CHAPTER 1

META-THEORY OF EDUCATION: EUROPEAN CONTRIBUTIONS FROM AN EMPIRICAL-ANALYTICAL POINT OF VIEW

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TRANSITION: One conception of the term 'knowledge' that is both possible and useful is to conceive of it as having the same meaning as 'true statements'. Following this conception makes it possible to distinguish know ledge about education with respect to the principle that is used to verify statements about education. The distinctions of analytic, normative, and empirical knowledge about education are made in this way. Following this conception of knowledge also makes it possible to distinguish knowledge with respect to the object about which the true statements are made, i.e. with respect to the object of knowledge. The distinctions between scientific and praxiological knowledge are dependent upon the criterion of object of knowledge (i.e., field of phenomena being characterized). Debates about the proper kinds of inquiry and kinds of knowledge about education that should be developed relate to the conception of knowledge as true statements, and they also relate to the distinctions that can be made with respect to principle of verification and object of knowledge (field of phenomena). The literature about educational inquiry that has been developed in Europe since the 17th century, for example, makes the distinctions among normative philosophic, scientific, and praxiological knowledge about education. Moreover, schools of thought have developed with regard to which of the categories of knowledge about education have legitimacy. In this first chapter, Professor Brezinka traces the origins of the debate over the issue of whether inquiry about education should be primarily normative philosophical, scientific, or praxiological. Brezinka proposes that the debate be resolved by affirming that inquiry directed at producing educology should produce it in its entirety. It should not be a case of either normative philosophic knowledge, or scientific knowledge, or praxiological knowledge about education. It should be all three. Even so, Brezinka argues, a clear distinction should be upheld among the three categories of inquiry and knowledge because different sets of criteria are required to judge the truth value of each of the three categories of knowledge about education.

INTRODUCTION

In the world there exists education, as well as systems of sentences about education. Education is a kind of action, or praxis. A system of sentences, in which education is spoken or written about, is a theory of education (or educational theory) in the broadest sense of the word......

'theory'. Its main subject or content is education. There are many theories of education in which knowledge of education is expressed. They are differentiated from one another according to their purpose, area of validity, and quality. In the Western world the term 'pedagogy' has been used since the 18th century for the phenomenon educational theory' (French: pedagogic; German: paedogogik; Italian~ pcdagogia; Spanish: pedagogia). The term 'educology' has the same meaning.²

The educational theories (pedagogy, educology) can be made the object of descriptive, critical, and normative investigations. There is also an epistemological theory of educational theories or, for short, a meta-theory of education.³ According to whether one calls educational theories 'pedagogy' or 'educology', one can also call the meta-theory of education 'meta-pedagogy' or 'meta-educology'. It centers on analytical-critical (or epistemological) philosophy of pedagogical (or educological) knowledge.

In this chapter, 1 would like to report on the most important contributions to the meta-theory of education made by some of the leading European educational theorists who have adopted the empirical-analytical approach to educational theory. I begin with the concept of education (1), briefly sketch the traditional, practical theories of education (2), as well as the criticism which has been made of them, stemming from the ideal of the empirical sciences (3), and treat then the meta-theoretical views which Willmann, Durkheim, and Lochner have expressed on the differentiation of educational theories (4). I conclude by making my own suggestion which is derived in part from the works of these authors (5) and report on the present state of the discussion (6).

THE CONCEPT OF EDUCATION

Among the many actions which human beings take are those which are called 'educating'. They appear in all societies that are known to us. The concept of education refers to actions by which human beings try to improve permanently the structure of the mental dispositions of other human beings in some respect, or to preserve those components judged valuable or to prevent the development of dispositions regarded as bad. Included among those actions are those called 'teaching' or 'instructing'. The concept of education however is broader than the concept of instruction. It includes not only the educational actions of the teacher and other professional educators, but also those of fathers, mothers, and other persons who only occasionally educate. The institutionalized education, which is performed by teachers in schools, is only a small part of all the educational actions which occur in the world.

Educational action is always a means to an end. It takes place for a purpose. It only comes about because the acting person believes that his action is an appropriate means for achieving what he wants: the formation, the preservation or strengthening of the mental dispositions......

in the educand which have been established as the educational goal. For this reason, thought is a prerequisite of education.

Whoever educates depends on knowledge. He needs: (1) knowledge of the goals (such as virtues, knowledge, belief systems, and abilities in the educand) which he wants to achieve; (2) knowledge of the personality, living conditions, and the situation of the educand; (3) knowledge of the available means which appear to be appropriate, under the given conditions, for the achievement of the established goals.

This knowledge stems primarily from the traditions of the society to which the educator and his educands belong. It contains normative convictions about the duties of the human being and the meaning of his life as well as empirical hypotheses about his nature, his particular conditions and about possibilities of influencing him. This mixture of normative convictions and the results of one's own experiences as well as those of others, interpretations of situations, and educational-technological suppositions is the oldest form of a theory of education.

PRACTICAL THEORIES OF EDUCATION

The first educational theories were devised in order to guide the educator in his educational actions. They contain recommendations, rules, instructions or norms for educational action. They are instructions for the art of education. They are practical theories, not scientific theories.

The difference between practical theory and scientific theory has been in use over since Aristotle. According to him the theoretical sciences are those which are desirable for themselves and for the sake of knowledge," and the causes of phenomena are to be examined. In contrast, the purpose of a practical theory is to provide guidance for action, for praxis. In a scientific theory one attempts to describe and explain what is and what has been. In a practical theory one tries to express what should be, what should be done and what not. It contains value judgments and norms as essential elements. According to Hirst, "scientific theory and educational theory are as different logically as judgments of what is the case are different from judgments of what ought to be the case."

The practical theories of education have been devised above all for the education of the educators. Most of them apply to teachers, private tutors, and catechists, but also to parents. They are attempts to summarize the knowledge that educators need in order to educate in the given social-cultural conditions. Depending on the given educational goals and the personality traits of the educands, practical theories of education which can he called *specific*, have been developed: For example, one kind of theory has been created for the education of princes, another for the education of Catholic priests; one kind for the education of future scholars, another for working class children; one for the education of.

girls, another for toys.

In addition to those specific educational theories, practical theories of education of a *general* kind have been established in which one attempts to portray education and all the factors which influence education in general. They involve the educational goals which are supposed to be valid for all educands, as well as the personality and development of educands in general, and the means which are available to the educators. To describe this subject area, the term 'general pedagogy' has come into use.⁷

Both kinds of practical theories of education, the specific and the general, have in common a practical purpose. They offer a normative orientation about educational goals and means. The norms which concern educational goals are taken from the religion, the ethics, or the *Weitanschauung* of the given society. The norms which relate to the means stem from psychological knowledge. Corresponding to its practical purpose, the language in practical theories of education is used not only descriptively, but also prescriptively and emotively. By means of practical theories of education one attempts not only to inform, but also to inspire educators to educational actions which correspond to the ruling belief systems and moral norms.

Since value judgments and moral norms it the greatest importance for the normative orientation of both the educators and educands, pedagogy in 19th century academic circles was primarily associated with practical philosophy or ethics. The earliest academic form of pedagogy was a body of knowledge on the art of educating joined to ethics. However, it was clear from the beginning that ethics could only offer normative knowledge about educational goals (and *moral* aspects of the means), and that empirical knowledge about the means was dependent on psychology. But since psychology was also regarded then as a philosophical discipline, it is understandable that pedagogy was considered as a branch of philosophy. As a practical theory of education it remained a mixture of evaluative, normative, and empirical sentences which were taken partly from ethics (and metaphysics), and partly from psychology and historiography.

CRITIQUE OF PEDAGOGY ACCORDING TO THE IDEAL OF THE EMPIRICAL SCIENCES

As early as 1806 Herbart recognized that pedagogy, as a practical theory of education, was not a science in the strict sense of the word. In contrast to the traditional pedagogy, he developed the ideal of a scientific theory of education and called it "psychological pedagogy."

[it is] *purely theoretical*; and since it *explains education* simply as a fact . . . it makes every bad action and its effect just as understandable as the good. Since it actually ignores the difference between right and wrong everyone can use it.

Psychological pedagogy is accordingly not at all reformative. *It is simply informative*. ⁹

However Herbart could not create this scientific theory of education himself because in his day the kind of psychology, on which it must be based, did not exist.

In the 19th century practical theories of education were regarded almost universally as the only kind of educational theory that is possible. Even today there are educational theorists who support that view. Since pedagogy gradually reached, within the framework of teacher education, the rank of an academic discipline, one got used to seeing it as a special kind of science: a "practical science." Only a few educationists have thoroughly thought about its epistemological foundations, its limits, and its uses.

Nevertheless, there has not been a lack of educational theorists who have recognized, and publicly criticized, the scientific inadequacies of the practical pedagogy. In 1882, the Austrian Otto Willmann designated "popular reasoning . . . as its main element;" it is "rich in advice and well-wishing," but "poor in observations and facts." In 1888 the German Wilhelm Dilthey criticized its "noble popularity, which is the sign of improper science." It is characterized by an over-emphasis on educational goals in which "the most beautiful flowers from the field of moral life, happiness, perfection, ethical personality . . . are bound together in a friendly bouquet."

In 1911 the Frenchman Emile Durkheim asserted that "pedagogy has too often been only a form of utopian literature." The Italian Maria Montessori stated in 1913 that there has "in reality . . . never . . . been a scientific pedagogy." There is "something very indefinite, hardly anything clearly intelligible which can be understood in it. One could say that up to now it has only been the reflection of a science which must first develop itself out of a chaos of results' from the 'positive and experimental sciences." In 1928 the German Aloys Pischer attacked German pedagogy for being "more a collection of creative ideas than knowledge of facts;" and of "remaining in essence . . . philosophy, more creed and claim than knowledge and proof." 15

In 1966 the Englishman R.S. Peters characterized the state of educational theory as "an undifferentiated mush." In 1964 the American, Travers, wrote: "What is commonly referred to as educational theory is much more appropriately described as folklore than as science." In his book entitled *American Educational Theory*, published in 1964, Charles Brauner came to the following conclusions:

With but rare exceptions, the bulk of what is written about education fails in substance, form, and vocabulary. It fails as scientific interpretation, communication, and as guidance for instruction. In substance, what begins as if it were inquiry into.....

human behavior too often ends as a pronouncement on human nature. In *form,* the attention given to speculation usually outweighs the effort given to observation or to logical analysis. In *vocabulary,* technical terms imported from other fields soon lose the precision which gave them distinctive meaning and become nothing more than pretentious synonyms for common words . . . Thus we are confronted, in education, with an illiterate literary discipline. ¹⁸

For about one hundred years pedagogy has been criticized by educational theorists in many countries, but this criticism has had little effect. It is true that since the beginning of the 20th century, also, scientific theories of education have been propagated, in addition to the practical theories of education, and attempts have been made to realize them. Herbart's ideal of a "psychological pedagogy" has been followed by Lay¹⁹ and Meumann²⁰ under the name "experimental pedagogy" and by Fischer²¹ and Lochner" under the name "descriptive pedagogy," and it seems to be widely realized in modern educational psychology. But the task of theoretical integration of the results of empirical educational research into an "empirical science of education" is still far from being solved. It is even debated whether this task can ever be achieved or whether the empirical knowledge of educational phenomena for ever remain spread among several empirical sciences.²³ In the meantime pedagogy continues to live in the form of a practical theory of education in the academic teacher education courses in all countries of the world. That it has occasionally been called "scientific pedagogy" or "science of education" for reasons of prestige does not change anything in its overwhelmingly *practical* character.

Criticism of this kind of pedagogy is possible from various points of view. One can use as standards norms such as scientific method, proximity to reality, normative content, usefulness for the educational practitioner, or simplicity and clearness. Most of the critics who have been quoted here, have based their criticism on the ideal of the empirical sciences. Pedagogy as ~ practical theory of education is without question far from this ideal. The defenders of the practical theory of education object that the ideal of the empirical sciences is not suited to pedagogy because pedagogy is not an empirical science, but rather a *practical* discipline. It is frequently called a *philosophical* discipline. In any case, a *normative* system of sentences or a discipline with a normative-descriptive character is meant.

In recent decades a vast amount has been written to justify or criticize pedagogy as a practical theory of education. The meta-theoretical debate about the scientific character of pedagogy has already cost the educational theorists too much energy which could have been used more effectively for the solution of factual problems in their subject area. On the other hand, one can not abandon the attempt to clarify the epistemological foundations, since the decision for one or the other foundation is also a decision about the purpose of an educational theory,

the methods and thereby at least partly, and indirectly, about the contents.

For a long time the discussion about the scientific character of pedagogy saw no progress because most participants believed that there can be and must be only one kind of pedagogy. According to the traditionalists, this *one* pedagogy should be and must remain a practical theory of education. According to their empirically-oriented critics, it should finally be re-made into a *scientific* theory. Those who favor compromise argue that it should be at the same time a scientific and practical theory. Since each group tended to see its own view as insight into the essence of pedagogy, it fought against deviations from its own interpretations as if they were heresy. Some philosophers of education branded those educational theorists who favored an empirical science of education as immoral 'scientists.' On the other hand, some educational scientists ridiculed the supporters of practical theories of education as unscientific moralists. In so far as these fruitless epistemological arguments are not purely battles for power, prestige, and influence, the most important causes center on misunderstandings. One has overlooked the simple fact that there are several possibilities to construct a theory of education and that educational theories of various kinds do not necessarily exclude one another, but rather can supplement each other.

Only within the framework of an analytical—epistemological philosophy of educational theories (or a meta-theory of education) has it been possible to soften the intensity of the debate among the supporters of the various concepts of pedagogy. The first and most important step consisted of differentiating among the various classes of systems of pedagogical sentences.

EARLY PROPOSITIONS FOR DISTINCTIONS AMONG EDUCATIONAL THEORIES

Herbart (1776-1841) already recognized that the usual, practical pedagogy is not the whole of pedagogy, but only the "first half." However, he did not state in detail his thoughts about the "second half," that is, about psychological pedagogy' as a scientific theory of education.

As far as I can tell, Otto Willmann (1839-1920) was the first educational theorists to differentiate clearly between scientific and practical theories of education; he did so in a lecture given in 1876 at the German University in Prague. Both these forms of pedagogy are based on the difference between the theoretical and practical view of the process named 'education'. Willmann brought this difference in relation to the difference between laws and rules. The laws are statements about what is; rules proscribe what should be done. The *scientific pedagogy* limits itself to statements about social and cultural facts. It 'doesn't regulate, nor give instructions, but simply explains; it is concerned with that which is; it explains education as facts from its societal and.

psychological side;' it does not state "what ought to be done.' It is an *empirical*, analytical, inductive, explicative *social science*.

In contrast to that, practical *pedagogy* -- usually called by Willmann "*Erziehungslehre*" (educational doctrine)²⁶ -- is characterized as a system of norms for action or precepts which, as a matter of principle, are not derivable from scientific knowledge. The practical pedagogy is normative, 'demanding" or 'regulative. Its style is "the imperative." It 'stipulates what should happen, of course under certain given relationships, because that can not be determined in general and absolutely." It "is not universal, but rather peculiar to a specific area," a 'specific society," and tied to a definite historical situation. The validity of its sentences is limited by time and place.

Among the "educational doctrines" there exist great differences in content. They can be pursued more or less comprehensively, more or less thoroughly. They range "from the instruction that something is to be done in a particular way, to an idealistic proposal for a better education." They are tied to the existing ethos of a particular society at a particular time. They depend on the *Weltanschauuing* of their originators and their addressees. That does not however exclude the possibility that an educational doctrine can apply in a "reformatory way to society, religion, and the state' in order to set in motion some improvements. Indeed Willmann recalls that the pedagogical reflection is usually "called forth by the practical drive to improve the existing educational habits and educational institutions, if not to replace them completely, and in that sense . . . is directed towards the formation of the future."

Although Willmann was convinced that "pedagogy can only be treated scientifically as a part of the social sciences," he considered practical pedagogy to be justified, indeed indispensable. He had no intention of proposing its elimination and its replacement by the science of education. He only opposed the confusion of practical pedagogy with scientific pedagogy. Willmann, Durkheim, and Lochner only attacked the claim that practical pedagogy was already the science of education, which did not yet exist but was to be created by applying scientific methods to problems of education.

The second pioneer in this area was Emile Durlcheim (1858-1917). In an article entitled "The Nature and Methods of Pedagogy" which appeared in 1911 he stated that one can think about education with different intentions, namely scientific or practical. In the former one tries to describe and explain what is or what has been. The result of those attempts are scientific theories. In the latter one tries to determine what should be done. Interest is centered on the future. One is concerned with the representation of contemporary, practical actions, but rather with rules for future action. The results of this thinking are referred to as "practical theories" ("theories pratiques") by Durkheim. He calls the scientific theory of education "science of education" ('la science de l'éducation"), and the practical theories, "pedagogy," ("Pédagogie"). "Pédagogie is something other than the science of education."

The "practical theories" have their place between "art" (in the sense of "the exercise of an ability" or "praxis") and science. They come into existence when "one reflects on the processes of action which are thus employed, not to understand and explain them, but to appreciate what they are worth; if they are what they should be, if it is not useful to modify them, and in what way, and even more, to replace them completely with new procedures)' We are confronted there with a combination of thoughts whose purpose is to orient actors. 'Practical theories" are 'programs of action.' "Pedagogy" is seen by Durkheim as a "practical theory of this kind. 'It does not study systems of education scientifically, but it reflects on them in order to provide the activity of the educator with ideas to guide it." Its purpose is to direct the behavior of the educator.

In the "science of education," on the other hand, educational phenomena are investigated as "social facts. Its main problem, according to Durkheim, is the origin and functioning of educational -systems. It tries to observe educational systems as elements of social systems and to describe, compare, and discover typical manifestations which correspond to the various kinds of societies. The description and classification of the "types of education" should be followed by the causal-analytic examination:

we would have to explain them, that is to say, to seek out the conditions on which the characteristic traits of each of them depended, and how they have emerged from one another. One would thus obtain the laws which govern the evolution of systems of education.

The science of education aims therefore at the description of contemporary or past educational phenomena and at the discovery of their causes and effects. Durkheim knew that a science of education of this kind scarcely existed in his day, but had to be created first, according to his program, with psychological and sociological research methods.

For decades the meta-theoretical views of Willmann and Durkheim were paid very little attention. In Willmann's case the reason was that he had never published them, because he himself had rejected them, as a consequence of the experience or religious conversion, after a short period of critical, empirical-analytical creativity. He then adopted the view that pedagogy is a mixed, normative-descriptive discipline. In the end, he considered even "scientific pedagogy" to be identical with the "Christian pedagogy." In Durkheim's case the very small effect of his views can presumably be attributed to the fact that he dealt with our subject solely in a short, relatively unknown article in a handbook, and was otherwise almost only distinguished as a sociologist.

Working independently of both these forerunners, the German educational theorist Rudolf Lochner (1895-1978) published meta-theoretical considerations of the same kind which are much more detailed. In his

main work, published in 1963, he combines a historiography of the epistemological principles in German pedagogy from the 18th century to 1960 with a systematic representation of the different structures of the "science of education" and 'educational doctrine' ("Erziehungslehre").³⁰

In 1934, Lochner published the first German text in which the *science of education* is consistently treated as an empirical science.

Its subject area is the educational events in the life of the individual and society, its course of development, its results, and effects. [Its purpose) is not to influence an educational action, but rather . . . to recognize existing situations. In that sense it is directed only at what is.³¹

Lochner tried to observe, describe, and classify those phenomena which one meets in educational situations, the results of which he called the "phenomenology of education." However, in his systematic studies he did not surpass an interesting categorization of our everyday knowledge of education. He never tried to gain knowledge about the law-like relationships among the phenomena, which can be used for explanation, for prediction, and for the solution of educational-technical problems. The epistemological framework for this kind of investigation is however available in his meta-theory.³²

According to Lochner, the purpose of "educational doctrine" is action.

Educational doctrine is based on the sciences, among them the science of education; its task is to state what ought to be, to present goalc and recommend them, to judge methods, and to prescribe.³³

By 'doctrine' ("Lehre"), Lochner means in this context "an ordered summary of advice, recommendations or norms, how a subject area is to be organized, mastered, and improved." "Doctrine makes demands on the establishment of norms." Its norms prescribe actions, and the way they should be executed; but they also serve as a "standard for the judgment and evaluation of actions, modes of behavior, and conditions." ³⁴

An educational doctrine portrays 'how education should be done, how an educator should behave, and what he should consider, when he strives to achieve educational effects. Educational doctrine is concerned with goals and norms and . . their clear formulation. Its tendency is not research, but rather assistance for practical action.' It "seeks to influence educational praxis, as it occurs in groups, that is, to give advice for its improvement." ³⁵

Lochner was the first to present a thorough analysis of the epistemological structure of the practical theories of education. He showed their non-scientific character as well as the possibility and necessity.....

of formulating them in close connection with science. However he neglected the philosophy of education in his meta-theory. He especially underestimated the importance of a *normative* philosophy of education. The reason for that is that up until recently German pedagogy has been understood and pursued as normative-philosophical pedagogy in the tradition of practical philosophy. Since Lochner had to battle during his life against the prejudices of the supporters of this point of view, and for the recognition of his program of an empirical science of education, he emphasized more strongly the importance of the science of education rather than the indispensability of the philosophy of education as its supplement.

NEW PROPOSALS

In the last few years, doubt about the scientific character of pedagogy and its utility in educational practice has intensified.

There is almost no other science in which unscientific chatter, one-sided eagerness, and dogmatic narrowness is so widespread as it is in pedagogy. ³⁶

This crisis of pedagogy³⁷ can only be overcome when its epistemological fundamentals are clarified. For this reason the illusion must be given up that everything which is called 'pedagogy' ('educology') is also scientific. One needs the courage to test pedagogical systems of sentences on the basis of the methodological rules of science and to differentiate between their purposes and their values.

Only when it is clear to which norms educational theories should correspond, can one decide why existing educational theories are inappropriate and how better educational theories can be construed. The quality of pedagogical theories depends to a great extent on what kind of meta-theoretical (or epistemological) norms are recognized by educational theorists and how these norms are followed. Their meta-theoretical views influence the level of training of the educational professions and thereby the quality of educational practice. This influence is exerted in the intermediary of educational theory, as it is transmitted in pedagogical writings and lectures.

Thanks to the meta-pedagogical (or meta-educological) preparatory work accomplished by Willmann, Durkheim, Lochner, and many others, it is nowadays no longer very difficult to recognize the deficiencies of the traditional academic pedagogy. They are rooted in the attempt to connect *in one and the same system of sentences* the *normative* tasks of a *practical* theory of education with the descriptive tasks of a scientific theory. This has led to a blurred collective discipline which neither satisfies the methodological demands of a science, nor is it as usable for the educator as one would expect from a practical theory of education.

On the other hand, both tasks must be achieved. We need an empirical science of education just as urgently as we need practical theories of......

education for the educator, practical theories are no substitute for scientific theories, but likewise scientific theories can not fulfill those purposes which practical theories must fulfill. Since it is a question of various kinds of theories, I have suggested that pedagogy no longer be considered as an inadequate unitary discipline with the twofold normative-empirical (or practical-scientific) task. I propose that its concerns be divided in three classes of educational theory (or classes of pedagogical knowledge): the science of education, the philosophy of education, and the praxiology of education. This division into three classes is based on those three points of view which up to now have been held towards the problems of education: the scientific, the philosophical, and the practical. I want to describe briefly the tasks of these three types of educational theories.³⁹

A. SCIENCE OF EDUCATION

It is the task of the science of education to achieve scientific knowledge about the area of action called education. First it is necessary to describe and classify, as exactly as possible, contemporary and past educational phenomena as a sort of the social-cultural situations or "fields." Educational activities can, however, only be understood within the framework of the end-means relationship. They are means in order to achieve ends. Therefore it is not sufficient to examine only the means, separated from the ends. Instead, the educational end-means relationship must be seen in its entirety as the central subject of the science of education. Its main problem is to research the conditions for the achievement of educational goals (or ends). It is not a science which only describes facts, but rather a teological-causal-analytical science.

The attribute "teological" means that one must begin with the goals (ends or purposes) which are desired, and which one tries to realize through education. The attribute "causal-analytical" means that causal relationships must be investigated in order to find possibilities for intervention by educational actions. One looks for the conditions from which it depends, that men acquire the kind of personality (a body of psychic dispositions) which more or less corresponds to the established ideals. Then, one asks whether and how these conditions can be produced. The educational scientists can not limit themselves to a description of educational actions and institutions. They rather should relate these actions and institutions to the given purposes and situation of the educands in order to test whether they are actually the appropriate means, or whether they perhaps produce entirely different effects from those which are desired. When means prove to be inappropriate, one must look for the causes. Then other means should be looked for which might be more appropriate under the given circumstances. The causes of success and failure of education is the most important topic of the science of education.

These problems can only be solved when it is possible to discover laws to which the individual phenomena in the psychic and social-cultural.....

reality follow. In the ideal case a scientific theory of education is a system of such hypothetical laws which are logically tied together and more or less confirmed. It is a prerequisite for explanations, predictions, and the solution of technical problems.

In order to achieve this goal, the scientific method must be employed. Simply expressed, it consists of asking questions on the basis of available knowledge about a problem area and proposing temporary assumptions (hypotheses) as answers. These hypotheses are then tested according to their correspondence with the facts and their logical connection to the other hypotheses of the theory which have been relatively well confirmed. With regard to methodology there is no significant difference between the science of education and other empirical social-cultural or human sciences.

B. PHILOSOPHY OF EDUCATION

Since the word 'philosophy' has many meanings, the expression 'philosophy of education' can also have various meanings. Depending on the problem which is being treated, one can differentiate between epistemological philosophy (German: analytischerkenntniskritische Philosophie), metaphysical philosophy (or German: weltanschauflche Phtlosophie), and normative philosophy. What is needed most of all as a supplement to the science of education is a normative philosophy of education that answers to questions of values and norms which arise in educational planning and action. Its task is to provide educators and politicians responsible for education with the evaluative and normative orientation which can not be accomplished within the empirical science of education.

In a narrow sense normative problems concern the question: "What should I do?" In a broader sense they deal also with answers to the preceding and more comprehensive question: "How should I evaluate?" The establishment of norms is only possible when at first phenomena are assigned values, or non-values, and an order of precedence for goods (or values) is established. Giving an evaluative meaning to life, by establishing a highest purpose (ideal, value, or good), is also part of normative philosophy. In summary, then, the problems are: giving a meaning to life and evaluating and prescribing norms under the heading of normative problems.

In the normative philosophy of education first of all problems of evaluation are discussed. They concern all elements of educational situations, especially of course the ends and the means. One thinks, for example, of the problem of selection of teaching subjects from our cultural heritage. Only when value judgments have been made, is the prescription of norms by a 'norm-giver" possible.

The *problems* of *prescribing norms* form the second part of this area. It is important to differentiate between norms which express what should *be*, and norms which express what should or should not be *done*. The former......

are called *ideals*, and the later, *norms for action*.

The tasks of a normative philosophy of education can most easily be classified according to the end-means model. Following this distinction one can differentiate between a normative philosophy of educational goals and a normative philosophy of the means. In discussing the means, one must differentiate between the educators and their educational actions, on the one hand, and material means on the other. The first group is treated in the normative ethics for educators. It is divided into the normative ethics of the virtues of educators (the teaching of virtues) and the ethics of educational actions of the educators (the teaching of duties). The second subject area, the evaluative theory of the material means, includes the normative theory of teaching contents (normative didactics) and the normative philosophy of educational organizations. Thus the normative philosophy of education is not limited to moral norms concerning education, but also includes value judgments. Resides moral value judgments, also legal, aesthetic, religious, economic, hygienic, and other values are to be taken into account.

C. PRAXIOLOGY OF EDUCATION

The praxiology of education does not have a scientific purpose, but a practical one. It has been invented in order to supply educators with a knowledge related to praxis which they need for rational, educational action. It refers in every case to a specific social, cultural, institutional, and personal area of educational action. It is proposed from an ideological (German weltanschaulichen) point-of-view, and is evaluative. Accordingly it consists of normative and descriptive sentences. It ought to be free from scientific and philosophical accessories which do not directly serve its purpose. In summary, one can define it as a mixed normative-descriptive system of sentences which is to inform specific groups of educators living in a specific social-cultural situation about their educational duties as well as the means available for the execution of their duties. It is also meant to inspire them to educational action according to the valid Weltanschauung and morality. Practical pedagogy has four tasks: (1) it should offer educators an evaluative interpretation of the social-cultural situation; (2) it should state the educational goals; (3) it should provide practical view points, rules, recommendations of instructions for educational action and the formation of educational institutions; and (4) it should rouse, encourage, and support the value orientation and the dispositions necessary for morally valuable educational action (or the professional virtues of the educator). The praxiology of education has therefore a situation-interpretative, a teleological, a methodological or technological, and an ethical element. Its contents depend on the cultural situation of a society and the state of mind of its members. Even when it is designed with a critical and reformatory intention, it must be related to the existing state of mind and the existing educational praxis.

From an epistemological view the praxiology of education can also.....

be called 'practical canonics', that is, a system of instructions based on science and dogmatics.

ON THE PRESENT STATE OF THE DISCUSSION

Since 1967 these meta-theoretical proposals have been discussed a great deal in central and eastern Europe. Objections come primarily from those educational theorists who reject the difference between science and *weltanschauung* (or ideology). Accordingly they also reject the ideal refraining from value judgments in the science of education and believe instead that value judgments, the prescription of norms, and partisanship in systems of scientific sentences are necessary and appropriate.

Supporters of various religious, philosophical. andpolitical beliefs agree that they want a "complete pedagogical theory" (German: paedagogische Gesamttheorie) of their ideological orientation to be recognized as a "scientific' theory of education. ⁴¹ Besides Catholic theorists of education, especially Marxists are opposed to my proposals for differentiation. ⁴² They favor the maintenance of a denominational, practical theory of education as the only legitimate system of pedagogical sentences. They brand the program of a purely empirical science of education as "positivistic."

My proposal for differentiation is also opposed by educational philosophers who regard pedagogy as a normative or (practical) *philosophical discipline*. They believe that an empirical science of education is superfluous because in their opinion psychology, sociology, and biology are sufficient for the investigation of educational phenomena. They regard empirical knowledge of education peripheral, in comparison with normative-philosophical knowledge. On the other hand, educational philosophers, who take a phenomenological-hermeneutic view, show more understanding and sympathy for the ideal of an empirical science of education and for the necessity of demarcating it from the philosophy of education and the praxiology of education.

Finally there are supporters of the program of the empirical science of education who believe that the praxiology of education is superfluous because all problems can be solved within the framework of the science of education. Among empirical educational scientists, there is also much skepticism with regard to the usefulness of a normative philosophy of education.

Discussions of this kind can be useful for the clarification of the existing epistemological possibilities. It should not be forgotten, however, that meta-theoretical considerations and decisions as such are not sufficient to produce better theories of education. The analysis of the epistemological fundamentals has to be followed by systematic theoretical work. In future days the results of this theoretical research will show which of the epistemological programs, that rival today, has actually proved fruitful.

FOOTNOTES

- 1. Prom the Greek *paidagogike techne* (Latin: *are paedagogical*), meaning the *art* of education and the *knowledge* of the art of education.
- 2. Recommended by Elizabeth Steiner, "Toward Educational Theorizing Without Mistake," in *Studies in Philosophy and Education*, Vol. 7 (1969), pp. 154-137.
- 3. See Wolfgang Brezinka, *Mletatheorie der Erziehung*, Munich: Ernst Reinhardt, 4th Revised Edition, 1978.
- 4. Wolfgang Brezinka, *Crundbe~riffederErziehungswissenschaft*, Munich: Ernst Reinhardt, 3rd Edition, 1977, p. 95.
- 5. Aristotle, *Metaphysics*, A, I, 982, a.
- 6. Paul H. Hirst, "Educational Theory," in J.W. Tibble, Editor, *The Study of Education*, London: Routledge and Kegan Paul, 1966, p. 42.
- 7. See Johann Friedrich Herbart, "Allgemeine Paedagogik" (1806), in *Paedagogische Schriften*, edited by Otto Willmann und Theodor Fritzsch, Leipzig: Zickfeldt, 3 Volumes, 3rd Edition, 1915-19; *Algemeine Paedagogik* (1852),4thEdition,Braunschweig: Vieweg, 1898
- 8. See Herbart 1806; Friedrich Schleiermacher, "Die Vorlesungen aus den, Jahre 1826," in *Paedagogische Schriften*, Vol. 1, Duesseldorf: Kuepper, 1957, p. 12; Waitz 1852 (4th Edition, 1898, pp. 10-24).
- 9. Herbart, Vol. 1, p. 237; Vol. 2, p. 192.
- 10. See, e.g., Wolfgang Ritzel, *Paedagogik als praktische Wissenschaft*, Heidelberg: Quelle and Meyer, 1973.
- 11. Otto Willmann, *Didaktilc als BiZdungslehre* (1862), 6th Edition) Vienna: Herder, 1957, p. 18.
- 12. Wilhelm Dilthey, "Ueber die Moeglichkeit einer allgemeingueltigen paedagogischen Wissenschaft" (1888), in *Geammelte Schriften*, Vol. VI, Leipzig: Teubner, 1924, p. 60.
- 13. Emile Durkheim, *Education et sociologie*, Paris: Felix Alcan, 1922; English translation: *Education and Sociology*, edited by Sherwood D. Fox, Glencoe, Illinois: Free Press, 1956, p. 110.
- 14. Maria Montessori, *Selbsttaetige Erziehung im fruehen Kindesalter*, Stuttgart: Hoffmann, 1913, p. 1.
- 15. Aloys Fischer, "Die paedagogische Wissenschaft in Deutschland," in, *Die neuzeitliche deutsche Volkssksschule. Bericht ueber den Kongress.*

- in Berlin 1928, Berlin: Comenius, 1928, p. 80.
- 16. R.S. Peters, *Ethics and Education*, London: Allen and Unwin, 1966, p. 7.
- 17. Robert M. W., Travers, *An Introduction to Educational Research*, Second Edition, New York: Macmillan, 1964, p. 15.
- 18. Charles 1. Brauner, *American Educational Theory*, Englewood Cliffs, N.J.: Prentice Hall, 1964, p. 303.
- 19. Wilhelm August Lay, Experimentelle Paedagogik, Leipzig: Teubner, 1908.
- 20. Ernst Meumann, Abriss der experimentellen Paedagogik, Leipzig: Engelmann, 1914.
- 21. Aloys Pischer, "Deskriptive Paedagogik" (1914), in *Leben und Werk*, Vol. 2, Munich: Bayerischer Schulbuch-Verlag, 1951, pp. 5-29.
- 22. Rudolf Lochner, *Deskriptive Paedagogik*, Reichenberg: Stiepel, 1927. Reprinted: Darmstadt: Wissenschaftliche Buchgesellschaft, 1967.
- 23. See, e.g.. Israel Scheffler, "Is Education a Discipline?," in Scheffler (Editor), *Philosophy and Education*, Boston: Allyn and Bacon, 1966.
- 24. Herbart (1806), Vol. 1, p. 237
- 25. Cf. Fritz Pfeffer, *Die paedaqogische Idee Otto Willmanns in der Entwicklung*, Freiburg: Herder, 1962, p. 103.
- 26. On the German term Erziehungslehre or pedagogy as Kunstlehre cf.. also Richard Meister, "Paedagogik als Wissenschaft, Kunstlehre und Praxis' (1947), in Beitraege zur Theorie der Erziehung. Neue Folge. Graz: Boehlaus, 1965, pp. 42-66; Karl Erlinghagen, "Erziehung Erziehungslehre Erziehungswissenschaft' (1965), in Erlinghagen (Editor), Erzichungswissenschaft und Konfessionalitaet, Frankfurt: Akademische Verlagsgesellschaft, 1971, pp. 115-123.
- 27. Willmann, (1957), p. 36.
- 28. Durkheim (1922), p. 86.
- 29. Cf. Wenzel Pohl, *Otto Wilimanns religioeser Entwicklungsgang, Vienna:* Oesterreichlscher Bundesverlag, 1935.
- 30. Rudolf Lochner, *Deutsche Erzichurtgswissenschaft. Prinzipiengeschichte und Grtcndlegunq*, Meisenheim: Anton Ham, 1963.
- 31. Rudolf Lochner, *Erziehungswissenschaft*, Munich: Oldenbourg, 1934, p. 2

- 32. Cf. Wolfgang Brezinka, "Rudolf Lochner, Erzieher und Erziehungswissensehaftler," in *Paedagcgische Rundschau*, Vol. 32 (1978).
- 33. Lochner (1934), p. 2.
- 34. Rudolf Lochner, *Erztehungswissenschaft in, Abriss*, Wolfenbuttel: Wolfenbutteler Verlagsanstalt, 1947, p. 7
- 35. Lochner (1963), p. 511.
- 36. Otto F. Bollnow, "Empirische Wissenschaft und Hermeneutische Paedagogik. Bermerkungen zu Wolfgang Brezinka: Von der Paedagogik zur Erziehungswissenschaft," in Zezttschrift fuer Paedagogik, Vol. 17 (1971), p. 708.
- 37. See Wolfgang Brezinka, "Die Krise der wissenschaftlichen Paedagogik im Spiegel neuer Lehrbucher," in *Zeitschrift fur Paedagogik*, Vol. 12 (1966), pp. 53-88.
- 38. Brezinka (1966), p. 57; Wolfgang Brezinka, *Der Erzieher und seine Aufgahen*, Stuttgart: Klett, 1966, p. 9.
- 39. See Brezinka (1978).
- 40. See, e.g., Mario Bunge, *Scientific Research*, New York: Springer, 1967.
- 41. See, e.g., Heinrich Rombach, "Der Kampf der Richtungen in der Wissenschaft," in Zeitschrift fuer Paedogogtk, Vol. 13 (1967), pp. 37-69; Stephan Strasser, "Paedagogische Gesamttheorie als praktische Wissenschaft. Versnch einer aufbauenden Kritik im Zusammenhang mit Wolfgang Brezinkas 'Vonder Paedagogik zur Erziehungswissenschaft," in Zeitschrift fuer Paedagogik, Vol. 18 (1972), pp. 659-684.
- 42. See, e.g., V. I. Malinin, "Some schools of thought in the bourgeois pedagogy in the Federal Republic of Germany," in *Sovetskaja pedagogika*, Vol. 35, No. 3 (1971), pp. 124-133 (Russian); Franz Hofmann, "Von der Paedagogik zur Erziehungswissenschaft. Neopositivistische Erneuerungsversuche in der spaethuergerlich-imperialistischen Paedagogik der BRD," in *Verliechende Paedagoqik*, Vol. 8 (1972), pp. 74-83; Gerhard Stierand, "Die Vereinigung von Rationalismus und Irrationalismus durch Brezinka," in Akademie der paedagogischen. Wissenschaften der Deutschen Demokratischen Republik (*Editor*), *Jahrbuch* 1975, Berlin: Volk und Wissen, 1975, pp. 192-214.
- 43. See, e.g., Josef Derbolave, 'Eine Metatheorieder Erziehung. Ueberlegungen zu Wolfgang Brezinkas neuestem Werk," in *Paedagcgische Rundschau*, Vol. 32 (1978), pp. 341-342.
- 44. See, e.g., Wolfgang Ritzel, "Bcmerkungen zu Brezinka," in *Paedaqogische Rundschau*, Vol. 32 (1978), pp. 501-507.

- 45. See Bollnow (1971)
- 46. See, e.g. Helwut Held, "Zur logischen Struktur einer empirischen Sozialpaedagogik," in Dieter Ulich (Editor), *Theorie und Methode der Erziehunqswissenschoft*, Weinheim: Beltz, 1972, pp. 234-291.
- 47. See, e.g., Felix von Cube, *Erziehunqswissenschaft. Moeglichkeiten, Grenzen, politischer Missbrauch*, Stuttgart: Klett, 1977.