive development of the personality, Payot protests as follows: (page 159) "Who this student is, the one who has not felt with sorrow the discrepancy between its desire to do good and the weakness of its willpower? You are free! Our masters said. And to our despair we felt this statement was false. No one taught us that willpower is conquered slowly, and no one thought of studying how it is conquered. No one trained us to fight, no one supported us, and then, by a very natural reaction, we eagerly committed to the doctrines of Taine and of the fatalists who at least did comfort us and taught us something: it was to resign ourselves to the pointlessness of the struggle. And we were quietly going downhill, dazing ourselves so as not to feel the lie of these doctrines comforting our idleness. Ah! yes, the fundamental cause of these fatalistic theories of willpower is the theory at a time gullible and fatal of the philosophers of free will! Moral liberty, like political liberty, like all that has any value in this world, must be conquered after a hard fight and incessantly defended. It is the reward of the strong, the clever and the determined. *No one is free if it does not deserve to be free.* Freedom is neither a right nor a fact: it is a reward, the highest and the most productive of happiness. It is for all the events of life what is sunlight for a landscape. To

those who have not conquered it will be denied the profound and lasting joys of life (1).

Positive education can only succeed where there is constant stimulation. It must be directed towards a definite goal in a reliable direction, and one must have a positive ideal of it. If pragmatic education is an aspiration towards ideals to be achieved in the immediate future, within the practical limits of life, and by a sane balance of social forces acting on the child, idealist education (conversely) has its motivations in the past and its end in a future whose immediate vision is hidden from an ordinary student. This adjustment requires an intuition related to time, and this intuition shall be developed only after the initial training for this task, because this training is not something that is spontaneously achieved in the course of ordinary events.

We already said that this adjustment is not objective. It is more than a way to behave: it is a subjective effort towards the achievement of something beyond our reach. It is the constant search for a noble cause by which we can put ourselves at the service of the general good.

(Page 160) To acquire this state of mind and the aptitude to make a patient effort as demanded by the search for this positive ideal, we shall not find much use with what the books provide us. In other words, what is of paramount importance is the qualitative aspect of knowledge. Here is how Payot talks about the qualitative values and about the knowledge and approaches that the education of willpower involves: "The value of the erudite", he writes, "is not proportional to the accumulation of facts piled up. It is due to the energy of the mind, of the search and of the adventure constantly controlled, so to speak, by strict critical faculties. The *number* of facts is nothing, their *quality* is everything; that is what we forget too much in higher education. It does not develop vigor of judgment and resourcefulness together with circumspection: young people are overloaded with concepts of very unequal value, we cultivate only their memory, so that we forget the most important, that is - let us not fear to repeat it over and over again - initiative combined with methodical doubt . " (2)

(1) P. 28 and 29 of "Education de la Volonté".

(2) P. 258 of « Education de la Volonté »

There is no need for long discussions to admit that positive idealist education lies in cultivating a state of mind. It is clear from what we said earlier that this state of mind must be all the more positive as it is attempting to give an impetus of initiative or of venture and that it concerns, so to speak, the future. This state of mind, as we have seen, must be sustained by continual stimulation without which it is in danger of retreating and of getting completely lost. What is essential to support this state of mind is an effort continuously going in the same direction and extending over a long period of time. But the method and regularity required by such research are often out of reach to an ordinary student who is not helped and guided in a special way. Men like Pasteur and Darwin provide us with typical examples of this attitude. Their actions, untirely unselfish, were continued for many years before achieving tangible results. Here we are talking about men of science, but in even more subjective branches of knowledge we (also) have similar heroes and inspiring examples, each of which belonging to its specific type while retaining certain essential traits that bring them closer. (Page 161) Their main feature is always a constant effort towards a better future.

It is easy to see how this kind of subjective adjustment can not come from the constant stimulation exercised by the personal surrounding of any individual. Beside we have also seen that the opinion of a crowd can not be the best kind of stimulus in this kind of idealist and subjective adjustment, since the opinion of the crowd is rather focused on the objective side and therefore more practical and functional. A person who strives for superior development of natural tendencies can not logically base its efforts on the applause or encouragement of the masses. A demagogue speaker or histrionist (Paillasse) is more likely to be a crowd favorite than worthy speakers or actors. Thus, the whole question comes down to the fact that, to rise to this higher region of the mind, the individual must choose as a guide a model, a philosopher and a friend in whom it has its absolute trust. At this point in the discussion it may be argued that the effort of a group on democratic bases might perhaps produce the same required stimulus to move forward. Payot answers to this in the following way: "But these groups formed with its own peers are not at all sufficient, unless a mate has a definitely prominent moral value, which is hardly possible at this age. There is a need for higher support in order to get a personal approval from someone from on high. It is such a human need that the Church fulfills by spiritual guides. Here, nothing like that: the surrender is complete. Now, when we see how much admiration the students have for the masters they regard with esteem, when we feel the strength of their faith if the masters prove themselves worthy of it, we can only be deeply saddened to think that we do not derive anything out of this feeling. The master hardly knows its students, he knows nothing of their background, nothing of their families, nothing of their desires, of their aspirations or dreams for the future. If only we could suspect how important a word of encouragement, a good advice, and even a reproach provided it is friendly, may be at these blessed hours of the twentieth year! (Ibid., pp. 254-255).

It is important to specify that this influence must be that of a superior who went this way before its young disciples. Here we come to a form of organization in education that is different from the democratic ideal. The scholastic masters of ancient times, such as Pythagoras, Aristotle, Plato or Socrates, are for us the closest examples of this kind of guidance in idealist education. (Page 162) The relationships must be based on mutual respect. Whereas during the first stage - considered negative - this relationship could be, so to speak, maternal, now it must be more positive, like that of a father or a patriarch. The first is retrospective, the other prospective.

The true secret of the interest that a young person feels for this positive relationship with its guide is that it sees in it the image of what it will be in the future. It is the future that the young man (or the young woman) dreads more than anything else, for he is eager that this mysterious future be revealed to him. This interest and sense of mystery increases as the adolescent becomes an adult, and anyone who can project a ray of light into its future will be regarded with esteem by the student. The popularity of a fortune-teller is based on this same principle. There is clear evidence of this prospective influence among the most beloved masters in the Sanford Bell statistics ("A Study of the Teacher's Influence", Pedagogical Seminary, Dec. 1900, book 7, pp. 492-495) to which Stanley Hall refers (Youth, its Education, Regimen and Hygiene", p. 211): "What seems to be the most appreciated in teachers is the giving of purpose, arousing of ideals, kindling of ambition to be something or do something and so giving an object in life, encouragement to overcome circumstances, and, in general, inspiring self-confidence and giving direction."

The second important question that arises about the need for personal guidance in idealist education, is that of the common reluctance in our modern democracy for all that implies subjection. This is a sentiment analogous to that expressed in the revolt against slavery. The whole current of political events in the world is directed towards the abolition of too much authority. The fear of inquisition torments people's minds and manifests itself when it comes to the superiority of one person over another. The popular instinct anticipates and dreads, rightly, an open door to corruption in public affairs. With regard to this objection it must be remembered that material superiority belongs to a different order than purely spiritual superiority. The finding that there is a fundamental distinction has guided us, in fact, many times since the beginning of our study, and it is also important for a proper understanding of this superiority which is a favorable condition in idealist education.

(Page 163) The abuses to which could lead the implementation of this kind of arrangement in every day life may be avoided if certain precautions are taken: In the first place, the idealist educator should not expect that the interest that it will devote to its pupil shall earn it a personal lucrative benefit. Society should ensure that the personal needs of an idealist

master are independent of its duties as a master so that it has nothing to gain by exerting dominance over its students.

As in ancient Greece and in India a master should be requested to comply with an ideal of simple life and high spirituality, and it should give up its wealth. Then these idealist masters should be above any social class and any political or religious organization, so that their teaching is not degraded by propaganda motives. It is possible to guard against corruption as it has been demonstrated by ancient India where it was, and where it is still to a certain extent, the rule that the idealist educator is someone who has no ownership - that is to say, no wealth for its own pleasure and its own enjoyment - and where the people consider an idealist master to be somebody above any caste or party. Such a master is called "Guru". When a young man submits himself to the guidance of a Guru, he does it of his own free will and without material motive. The Guru, on his side, accepts this homage without any ulterior and vain thought, but only with the desire to communicate experiences of personal nature and to share them with the youth with a view to his salvation. At any moment, the pupil remains free to leave his teacher if he does not like to live with him; he is not socially obliged to undergo his supervision. With such freedom of relationship, the intimacy that results from it has the spontaneity and freshness of childhood, without any lower order motive; and the influence of the older person will be pure, salutary and truly idealist.

In India it is customary now to raise the Guru to the rank of a god, and the adoration bestowed upon him is considered as divine worship. Keay expresses as follows the traditional symbol that is represented by the Guru: "The deepening of relations between the master and the pupil. . . showed that the master was revered up to such a high degree that he was adored by his pupil. In the early Vedantic schools, the master or Guru was always one of those who were considered to have reached a degree of relinquishment that placed them on the same level as Brahma. From the worships (or Bhakti) practiced in honor of Brahma to the worship of the Guru, there was only a small step to be made for the student to equate the Guru with Brahma. (Page 164) This was already reported by the Svetavatara Upanishad (VI 23), maybe around the fourth century B. C." (1).

Thus, it is easy to see how in idealist education the Guru, or master, is equated with the ideal towards which we aspire. He becomes an object of contemplation, and through constant contemplation of the Guru's personality those who are unable to reach a higher level by themselves are helped to reach this goal or ideal.

(1) "Ancient Indian Education", p. 50.

In an idealist education of this kind, the Guru is thus acknowledged as the natural object of contemplation. Through a long succession of contemplations, the personal contact with the Guru will disclose the inner attitude that will give value and meaning to the abstract truth or ideal.

It is true that Eastern thought is inclined to overemphasize and idealize in a different way than do free judgment and the idealist and scientific tendency in the West. But even if we remove any possible exaggeration from this Eastern attitude towards the Guru, the need for personal contact is easy to admit. Even a Western scholar and thinker like Payot goes so far as to say:

“As we see, the two basic needs of the student, the need for moral guidance, and that for guidance in the methodology of work, have a common solution: the intimate connection between the teacher and the student. The teacher itself will find there its reward, for by raising its disciples' enthusiasm for knowledge, it will retrieve its own. On the other hand, it will easily convince itself that the great movements of thought accomplished in the world have not been so by knowledge transmission, but by transmission of a longing for truth or for some great cause, and by transmission of beautiful working methods: That is to say, in a word, that influence is obtained only by the man-to-man contact and the soul-to-soul contact. This is how Socrates conveyed a method and his enthusiasm for truth to Plato. This is how it is explained that in Germany the great geniuses of science come from small university centers where the professor and the pupil are in that soul-to-soul contact of which we have just spoken " (1).

(Page 165) In such excerpts we find the same fundamental principle that acknowledges the subtle function exercised by the personal educator in higher education.

It is the personal behaviour and profound qualities of the master that are of the greatest value for the idealist "seeker of knowledge". It is by constantly meditating on the personality of the master, and maintaining an intimate relationship with a man who has the secret of life, that the student - or disciple - will acquire the qualities and the conduct that make the master who he is. It is this truth that must be more and more accepted in the educational centers of our time.

In the case of persons who have acquired this idealisation and this superior adjustment (in the pedagogical sense) while having reached adulthood and having entered somehow an active life, this kind of adjustment often takes the form of a sudden conversion. We will not take into consideration the cases of sudden conversion that belong to the field of abnormal psychology.

(1) “L’Education de la Volonté”, p. 261.

To illustrate the nature of the personal influence and the behavioral change that is produced by it, we will choose only cases that are significant in the field of education.

An examination of the lives of some holy men, and more particularly of the life of an Eastern wise man, will not fail to reveal many cases where sudden conversions of this kind were made thanks to personal contact. The disciples have always been transformed after having been suddenly touched by the personal conduct of a new master whom they unconsciously want to imitate. We encounter many of such examples of conversion in the life of a Jesus or a Buddha. There has been no lack of such positive idealist personalities in India, even in recent times. They seem to be emerging in the countries that need them most, due to a decay of society. They become leaders and leave behind a large group of disciples who engage the same conduct as their master. In schools of philosophy, in monastic orders and even among social reformers, the impact of personality on this higher adjustment is revealed to us on a large scale and in all countries.

(Page 166) This sudden conversion is more common in people who suffer from mis-adjustment. A man who has been dragged into aspects of education that we have called "horizontal" will probably be sick of the monotony and lack of harmony that such a life provides. If it happens that such a man finds himself as a patient in a religious hospital, and experiences the pleasures of a calm inner life that inspires him for the first time with altruistic feelings, by way of contrast with the disorder of his previous life, they will give rise to an enthusiasm that will guide him to a new life. I have met several cases where patients became enthusiastic about the religious and philanthropic life of the institution to which they were accidentally linked. This is true of almost all cases of sudden conversion, even though they were abnormal since most of them were due to a pathological condition. Since we are more particularly interested in cases of a less advanced age where conversions are caused by continuous and conscious contact, we enter the field of personal influence in education.

It is after adolescence that this idealist education begins. Rousseau does not speak of God or religion to his Emile before this age has been reached. He makes the following remarks concerning this education: "At fifteen he did not even know that he possessed a soul, and even at eighteen it may not still be the right time that he should learn it; for, if he learns it earlier than necessary, he runs the risk of never understanding it" (Emile, p. 160).

Thus, whereas idealist education is a necessity at a later age, the pupil must be cautiously subject to it, even in the years following adolescence. But whatever the age, change has the same characteristics; it is a second weaning, a new orientation where thought is channeled to the subjective and introspective life. Momentum is then given to personal tendencies by various forms of discipline.

I had the opportunity to be in touch with some of the personalities of modern India who have exercised the influence we have discussed above. Among them the names of Ramakrishna, Vivekananda and Gandhi became familiar to French readers thanks to the works of Mr. Romain Rolland. S'rî Narayana Guru, with whom I had the rare privilege of being associated for several years, was another personality of equal worth.

It is appropriate to conclude the preceding remarks by referring to specific cases that I know, and which will illustrate what I said above.

(Page 167) We will mention only one case showing the influence of the Guru on a personality of a relatively advanced age. A man in his fifties was waiting for the Guru on his way. The man had led a very troubled life; he was known for his boisterous and quarrelsome nature. He asserted his dominance over the villagers whom he did not hesitate to oppress if they did not submit to his will. Physically robust, he had a bunch in his service, ready to pop up at the slightest hint. He had been jailed several times, and among the prisoners he had acquired a leadership position. The incarcerations had had little effect on him. It was when he became attached to the person of the Guru that a change took place in him. He began to serve the Guru, working to please him. The Guru granted unto him a privilege of being surrounded by him so that he could revere him as his master. He attracted him more and more and, in his journeys, he invited the man to come along as a travelling companion. He took care of the personal matters of the Guru such as preparing his bath, making his bed or fanning him when it was hot. All that care helped him to gradually focus his attention on the person of the Guru who represented a set of tendencies toward the good, tendencies which were likely to generate the admiration of even a strong-willed person. Through these continuous and strong relations, the conduct of the Guru was inserted into the personality of the disciple.

A change of this nature was striking. He began to gain a new reputation and was more and more respected; he became interested in public welfare and became active in the service of society. He gave the community a piece of land land he owned and wanted to establish a public institution there. We could not notice any longer his quarrelsome and fighting tendencies, but on the contrary he had a great compassion for those who had the misfortune of being implicated in a crime. He helped several of them, with money and advice, to get out of run-ins with the law. It is in this way that his original tendencies were somehow "sublimated". It is not only a case of complete suppression of certain tendencies, but a sublimation of them; it is the consequence of the nobler tendencies that his contact with the Guru had initiated in him. The inner life which was lying dormant in his first life awoke and was in addition to all his activity. He found pleasure in reading and meditation. Although he was far from having reached a complete transformation, the change was clearly oriented towards the good. He began to live as a respectable citizen.

(Page 168) The case mentioned above concerns a person who has passed the middle age; let us now examine the case of a younger one and let us follow the nature of the Guru's influence. He was a man of about thirty, with a firm and active willpower. In his youth, he had been leader and schemer, and, at quite an early age, he was leading a group of young people who were not always taking well-intentioned initiatives, and looked for opportunities to manifest their rebellious spirit by taking part in the scuffles they provoked. Then, the young man fell under the influence of the Guru and his previous tendencies were slightly sublimated. He set up a socio-religious association in order to spread the ideals of the Guru. All his power of leader and schemer was placed at the service of this beneficent association. From time to time he went on visiting the Guru, and this influence little by little and steadily changed his conduct. When he left his student life he entered the police, hoping to find there an opportunity to exercise his power. He gained consideration and esteem, but soon this profession seemed to have no appeal to him any more. While maintaining his relationship with the Guru he engaged in various public services. He had just founded a home when he thought himself called to a special mission. This new conduct, which was that of the Guru, progressively replaced his first tendencies, until the day when it seemed to him that he had no other life to lead than that of the Guru and that he had to live as a recluse and philanthropist. He left his home and his family and went traveling from place to place. It was a period of preparation and testing with a view of a real conversion. After two years of traveling he returns to the Guru and remains with him as "sanyasi" or recluse (1).

After having thus converted, he founded a dispensary for the sick. He taught a kind of meditation in which the search for a subjective ideal is practiced. And finally, he became fit to take charge of a large religious organization; this metamorphosis was widely known to be the fruit of the Guru's influence.

The two examples which we have just examined are somewhat special, since they are cases where a new conduct has been grafted on the conduct of middle-aged persons, as a result of the action exercised in their lives by an "image" that impressed them strongly. (Page 169) The most ordinary and frequent cases are less striking, but they are more important from the point of view of education.

(1) In India a *sanyasi* is a man who gives up his property and engages himself in a discipline of meditation and purification.

These cases were common in the life of the Guru and were mostly related to young people who came to him to find the way and the ideal of their lives. As a typical example, let us take that of young villagers brought up to the age of eighteen or twenty according to ancient traditions. Most of them were young people of remarkable mental and physical energy who were constantly in search of adventure. They talked about them to the Guru who understood their troubles and accepted them as free members of the Ashram community (1). The treatment prescribed depended on the nature of their transgressions, depending on whether they were permanent or transient. The difficult elements, the Guru held them as close to him as possible. To better understand the processes the Guru uses to lead his protégés, we have here to consider a particular tradition in India which concerns the Guru's relationship with the Sishya or pupil. In India, since ancient times, it has been an honor to be allowed to serve the Guru in person. This tradition remains today. In the ancient outdoor schools, we see the pupils, on the occasion of their admission, coming with a bundle of wood symbol of the help and service they are ready to give to their master.

Keay refers to this tradition as follows: "This offering of firewood to a teacher became the regular way by which a youth sought to be recognized as his pupil, and implied a desire to partake in his domestic sacrifice and to accept the duty of helping to maintain it" (Ancient Indian Education, p. 19). The pupil's state of mind towards the teacher was considered as very important, and this personal service for the teacher was necessary to establish in the pupil's mind a respectful attitude and a receptive attention towards the Guru. This is the same principle as the periods of silence imposed by the ancient Greek philosophers, such as Pythagoras. These customs, sometimes exaggerated, had been established in order to emphasize the great importance of the pupil's attitude in subjective and idealist education. Instruction in the classical sense was sometimes neglected by the master until he found that the pupil had the proper receptive attitude.

(Page 170) In the case of the positive-objective personality type, it was necessary, before a higher adjustment could be made, that all divergent tendencies be contained and channeled; it was serving the Guru which had an effective action and constituted an efficient and natural way of guiding and sublimating these tendencies.

(1) Idealist institution presided by a *Guru* and inhabited by him.

It is in this way that the Guru, basing himself on this same principle, allowed young men to regard him as an object of veneration and accepted to be served by them who came to him in search of an idealist life. The connection between the Guru and these young people was so constant and complete that none of their activities or behaviours escaped the Guru. The guru was particularly interested in cultivating personal and continuous behaviours. The action seemed to him less important than the principle that had directed it. That is why the main task of the Guru was always to develop a righteous attitude and to release bad tendencies in order to graft others. This required a constant psychological intuition that only people in intimate contact with others can possess.

It must be pointed out here that in these relations, as they are recognized by the Hindu tradition, there is no question of servility or adoration likely to hurt self-esteem. It was only in the idealist sense that the pupils depended on the Guru (1). He never demanded submission to the utilitarian things of the world. He exercised no social pressure on them. A subjective and free ideal was the guiding principle of their relations.

Besides, pupils never worshiped their master as an individual, but as a symbolic character.

Uniformity of results is not an ideal in such an education system. I have known people whose lives have been influenced in this way; many of them became Sanyasins with the qualities we mentioned above. Others founded schools or public institutions. There are some who founded a home guided by high aspirations. I knew one who became a well-known poet and several other clever speakers. Behind all these cases, an attentive observer would perceive the Guru's work and conduct. This philosophy enriched their actions and gave public value to their personality. (Page 171) This fact was often observed, both by those who surrounded the Guru and by those who received the mark of his influence (2).

(1) Cf Keay, "Ancient Indian Education", p. 36.

(2) Some details on the Guru's life can be found in the series of articles on "Life of an Indian Saint" published in the Sufy Quaterly of Geneva, Dec. 1928-June 1930. Kundig. Since published as booklet: "The way of the Guru", Geneva 1931.

CONCLUSION

After finalizing our study on "the Personal Factor in the Educative Proces", we still have to take a general look at what we have sought to demonstrate here.

Our main starting point was to consider the individual as a whole, that is to say having a bodily life with its behaviors and emotions, and being endowed with an intelligence and a mind capable of thinking. This review of the inventory of everything that belongs to the individual led us to consider two aspects of the personality: one which considers receptive, representative, symbolic and strictly individual activity; and the other which considers the expressive, actual and social activity complying with the objective world around us. What emerges first of all from this distinction is the fact that we can not rely solely on the expression of the mental capacities of the child, but that in estimating them we must take into account the back-ground of its personality. This distinction has also led us to consider the types of pupils as the asymmetrical expressions of these two fundamental aspects of the personality. In examining this process of education, we have found that the stages of development from childhood to adulthood have characteristics that also correspond to the types we have distinguished: Childhood, up to about 8 years of age, comes under what we have called the negative-subjective type; the adult, who has get passed its twenties, the positive-subjective type; the negative-objective type and the positive-objective type being interspersed between the two ages mentioned above. We have tried to see how, in relation to each stage and each type of pupil, the master must figure out the type of its educative influence: retrospective, prospective, negative or positive, according to the case.

This latter necessity implies that the relationship between the master and the pupil must have a bipolar character and fulfill the conditions set out above. Thus, education must be conceived as a connection between the master and the pupil, in an intimate and personal sense, which can in no way be replaced by a system, by rules, by programs or by established methods.

(Page 174) Finally we have examined the existing theories on education and tried to see their relation with the different stages of personal adjustment. In the negative stage, the influence of the master on the child's surrounding is one of control and selection. It is not a question of guiding intellectually, but of establishing intimate relationships between the master and the pupil. In the middle stage of adjustment (that is to say between 15 and 20 years), the child needs a social activity. As we have said, the intimate and personal relationship is not as necessary as in the first and last stages. In the last stage the master becomes strictly speaking a guide: it represents the subjective ideal of the future that is hidden. In the process the idealist stage is the last. By constant reflection from the pupil, the ideal of life and the ideal state of mind, as well as the leading principles of a more advanced person, are transferred or grafted onto itself, giving itself a more profound vision of life.

On the other hand, we have examined some concepts of Hindu thought, which since ancient times have given particular importance to personal relations between the Guru and the pupil. Besides, we could use in our discussion some of the specific concepts of Hindu pedagogy, especially concerning the negative and idealist stages of personal adjustment. They have amply demonstrated that this pedagogy, in its essentials, conforms to the pattern of personal development and educative relations that we presented in this study.

Vu : le 14 octobre 1932.
Le Doyen de la Faculté des Lettres
De l'université de Paris
H. DELACROIX.

Vu et permis d'imprimer.
Le Recteur de l'Académie de Paris,
S. CHARLETY

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