This monograph contains, in condensed form, the papers presented by the members of a joint working group of curriculum researchers at the Curriculum Seminar in Helsinki in September, 1986. The articles largely reflect the problems which curriculum researchers have in Finland. In this report, the curriculum has been confined to refer exclusively to advance planning. Six papers are included: (1) "Notes on Curriculum Research in the Sociology of Education" (Ari Antikainen); (2) "Curriculum From the Future-Oriented and Value-Futurological Perspective" (Sirkka Hirsjarvi); (3) "The Curriculum as a Factor Directing Teaching" (Pertti Kansanen); (4) "The Operational Structure of School Curriculum" (Paavo Malinen); (5) "Has Somebody Hidden the Curriculum?--the curriculum as a point of intersection between the utopia of civic society and the state control" (Risto Rinne); and (6) "The Role of the Curriculum in the Formation of the World View" (Juhani Suortti). (JD)
RESEARCH FRAMES OF THE FINNISH CURRICULUM

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Helsinki 1987
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Preface

As a pedagogical concept, the term curriculum was adopted in Finland at the end of the 19th century. Finnish views were influenced partly by German ideas (e.g. Herbart) and partly by those from the U.S.A. (Dewey). To parallel these pedagogical plans, administratively constructed curricula have also gradually emerged. The usage of this concept has been varied in Finland, diverging both from the German concept "Lehrplan" and from the US concept "curriculum". We are now using the term "curriculum" to refer to those administratively endorsed plans for the primary and secondary levels, which specify the organization of work in a given school type, including subjects and the main contents of instruction. These plans also present general educational aims and principles of child development, thus amounting to a relatively many-sided description of projected teaching work. In higher education and in adult education the curricula are not administratively tied to the same extent as they are at the primary and secondary levels, however, we shall now limit ourselves primarily to the examination of the 9-year comprehensive school and, as its continuation, secondary level general education (the upper academic secondary school) and secondary vocational education.

In Finland the curriculum provides administrative endorsement of educational goals and forms of instruction. At the same time, however, it is stated that instruction must be organized according to the capacities of students. The realization of the curriculum is thus referred to teachers' interpretation, since it is only the teacher who can be familiar with the qualifications of students. Although the curriculum defines the syllabi for the different grade levels, their acceptable achievement should be interpreted starting from the capacities of students and standardized tests are not used to measure the achievement level. This presupposes a great deal of confidence in the teachers' ability to assess the qualifications and performances of students. Notwithstanding the fact that it is administratively tied, the curriculum therefore mainly functions as a pedagogical guideline. In accordance with this dual nature, the official plan is therefore called pedagogical-administrative curriculum.
It is not until the 1980s that the current practice of curriculum application on the primary and secondary levels has evolved. Its theoretical grounds have been unclear, and therefore Finnish researchers have been interested in analyzing the structure and the concepts of the curriculum. The Institute for Educational Research (University of Jyväskylä) has participated in the International IEA-study (International Analysis of Educational Achievement) thereby acquiring research data related to comparative education. Some Finnish researchers have participated in the "Scandinavian - German Workshop on Curriculum Research." This workshop has also dealt with the Finnish curricula in its conferences. In connection with the school reforms the social significance of curricula has increased, and therefore also resources have been reserved for research work.

From 1985 a joint working group of curriculum researchers has also been active in Finland. The purpose of this group is to
- coordinate the work of researchers functioning in different universities,
- standardize the body of concepts and improve theory construction,
- enhance interaction between researchers and practitioners in education and
- undertake the international dissemination of information on curriculum research in Finland.

Professor Pertti Kansanen (University of Helsinki) has acted as Chairman for the working group while its members include Professor Ari Antikainen (University of Tampere), Professor Sirkka Hiršjärvi (University of Jyväskylä), Doctor Risto Rinne (University of Turku) and Professor Juhani Suortti (University of Oulu, Department of Teacher Education in Kajaani) and Associate Professor Paavo Malinen (University of Jyväskylä) has acted as Secretary. The working group has held preparatory meetings and in September 1986 it organized a two-day, Curriculum Seminar at the Department of Teacher Education in the University of Helsinki. At the Seminar the members of the working group acted as introducers and the commentators were Professor Erkki Lahdes (University of Turku) Doctor Kimmo Leimu (The Institute for Educational Research, University of Jyväskylä). A total of 120 researchers and administrators participated in the Seminary and lively discussion took place on
the presented papers. The introductions, commentators' reports and summaries of the discussions held at the seminar have been published in Finnish as a report of The Department of Teacher Education at the University of Helsinki "Opetussuunnitelman tutkimukselliset kehykset" (The Research Framework of the Curriculum. Tutkimusla 48/1987). The presented paper contains, in a condensed form, the papers presented by the members of the joint working group of curriculum researchers at the Curriculum Seminar in Helsinki in September 1986. The articles largely reflect the problem posing which curriculum researchers have in Finland. It is however true, that accurate translation into English of the concepts used in Finland is no easy task, as we already mentioned above in connection with the examination of the concept "curriculum". These articles are not restricted to any particular level of schooling in their examination, but they are mostly grounded on curriculum research of the primary and secondary levels of education. The working group has limited its inquiry to a basic-research type analysis of the current situation, not wanting to search for new values or norm for the basis of planning.

In this report the curriculum has been confined to refer exclusively to advance planning. Consequently, the criterion of its usability is the teacher's ability to utilize the curriculum plan in preparing her instruction. In mediating the curriculum into practice teacher activity is thus a central concept. Previously constructed guides, textbooks and other teacher materials are available to the teacher. In teacher's planning work these play a more important role than the actual curriculum plan. The importance of the curriculum can nevertheless be emphasized, if it is structurally clear and if it helps to transmit the most essential, administratively and pedagogically important information. Teacher activity thus includes interpretation of the curriculum and choice of materials and the work forms. Along with the transfer to the actual teaching work in schools, several other situational factors become relevant, which cannot be taken into consideration in the curriculum. These issues which have a strong influence on the student achievement are disregarded in this context.
During the seminar discussions regarding the development of curricula in Finland, it was noted once again, how the design and the characteristics of curricula can be examined from many different points of view. These articles also indicate that there is a great number of perspectives and that it is hard to construct a coherent curriculum theory. A wish was expressed from the administrative quarter, that researchers should draft a model curriculum plan as a basis for the administrative development of curricula in the future. It seems, however, that this demand is beyond the present resources of curriculum researchers, for the value-commitment of the Finnish society is different from that which the researchers would prefer to use. Therefore it is apparently very difficult to carry the standardization of curriculum research any further from what has been accomplished here.

We would like to extend our sincere thanks to the members of the curriculum researchers' joint working group for excellent cooperation in preparing this report. We are also indebted to the Department of Teacher Education at the University of Helsinki for publishing our report, as well as to the Academy of Finland for the financial support we have received. Many researchers and administrators have encouraged us to explore this field of great practical importance which is theoretically so difficult to command. Thank you for all the support and criticism.

On behalf of the joint working group of curriculum researchers.

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NOTES ON CURRICULUM RESEARCH IN THE SOCIOLOGY OF EDUCATION

Ari Antikainen

1. Present state of research

It is surprising to find out that there is so little Finnish curriculum research that is sociologically oriented or that applies sociological thinking. There has mainly been some discussion on the theoretical foundations of curriculum research as a response to treatises published abroad. In fact Suortti's (1981) philosophical and Rinne's (1984) historical-sociological dissertations may be regarded as the most interesting treatises from a sociological point of view. The situation is somewhat absurd because societal and social aspects have a major role to play in the curricula issued in the 1970's but, there is practically no research knowledge in this field. In the late 1960's multidisciplinary approach to curriculum research was formulated (e.g. Takala 1968) and, at the turn of the decade, the exemplary POPS I Report (Comprehensive School Curriculum, Committee Report) was published. However, nothing particular was achieved in research into the sociology of education in the 1970's.

Even though the contribution of sociological research is mainly descriptive in nature, research could have provided planners and decision makers with knowledge of the social conditions and mediating mechanisms that determine the designing and implementation of plans. These clear afterthoughts blend with a bitter foretaste of the future. It is easy to imagine the following situation towards the end of the twentieth century: as the municipal (local) curriculum was only viewed as a marvellous alternative, with no reference to its eventual limitations, in the late 1980's, the results have been contrary to expectations. Perhaps then a group of disappointed educational researchers will be organizing a seminar which will discuss curricular problems within a rational nation-wide and international framework!

1 I wish to thank Ilkka Pirttilä for the valuable comments I received while writing this article.
Despite the fact that other branches of educational research seem to include more curriculum research (Mallinen 1985, 175-177) the concept of curriculum remains vague in the Finnish discussion. The concept draws on both *curriculum* and *Lehrplan* terms. The comprehensiveness of the concept, and the tendency at least on the part of researchers, to relate it to school practices and, eventually, to pupils' experiences, may come from the former. The latter may have contributed to the idea of the curriculum as a plan defining exactly both subjects and contents. It might be worth discussing what this combination of so different premises and components really implies. It would seem reasonable to agree with the conclusion presented by Kansanen in his article, i.e. the terms, once adopted, have remained but their meanings have gradually acquired primarily national character in the Finnish discussion; there are no international counterparts.

From the researcher's point of view only a comprehensive notion of curriculum will provide a productive theoretical starting point for research. To restrict the concept of curriculum in this context would probably imply that research would take factors in or influencing the curriculum - or whatever the term might be - as 'given' or self-evident. At the same time this would imply that curriculum theory would lose its significance as a theory of education or as a part of it. Then, if the curriculum is not regarded as a notion opening up theoretical perspectives - which is entirely feasible - the comprehensiveness of the term will lose its significance. In the sociology of education the comprehensive notion of the curriculum may well be conceived as referring to the process of socialization and transmission of culture from generation to generation. Consequently, the curriculum is a plan that organizes the functions of the school in this process. The crucial points then are what elements of culture are selected to be transmitted by the school, who selects, and how the actual process is directed. These questions are extensively discussed in the general treatises of the sociology of curriculum (e.g. Lawton 1975, Eggleston 1977). However, there is no coherent sociology of the curriculum.
2. Theoretical foundations

Several starting points are available in educational sociological research into the contents of education. Education may be viewed as a phenomenon which is historically conditioned (e.g. Rinne 1984), structurally determined (e.g. Takala 1983, Tuomisto 1986) and which acquires its meaning in action (e.g. Olkinuora 1983, Nillistö 1985). It is not always necessary to use the term curriculum in a study even though it dealt with curriculum.

The sociology of knowledge may be the tradition that has most contributed to the sociology of the curriculum. In the sociology of knowledge the questions how society and the social reality determine the formation of knowledge and how knowledge affects society, can be, according to Aittola and Pirttilä (1986, 3.4), viewed as the logical fundamental questions. In the research tradition knowledge, in its widest sense, refers to the system of beliefs accepted by the members of a social group or a community. Consequently, it is different from the notion of knowledge used by both philosophy and psychology (Airaksinen 1979). Research has to deal with every day thinking and ideologies, with science and technology, as well as with school knowledge. The crucial theoretical point here is the distinction between structural theories (or structurally oriented research) and action theories (or phenomenologically oriented research). To simplify a little, the difference between the two approaches can be described, according to Aittola and Pirttilä, in the light of the following three points. The structural theories have frequently focused on ideological systems while the action theories have concentrated on people’s every day knowledge. Within curriculum research the code analysis used by Rinne in his article would provide an illustrative example of the former approach whereas the latter could be represented by research focusing on the knowledge generated and transmitted in the interaction process within the classroom. The traditional structural theories have presented social classes or groups as subjects of knowledge and knowledge only as an object while, according to the authors above, the action theories stress the subjective nature of knowledge. The third difference between the approaches is in that the traditional structural theories often include a thesis of the pre-
valuing ideology whereas the action theories emphasize the
diversity of knowledge structure. Berger and Luckmann's (1967)
conception of society as both objective and subjective reality,
and the socialization of the individual into a member of
society may here serve as an example of action theory within
the sociology of knowledge. It is also a socialization theory
where school has its own place.

In socialization the individual does not only create the
meanings of things autonomously but also meets the
world as 'given' i.e. historically determined. Primary
socialization is the first socialization process in
childhood, through which an individual and his identity is
formed. It is a very comprehensive process, which does
not refer to cognitive learning alone but takes place
under emotionally charged circumstances. It is obvious
that this process would be almost impossible without
emotional attachment to the significant others (mother in
particular, parents etc.). There are no identification
problems in primary socialization because no other people
are available. The world of the parents is the only world
available to the child. Secondary socialization - where
school has a prominent role to play - refers to the
internalization of institution-based 'sub-worlds' or world
views. The fundamental problem here is the fact that
primary socialization and, consequently, an already
formed self and reality have to be taken into con-
sideration. However, secondary socialization particularly
depends on the division of labour and social organization
in a society. While primary socialization presupposes the
child's emotional identification with the significant
others, secondary socialization can do without such identi-
fication. The child has to love his mother but he does
not have to love his teacher, only understand him, as it
is necessary for the teacher to understand the child's
world. The view of the world transmitted by the school
is already institutional to the child and, consequently,
not dependent on the individual teacher. Besides there
are more options than in the world provided by parents.
As for the location of school I quote Alttola and Perttilä's (1986, 74) account:

"Socialization is never complete and, therefore, all societies have to develop a variety of procedures to maintain a measure of symmetry between subjective and objective reality. Consequently, all societies have tended to secure the transmission of an appropriate symbolic universe to the coming generations by taking over the central institutions of education and socialization. Thus the primary function of educational institutions, in addition to the socialization process, is to legitimize the prevailing social structure and the fundamental institutions of society as well as to make an individual's process of life into a meaningful entity."

I have sometimes played with the tentative idea that tertiary socialization would be a process through which an individual becomes aware of the existence of different societies and learns to identify with their members at least to some extent. (Knowing other meanings of tertiary socialization.) The development of mass media and tourism will make this possible. Behind the idea is a fear that our educational theories are inadequate in analysing the problems of the international community, mankind and the human race even though we may think that preserving and maintaining life is the highest value in education.

When English sociologists of education began to investigate school knowledge in the early 1970's, their starting points were in accordance with the tradition of the sociology of knowledge. The school system was to be analysed not only as a selector and processor of individuals but also as a selector and processor of knowledge (Young 1971; see also Antikainen 1986, 122-133 and 1986a). According to the radical programme of the so-called new sociology of education, researchers should not accept the normative bias that results from adopting the notions of the national school administration as the starting point of research but they should go beyond this 'rhetorical smokescreen'. I subscribe to this goal: descriptive investigation of the prevailing educational reality is an indispensable condition for the progress of educational research. Research on school knowledge (educational knowledge) is to focus on the curriculum, which can be analysed as the social organization of knowledge. According to researchers, the curriculum reflects
the social control and the distribution of power in society or, to quote Bernstein (1971): "How a society selects, classifies, distributes, transmits and eluates the public educational knowledge reflects both the distribution of power and the principles of social control".

This theoretical notion led him to two educational knowledge codes - 'collection' and 'integrated' type curricula - and to two types of pedagogy - 'visible' and 'invisible'.

The representatives of the new sociology of education thus questioned the prevailing curriculum and the knowledge to be transmitted in teaching. According to them, school knowledge is not made up of 'objective' forms and knowledge contents but, instead, the curriculum is a social organization of knowledge that can be influenced. So far the criticism put forward by the new sociology of education was accepted by many writers. However, if the representatives of the new school suggested - which is somewhat unclear - that objective knowledge does not exist, and that also the criteria of truth are social, their ideas were generally discarded. In trespassing on the territory of philosophers and curriculum experts the new sociology of education was met with criticism and arguments. Even the worst critics acknowledged, however, that the production and dissemination of school knowledge (e.g. school books), and the functioning of the school organization and the school community were vital and neglected fields of research. Instead, they denied the direct relation between school knowledge and social stratification, on the one hand, and the powerful selective and manipulative functions of school knowledge (and the concomitant school practices), on the other. As far as I know, the school has, however, received support for part of its main ideas at least from socio-historical investigations that have described how subjects and curricula have been redefined at various points of time by various interest groups without any 'objective' reason (see Cooper 1983; Goodson 1983).

On micro-level the learning environment investigated by the new sociology of education covered, in addition to school knowledge, also classroom interaction and the language of school. Social influences were seen in all these components. Interaction is hierarchical in nature. It tends to label pupils and is based on the image of the ideal pupil and on the
socially acquired expectations of the teacher. *Language* is formal, reflecting the code of the middle and upper classes. It serves the functions of classification and control. In the experienced *curriculum* each subject has its own status and stands in a fixed mutual relation to the other subjects (e.g. Saha 1978). According to this conception the teacher should be able to realize the socially determined character of the learning environment in order to be able to question it and to change school practices so that the pupils with different social backgrounds could be more equally treated. This argument contains at least two critical points: first, one should be able to separate valid classifications and labels from 'purely social ones', and, second, one should define the extent to which school knowledge can be manipulated (see Blackledge & Hunt 1985, 290-315). It has been estimated that this micro-level research has had some practical impact in England. It has demonstrated to the teachers that they have an important position and that school can be reformed and its practices diversified through conscious action (Banks 1982).

In the Finnish context this might imply that the implemented and the experienced curricula are conceived as opportunities of reforming school at the grass-roots, instead of treating them as defects in planning (as for the terminology, see Kangasniemi 1985).

As, at the beginning of this article, I wrote that the contribution of sociological research is mainly descriptive and concerns the social conditions and mediating mechanisms that determine the implementation of the curriculum, I now hope that the above presentation has demonstrated that research in the sociology of education has made attempts to focus also on the contents of the curriculum. It has to be remembered, however, that the concept of knowledge prevalent in the sociology of knowledge differs from that used in both philosophy and psychology.
3. Challenges to research

An advancement in curriculum research may not be possible without progress in basic research within education. Research into the socio-historical foundation of education is one significant branch of study. Rinne's article above deals with this area. As for applied research, the study of the various branches of education and that of the various subjects (or branches of knowledge) have a major role to play. In the Finnish school system it is difficult to imagine any changes without the contribution of subject-specific expertise. The following discussion of the challenges to research presupposes an understanding of the whole field of research, and, consequently, I may confine myself to the current knowledge needs of educational planning.

It is generally thought that the content of education is largely determined by the goals set for the various levels of the school system (1. educational goals relating to the pupils' personality, 2. goals for the school organization and the school community, and 3. goals of educational policy relating to the social functions of education). In my opinion the deliberate setting of goals can be regarded as a major outcome of educational planning in the 1970's. In reality, however, the goals remained largely unconnected and idealistic when other, stronger factors (tradition, employment prospects of the various teacher groups etc.) dictated the contents of curricula. This may not have been an infrequent phenomenon in other public planning either. It is interesting to notice that the present planning ideology is more sceptical about the possibility of defining the goals in advance or outside the actual institution. Similarly, confidence in comprehensive planning seems to have decreased, and rationalistic planning seems to have been replaced largely by an incrementalistic or mixed ideology (Vartola 1985). However, it is still to be remembered that giving up the rationalistic planning ideology and developing an organization entirely through the activity of its individual members means that the control and direction of market factors will increase (c.f. Berg 1984). Attempts should therefore be made to decrease the gap between goals and action.
If the functioning of the school system is seen from the viewpoint of goals, the research in the sociology of education has been able to point out at least the following structural factors that have prevented the goals set in the 1970's from being realized:

1. Education reproduces the prevailing social stratification instead of decreasing it. According to the available information, practically no change in social selection to upper secondary school and universities took place in the 1970's (Kuusinen 1985; Antikainen 1986, 133-138).

2. The official rule system of school organization is in conflict with the official educational goals (Uusitalo 1984).

3. The actual school practices (the so-called hidden curriculum) are in conflict with the public goals of education (Kivi nen et al. 1985).

The most important contribution of research in the sociology of education may be the specification of the mechanism that are behind the above results. For example in research into the reproduction mechanism it is interesting and fruitful to examine how the two cultures, that of the school and that of the pupils, interact (c.f. Willis 1984). There seems to be a more general need for an approach in which school's functioning and the pupils are not viewed mechanistically as reflecting and reproducing structures but the individuals are conceived to act within the structures as active and self-conscious subjects (c.f. Gordon 1986).

It is not easy to change even the official, written curriculum to say nothing about the actual school practices. The curriculum is in the focus of various interests. Consequently, knowledge is only one of the components, status and power are also involved. Eggleston (1977) describes the decision making concerning curricula in England as an institutional conflict which involves a large number of interest groups. Also the Finnish curricular governing and decision making system ought to be studied. The need for research is further emphasized by the decision making arrangement, which concerns the comprehensive school and the upper secondary school: the National Board of General Education compiles the curricula but other planning and decision making is decentralized to local administration and to schools. Inspite of the fact that my remarks are speculative in nature and, at their best, will only
offer material for hypotheses, I want to express some primarily critical comments about the new situation. While reading them one should bear in mind that I have published my positive attitude towards the decentralization of the school system (Antikainen 1986). I also expect that the new curricula system will have the positive impact that teachers and members of school boards etc. will have to familiarize themselves with the curricula.

While reading the new curricula (POP 1985 - Comprehensive School; LOP 1985 - Upper Secondary School), two questions occurred to me. First, is there a danger, pointed out by Rinne, that thinking related with man and society will decrease in scope and move towards administrative rationality? Second, isn't it rather flimsy moral thinking, and also undemocratic, to justify value goals by pointing out that they have the support of the majority? The relationship between goals and content was already discussed above.

As for decentralization, it would be rather easy to analyze the experiences gained in the other Nordic countries. This work may already have started within school administration. As a theoretical question decentralization is a complex phenomenon. Lane (1984), from Sweden, analyzes it into the following components: utlokalisering, integrering, privatisering, implementering, kommunalisering, participation, access, beslutsfördelning, and formalisering. In our situation the first question might include the following: What is the relation of the decentralization of the curriculum system to other educational planning and administration? What is the significance of local (town/municipality) applications of the central curricula regionally and functionally? Is it mere change in the degree of state control? Lane's (1984) principal theoretical conclusion is that decentralization should be connected with the concept of institutional autonomy. This might provide a useful perspective for the study of organizations also in Finland. As far as the content of teaching is concerned, it is generally thought that the local contents of instruction will easily focus on local traditions alone.

The new situation also underlines the importance of studying the teaching profession. Here the theories developed within the study of professionalisation and professionalism have a role to play. Here is a case in point. Goodson (1983) and Cooper
(1983), using the socio-historical analysis, studied changes in school science and mathematics in the English school system. A very decentralized curriculum system is in question, and the situation is not comparable to the Finnish context. Cooper presented the main results as the following model:

1. A subject is seen as a set of segments or groups, with distinct missions or perspectives, and material interests. (E.g. 'pure' and 'applied', 'classical' and 'modern' mathematics).
2. Conflicts and co-operation between these groups, and their alliances with groups inside and outside the subject are viewed as the major explanatory factors in changes in subjects.
3. The power of these groups, and of individuals can be analysed in term of the resources available to them (which resources, in turn, are affected essentially by the alliances above).
4. Changes in the conditions for action among subject members are particularly important. Frequently the changes are related to changes in society. (For instance increasing use of computers has affected mathematics).
5. According to Kuhn (1963) the textbook initiates the student into a paradigm. Consequently, university subject communities tend to compete for influence over redefinition of the textbook-based subjects in secondary education, particularly over the nature of the textbooks used.
6. Missions and perspectives are viewed partially in relation to career interests of individuals and groups.
7. Changes in textbooks and materials are to be analysed also in relation to the missions and interests of the relevant groups.
8. A redefinition of a school subject is a compromise between the various powerful groups, and It is to be expected that its legitimacy is continuously subject to changes.

The evaluation and follow-up of existing curricula can offer useful ideas for the development of curricula. From the viewpoint of the sociology of education Annika Takala's world view study and her investigation, based on pupils' compositions, of comprehensive school pupil's cognitive, social, and moral development are interesting follow-up studies (Takala 1986 and 1981). The following conclusion by Takala may serve as an example:
"The ethical and social goals of education have been written so that they highlight the values that should direct both the choice of contents and perspectives in teaching, and the work of the school community and the interaction between its members. It is my opinion that this is the way the value goals of ethical and social education should be expressed. This way of expressing goals lends itself well to setting goals in democratic school education. Citizens can express their views on what kind of values and principles should be observed in school when things related with the local community, society and international interaction are taught. If the goals were expressed only in terms of developmental psychology, i.e. by defining various stages of, for instance, thinking and moral development that should be reached, laymen could not possibly take any stand on them. Value goals should mainly be understood as meant for school, teachers, contents of education, and materials. They are not meant to express strict terminal behaviour outcomes. Thus the notion of a young person as the subject of his or her development will be retained, a subject that actively constructs his or her personality and values." (Takala 1981, 127-128).

First, I can sign the above conclusion with the reservation that I expressed earlier in connection with an inappropriate use of Gallup-thinking in setting goals (which is not what Takala means here). Second, it is interesting to notice that the above conclusion leads us to an area that I have not yet discussed, viz. to the school community and social pedagogy. Is it not true that the expanding ways of organizing learning that compete with school stress the significance of the school community to the school system more than ever before? Should research not again focus on the school community as well?

Research on world view provided me with one interesting example. According to Nuutinen (1983) the image of society among Finnish youngsters is not very developed at the end of the comprehensive school. Two further years in the upper secondary school or in vocational schools does not seem to improve the results to any considerable extent. It would be interesting to know to what extent this is due to social studies in school. Nuutinen further wonders whether the timing of social studies in the curriculum is appropriate. The curriculum for the upper secondary school raises another question: to
what extent this is due to the absence of any theory of the social sciences in teaching? For example, the curricula of psychology and philosophy are clearly better in this respect.

So, it is possible to utilize existing studies and data in re-evaluating curricula. It would be of vital importance also to start creating a new frame of reference and a new design for the purpose of analysing the social significance of curricula.

References


1. The time-dimensions perspective

It will be my purpose in this article to describe curriculum construction and curriculum research at the level of planning which in many classifications is located at the top of the hierarchy. It is called general planning and is carried out at national level where discussion of the fundamentals of curriculum should take place. It is part of national educational policy.

There are significant differences between traditional and modern planning. The former was primarily directed at maintaining the existing system, whereas the latter seeks to produce controlled changes. Traditional planning consisted largely of shortsighted reactions to immediate problems; forecasting meant the short-term planning of activity. Modern educational planning is aimed in the long term at the integration of schooling and other social sectors. Liekkiisalo and Raivola (1986), for example, describe planning in these terms. In another connection (p. 182) the writers state that "Planning provides a tool in the attainment of a desirable future. It is aimed at controlling the future." The "spirit" expressed in the above statements has not been apparent in articles examining the problems and techniques of curricula planning. The future has not been the subject of discussion and it has not so far been possible to utilize the contribution of modern futurology.

1.1. Curriculum research from different time perspectives

All curricular issues - curriculum studies as well as questions of curriculum construction - are located in time. This notion is a derivative of the following statement by social theorist Giddens (1984, 303): "... all existing patterns of interaction are located in time." It can be considered an essential...
ingredient of curriculum theories that they are determined by time and space. Where time is not taken into account, the curriculum is seen as a "timeless photograph" located in a timeless society. Another consequence of neglecting the time dimension has been the identification of time and social change. Even when time has been taken into consideration, it has been treated more as an "environment" or as a frame factor in which social behaviour, e.g. curriculum construction, takes place. This means that it has not been regarded as a phenomenon central to that particular examination of theory. This criticism is by no means directed at historical research into curriculum plans. There are in fact many features common to the study of the future and the study of history (see e.g. Männikkö 1984).

The relationship between the past and the future can be illustrated by a simple figure of divergent paths (Figure 1): 

![Figure 1](image)

Figure 1. The past and the future as time dimensions of the curriculum (adapted from the figure of Malaska and Mannermaa, 1985, 471)

The figure shows how the past, present and future are closely interconnected. We cannot plan future phenomena in isolation from the present and the past. In the figure the continuous line drawn in the past illustrates that which has already been realized and the broken lines surrounding it illustrate those alternatives which were discarded. The study of such alternatives is called contra-factual historical research. The future still lies ahead and it is composed of an array of
alternatives depicted by the broken lines. Any one of the alternatives can be realized. Due to the complex nature of modern societies we are not even aware of all the possible alternatives. We cannot obtain absolute and perfect knowledge, but futurology can help us in the search for alternatives. The present time can be defined as the borderline between the future and the past.

The past future of the curriculum may be familiar to a historian in two ways: he can regard it both as open and as something that has or has not been realized. Historical events have contained alternatives, just as the future does.

A historian looks at the evolution of the curriculum primarily backwards. He or she sees the final outcome and proceeds from the end to the beginning and from the effect towards the cause. His method of analysis can be called retrospective. A futurologist generally proceeds in the opposite direction: he or she proceeds prospectively; in other words, he or she proceeds from the past, through the present time and moves on to the still open possibilities and alternatives of the future. They are both sciences of time in the sense that they accept time as the basic variable and that they examine the curriculum from the time perspective. Their research objects, which are located successively on the time axis, are comprehensive and global and therefore the research tasks will usually also become very complicated. They also have in common the fact that their research target cannot be made an immediate object of observations.

1.2. From prediction to the study of the future

Earlier images and models of the future constructed in the "Baconian spirit" were based on oversimplistic ideas about the forecasting of the future. Not until later did the striving for and faith in the meaningfulness of rational prediction weaken. A strongly normative aspect has now been added. There has been a considerable increase in efforts to make an explicit evaluation of the desirability and value-boundness of different future images.

Modern futurology aims at being problem-centered and often starts from the notion that research should try to promote an
essentially different future - one that is better than the past. This is what curricular reforms also aim at. Modern curriculum development work might follow principles which are identical with the features stressed by futurological research: the aim is not the discovery of permanent historical lines of development nor the simplistic forecasting of the future; instead, the evaluation is also focused on discontinuums, foreseeable new phenomena and structures and their effects. It should be the basic assumption of curriculum construction that future choices can be influenced by acquiring information about the alternatives offered by the future.

Curriculum construction must also face the challenges presented by the increased speed of social change processes, the growing complexity of decision making, the deepening interdependence of many different sectors, the rapid development of technology and its consequences, the expansion of knowledge and the build-up of communication networks. Due to this vigorous development, problems emerge more acutely than earlier. For this reason the strategy for encountering problems should be developed in the education and teaching sector. A solution might be the development of scenarios to assist in curriculum design. "The drafting of scenarios is a technique which shows how possible, probable or desirable future state develops or can be developed step by step from the existing situation." (Malaska & Mannermaa 1983, 1985).

The shift of emphasis from forecasting to wide-range future research is shown in Table 1. (Malaska & Mannermaa 1983)

<table>
<thead>
<tr>
<th>Forecasting</th>
<th>Future research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature of future</td>
<td>What will the world be like?</td>
</tr>
<tr>
<td></td>
<td>What are the possible worlds?</td>
</tr>
<tr>
<td>Strategy of activity</td>
<td>How can we achieve our objectives?</td>
</tr>
<tr>
<td></td>
<td>How can we prepare for different futures?</td>
</tr>
</tbody>
</table>

Table 1. From forecasting to the study of the future.
The curriculum construction process might be based, for example, on the following kind of progression:

1) A critical analysis of the present situation of educational system.
2) The future development of the present situation of education assuming no unforeseen contingencies occur.
3) Definition of the logical future of the educational system by means of the two previous steps.
4) Explication of several possible futures by assuming into the system specific and deliberate forces that produce change.
5) On the basis of the preceding points, a number of objectives are defined which will help to produce an outline of the preferred future.
6) Intermediate objectives and strategies are defined within precise time limits.
7) The framework of institutional influence is defined.
8) Finally, a description is made of the transition phase which the system has undergone according to the planning process. In the light of this new planning process can be initiated.

The above model is an adaptation of one developed by Obzekhahn (Julien & al. 1979). This sort of planning is prospective in nature. The distant future forms the horizon from which one proceeds at the strategic stage to a more precise examination of the nearer future, from which one finally advances at the tactical stage to the immediate future. This planning process with its different stages is illustrated in Figure 2.

2. The technologically and socially determined starting points of the curriculum

Because of the unprecedentedly radical social changes which have occurred during the past two decades, the question of how to analyze this change has become more central in the social sciences. The essential question is which factors should form the starting point for explaining general change processes and
Figure 2. Prospective planning process
from where should the reform of curricula be commenced. The following three viewpoints (with slight simplification) can be singled out from recent discussion (see e.g. Antikainen 1982, Suhonen 1984): (1) Technological development controls the development of the future, (2) Social relationships are decisive factors in the development of the future and (3) Value changes are central to the creation of the future.

The above division into three perspectives makes the phenomena appear to stand somehow in opposition to one another. The approaches are not, however, mutually exclusive. In some descriptions the latter two appear as complementary to each other. In investigating value changes post-Industrial society may be taken as an objective starting point. By applying the Delfoi-technique the formulation of research problems may be as follows: "Which values are likely to change under the impact of foreseeable-scientific-technical-demographic-socio-economic change, and how should curricula be constructed or reformed according to these changes?"

Theories explaining change can also be found, for example, in the sphere of cultural research. The above tripartite division is therefore by no means exhaustive. The following discussion will nevertheless confine itself to an examination of these three approaches. We shall first focus on aspects of technological development and social determinism.

2.1. Directing the course of the curriculum from the technologically deterministc perspective

Theories of social development and derivatively many areas of human activity, including the educational sector have been coloured by some degree of technological determinism. When applied to the curriculum this means that technological development is seen as an autonomous factor without social alternatives, which provides the framework for the shaping of the curriculum. The great majority of sociological research on technology has been stamped by technological determinism in a way or another. Since, according to this view, technology advances autonomously, other sectors of society and its social structure have no alternative but to try and adjust to the changes.
Notions of technological determinism may be narrow or broad. When the narrow viewpoint is applied to curriculum planning, it means that changes in the functions of education, in its structure, process and resources are explained in terms of technological development. It is believed that changes in these areas are caused by technology, its quality and level of development. The broader perspective, on the other hand, implies that the effects of technology are seen as encompassing the whole of society and explaining social and economic developments. The effects of technology on the planning of education are mediated through these more extensive changes in society.

In the most radical form of technological determinism technology is understood as being without history and isolated from other social development. It is as though there exist "technological" and "social" phenomena which are clearly distinguishable from each other. The curriculum is a social phenomenon and since there are different phases in technological development, these will be observed by social change and it is therefore even possible to predict changes in the curriculum by studying technological change. In opposition to this view there is the systems theoretical approach. This sees technology as diverging from the rest of society with its non-technical sub-areas and thus having a relative autonomy, but technology takes shape only as a force which is subordinate to the whole of society.

There are technocrats who, for example, ask "Does our present educational system take the challenge of modern technology into account?" Although it is self-evident that technological development cannot be ignored in Finnish society any more than in other developed countries, it is in many ways too simplistic to pose the question in the form described above. From the viewpoint of education and of the whole of society, the question has been formulated in reverse. As planners of education we should rather ask about the direction we want to develop our society in and the sort of people we want to educate. What kind of curriculum should we construct that would lead to the goals formulated in this way?

While in Finland all levels of schooling have been accused of responding too slowly to changes in society and especially to changes in technology, there has been an unprecedented
level of interest in the potential applications of information technology. At times it almost seems as if we are drifting into a situation where technology will become the most important factor in the direction and control of educational planning. When, in 1985 a decision in principle was made on the development of education in the field of Information technology, the new technology became the core issue in many sectors of education. During the last five years there have been frequent accusations that our present educational system is extremely backward, that it responds too slowly to the pressures of change and that it is even partly incapable of meeting the technologically oriented needs of a society undergoing transformation.

Educational policy and curriculum planning permeated by technological determinism would be very limited in scope and it would lead to a shallow view of the changes taking place in the nature and content of education, and of the connections between the content of education and other social change processes. It would also lead to faulty conclusions regarding schooling; for example, to mistaken views on the impoverished nature of school work, the transformation of a teacher's work, etc.

It is of course necessary to ask what the discussion on the information society means and how it sets challenges for curriculum reform. Discussion on the Information society takes place in many different quarters and is occasionally quite lively. Its main focus seems to be on the examination of the effects of technological development and its role. From this point of view the information society has been understood as "given".

"The information society is coming, it is said. Its arrival will not be decided on in parliament, instead it will somehow come under its own momentum. The course of development is predetermined; we have to adjust to it, or we will be overtaken by the development or something even worse will happen to us." (Nurminen 1986, 187).

Nurminen further states that credibility for this image of the information society is sought by appealing to empirical observation of social development. According to this view, the information society is created through the impact of technological development, and neither society nor the individual
can influence its formation in any way. Once and for all the world has been digitized and networked with cables. Technology is the real dynamic force in history and the information society is its most important product. The computer is an important part of the control system of this society.

It is obvious that social scientists or educational planners do not have much say in the shaping of future alternatives if it is believed that technological development advances along its own unknown paths.

In analyzing the characteristic features of the information society and in trying to reveal possible deep structures concealed behind this phenomenon, another explanation can be found for the emergence of the information society. Lehtinen and Luotola (1985) state that in the background there is another much more powerful force at work. The name most commonly given to this force is the concept of international competitiveness. Whereas in the earlier explanation the determinant factor was technology, it is now competitiveness. This is a challenge that education must meet. Competitiveness can even be seen as one of the determinants of curriculum construction. A shift of focus has taken place here from the sector of technological determinism to the sector governed by social relationships. This issue will be dealt with in more detail in the following chapter.

The conception of technology as a so-called prime mover has aroused criticism in which the conceptions of technology applications and their corollaries merge with each other (e.g. Niniluoto 1984, 278). Von Wright (1981, 182) states that our civilization has reached a phase which could be called a legitimation crisis. This means that the goals which man seeks to realize and the means leading to them, are without justification. A major part of our so-called "development", especially in the field of technology, is without a legitimate basis.

Undoubtedly there are particular (historical) reasons for the rather confused discussion which is taken place on the information society and for the present technology-oriented deterministic perspectives. One reason may be the fact that social scientists have taken only a minor part in the discussion concerning the relationships of technology and society.
2.2. Directing the curriculum according to the sociodeterministic mode of thought

The mode of thought according to which future society and its educational planning and curriculum planning will be determined by autonomous social relationships, is also coloured by determinism. Suhonen (1974) states that such thinking has been characteristic of approaches which also share a more or less close connection with the Marxist sociological tradition. Similarly, all such pessimistic visions of the future which predict that man's freedom will be threatened by some enormous systems are coloured by this kind of pessimism.

In a society where social conditions start to direct and control man's activity instead of themselves being guided by man, social relationships "live their own life". The West German, Hirsch (1981), speaks of "a security state" which is characterized by a web of organisations and institutions which permeate the everyday life of that society and direct, maintain, supervise and control people's lives. All the different domains of human life and their interconnections, down to the slenderest branches (man's dreams, fantasies etc.), are subjected to commercial marketing strategies. Even education is part of the controlling machinery and subject to the interests of the commercial world: its goal too, is to acclimatize individuals to the "Fordistic" production and consumption cycle. With this as their basis the functions of education, educational objectives and the procedures leading to them are formulated.

The concept of the "security state" (Sicherheitsstaat) embraces the dual nature of the present "welfare state". While living conditions of different social groups are evened out (blurring the distinction between the proletariat and the middle class), new conflicts will arise between the government apparatus and groups which have been left outside (Sililäinen 1985). A society will emerge which is highly developed, organized and fragmented in complex ways.

The organization-saturation and "nationalisation-saturation" of society cause different kinds of reactions both at individual level and at the level of political activity. Social isolation will
grow, "narcissistic" tendencies will increase, reification and alienation will occur, so that people start to assess themselves and others through their possessions. Hirsch (1981, 12) maintains that the effects of "behavioural norms" based on production and consumption (you must work more and more in order to consume greater and greater amounts of less and less useful things) are far from straightforward: they also cause opposition, maladjustment, refusal and subjective readiness for rebellion, which, however are not simple to locate "sociologically because they keep changing and altering".

At the political level there will be increasing anti-institutionalism, opposition to bureaucracy and antipathy towards the state. The security state attends to and monitors these responses.

The perspective which emphasizes autonomous social relationships is related to the question of the correlation between education and society, a question which occupies the minds of educational sociologists. The idea that education is an autonomous phenomenon is an erroneous and naive one. Hurn (1978), for example, regards the educational system and the school system as a completely autonomous system which is independent of the rest of the society. A divergent view is found in both Marxist and functional philosophy: a very strong causal relationship is seen to exist between education and society (Slurala 1983). From the civilization-critical point of view (Bourdien, Foucault), education is seen to have a dual purpose. It both serves the prevailing social system and also creates a basis and provides the tools for an individual to develop as an educated person and as an influential agent (Rinne & al. 1984). Karlsto (1984) maintains that if this viewpoint is given prominence, it may lead people to underestimate man's role in the development of society.

Even if we start from the assumption that speaking of the autonomy of education is ancient history, there still remain a few alternatives concerning the correlations between education and society. Hargreaves (1980) groups these views into three categories. The first represents the uncompromising sociodeterministic viewpoint: education is totally subordinate, responding only passively to demands for change. The second group is the relative independence model. Its message is that education has its own relatively independent position in so-
The third group maintains views, according to which there exists a correspondence between education and society at the level of social control, but that there is no correspondence at the interaction level and partly at the organisation level, and that school would rather have some independence.

In many articles Antikainen (1982, 1985) comes down in support of the notion of the relative autonomy of education. According to him, this would result in the following:

1) In the future, it will not be possible to base detailed descriptions of educational systems directly deterministically on the alternatives of social development. A certain range of fluctuation and degree of uncertainty must be taken into account.

2) A goal-directed approach to the future can also be considered relevant.

3) It is important to examine not only the alternatives in the educational system, but also those in the school.

In the following chapter, educational planning will be examined primarily from the perspective of the second alternative cited above. A goal-directed future is a phenomenon which is related to values. This examination can be called value-futurological.

3. The value-futurological starting point

The viewpoints discussed above convey the idea that curricular changes are always in some degree consequences of changes which have occurred in other domains of society. According to views which emphasize technology and the deterministic nature of interactive relationships, man's role as the creator and director of change was minimal or at least very small. When values are raised to a position where they set the pace of change, it also means that man is given the decisive role in the shaping of the future. People are originators, subjects, and not technical innovations or social relationships. The educational sector can be seen as a reforming force and to it can be assigned the role of an agency for change. The normative aspect is thus emphasized in the curriculum. A value-futurological-examination is given central importance. In the
work aimed at reforming the curriculum, as in the study of the future which contributes to it, the question of the role of values cannot be avoided.

3.1. Problems of the value-based approach

The adoption of values as the basis for predicting the future of educational planning has been justified on grounds of the permanence of values. When social scientists often claim that values have some degree of permanence, it means that values are not seen as mere expressions of immediate emotional reactions of individuals. Instead, values are regarded as indicators of the "undercurrent" of the entire community. Values are regulators of human effort and behaviour, and they influence the principles of social life in many ways.

Problems are caused by the fact that values vary not only in space but also in time. How can a curriculum constructor know whether a particular state of affairs is desirable in the future? What will people value when children, who are now entering the educational system, are adults and citizens of working age? How can the curriculum constructor make choices on the basis of today's values which will correspond to the values of tomorrow?

Evolutional discontinuity is characteristic of value changes. Part of the society can be transformed in a relatively short time, part of it cannot. Slow change takes place in things related to the structure and organization of society; on the other hand, in comparison to these, values and ideas change in an exceptional way. They can be immutable and unalterable for a long time and then change quite suddenly and in a stepwise manner. It has also been assumed that in the case of long-term changes the real cause of changes is the relationship between values and other factors (material factors), because at each point of time both values and other factors can be ahead of or behind their time.
3.2. Quality of life as the starting point for the curriculum?

The present world situation can be described according to certain characteristics which seem to be leading to changes in both the material and intellectual domains of life.

Gillies (1980) describes seven factors which will exert great influence:

1) Recently created technologies
2) Great changes in the world economy
3) New social and political organizations
4) Information flow
5) Increasing disillusionment at world poverty
6) New strength of the Third World
7) Diminishing of global resources

Many politicians and social scientists believe that we are experiencing a period of economic crisis which the developed countries drifted into as early as the 1970s. The steady growth of the 1950s and 60s was followed by slow economic development. Another present-day concern is the environmental crisis, where it is particularly the efforts to pursue economic benefits that are seen to be causing damage to nature. The crisis of working society means that the notion of work as the central purpose of life is receding. The crisis of the welfare state - which also concerns Finnish society - is a concept which refers to the diminished ability of government to promote the well-being of citizens. Alongside all the above-mentioned crises the crises of values is also mentioned together with the notion of a value revolution.

Since we accept the world of values as the starting point in the quest for future alternatives, the logical continuation of this examination is theoretically rather straightforward. We shall now examine in what direction Finnish society is moving, according to those who have studied the problem, and then base our premises on these assessments.

A study of the literature reveals very quickly that this present time of ours is in such a state of ferment that it is difficult to locate the features which might at least be fairly certain. Sipla (1985), among others, states that the social situation is full of contradictions; it has elements which could lead to very different developments. Somewhat obscurely, however, he also states that there is uncertainty about the di-
rection and the possibilities for the future development of society and therefore the present situation is extremely difficult from the point of view of predicting the development of values. This statement reflects the somehow subordinate nature of values in relation to other mechanisms.

It is evident that people will not abandon their material well-being, even if there was an increase in the appreciation of individual liberty. It seems that man’s values change simultaneously along several dimensions. For example, the values related to work and free time are passing through an obvious transition stage as appreciations are shifting from work towards free time (Suhonen 1984, 21).

Uusitalo (1984) describes the value revolutions of Finnish society. He makes it clear that the discussion about a value revolution is not without foundation. The values of comparatively large population groups are changing in such a way that the emphasis placed on material standard of living is shifting towards the quality of life. For the present, however, these value changes can only be seen in the overt behaviour of relatively small groups. The shift of values towards quality of life implies, among other things, that:

"Increasingly few people regard work as the central purpose of their lives; and increasingly many feel sympathy towards softer values; they want to live in harmony with their environment, they are dubious about the large organizations in business and government and feel tempted to jump off the threadmill of status anxiety at the same time as attempts are made to increase the speed of the mill in social politics." (Uusitalo 1984, 6.)

The latest investigations indicate that apprehensions about decreased valuation of work have actually become true. Basing his conclusions on material collected in spring 1984, Ylöstalo (1986) states that the status of work in relation to family life has decreased strongly in five years. According to the findings, the proportion of those who regard work as the primary area of their lives, has decreased by 16 percent in five years. Nowadays only 35 percent of Finns regard work as the most important thing in their lives. More than half of the respondents regard home life as the most important sector of their lives. It should be noted that, according to this study, the importance of freetime spent outside the home has remained small.
According to Uusitalo, it is important to note that these value changes imply that people are beginning to question the socially dominant conception of well-being. Whereas up to the present time economic and material well-being have been prevalent, there are aspirations germinating where definitions of well-being are no longer interpreted directly according to gross national product. Economic well-being is only part of total well-being. Well-being also includes the quality of life, representing something non-material (spiritual and social good), which does not necessarily improve in step with material standard of living. In the world of values so-called soft values and privatization are gaining emphasis in contrast to the hard values and collectivism of the past. The voter-citizen is more unpredictable and volatile than ever before. Now the pressures are manifold and pull in several directions and people cannot be steered as easily as they used to be. The abundance of information, a high level of education and improved communications, make it possible for people to make their own decisions. The political controllability of society is decreasing all the time.

One ingredient of the quality of life is an experience of life's meaningfulness. Material well-being alone is not sufficient to create a satisfying life when there is a lack of meaningfulness in life, a sense of life's futility. According to Frankl (1981), man needs tasks which add to the meaningfulness of existence. It should be the task of education to help people to set goals for their lives and to take on tasks for themselves. Siplilä (1985) stresses that it is important that people should not find the meaningfulness of life in themselves, but rather in participation in the human community.

In curricular decisions the value changes described above should be applied at least to the discussions about goals and contents. Are we, by means of the curriculum, aiming at producing people who work for 40 years of their lives and is it the task of school to prepare people primarily for work? If not, where is the emphasis? What does quality of life at a deeper level mean as an educational aim?
4. Concluding assessment

The thoughts, visions and sketches presented above are naturally only ideas and views. Reality is reality. The designers of the practical curriculum and those who implement the curriculum, are not as gullible as theoretically oriented dogma: the practice of teaching is more realistic than the most realistic theories.

It seems evident, however, that decision-makers in the educational sector are not capable of coping with the unexpected events which the present and the future entail, unless we are prepared for them. We should try to construct images of the future and our approach should be by means of reasoning. Forecasting is the keyword in future education and also in curriculum construction.

Who is going to dictate the "right" way to solve curricular problems? Are the decisions based on conventionality or on a future-oriented intellectual climate? How can we avoid in the field of education the kind of policy which is based on subordination and adjustment? Can education become an agency of social change and what would this require of the curriculum?
References


THE CURRICULUM AS A FACTOR DIRECTING ACTUAL TEACHING

Pertti Kansanen

1. The curriculum as an independent concept

Viewed from an international standpoint, the systematization of the study of education shows an exceptional diversity. Here in Finland we have long been in the habit of considering the study of education to be an independent branch of scholarship, even if research in this field has produced little which is independent of that which has been attained within the framework of other disciplines.

In Finnish academic instruction a division of the study of education into subdisciplines has been followed since the beginning of the 1960's. This division recognized five main fields: the philosophy of education, the history of education, comparative education, the psychology and sociology of education, and didactics. We have also tended to recognize marginal fields, the main problems of which are considered as falling within scope of the study of education if the perspective from which these problems are examined has its origin in that field. Examples of such marginal fields are the psychology of learning, the social psychology of education, developmental psychology, etc.

A classification of this type is, of course, always arbitrary to some degree, and it serves some specific purpose. From the standpoint of academic teaching the division has demonstrated itself to be quite practical. It has, however, not been free of problems nor is it one which is generally accepted. Development within the field has naturally led to a point where a division of this type has begun to show its age, but the basic division can still be seen in university degree programs.

Within the Finnish context an interesting additional aspect has been provided by the fact that the division in question has often been used as criterion in the opinions submitted by the experts who are asked to evaluate the candidates for professorships in the field of education. This has been particularly true when filling a position in this field which does not have any particular specialty. In case after case the minimal require-
ment has been expertise in at least two of the five subdisciplines. The procedure originated at a time when positions were not usually linked to a particular specialization. Nowadays, however, they tend to be more carefully defined.

In any case didactics appears as one autonomous subdiscipline within the field of education, and it often assumes the role of the actual specialty. Nevertheless, the international terminology is confusing, the reason for this being the significant difference between the relevant English-based and German-based vocabularies. In following discussion an analysis will be made of the similarities, differences, and connections between the concepts 'didactics' and 'curriculum' on the basis of the terminologies which have evolved on the basis of these two languages.

a) The English-based terminology

International terminology exhibits considerable differences depending upon whether German-based or English-based terminology is followed. Tibble (1966), a basic work intended for teacher education, follows the division in question rather closely, but it is nevertheless essential that neither didactics nor any corresponding subdiscipline has any place at all beside the theory of education, the philosophy of education, the history of education, the psychology of education, and the sociology of education. This evident difference ultimately demonstrates itself to be an ever-present source of difficulty when attempting to relate the terminology used in Finland to that which has been formulated in English.

It is clearly evident that one central explanation for the difference in question is the linking of central questions to the examination of problems within both education and teaching. Particularly in the American literature, issues pertaining to education are clearly examined in a manner which emphasizes their factual and normative aspects, in which case the latter field is often referred to under the label 'teaching methods'. In basic textbooks the psychology of education and didactics are linked together, being referred to as 'educational psychology' (cf. such works as Klausmeier & Ripple 1971 and Gage & Berliner 1984). Books of this type have lengthy sections con-
taining background material of a purely psychological nature as well as clear normative sections which correspond to the books used in Finland for didactics.

As pertains to American practice, the suitability of the terminology is evidently linked to the fact that teaching is studied in conjunction with different types of curricula. This means that parallel curricula may exist simultaneously, with teaching thus being studied as something on a level above the curricula. This feature is particularly well evidenced in those anthologies which attempt to provide a synthesis of the results of research devoted to teaching. The well-known book by Dunkin and Biddle (1974), to cite but one example, does not even contain the term 'curriculum' in the index, its meaning being presented (p. 43) in one sentence as one contextual factor of the school class. This feature of the book naturally brings along with it a vacuum with respect to specific values. It also makes results extremely difficult to compare since teaching goals do not guide the study. On the other hand the claim can certainly be made that the practices characteristic of western schools have so many universal goals that they make comparison of results possible. But if this is the case, then the only comparison attainable is of a partial nature.

The same feature is repeated again in handbooks for conducting research on teaching (the latest being Wittrock 1986). In such books the examination of teaching has, almost as a rule, been separated from the context of the curriculum. This being the case, it is understandable that when criticism has begun to be voiced against the widely used process-product paradigm it has been directed specifically against the normative aspect of teaching. Garrison and Macmillan (1984), to cite an example, focus attention on those deficiencies in the studies conducted thusfar which are the result either of intentions having been neglected or of the difference which is caused by the normative component of teaching compared to the situation prevailing in research carried out within the framework of the natural sciences. From our perspective criticism of this type seems to be astoundingly simple, but it may be understandable specifically because of the difference in the background to the curricula. For all practical purposes we have in Finland one and the same national curriculum which, at least in principle, provides all research with the normative component in a man-
In English-based usage that which is equivalent to didactics is to be found more through the intermediary of the concept of curriculum than by combining educational psychology and teaching methods. This method does, naturally, bring us quite close to the type of didactic books used in Finland, and we come all the closer, the more general the type of didactics with which we are dealing. The central question is evidently one bearing on two issues: how general may the terms be in which didactics may be written and how concretely may the goals and philosophical bases be presented. General didactics is based on, and, indeed, must always be based on, some type of interpretation of the goals of education, but in such cases the goals might only be of so general a nature, so universal, that generality still has some utility. The determining factors in these cases are such goals as teaching fundamental skills in reading, writing, arithmetic, with additional determinants being factors such as the conditions set down by the school system pertaining to the number of students, age groups, class sizes, and similar considerations.

In situations of the type depicted here it would undoubtedly be possible to write a general didactics without it having to be linked to any specific written curriculum. In such cases the social situation as well as background issues of a philosophical nature are implicitly included without their having to be pointed out separately. In principle, cases such as this provide the possibility of analyzing the considerations constituting the background and then, almost as though afterwards, of presenting the basis of the curriculum. Nevertheless there are grounds for questioning whether a didactics of this type could be transferred from, let us say, one school system to another since the curriculum will be different in any case. Or might it be the case that the general goals of teaching in particular are so similar within the same cultural region (e.g. Northern Europe) that a general didactics of the type under discussion is possible.

Nevertheless, the content of curriculum-oriented research provides an easier means for finding links to the subdiscipline within the study of education which in Finland is referred to as 'didactics'. In this case it is also essential that this puts us in the midst both of educational practice and of the educational system as it functions within society. Problems are no
longer examined primarily from the theoretical standpoint, viewed from the perspective provided by educational psychology, or from the standpoint of the general suitability of curricula, but rather in the manner regulated by both the goals of the curriculum and the conditions which have been presented. Curriculum-oriented research is thus of a practical nature, it is developmental work with respect to education in addition to being research, the subject of which is the effectiveness of teaching.

The curriculum-oriented aspect already contains the normative aspect of teaching in its initial stages, the curriculum is something like a plan for learning (Taba 1962, 11) but, of course, not for any learning at all, but rather for learning, the content of which has been specified. That which is planned and which provides the justification for conducting research thus depends upon the nature of the curriculum or, in this sense, the teaching plan.

From that which has been presented it is clear that no curriculum can be transferred from one school system to another without problems. Nevertheless, principles, theoretical models, and even theories may be formulated as to how a curriculum can be drawn up in the best possible way if the goals which have been presented are considered to be the criteria (cf. e.g. Saylor et al. 1981).

The above considerations also imply that curriculum-oriented literature may be quite general in nature if it is thought of as having been written for what is, in its essential aspects, the same curriculum. This actually makes the elaboration of a theory of curricula possible, nor does it exclude the formulation of a general didactics.

But what is it that separates the approach used within educational psychology and curriculum-oriented literature from one another? Works bearing titles such as Curriculum Theory or Curriculum Planning set forth goals which are very general abstract, neglecting altogether those which would be of a more concrete nature. In this respect they could serve as guidebooks for drawing up any curriculum at all. Neither do works of this type tackle the problems of actual teaching in any way which could be considered as deep or detailed, even though writing speculatively about something such as methods of work is certainly possible. It appears to be the case that curriculum-
oriented literature is primarily aimed at guiding the formulation of curricula, with didactics in the sense understood in Finland being found on the pages devoted to educational psychology and guides to teaching methods. The American didactic literature lacks general teaching guides written to direct the implementation of some concrete teaching plan.

b) The German-based terminology

In education as it has developed within the German-speaking academic tradition didactics has traditionally occupied a firm position as one of the subdisciplines within the field. In the survey presented by Blankertz (1975, 13-14) it is made clear that even though the term 'didactics' is Greek in origin and thus potentially an element of the common heritage of western education, use of the term has, in fact, primarily been restricted to German and those areas which are subject to influence from that language. The term is virtually unknown in the terminologies which have been elaborated on the basis of French or English. In any case, ever since the beginning of the 1600's 'didactics' has been a central term in the area where German is spoken.

The term 'curriculum' also has a long history and, according to Blankertz (1975, 118-122), it was also current in German until it fell into disuse some time during the 18th century, only to be revived at the end of the 1960's under the influence of English-based terminology. The term 'curriculum' thus came to replace 'teaching plan', but not as a synonym. The introduction of a new term meant the introduction of a new content (cf. also Mailmnen 1985, 15-24).

In clarifying the connections between 'didactics' and 'teaching plan' (that is to say 'curriculum') it is very easy to analyze each term separately, subsequently obtaining detailed information about the specific characteristics of each of them separately. On the other hand it is already more difficult to analyze the connections between the two terms. It would be tempting to identify 'didactics' with 'teaching plan', particularly so that the German term 'didactics' would be considered to correspond to the English-based 'curriculum'. This would, however, be an unjustified oversimplification, the specific rea-
son for this being that the term 'curriculum' is now also widely used in the German terminology, having acquired there a wide number of different meanings. The term 'curriculum' appears to have replaced the old term 'Lehrplan' (= 'teaching plan'), although not in all contexts. Additionally, it is now used instead of the term 'didactics'.

In the presentations of Klafki (1963 and 1970) and Blankertz (1975): German didactics is classified into several schools of thought, between which there prevail several rather considerable differences of principle. After Robinson (1967) caused the term 'curriculum' to be brought back into use, the theory of teaching plans as well as its derivatives have been linked together as something which, in actual fact, is a single subdiscipline within didactics. Klafki pointed out in 1970, and subsequently with even greater clarity in 1974 and 1976, that the theory of curricula could be subsumed under the concept of didactics which owes its origin to Weniger. In actual fact Klafki (1974) specifies both terms under a single entry (Curriculum - Didaktik). Nevertheless, there does not seem to be any unambiguous agreement concerning the use of the terms, and the mutual relationships between the two have also been regarded as a problem by Menck (1975) who, however, does not suggest any solution.

Since 'didactics' has no unambiguous meaning in the German terminology identifying 'teaching plan' with 'didactics' is also impossible. On this basis the term 'curriculum' must be understood as one of the orientations of didactics. Characteristic of this orientation is a specific emphasis on didactic problems, this being typical of orientations within didactics, each of which is characterized by a specific emphasis. To some degree the theory of teaching plans has brought forth problem areas of a type which traditional didactics has not treated. As examples of these Hamayer (1983, 55) calls attention to teaching materials, the different phases in decision making and their evaluation, and the implementation which follows it.

Aschersluben (1983) sheds light on some interesting aspects of speculation devoted to the connections between didactics and teaching plan (curriculum). Among the things to which he calls attention is the fact that Robinson thought himself able to completely replace 'didactics' with 'curriculum', this attempt reflecting the despair he felt at the time of reforming
the school system by utilizing stimuli originating in didactics. Aschersleben agrees with Klafki and Blankertz in interpreting the orientation begun by Robinson as representative of the already prevailing classification. In particular, Aschersleben considers the status attained by teaching goals in the current examination of didactics to be an especially noteworthy product of the orientation towards curricula. It should be mentioned that Aschersleben's habit of referring to the orientation in question as 'curriculare Didaktik' can hardly be regarded as advancing conceptual clarity.

Despite the fact that the term 'curriculum' was acquired by German didactics through influence from English, it may be analyzed as having numerous semantic contents and nuances, depending on the context in which it and the purpose for which it is used. Reisse (1975) points out that the term 'curriculum' is strongly culture-bound for which reason comparison of its meanings across linguistic boundaries is fraught with particular difficulties. That this is the case is clear, since a teaching plan is always drawn up for some particular purpose and differences between societies are also necessarily visible in the idea which has been accepted as the basis for the teaching plan. Additionally, of course, any term may also have several meanings within a specific cultural environment (cf. Connelly & Lantz 1985).

The discussion above does not apply to socialist didactic literature in German. There the term 'curriculum' is not used. On the other hand the idea of didactics as a branch of scholarship is consistent and, there being a nation-wide unified teaching plan in the German Democratic Republic, for example, all didactic analysis is specifically concerned with the problems resulting from this particular teaching plan. On the other hand it must be remembered that in the German Democratic Republic a clear difference is made between didactics and methods. This is a kind of sensitive point in didactics and it serves as a kind of division between different schools of thought. With respect to the orientations prevailing in the German Federal Republic several interpretations exist, some of which are mutually contradictory. The didactics current in Finland has, as is well known, so-called area of methods as one of its components, but it does not even make use of this term.
c) Conclusions

In the classification used in Finland didactics has thus traditionally had a clear position as one of the subdisciplines within the study of education, and this is probably primarily attributable to the German tradition of didactics. Despite the fact that the field of education has expanded, now containing specific subdisciplines which are more sharply defined than had previously been the case, the basic division has not been changed here in Finland. The newer academic textbooks in this field seem to follow this division either explicitly or with slight revisions (cf. Päivänsalo 1978, Antikainen - Nuutinen 1982, Viijanen 1982 and K. Nurmi 1983). Criteria for division based on factors other than the systematic nature of the sciences might, of course, also come into consideration. Such factors might be the contents of specific subjects (physical education, musical education, etc.) or a classification based on the progression of the educational process.

How, then, is the connection between didactics and the curriculum to be regarded? Blankertz identified the theory of curricula with a specific didactic orientation, but this solution does not have universal validity. Here in Finland Salminnen (1982, 7) has defined didactics using the curriculum as the basic concept. The definition is actually the same as that presented by Lahdes, Koskenniemi, and Hälnen as well as by the committee responsible for planning comprehensive school curricula. It is possible that at that time specifically English literature dealing with curricula was sought to provide support for the definition (for example Salminnen refers to Saylor and Alexander). This is also suggested by Kangasniemi (1985, 7) in his discussion of the origin of the definition which is used in Finland.

In this discussion, however, no stand is taken concerning the mutual relationships holding between didactics and the curriculum. It is true that in Kangasniemi's own analysis Kangasniemi refers to the order of these relationships when he presents the curriculum as a goal, stating that "An effort was made to subordinate teaching to the curriculum, ..." (Kangasniemi 1985, 2). In the analysis presented by Atjonen (1985, 13-14) we already see how comprehensive a teaching plan might be in the curriculum sense as well as how this makes the connection of
the curriculum to didactics problematical. Leimu also demonstrates the same point, basing his argumentation on Marklund's comparison of the term 'curriculum' as used in the literature written in Swedish or English, but, together with this he has added his evaluation concerning the use of the term in Finnish. The addition demonstrates that here in Finland the term 'curriculum' is really understood comprehensively so that it contains all possible arrangements (Leimu 1985, 19-23).

Evidently, in Finland, too, the position of the curriculum and of its planning will only become stronger in the future, judging from the fact that, from an international standpoint, this appears to be the direction which is being followed in our country. For example, such terms as 'implementation of the curriculum' (cf. Kangasniemi 1985) and the curriculum system taken into use by the Finnish National Board of General Education well lend themselves to focusing attention more on the administrative than on the teaching aspect. The danger is that the position of the didactic content will become weaker and such considerations as the implementation will acquire the status of some kind of a superordinate concept which contains teaching.

2. The position of didactics

In a previous series of articles (Kansanen 1976, 1985, and 1986) an effort was made to analyze the position of didactics compared to the curriculum (cf. figure 1). The foregoing discussion may, for its part, demonstrate that a curriculum may have and, indeed, does have a different status in different educational systems. In any case it is clear that a curriculum is always some concrete plan intended for some educational activity. The term 'educational plan' might be better suited to today's usage and purposes, as was already pointed out several years ago by Paakkola and Suortti (1974).

The figure clearly shows that it is possible in principle for an educational system to contain parallel curricula which surely require different types of didactic solutions. A situation of this type is to be found in many of the countries whose literature and research we keep track of here in Finland. This difference also causes terminological confusion. The Finnish
education system - the comprehensive school is the object of our examination here - nevertheless functions according to one so-called nation-wide plan which, in present circumstances can show some specific features from one municipality to another.

Figure 1. The factors forming the framework of a curriculum
Nevertheless, the philosophical bases of the curriculum are consistent, nor is it possible to diverge from them. Diverging from them might come into question in some special schools or in conjunction with educational experiments but hardly otherwise.

In the diagram the curriculum is shown divided into two components: philosophical and other bases, and the actual plan. The border between these two components falls specifically on the goals. When the bases have been considered and the background established - either explicitly or implicitly - the goals may be presented. The change with respect to that which has preceded is to be found precisely here and some of the imprecision characterizing the concepts is specifically attributable to the position of the goals in the curriculum. At the time when no separate goals were presented in the curricula the solutions reached in the curriculum pertaining to values were not discernible either. In the same manner a clear division into curriculum-oriented studies and didactic methodology also often meant a subordinate relationship to the advantage of the content. Didactic orientations of this type are still to be encountered, and to take one example, in the German Democratic Republic, the division continues to be a clear one (Didaktik - Methodik).

When compiling curricula the following observation appears to hold: the more those background factors and social conditions which play a role in the actual teaching process have been taken into consideration and, on the other hand, the more interest in didactics has been oriented towards the forms teaching actually assumes, then the more comprehensive a task the compilation of a curriculum has been understood to be. The explicit statement of the goals is but a short step to a consideration of the bases underlying them. Nevertheless, this step is decisive to the extent that along with the bases the number of factors exerting an influence on the compilation of a curriculum drastically increases, also, evidently, being shifted away from what has traditionally been the area understood to be didactics.

Furthermore, when questions of procedure are raised and placed either parallel to or even before the content, the manner in which the emphasis on specific goals is linked to the forms actually assumed by teaching is also brought more
clearly into evidence. Forms of teaching are no longer planned solely on the basis of simultaneous learning, but rather their use also has an intrinsic value. From this it follows that issues pertaining to the formal aspects of teaching are included in the curriculum where they can be treated as an independent whole and not merely as something connected to a specific whole. In any case the field of the curriculum is expanding in this direction as well.

The discussion which has been going on in the German didactic literature concerning the relationship between 'didactic' and 'methodology' (cf. Klafki 1970) may be examined as one demonstration of these developmental trends. Klafki shows that the interaction between these terms is based on the fact that working habits and other available means are also a part of teaching in a certain sense, and they may be used in trying to achieve certain goals. The goals of teaching, which hierarchically govern both the content and the forms of teaching, provide the specific unifying factor. Klafki (1976) has even begun to speak of the predominance of the 'intentionality of didactics' rather than of the leading significance of didactics as he did previously. After all, the older didactics specifically meant contents. Nevertheless, it must be pointed out that the goals of teaching understood narrowly with respect to specific subjects have not contained this train of thought, for which reason it was easy to subordinate the means to the content. A developmental phase has been needed as a consequence of which curricula have begun to have general goals written into them which would constitute the points of departure for individual subjects and other specific goals.

It follows from the presentation that the normative aspect of the curriculum is recognized more easily than was hitherto the case. Previously, when curricula were tersely written, the goals and solutions pertaining to values might remain unrecognized during an entire teaching career. They might, perhaps, have been internalized through other means and thus become self-evident. Nevertheless, the normative aspect of the curriculum was by no means unambiguous, as is demonstrated by Blankertz (1975, 18-27). The same values expressed on the general level provide reason for coming to quite different concrete details at various phases, as can be observed in the
ample literature dealing with the definition of goals on the basis of solutions reached. Thus, the normative aspect does not necessarily determine the solutions which pertain to the curriculum, but rather many other intervening external factors as well as the internal regularities of actual teaching influence the form assumed by the final curriculum.

Everything notwithstanding, the curriculum itself is always normative, this being a consequence of its bases and the goals which constitute the framework within which it was elaborated. And, since we in Finland have only one type of curriculum in use it is for all practical purposes the same as didactics. But is this conclusion generally valid, or does it only hold true in educational systems which function according to a national curriculum? To what degree is it possible for set goals to change without a corresponding change in the didactic conclusions?

In principle it is evidently necessary to tend towards the more extreme conclusion, in other words, to point out that insofar as the bases and goals are explicitly expressed we have a normative system. On the other hand it could also be thought that examination in context of goals which are sufficiently similar as to both their nature and their orientation may even be general and may, perhaps, become detached from normativity. In any case it seems that the curriculum contains a generous amount of elements which are not of a didactic nature and, in that sense, they might be essentially non-normative. From this we come to a conclusion according to which 'curriculum' may be a more comprehensive concept than didactics but hardly one which is superordinate to it. From this it can also be observed how the English 'curriculum', including as it does factors other than didactics, is more comprehensive than the old term 'teaching plan' which has been in use here (cf. particularly Mallinen 1985).

There is no unanimity of opinion as to what didactics means. Similarly, in the opinion of such authorities as Blankertz the status of normative didactics is low. In the diagram this detail is made evident in the connection holding between philosophical bases and the actual teaching plan. In teaching practice this is noticed in the comments of several teachers, according to which they consider goals and bases to be decorative sentences which have no significance in the actual
teaching. In any case a large amount of literature has been published in the German Federal Republic presenting different types of didactic orientations which demand for themselves scientific status (cf. e.g. Borsum et al. 1982 or Aschersleben 1983):

- Didactics may be understood as the theory of teaching ("Didaktik als Theorie des Unterrichts"), this being the orientation represented by such scholars as Schulz.
- Didactics, according to the view held later by Klafki, is a totality of decisions which take place in four dimensions "die Ziele, die Inhalte, die Methoden und die Medien" ('The goals, the contents, the methods, and the media').
- According to communicative didactics teaching is a communicative process in which group teaching assumes the role of the basic unit of interaction.

By calling attention to these examples out of the large number available it is our purpose here to demonstrate that German didactics attempts to be something other than normative or, to use the terminology current in Finland, something other than a doctrine of teaching. It is also noticed quite quickly that in orientations of this type virtually nothing is said about the content of the teaching, this is left to be the concern of the didactics of different subjects. Separated from their contents, didactic orientations may be descriptive, very general, and, what is most important, they are not linked to any specific curriculum. The difference between practice in the Nordic countries and that in the German Democratic Republic is considerable. If we observe the diagram we can conclude that West German didactics is, in principle, research on teaching, and, evidently, in its own opinion, most essentially the theory of teaching.

Is it then the case that Finnish didactics is linked to a nation-wide curriculum in such a manner that it cannot be understood as something descriptive or as a theory of teaching? In my opinion this is indeed the case. Nevertheless some reservations have to be made concerning this conclusion. Even though Finnish textbooks in didactics have been written with a set of goals as their basis we are justified in asking the degree to which this has limited our examination and the conditions under which the text could be transferred to the context of some other curriculum. In my opinion this shift
could be made very easily, given how general they are. Both in principle and from a formal standpoint didactics in Finland appears as a doctrine of teaching in the actual meaning of this term, but in practice the didactics practiced here concentrates so greatly on research and is so international in nature that the conditions set down by the goals hardly appear as limiting factors in the conclusions that are drawn.

The foregoing leads inevitably to the conclusion which follows according to which didactics as practiced in Finland has diverged from the German tradition and, as something different, has not been influenced by its newest orientations. The English-based approach as well as the acceptance of the curriculum as a central concept have confused the terminology. The influence exerted by English-based terminology would have assumed that we make a clean break with the old concept of didactics, but what has happened in Finland is that the terms have been retained, but their meaning has gradually changed to something which is primarily national in nature and which does not find any real international equivalent.

3. Some clues concerning the position of the theory of teaching

The diagram presented demonstrates that the attempt is made to have the theory of teaching refer to a more comprehensive phenomenon than a curriculum or didactics. The diagram also presents the origin of the theory inductively from the direction of practice. On the basis of accumulating empirical research material then general points of departure and regularities are outlined for teaching. If the construction of a theory of teaching is understood in this manner the solutions pertaining to values which characterize its content gradually fall away since the theory of teaching can hardly be linked to any normative background and this consequently also applies to a teaching plan.

In the construction of an empirically oriented teaching theory that which is common to teaching is essentially filtered as it passes through different cultural environments, different types of educational systems and the contexts provided by various curricula. The view hardly leads to pure eclecticism
since, insofar as teaching has any general regularities at all, they have to be made evident as results of the research. In actual fact, we approach a theoretical object such as the research concentrating on learning if we free ourselves from the limitations imposed by the curriculum examples of which are features such as the amount to be taught at one time and the division into grades. In the same manner limitations pertaining to content are easily encountered in that all students do not have the opportunity to continue their studies as far as their abilities would allow them to do. It should be observed that from a practical standpoint the separation of the theory of teaching from the curriculum and the doctrine of teaching is probably impossible.

On the other hand we could also think of constructing a theory of teaching deductively in which case it would not be primarily based on empirical results. Would it, however, ever be possible to free ourselves completely from the empirical data since, if the sources of the concepts are not documented in actual research, they are nevertheless based on some kind of view of the reality which surrounds the educational process. The manner in which this view was acquired constitutes, however, a new problem. Evidently, outlining a deductive theory of teaching is more difficult and it would require empirical information obtained from research to support it. The confrontation presented here is to be understood primarily as a means of bringing our observations into sharper perspective. However, the deductive procedure of outlining a theory does approach that which is understood as the curriculum theory. In a situation in which the first steps in compiling a curriculum are made, there are already so many conditions and limitations given that by analyzing them reciprocally it may be possible to arrive at a result which controls the curriculum.

If the conclusion that 'curriculum' is a concept which is wider than 'didactics' is taken into consideration here, the theoretical examination of our curriculum contains not only more but also different concepts than does the theory of teaching. The didactic solutions made concerning a situation determined by a curriculum are always made in accordance with the conditions which have been given. On the other hand, it is also possible to change the curriculum from the standpoint of the conditions if this measure is given sufficient
consideration. For example, a specific subject might have a specific number of hours reserved for it, teaching facilities might have been built according to norms, etc. Neither curricular planning nor the teaching personnel can have any real affect on these factors and didactical solutions must follow the conditions they predefined.

The aspect of evaluation still has to be considered when examining the compilation of the theory of teaching. The evaluation or effectiveness of the teaching are not the same things as the evaluation or feasibility of the curriculum. in actual fact teaching has been quite decisively subordinated to factors which constitute the framework of the curriculum. This indeed raises the question of the degree to which a theory of teaching could be general if a curriculum determines the so-called frame factors on the other hand and the goals and, as a consequence, the content of teaching as well as their methods of realization, on the other.

A cautious approach would be to determine the structure of a theory of teaching in at least two phases, of which the first one would be an attempt to rise above the normative limitations of the curriculum within a specific educational system (for example in Finland), while the other would be yet a further attempt to create an analysis which would be more general and transcend curricula.
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1. On the study of curricula in operation

It is possible to examine curricula in their different phases, beginning with general planning at the national level and proceeding to the planning and teaching work carried out by the teacher. Attention has usually been focused on curricular goals and contents, as revealed in written curricula, whereas the study of the operation of curricula is a comparatively recent concern. The notion of curricula in operation involves the interpretation and application to teaching of general curriculum plans constructed in advance. The research design includes, among other things, an analysis of the curriculum application process, an examination of its functional structure and a comparison of the different implementation models. In research of this type a normative approach is adopted, since the aim is to find an uncomplicated and appropriate operational model. The criteria of a good operational model are bound up with locally determined conditions, although it is possible to explicate a theory of functional structure at a general level.

Earlier work dealing with the theoretical examination of curricula has extensively analyzed typical features of planning. These have been classified as determinants of curricula (e.g. Saylor & Alexander 1966) or as curricular codes (Lundgren 1979). Such research has clarified the formation of general goals. One example of this type of research is the comparative study based on the reports of the primary and comprehensive school curriculum committees for the years 1925, 1952 and 1970 (Rinne 1984). This perspective assumes importance when the construction of curricula is detached from the administrative implementation. In an administratively defined curriculum it is possible to analyze factors which have influenced its practical implementation. Ilisalo (1984), for example, carried out such an analysis in his investigation of the implementation of upper secondary school curricula.
As the link between curriculum implementation and administration became more explicit in the 1970s, the need to examine the functioning of curricula increased in Finland. At the first stage the new structure was analyzed (e.g. Koskenniemi 1976 and Malinen 1976). The need to examine functional structure also emerged in the Report of the Curriculum Committee (1976). Descriptive schemes have been designed for this purpose also, such as Lundgren's (1972) frame factors. Frame factors include the goal defined in the curriculum, the number of hours allotted for teaching and the classroom teaching situations. The curriculum is thus connected to the study of practical teaching situations; in other words, the aim is to construct a model of a curriculum in operation. In Sweden the functional organization of curricula has been analyzed on this basis (e.g. Lundgren & Svinby & Wallin 1981), although points of contact with practical application have so far remained rather limited.

The shift of focus which has taken place in the study of curricula can also be seen in the research activity of the OECD. Whereas in the 1970s several reports were produced on the development of curricula with the aim of implementing the general goals of educational policy, in the 1980s the extensive International School Improvement Project (ISIP) was aimed at the improvement of the everyday work of teachers and students (van Velzen et al. 1985). Today people can no longer count on the continued expansion of education; instead, existing resources are utilized more efficiently than before. In these circumstances, centralized planning is no longer sufficient, and it should be replaced by flexible planning of instruction. The planning by people of their own activity is necessary in order to replace or to complement administratively directed development strategies. Thus the scope of curriculum research has expanded to embrace the analysis and planning of activity between people.

When implementation of curricula is investigated, the first stage often consists of an evaluation of the prevailing situation. The models which have been constructed for this kind of survey contain a great number of implementation details grouped to form mutually comparable schemes (e.g. Klein 1983). This is reminiscent of the earlier models for the classification of objectives (taxonomies of objectives). Curriculum
evaluation has also been developed as part of experimental projects (e.g. Skilbeck 1984). It seems natural to incorporate the evaluation of curriculum implementation into a broad planning process, and thus to arrive at a system for the evaluation of decision making. Such a system has been developed by Stufflebeam, among others, and it has also been applied to the analysis of curricular decision making in Finland.

The investigation of curricula in operation yields results which are typical of planning theory by formulating technical norms as conditional clauses: If you want to achieve objective A and you are in state B, you must carry out C. This provides some basis for decision making in the planning of teaching. Research, however, does not go as far as actual decision making, which would already mean the application of research rather than applied research (Niiniluoto 1984, 208 - 214).

The purpose of this study is to assess the functional structure of curricula in Finland. The prevailing situation is described somewhat loosely. Next, the reality of the planning process is analyzed from the perspective of sociological analysis and operational principles. This leads to a preliminary synthesis as to the appropriateness of the structure. The criteria of appropriateness are seen broadly without a careful analysis of goals. The central problems of the study are:

1) How can the functional structure of the curriculum in Finland be described by means of a theoretical framework?
2) How can the structure of curriculum implementation in Finland be developed by means of theoretical analysis?

2. Changes that have occurred in the implementation of curricula

It is not until the 1920s that we can speak of large-scale curriculum construction in Finland. In the 1970s, with the comprehensivization of the school system, the curriculum became the main object of educational planning policy, while its implementation explicitly became an administrative task. The curricula of the upper (academic) secondary school and of secondary level vocational education followed the same course. Alongside the administrative reform, however, other additional
operational changes took place, but full details of these have not been gathered together in a single publication. The implementation of these curricula in the 1970s and 1980s will be examined in the following broad description.

2.1. Rationalist centralized planning as a starting point

An explicit strategy in the implementation of the comprehensive school, starting in 1970, was to direct its operation nationally. Accordingly, in 1972 the National Board of General Education endorsed a scheme for the comprehensive school curriculum, which defined objectives and contents nationally. A centrally directed model was thus formed in which even local planning was organized as part of a centralized programme of experimentation. To justify this policy the argument was put forward that the rational implementation of the new system would thus become feasible in a comparatively quick and uniform way.

An equivalent planning model was followed in secondary education towards the end of the 1970s. Detailed directives regarding the construction of curricula were issued by the Executive Committee set up for the secondary education. Consequently, course objectives were formulated as specific behavioural statements according to Bloom’s taxonomic model. At the same time, the implementation of official educational policy was linked to the planning process. The same idea appeared in the report of the Curriculum Committee (1976). Ambitious targets were set for the standardization of secondary education, but in practice they were achieved at nowhere near the anticipated level.

Teachers’ reactions to the implementation of an administratively bound, rationalist model were rather mixed, mostly suspicious or negative. They experienced heightened uncertainty in their own planning, and therefore increasingly expected to be given explicit instructions for carrying out their work. This was apparent both in the implementation of the comprehensive school and in the structural reform of secondary education. There was a sharp increase in the number of personnel in central government offices (the National Board of General and Vocational Education) in the 1970s, and also in the number of
circular letters and guides sent to teachers and administrators in the field. It was felt that the curriculum was tied up to the administration and that the administration was responsible for its implementation. A few complaints were made claiming that the officially endorsed curriculum had not been followed in the comprehensive school. In vocational education on the other hand, complaints were made that teaching in a certain place had been carried out without an officially endorsed curriculum. These complaints were treated as administrative matters without going into the question of whether pedagogical goals had or had not been achieved. Provincial Departments of Education spent considerable time checking the legitimacy of the curricula in all the municipalities' comprehensive schools.

From the teachers' point of view, the official curriculum was nothing more than an administrative document, which they had not even seen. Teaching in the comprehensive school was based on the Report of the Comprehensive School Curriculum Committee (POPS), issued in 1970, and in practice teachers carried out this plan by using textbooks approved by the National Board of General Education. Later on, when the National Board of General Education made revisions to time allocations for school subjects and published teachers' guides for the different subjects, the concept of an established curriculum became even more vague. Uncertainty about the officialness or legitimacy of pedagogical schemes led teachers to give preference to administratively clear decisions. Consequently, individual pedagogical planning was reduced, even though no administrative restrictions were imposed on it.

2.2. Curricula interpretation increase

The uncertainty described above was discernible in the activities of many teachers towards the end of the 1970s and at the beginning of the 1980s, both in the comprehensive school and in secondary education. When the administrative implementation of the comprehensive school had been completed, it was possible to reduce dependency on centrally-directed administration. The position of the upper (academic) secondary school had also become clearer and strict, centrally directed guidance had been abandoned in secondary vocational edu-
cation. The adopted strategy was now aimed at recruiting people in the field to participate in the planning of practicable forms of implementation. Opportunities were thus provided for local interpretation of the general objectives.

Interpretation of the curriculum in the comprehensive school began in the late 1970s, when the National Board of General Education issued guides presenting the basic teaching contents in mathematics, foreign languages and mother tongue. At the same time it became a general practice to provide guidance to teachers in the field in order to help them to interpret the maximal goals set by the curriculum, according to the capabilities of pupils. This activity acquired official form in connection with the introduction of the time resource quota - system. In a seminar held in 1980 the Head of the National Board of General Education, Mr. Erkki Aho, gave the task of interpreting students' general eligibility for further studies to the experimental schools. The criterion of eligibility for further studies, according to Aho, should be the student's general maturity, based on his/her own abilities, which would determine whether he or she was capable of continuing his/her studies in secondary education. The same notion was given legitimate form a little later. In 1983, in a letter from the Ministry of Education to the National Board of General Education, and it was also presented in the Fundamentals of the Comprehensive School Curriculum (Anon. 1985, 11 - 12).

According to the Comprehensive School Law, education and instruction must be arranged according to the capacities of students. Educators in the students' immediate learning environment, i.e. primarily teachers, are thus made responsible for the appropriacy of teaching. They must interpret the curriculum as a basis for providing instruction which is appropriate for students. With the removal of setting from the upper level of the comprehensive school, it was left to the teacher to compensate for this organizational differentiation by pedagogical differentiation within the classroom. The reform increased the need to interpret the curriculum from the student's point of view, especially in grades 7 to 9, which at best will lead to the individualization of teaching.

Instead of administrative directives, there was now a clear striving towards guidance by goals. This no longer meant the precise specification of behavioural objectives at a national
level; instead, such guidance was left to the sphere of pedagogical planning. Previously, discussion had focused on a common level of basic objectives which educators sought to realize. Now people started to criticize that approach, because in practice it placed the emphasis on cognitive objectives, forgetting the overall educational development of students. This new policy was clearly visible, for example, in the Curriculum Bulletin issued by the National Board of Vocational Education (1983).

Teachers were thus offered opportunities of interpreting the curriculum and of adapting its goals to their own teaching, but in part these opportunities were no more than illusory. The previous centralized planning organization was not dismantled nor was there rapid development in those readinesses or forms necessary for the realization of the new approach.

2.3. Incorporating teachers’ joint planning into the system

The new comprehensive school and upper (academic) secondary school legislation (1983) transferred decision-making power from government agencies to municipalities. In the Instructions for curriculum construction, planning obligations were presented to the municipalities and teachers were urged to participate in local planning. This policy has also been adopted in vocational education, although it has, on the other hand, been an old practice particularly in the instruction of special lines.

Practical experience of teachers’ local planning was gained in connection with the comprehensive school differentiation and the time resource quota system experiments. One of the aims of the experiment was to encourage the planning of work with the needs of individual schools and students as a starting point, thus allowing teachers to make their own decisions independently, without providing them with ready-made directives from outside.

For the time being, it is still difficult to determine, how extensively local planning of teaching occurs as a cooperative activity amongst teachers. It remains to be seen which forms this activity will take after the initial stage. The necessity for local planning has been justified to teachers on the grounds that it makes it possible to include teaching material that
interests pupils and that the curriculum can be modified according to the principles of integrated teaching. Thus, the possibilities of breaking loose from precisely defined, compartmentalized instruction have increased, and it is now easier to receive administrative endorsement for activities conducive to project-type working methods.

"...local planning only affects part of teaching in schools. Instruction in mathematics and foreign languages, for example, continues to follow the national curriculum rather closely. Nevertheless, teachers' joint planning has led to new social processes, thanks to which teachers now discuss the curriculum more often than they used to. They perhaps even read the curriculum, or at least certain guidebooks related to it. In this situation the planning of teaching has, for many reasons, become associate with teacher education. Already in the 1970s this line had been adopted in the in-service training sessions of subject teacher organisations. Today it seems that this practice is becoming prevalent in all other teachers' in-service training as well.

The models for the planning of instruction described above are not separable in practice, and there are many situations where they overlap with each other. It may be true for some teachers that no change has taken place in the planning of teaching during the period under discussion. Nevertheless, description according to three planning models illustrates the general development of the situation and is suitable for theoretical examination.

3. Sociological analysis of the operation of curricula

3.1. Theoretical background

Models for the implementation of curricula that were described in the previous chapter can also be found in the writings of other educational researchers. Tanner & Tanner (1980, 639-640), having analyzed several studies dealing with the functioning of curricula, give the following description of the levels in the development of curricula:
I. Activity which is based on directions and maintains established practices (imitative-maintenance).

II. Segmental, adaptive treatment, and refinement of established practice (mediative).

III. Activity which improves on existing practices and is creative (generative-creative).

Research indicates that teachers usually operate as technicians on level I without adequate understanding of how to develop the curriculum. The aim should be, however, the kind of activity occurring on level III and it is for this reason that the writers are trying to find ways to improve the situation.

In his analysis of the teacher's role in curriculum implementation, Eggleston has arrived at a similar tripartite division (Eggleston 1977). He distinguishes

1) the received perspective,
2) the reflexive perspective and
3) the restructuring perspective.

The theoretical examination of human behavior provides sociological explanations for all these perspectives. Phillip Robinson has taken this same analysis further, extending it to the organization of knowledge on the basis of Bernstein's theory of social organization (Robinson 1981, 114 - 132). He uses the following terms:

1) rationalist models
2) reflexive models
3) relational models.

Although these concepts differ in their explanations from the perspectives presented by Eggleston, they are still clearly analogous to each other.

Alongside the above divisions we can take one more example, namely, the classification of curriculum types presented by Lawton (Lawton 1980, 20-22). He bases his analysis on a survey of the development of curricula in England, focusing especially on the definition of accountability and the control of teachers' activity at different periods. Furthermore, Lawton has classified evaluation models for curricula, which form the background for the description of different curriculum types (Lawton 1981).

Ulf Lundgren (1979, 84-89), in his examination of curriculum developments in Sweden, has described a rational curriculum model (or code). He has not, however, pursued this line in the
theoretical analysis of the models, but has merely stated that
the development of curricula has moved from the academic
planning of contents towards a more individual-centered ap-
proach. In his analysis of recent curriculum development Sving-
by has identified the self-directiveness of an organization,
according to Weber's model, as the opposite of the rationalist
model (Lundgren et al. 1931, 148 - 157). This gives local units
the possibility of setting their own goals while taking con-
textual factors into consideration. Finally, the administrative
organization of the planning of instruction is illustrated by
three models, which correspond fairly well to the models
Their theoretical background has been adopted from organi-
zational models used in the business sector.

While the above mentioned classifications differ in their
premises and contents, it is nevertheless possible to use them
side by side, and partly even in combination, when seeking
theoretical explanations for the operational models of curricula
in Finland, as described in Chapter 2. We shall call them the
rationalist model, the interpretive model and the teachers'
joint planning model. In practice, these models occur simul-
taneously, and hence a separate introduction of each model
does not reflect the real situation. Although conditions in the
USA and England differ from those in Finland, it is still
possible on a general level to arrive at an internationally
applicable analysis. At this stage, the normative aspect is not
considered; instead, the presentation is analytical in its ap-
proach, seeking to explain sociological viewpoints. We shall
examine these issues from the following perspectives:
   a) teacher's activity
   b) transmission of knowledge
   c) accountability and evaluation
   d) general pedagogical approach.

3.2. Examination of teacher's activity

In the rationalist model according to Eggleston, the teacher
acts as a recipient (received perspective). He or she wants to
know the basic facts of teaching which have been endorsed in
the curriculum. These are generally fixed for each school
subject at national level. In addition, a teacher may include in his teaching certain integrated topics, which have been officially proposed. The teacher must use textbooks which are based on approved syllabi and he must have explicit behavioural norms and methods of procedure. Then he knows he is doing his duty. These viewpoints have been illustrated, for example, by Hirst in his description of the fundamental motives of a teacher's activity in his quest for precisely defined (legitimate) instruction (Eggleston 1977, 56 - 60).

In the interpretive model a teacher reflects and interprets the given objectives (reflexive perspective). The underlying philosophical assumption is that individuals can modify their outlook on reality. Given appropriate guidance, they will interpret their experiences from different perspectives and will no longer be bound to their original viewpoint. The teacher can thus interpret the given goals and instructions according to situations and students' needs. It is the teacher who can adapt textbook materials and who can accept performances of varying levels.

In the teachers' joint planning model a teacher functions in a restructuring role (restructuring perspective). In this case he combines the various ideas originating from different sources, and thus completely reshapes the structure of the curriculum. He may break away from the subject-based structure, moulding his own integrated teaching blocks according to the needs and capabilities of his students. The philosophical basis of this model is man as a creative personality, who is capable of understanding the varying learning processes of students and of individualizing his teaching accordingly.

3.3. Transmission of knowledge

The rationalist model relies greatly on the utilization of scientific research in transmitting information on school subjects; in other words, the 'scientific management' of knowledge is efficient. The use of technical devices makes learning processes more efficient and considerable technical control is linked to the process. Tyler and Bloom developed a practicable way of analyzing knowledge for the curriculum by making a research-based system for curriculum design. This always ensures the
what, why and how of teaching. Knowledge is presented mainly in a behavioural form and it is transmitted as an integral part of a bureaucratic operational model.

In the interpretive model the humanistic significance of knowledge is taken into consideration. At the same time the sociological nature of knowledge is emphasized, as presented by Young (Robinson 1981, 126 - 127). The acquisition of knowledge depends on the needs of individual and on the community. It is thus possible to distinguish the curriculum-as-fact, which is an inspectable plan, independent of people. On the other hand, there is curriculum-as-practice, which reflects the intentions of those who carry out the plan. The latter view of the curriculum is rather too relativistic, presenting as it does a naive view of the teacher’s opportunities for interpreting knowledge.

In the teachers’ joint planning model knowledge has been related to the social structure of the school (relational model). This model also always explains the what, why and how of teaching. Now, however, the main focus is on the group to be taught. The legitimacy of knowledge is subject to social control and this presupposes cooperation between teachers, parents and students. Thus, actual teaching then depends only slightly on the general curriculum plan and is moulded according to practical demands. It is therefore no longer a question of interpreting knowledge but of restructuring the whole curriculum plan according to the social structure.

3.4. Accountability and evaluation

In the rationalist model there is a centralized control system. Teaching material is approved by the authorities and it partly replaces the curriculum plan. A standardized examination system is aimed at monitoring the level of knowledge; certificates play an important role in the evaluation work of school. The whole evaluation system functions on terms dictated by bureaucracy and provides feedback for the use of higher authorities. A teacher functions as part of the system, and is always conscious of the external demands placed upon him. At a pinch the future employment prospects of a teacher will depend on the students’ successful performance in examinations. The
school principal is accountable for the appropriacy of the administrative implementation as seen, for instance, in the allocation of resources.

In the *interpretive model* the assessment of the realization of the curriculum plan is mainly an internal matter of the school. The idea that it might be possible to obtain comparable information concerning the achievement of a certain level is then discarded. On the other hand, uncertainty regarding evaluation criteria may occur. These can be determined by teachers and by experts according to the situation. The criteria may consist, for example, of a student attaining a level of maturity to continue his or her studies and of the level of organization of his or her world view. There has been little legal support for accountability, because many kinds of ethical and moral viewpoints are involved. The problem of whether teaching has been carried out according to the right interpretation is constantly present.

In the *teachers' joint planning model* a cooperatively constructed curriculum plan is put into practice. What emerge are different value perspectives, which must be reconciled (value pluralism). Evaluation is carried out on terms laid down by local democracy. For this purpose Stake has presented a model which allows for the reflection of different value beliefs (Lawton 1981, 185 - 187). Evaluation is not aimed at determining the quality of outcomes, but rather at increasing people's awareness of local communal goals. There is shared responsibility for the realization of planning and this is based on mutual trust, negotiations and available resources.

3.5. General pedagogical view

In the *rationalist model* the starting point is the structural organization of the curriculum plan and the measurability of its operation. Curriculum implementation is generally evaluated by means of the taxonomies of Bloom and others; behavioural objectives are thus also applied to the formulation of curriculum plans. The underlying philosophy is often positivistic epistemological thinking. The main focus in planning is on knowledge-based facts, which are also most strongly emphasized in the definition of goals. Suitable models for this type
of knowledge-centered planning have been provided by Bruner and teaching entities have been created according to these. Differentiation has been planned in advance and also taken into account in the preparation of teaching material.

In the interpretive model different forms of activity are approved according to students' background. Intuitive norms and subjective decisions are applied in evaluation alongside standard measurements. In this model the underlying scientific philosophy is usually based on the phenomenological approach. While the curriculum plan has a uniform structure, it emphasizes the interests of teachers and students. Differentiation takes place according to the needs of students as interpreted by the teacher.

In the teachers' joint planning model original pedagogical solutions are constructed within the school. The pedagogical approach is student-centered, taking their needs and the stimuli offered by the environment as a starting point. Teaching is constructed in the form of projects; teaching units are not tied to subjects, but contents and working methods are selected as the need arises. Measurability is not a problem, since everyone present can see the results of the activities. There is no coherent underlying scientific-theoretical philosophy, since the model utilizes different views in the social framework the local community. Activity is guided by practical reason as well as by the desire to help students' all-round development.

4. A structural analysis of the operation of curricula

4.1. Theoretical background

In the operation of curricula, it is important to identify a functional structure which is appropriate with regard to the realization of the goals. Generally, this has been studied in connection with investigations of the functional structure of schools. Organization theories and decision-making theories form the basis by means of which the different phases of the planning process and the distribution of tasks can be described. Investigations are focused partly on administrative structures, partly on social structures. Empirical information on the functional structure of curricula is mainly provided by experimental
projects or development projects which enable the implementation of the different phases to be analyzed.

A typical research form is the case study, which describes the progress of a project, the impediments to its realization, its introduction to the field, etc. Within the context of OECD, forms suitable for international comparison have been developed for this purpose. In the latest OECD report (van V et al. 1985) examination of traditional curriculum research has been replaced by an analysis of the total implementation of the planning process by extending the examination of activity to include practical details. This increasingly ties research to the prevailing circumstances, and it is therefore difficult to present a general theory of functional structure.

Different methods have been developed for the evaluation of planning processes related to teaching. These have been mentioned above (Skilbeck 1984). Since it is not a question of merely evaluating the pedagogical structure, many viewpoints must be considered in the organization. It is not possible to examine all of these in this study. We shall, therefore, only concentrate on the structure of the activity from the teacher's point of view. Since there is no available theory for this functional structure, we shall try to compensate for its absence by describing the principles needed in the creation of the structure. This examination can be utilized when we compare the models presented in Chapter 2 for the implementation of curricula. This comparison will be carried out in Chapter 5.

4.2. Planning of activity from the teacher's point of view

When we were discussing the changes which had taken place in the implementation of curricula in Chapter 2, several changes in the teacher's planning work emerged. As regards the comprehensive school, factors influencing this work have already been analyzed (Malinen 1986). Structural changes took place in teachers' work and in their attitudes with the increase in in-service education and number of teachers' guides although the official curriculum plan had not been changed. In the new situation the teacher became less uncertain about his decisions, which reassured him in his work. Clarification of administrative guidance also contributed to this.
The analysis of the above-mentioned development process led earlier to a similar development structure, as described in Chapters 2 and 3. The teacher's position in planning was illustrated in the form of a diagram, which is now presented in a more developed form in Fig. 1.

**Figure 1. The functional structure of the teacher's planning**

In this structure, planning activity has not been linked to the administrative hierarchy and its own hierarchy is unclear. Influences come from many types of channels, and the curriculum plan functions as an important transmitter of background factors. When there has been no written curriculum, the general cultural background is transmitted directly to teaching through the teacher and through textbooks. Pedagogical planning then plays a central role. When administrative direc-
tives and the official curriculum are added to planning, administrative planning is given increased emphasis in the teacher's work also. Pedagogical and administrative planning partly replace each other, and partly complement each other. At any rate, they must not be contradictory, otherwise the teacher's planning becomes very difficult. These conflicting planning constructs could be seen in the 1970s when the comprehensive school reform was being implemented, and also during the preparatory stages of the vocational education reform.

In the curriculum differences between students of their home backgrounds are not usually presented. Nevertheless, these are realities to be considered in the teacher's planning, especially if classes include students who need special education, immigrants, or linguistic and religious minorities. The teacher has to interpret the objectives according to the student and his or her background. In such cases the home cultural background may also cause conflict in the teacher's work, which is based on the official cultural background. Questions of this sort only arises in local planning, which is why it cannot be totally avoided.

It is the teacher's activity which largely determines whether the curriculum is subject-centered. It is not decided at the level of national planning. When the different channels presented in Figure 1 are combined to form a teacher's plan, interpretation is always required, and this is done by reconciling administrative and pedagogical directives as well as the opportunities for students to function in the school environment. When administrative directives are few, a teacher is thought to have considerable freedom to act. Environmental conditions may however tie his hands in such a way that no new planning takes place. When the number of administrative directives increases (which was the case when the comprehensive school reform was carried out), teachers are left with less formal freedom and they feel that it is very awkward to be so paragraph-bound. At the same time, however, there has been an increase in teaching material and teacher education, so that the preconditions for alternative teaching practices have improved. According to investigations, however, teachers' working methods have not become more diverse (Kansanen & Uusikylä 1982). In spite of the efforts made, student-centered planning has not increased.
It is difficult to guide and to study the domain of a teacher's planning as described above although the authorities now wish to influence it both in the comprehensive school and in institutions of secondary education. The teacher's activity is based on forms of total impression where goal-directed rational thinking is combined with emotional experiences and will. Recently these factors related to teacher personality have again been emphasized as a counterbalance to rational planning (e.g. Turunen 1984, 147 - 153).

4.3. Principles connected with the structure of planning

Before a teacher can start planning his teaching, he needs the support of many kinds of preliminary planning, a point which is only partly shown in Figure 1. The entire planning process is an extensive project, whose structure is largely connected to administration. As long as the mid-1970s, the present writer began analyzing the structure of the planning of teaching by means of systems theory and decision-making theory. In the recent report (Malinen 1983) three principles have been formulated for the structure of curricula:

1) hierarchical structure
2) harmonization
3) cybernetic features

By means of these it is possible to construct an operational curriculum model, which has been called the pedagogical administrative curriculum.

The above mentioned principles have been drafted for the technical side of planning work, but there are also socio-political goals involved. We are now going to describe the implementation of these principles from this perspective.

1) The hierarchical structure is aimed at appropriate division of decision making, which means that specific tasks are also allocated to local planning. The administrative hierarchy is a useful tool in transmitting plans, but initially the treatment of the matter must be planned and only then can it be decided how administration can assist.

2) Harmonization means that pedagogical and administrative decision-making are reconciled to form a favourable entity from the point of view of teaching. At the same time the
objectives related to student development can be fitted into the framework of educational policy.  
3) Cybernetic features are aimed at creating an adequate feedback system for teaching and its planning, which will provide help in the continuous development of planning. This guarantees that the experiences of the field are taken into consideration in planning.

It is difficult to argue that it is precisely these principles that are favourable when the functional structure of the school curriculum is being planned. In monitoring the practical implementation, the present writer has noted many imperfections which could have been overcome, had these principles been followed in planning. Furthermore, it has been possible to put the principles into practice by giving concrete implementation instructions. The concepts of hierarchical structure, harmonization and cybernetic features easily become, however, superficial phrases, and therefore we must first have a well-defined educational policy during interpretation. This, in turn, is dependent on the school type and on local conditions, and in this way the principles of the structure become situationally bound.

It is, however, difficult to transfer from the principles of structure to the planning of the teacher's work. According to decision-making theory this is a question of practical reasoning where, by means of conditional clauses, one arrives at the preparation of activity and activity itself. In analyzing the forms of practical reasoning we have confined ourselves to a few general remarks concerning its application areas (e.g. von Wright 1971). The analytical approach can be applied only to the least complicated situations in the study of the teacher's work. According to Figure 1 there is a multitude of influencing factors and they are partly contradictory, such as the general cultural aims and the student's goal-orientation. Conflicting situations are not usual in planning and the principle of harmonization is intended to smooth these out.

In the teaching situation the teacher's decision-making is probably mainly guided by the goals of the curriculum, but they are mediated into practice through the cultural atmosphere, through the teacher's experiences and emotions and through the teaching material. Sudden situational changes, students' reactions and other such factors influence the
activity in such a way that it is difficult to construct a model for inferences leading to activity. A teacher's total personality structure, his worldview and his goals all play an important role here.

Although it is not very easy to analyze a teacher's emotional decisions, they can still be taken into consideration in the preparation of the curriculum, for example, by anticipating typical and desirable responses. In the theory of practical reasoning it has been found that we get closer to the activity when reasoning is carried out in the 1st person instead of the 3rd person. Then the reasoning reflects volition, knowledge and conviction, on the basis of which the act is accomplished. Reasoning presented in the third person contains propositions, whose linguistic nature is quite different (von Wright 1977, 177). The most usual way of writing a curriculum plan is to provide objective information on the contents of teaching and on the activity models. Purely informative text leaves aside efforts to influence the will and emotions. These are, however, important in a teacher's work and therefore an attempt should be made to bring communication closer to a teacher's individual experiences by modifying part of the plan in such a way that it deals with a teacher's experiences in the first person.

From the administrative point of view it is rather awkward to approve a curriculum plan which contains guidance for the teacher's world of experience. It is not possible to provide binding plans for this purpose, because a teacher has pedagogical freedom (or interpretative freedom). Therefore, it is necessary to have a mediating text which is not administratively binding, but which can be used in pedagogical planning. At this point another new problem emerges in the construction of a curriculum. Does the curriculum direct a teacher's entire activity or does it merely provide information?

The answer leads to fundamental decisions affecting the principles of the structure. These decisions are more important from the viewpoint of classroom activity than the above-mentioned principles of structure, which characterize the pedagogical-administrative curriculum.
5. Summing up perspectives on the operation of curricula

At the very outset it was shown that the study of the operation of curricula is dependent on the criteria which have been set for the operation. This value dependence has almost completely been ignored in the analysis of the present situation. The research problems presented in Chapter 1 still deal with questions of principle, but the development of the implementation structure of the curriculum already presupposes value choices.

Researchers have taken up distinctive positions on the question of good planning of teaching. Tanner & Tanner (1980, 838) find it necessary that teachers move from the first level of planning to the third level, in the other words, that they should no longer operate as mere teaching technicians, but that they should create teaching by themselves (cf. Chapter 3.1.). Robinson (1931, 129 - 132) prefers a model which has been adapted to local conditions, because then the hidden curriculum will remain less important. Lundgren et al. (1981) criticize the restrictive rationalist model while trying to find a new form for the organization of the planning of teaching. In analyzing the implementation of the comprehensive school curriculum, it was found that teachers' joint planning has many advantages (Malinen 1986). In the assessment of these researchers, pedagogical and sociological criteria have been applied to the functions of school as an institution intended for the development of students.

The situation may look different when the school's operational efficiency and the input-output ratio are used as criteria. This is when the rationalist model emerges as an adequate solution. Accountability with regard to the appropriate use of funding must first be settled, which entails the official endorsement of previously determined objectives and forms of activities. At this point, the administrative level must be clear about what general arrangements are good. It is, of course, possible to distribute funds and leave all pedagogical planning to teachers, but then the assessment of school's efficiency would be neglected. A sort of laissez-faire policy would be adopted where no one asks who is responsible. This is not, however, considered in the above description of alternative models.
An important aspect in the clarification of criteria as the prevailing conditions such as teacher education, school facilities and the typical expectations of society regarding education. It is futile to construct a working model for the curriculum which is totally unfeasible on the basis of the present situation. These practical questions are also theoretically significant, because the feasibility of the curriculum becomes the criterion here. We must answer such questions as: Has the impact of different factors been adequately taken into account? Have the goals been appropriately combined? How can we verify the feasibility of planning in the prevailing situations? (Moore: 13/8, 10 - 14). According to Moore, we can speak of a practical theory in the planning of teaching, in which recommendations are put forward as to practice. Its adequacy cannot be evaluated in the same way as we can assess the usefulness of scientific theories, because the verification of this practical theory is hampered by the situational constraints related to the circumstances.

An analysis of the criteria clearly indicates that is not a clear-cut task to present an operative structure for an 'appropriate' curriculum. Experience gained of the operation of school curricula in Finland also shows that the three models discussed here do not operate in isolation. Although the rationalist model might be dominant from the administrative point of view, some teachers may plan their teaching according to the interpretative model.

Teachers' joint planning operates alongside these. In order to produce a good synthesis, many kinds of situations should be examined, but we shall confine ourselves with one general description only. It is the same time our answer to the first research problem presented at the beginning of this paper.
Figure 2. A unified description of the operational models of curricula

Figure 2 presents a synthesis of the three models. This can be used as a framework for the operational model of the curriculum. Rationalist planning forms the basis of this combined model, by means of which national planning is shaped. This figure also illustrates the section which can be interpreted by a teacher. These interpretable aspects of the curriculum are supplemented by teachers' joint planning activities, which partly extend outside the official curriculum (extracurricular activities). In connection with the sociological analysis (Chapter 3) we examined the teacher's activity, transmission of knowledge, accountability and pedagogical philosophy. When these different planning models occur simultaneously, the implementation of these considerations is extremely problematic. This is exactly where we should fall back on the structural principles of activity planning and on the practical approach. An example from the planning of mathematics teaching will serve as a model:
The basic subject-matter for instruction common to all students has been approved at the national level. In addition, directives and teaching material for teacher's planning work have been issued. A teacher accepts rationalist planning as a basis of his work and is aware of the goals of educational policy. He interprets the goals and makes his choices of working methods with the view to achieving an optimal solution with regard to his students' education. There are many instances where he cannot operate on his own, but has to make arrangements with other teachers on questions of remedial teaching, application situation etc. He then changes his planning model and accepts cooperation and social control. A teacher can present behavioural objectives to students (e.g. the four basic rules of arithmetic), but, by interpreting the realization of the curriculum on pedagogical grounds, he allows for differences in their achievement. Similarly, in project type teaching he can monitor the achievement of basic objectives and simultaneously aim at diverse student-based activity.

The above described synthesis deriving from combination of three operational models must seem very familiar to the reader. In fact, there is nothing new about it; sensible teachers have pursued the same line for a long time in their work. The initial analysis, however, indicated that a teacher has to operate in a field of conflicting goals. If that field has not been organized and if the causes of conflict have not been analyzed, we easily end up in ambiguous situations. It was precisely to avoid these that the theoretical examination of the implementation of curricula was necessary in the 1970s.

The second problem presented in Chapter 1 concerned the possibilities of developing the structure of curriculum implementation by means of a theoretical analysis. This problem has been dealt with throughout the foregoing discussion, but the result has only been an even more extended analysis of the situation. Possibilities for the development of the structure of curriculum implementation must be considered on a case-by-case basis. Researchers may theoretically categorize some of the central factors, but the presentation of solutions is already beyond the scope of researchers.

In Chapter 1 I suggested that the study of curricula is becoming obsolete as far as the investigation of general structures is concerned, and that it has been replaced by
Practice-oriented investigations of factors which direct the operation of schools. This article has also touched very closely on the everyday work of schools, but at the same time the limitations of this research area have become obvious. A researcher cannot proceed very far by merely analyzing situations; he must, therefore, transfer to operational research. The researcher must thus adopt another pattern of thinking, just as the teacher must do, when he transfers from the rationalist model to the social configurations of local planning.

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HAS SOMEBODY HIDDEN THE CURRICULUM?

- the curriculum as a point of intersection between the utopia of civic society and the state control.

by Risto Rinne

1. The Genesis of Primary School as a Transition into the State Reproduction System

The term utopia generally signifies a dreamlike plan to reform the world. This kind of plan is directed into the future and creates an objective-based fiction of a better world and society. A utopia aims at changing the established order by putting forward an alternative of an imaginary "other form of existence", which more or less vehemently subverts the old.

A utopia is not very often a mere illusion. It may be quite a concrete and realistic plan to reform the world. Both utopia and ideology are disproportionately related to the prevailing reality. Ideologies may be incapable of describing reality and may quite well cover or hide reality. Thus they can also work as "a false consciousness" of reality. At the same time as ideology works as a form of securing the functions of the economic and social system, it integrates and stabilizes the relations within the division of labour and power by making them natural. (cf. Mannheim 1960; Abercombe 1980).

One of the most central developments of world history has been the secularization of the way of thinking and the basis of motivating and legitimation of activities among people and human societies, and at the same time, a potential rise in the standard of historical consciousness. For example Heller (1982), using the term historicity, refers to a solely human ability developed throughout history to locate oneself temporarily and spatially. (cf. Giddens 1984). The development of this ability has been preceded by various stages of historical consciousness ranging from a mythical way of understanding the reality into planetary consciousness.

In the times of tribes and clans people acted in terms of "primary forms of religions" (Durkheim 1980) and "generative myths" reduced from deity and nature (Levi-Strauss 1968). As Heller (1982, 6) states, as late as in the Hellenic society,
every barbarian was born to be a slave. In all myths there is working a hidden teleology, in which the explanation of genesis legitimates the established order; what you shall fear, do, avoid and hope for. The actions of man are guided by omens and warnings. The wizards work as teachers and readers of nature. The myth of genesis is at the same time a picture of the order of the world and the foundation for organizing experiences.

As historicity is shaping itself, geographich space and historical time begin to grow apart. In addition to religion, there rises a new kind of rationality, a science and knowledge to organize man's actions and observations. The world historic consciousness makes our culture relative, but at the same time it makes absolute our spatio-temporal reflection as the sole true reflection and progress of historicity. (op.cit.).

The traditional model of thinking and acting based on a religious and mythical way of explanation started to break up at the latest by the time of the birth of the industrial society. The mentality of human societies started to turn from a divine and ecclesiastical authority toward politico-social authority. The birth of the capitalistic social system also signified the construction of expanding state institutions and planning mechanisms directed through the state, side by side with the decreasing authority of the church and the rule of the nobility. In the civic society which was shaping itself people took the power in their own hands in a form never seen before in history by means of the suffrage and mass movements, but at the same time the state began to observe, control, and guide their work more closely. A relation of civil rights was born.

The effects of a social crisis on the change of man's way of thinking and acting have been described in many terms. The change of a value rational action into an aim rational one (Weber 1980), the change from mechanical solidarity into an organic one (Durkheim 1964), the change of Gemeinschaft into Gesellschaft (Tönnies 1963), a transition into commodity fetishism (Marx 1974), and the reification of man and human relations (Lucàs 1971); these all characterize the crises of mentality and the basis-of activities related with the breaking-up of the old feudal social system. The new social system demanded and created a new man who first had to be able to
use money as a means of change and to turn the new formula
Commodity - Money - Commodity gradually into the formula
Money - Commodity - Money where the central objective of
even the individual activity was an individual saving, calcula-
tion, acquisition of property.

The new social division of labour, the more eminent position
of the national states and the world opening both spatially and
temporally made strong demands of change also on social
reproduction. While in the traditional society the church and
the family mostly had been the central ideological apparatuses
of reproduction, their potential to take care of reproduction started
to deteriorate. In an urbanizing industrial society
which demanded work outside home the reproduction by gener-
ations within the family did not work in the previous sense.
Children, who previously in the agrarian and even in the pre-
industrial society ad been the necessary labour force, were
made redundant in the mass. Especially after the restrictions
of the use of child labour force and the development of child
protection the children were seen to be in one's way, a social
and economic burden. The problem of idle children expanded.
As at the same time the traditional reproduction society gave
models neither for work nor the "right" way of life, the
majority of the people's children were deserted, without the
traditional education and control.

At this stage, as an embryo of the present-day basic
education, Finland gradually built up a school system for com-
pulsory education, which applied all citizens. The first statute
on primary school was passed in 1866 (SA 1866), the first
training colleges for teachers were founded in 1863 (SA 1863),
and the school executive board in 1869 (SA 1869). School
started to develop into a state apparatus which passed by the
church; its task being to take care of the reproduction by
generations side by side with the family and the church.

At the beginning of the 20th century the state primary
school was seen as a strong source of hope concerning the rise
of both the economical, cultural and spiritual standards of the
nation. A prominent feature of a civilized, human, and equal society produced through education. The pri-
mary school was first meant to be an elementary school whose
task was to educate the uncivilized children of the people and
to take care of them while the parents were at work as well.
as bringing up diligent and conscientious citizens and working people. While the state was colonizing childhood by means of systematic education, it was considered that this way the threat of radicalization and political turmoil could be avoided, which were brought forward by the new social form when people were taken apart from their roots. The task of education was partly to put cement into the gaps of society.

Also some other institutionalized measures were taken within basic education in order to develop a whole protective educational system for idle and unprotected children especially in urban and industrial areas. Worksrooms, day nurseries, and kindergartens were provided in order to help "the children avoid loitering in the streets and learning bad habits and all kinds of mischiefs and to help them to get accustomed with order, obedience, hobby crafts, and work" (Kom. 1919, 31). The especial task of the day nurseries was to "save the children from the dangers of loitering and idling" (Kom. 1921, 68).

The formation of a state basic education for all classes of society can be described as a response to the so-called problem of representation created by the new social system. An essential part of the problem of representation is an increasing disintegration of the social production and reproduction and the development of a special expanding age group called "childhood". As the processes of production and reproduction processes in the old agrarian society were interlinked the children learnt the necessary knowledge and abilities from their parents by taking themselves part in the processes of production. A distinct state educational system was not needed, nor was there any need of "a pedagogical language" with its own aims, contents or methods of teaching. Learning for life and work mainly took place by training and living. The results of learning could be directly seen in the results of activities and work.

In the modern society the connection between production and reproductive learning was broken. At the same time as the split between the agrarian or handicraft work and product started to manifest, the same thing happened with the connection of the reproductive family and the productive work. Parents moved into production and wage labour out of the immediate sphere of life of children. Putting aside seeing and doing, there was an expansion of the text. Production and
work were beginning to be intermediated into the world of children through a literary school.

The problem of representation is the most central problem of education in the way how a work-orientated and production confined training contextual learning process is changed into a decontextualized pedagogy, which the school carries out with its narrative and literary forms in order to intermediate and reproduce processes and relations of production. (cf. Lundgren 1983; 1984).

The problem of representation is not, however, limited only within the area of the division of labour and production. The educational system carries out also more extensively the tasks connected with social stability taking care of the moral integration of society. (Durkheim 1964). Also in this task school plays a central role as an institution of social reproduction (cf. Rinne et al 1984).

A central attempt to solve the problem of representation is to construct a state reproduction institution, the task of which, together with the family, is to take special care of vertical reproduction, the transmission of the cultural tradition and the socializing of the future generations. For this state institution was created, in addition to school, a special pedagogical discourse and a pedagogical text, which become most solid in the form of curricula, textbooks, and didactics.

The pedagogical text attempts to define the limits of a right and permitted discourse. Within the curricula this definition is carried out as a creation of hierarchic constructions of standard aims, syllabus, and methods. It is a question of writing down a culturally, historically, and socially determined pedagogic discourse, which is made the aim. This "official" curriculum is intermediated into the praxis of schools, however, by effects which are refracted from the social reproduction and rituals seen petrified in the tradition of the school system. Thus "the official text" and the reality of school are contradictory. It is by means of the official and the unofficial that we can discuss "the double character" of the school praxis and "the intermediation" of the curriculum. The socially determined character of common sense and activities and the utopian-ideological official state curriculum text do not go together one in one. Also the official curriculum text itself contradictorily contains, on one hand, the task of social re-
production of school, and on the other hand, its emancipatory-cultural utopia about the future.

Adapting Lundgren (1983; 1984), the formation of education as a response to the problem of representation can be illustrated by the following figure:

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**DIVISION OF LABOUR**

- **PRODUCTION PROCESSES**
- **THE PROBLEM OF REPRESENTATION**
- **REPRODUCTION PROCESSES**

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**THE CODE**

- the organization of education
- the selection of contents (knowledge, syllabus)
- the method of transmission (the form of teaching)

---

**REALIZATION OF THE TEXT**

- **THE PRAXIS OF SCHOOLS**

---

**Figure 1.** The formation of education as a response to the problem of representation (cf. Lundgren 1983 and 1984; Rinne et alia 1984)
Thus the task of curriculum can be seen primarily as an attempt to organize and control experiences of learning (cf. curriculum vitae) in a more or less rigid form. Based on the ideas of Bernstein (1971; 1980) and among others Kallós & Lundgren (1976) the most central instruments of the curriculum and the pedagogy and evaluation attached to it can be reduced into the selection of contents and the definition of the method of transmission as well as the development of the systems of control and evaluation.

The selection of contents is connected with the social division of labour attempting to define the limits of the permitted discourse on the field of school (transferring wider than that): the right world view, the limits of the allowed speech, which pieces of knowledge can be connected, and how knowledge should be placed into the hierarchy. Both the selection of knowledge and the classification and structuring of knowledge with the proper division into age groups are connected with this.

The method of transmission in its turn is connected with defining the relations of activities and control between men. It essentially culminates the social relations of the distribution of power with all its positions of authority and obedience. In the modern "Invisible pedagogy" (Bernstein) this relation of the distribution of power has been left at the backstage as it applies the pedagogic text of a dialogical or symmetrical relation between the student and the teacher. In the progressive pedagogy it is exactly in this way that the whole school works (misrecognized - Bourdieu) as a place outside the social distribution of power, in which no vertical reproduction takes place, but in which the students themselves choose their own individual way in terms of their own individual freedom. (cf. Kallós 1979; Bernstein 1983; Broady 1985).

Selecting the contents and defining the method of transmission within the curriculum is an attempt to define the totality of the learning experience which takes place at school: the permitted discourse and the permitted physical and mental activities. In addition to the contents and methods of teaching, the curriculum usually also defines the system of aims as well as the system of evaluation, which in a way close the process of activities outlined in the curriculum. The interaction of these four elements, especially that of the contents
and form, builds up a whole style of curriculum, which reflects the social conditions and intentions of its time in socializing the new generation. (cf. Rinne 1984).

The curriculum is a constant attempt to solve the problem of representation, though it can sometimes be quite a pure idealistic utopia or "poetry of curriculum" (Svingby 1979) thus passing on the real executive power to the hidden curriculum praxis of the frame factors and traditions of school.

2. The double character of the curriculum

In the following the curriculum stands for the official curriculum text, which in Finland is formed on the basis of the German Lehrplan-tradition and a bureaucratic tradition of a central government as a national plan for the whole of the basic education of the nation. In Finland the curriculum of basic education makes notes of the benevolent educational aims meant for the interests of both the individual and the nation, the objects of which are planned to be each age group with its own experiences of going to school during the time of its compulsory education. The curriculums make notes of the aims which liberate the children and the citizens, the contents expanding and developing the world view, the methods of teaching emphasizing a democratic and independent relation of acquiring activities and knowledge, as well as the evaluation mechanisms supporting the personal learning system of the children.

The Finnish documented curriculums present their utopias and ideologies as neutral ones shared commonly by the nation, the background and the effects of which are beneficial for all. Each individual develops according to his resources and inclinations into a suitable career of education and life. The consensus-based curriculums do not problematize the world view and the ideology conveyed by the totality of the curriculums. The factual hegemony relations, social structures, classes, and class cultures are omitted by the curriculum discourse presented by the state as the official legitimate utopia. In its ideology the curriculum is based on "everybody's will" (Rousseau 1947), and hides inside its own "myth of birth" (Heller 1982).
The official curriculum is not transferred, even in all its hegemony and ideological nature, as such into the praxis of school. The curriculum is intermediated into the school praxis by teachers, who in their culture, work, and position of "a pedagogic expert" also work for their professional and union interests. Controlled by the teachers, the official curriculum is materialized outside the sanctioned activities only in case it is significant for the teachers or if its materialization is useful for maintaining the order inside the classroom. Teachers work on a field where the utopian-Ideological curriculum meets with the hidden curriculum effects of the frame factors and traditions of school, and in which the task of the teacher is to adjust the official and the unofficial.

The juxtaposition of the curriculum and the hidden curriculum at school correctly describes the paradoxical double character of the school praxis. On one hand, there is the official "neutral" curriculum utopia, a promise of a valid structure of knowledge and a relation of activities produced by school, a promise of the utilization value of school knowledge and activities on fields after and outside school. On the other hand, there is "the unofficial curriculum", the hidden curriculum, a compulsion to obey minutely and unquestioned the temporal, spatial and ritual relations established at school and this way emphasizing the exchange value ratio of school knowledge and activities. As the official curriculum emphasizes the themes of an inner motivation, profound learning, and mastery orientation, the hidden curriculum emphasizes the themes of self-discipline, submission, and obedience. On the level of the hidden curriculum the exchange ratio of knowledge and obedience is at least as important a factor defining the whole of the learning as is, on the level of the official curriculum, the utilization value ratio of acquiring knowledge and comprehensive reading.

As Broady (1985) among others states, historically this double character of the curriculum and the hidden curriculum connected with it have not always been as much hidden as today. Still in the time when basic education and the curriculum were shaping into their initial forms, submission, obedience, dutifulness, and school as an instrument of control and guidance were much more visible. The new kind of solution for the problem of representation in terms of the progressive
pedagogy and the overt contents of knowledge are historically only some decades old. "The Invisible curriculum code" (Lundgren 1983) and the "Invisible pedagogy" (Bernstein 1983) are the latest stages of development in the history of the curriculum codes. Their most central characteristic is making the individual choice absolute, and this way manifesting the fact that school is misrecognized as being neutral (cf. Bourdieu 1985). The misrecognition does not necessarily work as far as the customers (students) are concerned. Even though citizens, parents, and especially pedagogic experts and administrative authorities took the official curriculum seriously, very often teachers and especially students see through it. School works as a field through which you get applying different strategies.

The following will outline the double character of the curriculum with a complicated, even though simplified figure on the confrontation between the curriculum and the hidden curriculum.

The official curriculum works as an ideologically loaded utopia, a description and a plan of "a better state of being", which at the same time contains a strategy for gaining the endeavoured future. As the curriculum also represents the common good of the state, it as well crystallizes the ingredients of hegemony defined by Gramsci. The curriculum in its recorded form is not, however, in the least a practical ideology, a practically penetrating form of thinking and action of those who are its objects and the ones who carry it out, but definitely a recorded plan for guiding and controlling this kind of thinking and action. Though school is one of the most central ideological state apparatuses of modern society, the curriculum officially guiding the activities of school is not practical ideology in the same meaning given by Althusser.

1 A particularly significant new attempt to analyze the position of the curriculum and the whole of the pedagogic discourse in social reproduction is an article by Bernstein (1986) "On Pedagogic Discourse", in which he further develops his own comprehensive theory on the basis of recent discussion within the sociology of education.
In the school praxis the different student culture formations meet with the official will of society intermediated by the teachers by means of their work culture. The confrontation of these cultures is surrounded by the effects coming from society due to the frame factors and traditions of school, which are reduced into the categories of time arrangements, space arrangements, and rituals in the figure. From the point of view of the official curriculum, these effects are unofficial hidden curriculum effects, and the surrounding conditions dictated by them essentially constrict the functional freedom and possibilities of the official curriculum and also the teachers' work culture and the student cultures in the school praxis. Classroom-based studying, life sliced into pieces according to the timetable of continuous progress, the contents broken into ready-made subject distributions and textbooks, passive waiting, an individual competition for marks, constant observation, showing of obedience and so on; all these define the real experiences of learning at school as much as the official intentions. In their own language they tell the students the compulsory rules of playing the school play and teach the right coping strategies, the most central feature of which is self-discipline.

1In this figure the aim has been to reduce and develop a wide, intensified, often diffuse, and descriptive tradition observing the hidden curriculum (e.g. Dreeben 1968; Jackson 1968; Broudy 1872; Giroux & Purple 1983) into a more systematic presentation on the central forms of effects of the school praxis. Thus the historically, socially, and philosophically best argumentated categories have been those among the categories of time, space, and rituals organizing human life. (Cf. Rinne et alla 1984).
The established economic and cultural elite and the state and their hegemony on the field of education and culture

The official national-communal curriculum: the ideology of a promised future world and man presented as neutral

Educational aims
1. the total development of the whole of a citizen's personality
2. an independent, profound, inner motivation for learning
3. social solidarity
4. a democratic and democratizing school

The syllabus
1. emancipatory general knowledge
2. an integrated expansion of a scientific world view, an expansion of spatio-temporal thinking and activity
3. a good cultural taste
4. good manners, good behaviour
5. high cognitive qualifications

The methods of teaching
1. active, autonomous student work
2. differentiated teaching and learning
3. an equal interaction (dialogue, symmetry)
4. social activity

I. the total development of the whole of a citizen's personality
2. an independent, profound, inner motivation for learning
3. social solidarity
4. a democratic and democratizing school

I. anticipatory general knowledge
2. an integrated expansion of a scientific world view, an expansion of spatio-temporal thinking and activity
3. a good cultural taste
4. good manners, good behaviour
5. high cognitive qualifications

I. active, autonomous student work
2. differentiated teaching and learning
3. an equal interaction (dialogue, symmetry)
4. social activity

Production of textbooks and material for learning:
- selection of the systems of knowledge, arranging in a hierarchy and organizing
  - academic sciences
  - high culture

The training and recruiting of professional teachers:
the model citizenship, teaching proficiency
- teacher training and the election of teachers
- teacher corporations
- trade papers

The professional culture of the teachers, life style and class position: the changing of the curriculum into a normative "pedagogic discourse"

Behavioural sciences: the relation of control and action at school
- psychology, education, didactics: normal type of development and learning, stage theories, the causal attribution theories of failure and deficiency, classification legitimations, "good teaching"

Figure 2. The confrontation of the curriculum and the hidden curriculum (Rinne 1986; cf. Kivinen et alia 1985)
Children who are different in their class position, culture and life style

1. The students' cultural formations, life styles, aims and coping strategies aiming at school learning conflicting with the teachers' work culture; the style of control and life present in it, the hierarchy of tastes and the coping strategies
2. The change of the institutional forms of school into cultural activities and significations: the basic mechanisms of school praxis: the exchange ratio of obedience and knowledge/certificate; the relation between the student and the teacher.

Time arrangements
1. The distinction of work and leisure: standard lessons, breaks, work days, days off.
2. The contradiction of waiting - patience and punctuality - diligence - producing
3. "Here and now", the temporal perspective reduced within the conditions of school.

Space arrangements
1. Isolating, privacy, closing up the room for activities (school, classroom, desk).
2. The functional differentiation of room (the school yard, classroom, small group room, staff room, corridors).
3. The spatial regulations, the quantitative ratio of teachers and students, resources, crowded conditions, mass teaching.

Civilizing rituals
1. Regulation of the quantity, loudness, and quality of sound, speech and language, legitimacy (who is allowed to talk, when, on what topic, and how and on what to be quiet).
2. Regulation on moving/movements, when, where, how you may be and move, making the body obedient.
3. Showing obedience, "good manners" (knockings, apologies, greeting manners).

Grown-ups classified into the social division of labour and the distribution of the cultural capital, as well as those who have gained civic prowess and full civic rights and social identity, vs. the displaced grown-up citizens

The social function of school
The control and evaluation and order of the "modern" way of life and its power relations.

THE EFFECTS OF THE HIDDEN CURRICULUM

The school praxis

Figure 2. (cont.)
Without making here any detailed comments on the position of the hidden curriculum in social reproduction, in any way, its effects can clearly be seen to be linked with the connection of modern society and the gradually developing social state. The exchange ratio of the knowledge and obedience learnt through the hidden curriculum helps the future citizens to find their way through the labour market and the markets of consumption and leisure. The figure shows the basic characteristics of the formation of the "new man" produced by school. The characteristics are connected with both the qualifications necessary at work and the qualifications belonging more generally to the cohesion and moral order of society. Hidden curricular realism produces to a great extent new grown-ups different from the utopia presented by the official curriculum.

Carrying out the utopia presented by the official curriculum would probably threat, not only the whole of the social order, but, at least as menacingly, the whole of the classroom order. The relationship between the expert and the customer attached with all its educational mechanisms locating into certain positions within the division of labour would be jeopardized permanently. "A crisis of legitimation" (Habermas) and "a crisis of liturgy" (Bourdieu) could be established at school, if "the curriculum poetry" changed into the reality of learning.

3. The Finnish Compulsory School and Its Curriculum Codes

The official curriculums of the basic education of the Finnish national state are the Model courses of the year 1881, the Rural primary school curriculum of the years 1916 and 1925, the Primary school curriculum of the years 1946 and 1952, the Comprehensive school curriculum of the year 1970, and the Comprehensive school curriculum principles of the year 1985. By analyzing these curriculums we can outline the curriculum codes which temporally vary the official Finnish curriculum ideology.

The curriculums are organized as follows:
The period from the birth of the primary school up to the Second World War (1881-1945) is characterized by a moral curriculum code, in which the aim was to change the objects of education unquestioned as being partakers of the established religious and peasant way of thinking and activities. Work and faith were the central concepts of the curriculum, home and fatherland the solid ground. The period 1945-1970 is characterized by a civic code in which the legitimation of the curriculum was sought within the real social world of the people, and in which the most important part was the education for democracy. Moral questions were still important, but now school was constructed into "a miniature society", where value judgements were always discussed from the point of view of society, the nation, and the state. The aim was to organize education into a training ground for civic rights, civic duties and privileges.
In 1970 the curriculum code breaks up into an individualist code, in which moral discussion is left as the personal solution of the free individual. This code is clearly connected with the rational code brought forward by Lundgren (1979). Above all, the common feature is presenting the individual as the basis of legitimation and as the starting point. The individualist code also implies elements which refer into the direction of aim rationalism, as the aim is to bind the student more closely than before into the state rational-bureaucratic mechanisms of planning and evaluation by developing a system of aims and evaluation which orientate towards the educational institution and the individual more thoroughly. The curriculum legitimates its influence by the interests of the individual and as a profitable social investment. In developing the system of evaluation, from 1985 on especially, the aim is to emphasize the evaluation of the individual's total behaviour, performance and will, and to leave the qualifications of cognition and skill aside in a minor position. The individual and the obedient citizen are set side by side in the curriculum.

In the changes of the Finnish curriculum an interesting line of development to be seen is the omission of the divine authority, the rise and omission of the authority of the nation and, finally, the rise of the modern individual. At the same time the change of the curriculum codes shows how the initially remote position of the children changes into citizenship and later into individuals by means of education and throughout the period of education. The aim of the curriculums of basic education is to guide in a controlled way the integration after the Civil War (1917), the national reconstruction after the lost Second World War (1945-), and from this period on (1970-), the personal choices and tastes of the "the free individuals" already living in "the welfare state". The results of mobility, urbanization, the expansion of the middle class, and the rise of the service occupations are, on the level of curriculum, perhaps crystallized especially in the form of the breakthrough of the individual code. Apparently the development of the curriculum codes in this sense can be explained by the structural changes, which in Finland took place later than in the rest of the Scandinavian countries. There is, however, a need to emphasize the fact that the ideology of the official curriculum only involves the phenomena of the
manifested level. The school praxis and the practical ideology based on them can work strongly opposingly. For instance, the individualist curriculum code could thus work as a creator of the illusion of individualism, which only produces a misrecognition.

Historic time with its economic, political, and cultural structures makes possible a certain kind of curriculum code. The moral and individualist curriculum codes cannot exchange their temporal locations, because in the curriculum code solidifies the whole mentality, world view, and hegemony of the era.

The educational institution and especially the comprehensive school institution in its forms of organization looks relatively similar all over the industrialized world. It covers different years of age given the name childhood, takes place in the mass, in classrooms, makes use of trained teachers, specially prepared learning materials etc. However, the aims of school-type education as such are regulated by the specific national development goals with their own characteristics. Though all over the world school teaches how to read, count, and write, this takes place in the national language and according to how each country defines its position historically, geographically, and politically. As a plan and reflector of the way of life of the nation the curriculum and the specific character of whose culture it crystallizes.

When there was at the turn of the 20th century some debate on forming the curriculum in Finland, it was seriously considered to employ different kinds of curriculums not only for the countryside and the towns but also for boys and girls and the lower and the upper classes as well. In fact, the secondary school curriculums are the very relics of the curriculums originally made for the upper classes, and the curriculums of the primary schools are those originally made for the lower classes. The rural primary school curriculum is an example of a curriculum made for the countryside, and the urban area curriculums of each town are examples of the educational planning in towns. Among others, the city of Helsinki first made a separate distribution of subjects for boys and girls (cf. Somerkivi 1975), which reflects the influence of a society committed to the distinction of gender on the educational curriculum work.
The education of the two sexes, the offspring of different social classes and the offspring of the people living in the country and in urban areas in one unified school institution according to a unified curriculum is, historically, quite a new change. In the exceedingly dominant rural primary school of the turn of the century there was no need for any distinction based on the social structure apparently because the objects of education were primarily the children of the countryside and the lower classes. The moral curriculum code is sufficient for this purpose without distinction. Instead, it strikes very odd how the distinction of gender is planned to be carried out in the rural primary school. Perhaps the distinction that was made inside manual training, the distinction between woodwork and the needle work, and the distinction of gender clearly seen in urban areas give an idea of the methods of the standard of the "accomplished curriculum" in this respect.

The primary school curriculum after the Second World War does not, either, organizationally differentiate the curriculum according to the distinctions connected with the social structures, though it is the first curriculum involving uniformly all the children at the age of compulsory education. Inside it, however, there is as the guiding division the distinction between "theoretically talented" and "practically talented" children, which is widely motivated by scientific and psychological arguments as well as the intention is to put it into practice as a principle for the selection of the social division of labour, which takes place at school. There is no wider debate on gender or the distinction countryside - urban area, but the civic code of the curriculum is directed towards all the citizens. The intellectual and manual division is supposed to meet similarly with the social classes, the distinction countryside - urban area as well as the distinction of sex.

The individualist code of the comprehensive school excludes out of school the whole of the classification based on social structure. In the individualist code, even in a more forceful way than in the civic code, all children have the same starting point. School presents itself more and more clearly as a neutral, objective, evaluating and investing machinery, to which each individual can resort according to his personal ability and will. Success or failure at school is no more due to the division reduced to social structures, but, at the most beyond the
individual, due to the badly motivating or depriving atmosphere of a specific home or family. In the curriculum the distinction of gender, the distinction of the urban area and the countryside and the differences of the social class background completely vanish. Instead, the object of school becomes the individual as such with his particular early childhood environment. The social world is reduced into individual, child, and learning psychology.

The curriculums and codes are reflections of their time, place, and structures as well as ideological utopias about the endeavoured future. In Finland they describe the development of the nation in an interesting way. There is no certainty, however, of the question to which extent they concern the school praxis and how they have been able or willing to guide the reality of the nation and school according to their explicit or implicit guidelines.
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The curriculum has become the object of extensive international research during recent decades. This research has been linked particularly with the practical situation created by educational reforms. The question of reforms in the contents of subjects and that of the re-evaluation of teaching methods and goals have presented researchers with even more central and extensive educational problems than before. The concept of the curriculum has been understood as a multi-disciplinary problem demanding wide-ranging analyses from researchers in the social sciences and the humanities. For the present, a broadly-based re-evaluation of social and educational realities is the specific problem of curriculum theory.

The broad scope of such an analysis presents a number of methodological problems. It is difficult to present any single general and detailed methodological model for approaching the problem. For these reasons, the theoretical and methodological basic analyses (educational philosophy in particular) and empirical studies must dynamically support one another, if a sufficiently comprehensive grasp of the problem of the curriculum is to be possible. Due to reasons irrevocably connected with the nature of the object of study, it is difficult to define the concept of the curriculum in an uncomplicated way. From the point of view of the concretization of research, it is most profitable to talk about the curriculum as an open and dynamic concept.

What does the curriculum contain as a theoretical concept? A multidimensional illustration of the concept is possible, and theoretical consideration dealing with the curriculum have largely been focused on such a description. The most general descriptive definition of the curriculum could read as follows:

The curriculum is a crystallization of various cultural and social factors fundamentally influencing education, the element in which these factors are concretized in educational reality and in which they are transmitted to practical teaching situations.
For this reason, due to its multidimensional nature, the curriculum can be regarded as one of the most central concepts of educational science. It is - for better or worse - an implication of educational theory which, as a concrete plan, is realized in the educational system of society.

The philosophical aspect of the curriculum has been relatively rarely focused upon when analyzing the concept. The curriculum as a plan is, in a way, a script for intended action or a helpful sketch for directing activity. In this connection, the conversion of theory to practice becomes particularly important. Most curricular reflections especially in Finland have been concerned with practical questions either from an administrative standpoint or that of teaching content.

From the point of view of research, it is also illustrative that so-called "curricular analyses" have been especially directed towards the so-called "implemented curriculum". Research has also often been split into studies of different school subjects. Educational researchers have been inclined to commence narrow empirical investigations which have little bearing on the broader conceptual problems of the curriculum. In particular, one-dimensional taxonomic thinking, according to which the curriculum is, above all, a producer of certain "desirable behaviours", leads into a purely adaptive attitude, e.g. the reform of certain professional "activities" for the growing generation. This kind of thinking has its basis in behavouristic psychology which has risen and fallen on the assumption that human actions basically are a mechanistically "behaviourist". This situation complicates the analysis of the world view and the view of man in curricular theory.

Empirical curricular research can naturally be accused of many mistakes, but in the study of didactic processes the approach is correct. Similarly, it can be accused of a narrowness of scope, but the positive value of research based on behaviourism must also be recognized. In most cases it is not the approach which causes the error, but the fact that the researchers using these methods are not aware of the need for a broader philosophical background particularly in questions dealing with the curriculum.

I have in various connections presented ideas dealing with the problem of the curriculum, which - if correctly applied - would lead to a more heuristic view of the complexities of
this concept. The common factor in everything that I have said is that the structure and internal relations of the determinants and attributes of the curriculum can be understood only with the help of a systematic philosophical foundation. By systematic philosophy one cannot, in this context, refer to any ready-made particular "ism", a religious or political ideology, but to a much broader multi-disciplinary analysis of the world view and view of man, which would arise out of the relations between the categories of knowledge and activity.

It is not possible to unravel all the factual relations the concept of the curriculum refers to in this short presentation. In present-day social praxis, the concept of the curriculum has mostly appeared as a means of planning everyday teaching. It has been directly connected with the various analyses of the real states of society and the teaching realized in it as well as specifically with reform. The logic process of construction of the curriculum has attempted to have a direct impact on didactic praxis. An attempt has been made to realize the potential "ideal" starting from administrative and political aspirations. In this process, administrative planning, political goal-setting, and taking into account the different interest groups, has meant reformist compromises e.g. in the development of the Finnish comprehensive school. Political and administrative philosophy has been carried so far that a number of definitions, the purpose of which is to lead to what is right and proper, have been noted down in school legislation. Behind this reasoning exists a kind of ethico-positivistic "philosophy". The concept of the curriculum then refers in a particular way to the form in which social and political power is exercised at a given moment.

Different studies dealing with the process of social reproduction have clearly pointed out the nature of the curriculum as an instrument for analyses of school praxis. Particularly successful in this respect has been research in educational sociology without, however, providing an alternative. The social and practical importance of the concept of the curriculum has been clearly focused upon in the Finnish planning system. The problems of the real state of education have led to a more systematic analysis of the most urgent problems and to an attempt to achieve reforms by means of the ideology of planning. This socio-political approach to the problems of the
curriculum is not contradictory to the logical status of the concept at the level of the system. The conflict becomes apparent, in relation to the logic of planning, in what facts are dealt with in the planning process. The form and the contents of a plan differ from one another. In Finland, this phenomenon can be seen in the comprehensive school as an administrative solution e.g. in that the actual planning of teaching contents is liberated by delegating decision-making power down in the administrative hierarchy. Swedish researchers in particular have criticized the effectiveness of this system. The act of delegating has merely moved a difficult pile of paper from a larger desk to a number of smaller ones. The administrative autonomy of the school has been increased, which is in accordance with the ideals of democracy.

To what extent can we now expect that the requirements concerning the logic of teaching are being fulfilled in the ethical and psychological reality of the educant? Against this background, the curriculum seems to be an indicator of the state of society, a qualitative and extensive analysis of which is required. The curriculum has thus clearly pointed out its nature as a political factor. This fact can be explained by the description of the activities and social rituals in the compilation of the curriculum. The concept of the curriculum has revealed its social significance, the actual weight of which is not in educational science but in the framework of wider socio-political research. Thus the curriculum is more of an individual example which reflects any plan realized by society and the logic of social planning. On this level, research on the curriculum can be diverted to much more general research dealing with the organization of the society.

An organizational study of the curriculum hardly brings forth new ideas on what teaching itself contains, but it will help an individual to a better understanding of the nature of his or her individual personal link with social praxis both as a decision-maker and implementor of the decisions. Thus the impact of the curriculum on the world view begins already in the planning process.

The problem of the curriculum can also be examined by means of empirical research at the level of reality. Then the study of the world view with regard to the curriculum is first and foremost an attempt to clarify the problems connected
with the concept of the realized curriculum. Thus we come to relatively traditional ways of investigating existing factual relations. When we stress this kind of research at the reform level, we have to accept more explicitly the goals which we have taken to be good. Here research on the curriculum especially reveals conflicts between the realized and desired states. Curriculum research thus gains a developmental emphasis and considerations dealing with the world view and the view of man are stressed. Research on the curriculum can then proceed more clearly into value-philosophical argumentation and involves considerable emphasis at the ideal level. From the point of view of educational research, the problems of the paradigm, which have been bothering researchers for a long time, arise. An attempt has been made to solve the problem by drawing a line between empirical and theoretical research and, at the same time, between facts and values. Efforts have been made to make locate value philosophy a task for educational philosophy.

As stated above, the problem of the curriculum contains factual relations such that it is not possible to "canonize" or "polarize" it in relation to a single discipline. The problem is multi-disciplinary in character. It is then natural that philosophical argumentation must be part of its study.

In Finland, however, no fruitful discussion on the theoretical foundation of the curriculum problem in which the concepts of the world view and the view of man would have been of great theoretical significance has been undertaken. Both concepts relate to the goal-orientation of the curriculum. It is very likely that the focus of the curriculum problem has to be moved in the direction of an analysis at the ideal level due to real and reformist pressures and, in particular, to political praxis. My opinion is that the general discussion on the problem of the world view and the view of man in the curriculum has been far too abstract and has remained separate from theoretical conceptual formation. By writing clauses containing teaching objectives on the world view and view of man into educational law, educational policy has revealed that the analysis of the curriculum theory must be undertaken from more profound premises than the contents of the law and its second section in particular.

It is very likely that the contents of the second section of
the law pertaining to the comprehensive school will put pressure on educational science. This will happen at the latest when it appears in reality that the educational wishes expressed in the law are not realized. In the present school discussion, reference has already been made to the incompetence of educationalists. Besides being a national problem, the curriculum also is a universal educational problem. Many philosophically structured social and educational utopias - without any intention to demean the concept of utopia - have dealt with the problem of the ideal. The writings of Plato, Rousseau and Locke have, however, lost their theoretical relevance in the present scientific tradition. The curriculum, however, presupposes utopias and a clearcut theoretical and dialectical analysis. If this is not the case, the analyses of the view of man and the view of the world borne by the curriculum will not be carried out.

In respect of the prerequisites of the curriculum now to be examined the heading of this paper must be understood as a survey of the ideal level. The study of the ideal prerequisites of the curriculum is endorsed by an anthropological analysis of the theory of education and teaching, which implies the curriculum. The basic ideal of educational theory must then fulfill three sets of prerequisites related to one another, which also concern the ideal of the curriculum. In order to be theoretically relevant, a theory of education has to contain three components. More simply one could say that educational theory must be ethical, logical and psychological. The curriculum should then, starting from these premises, become an ethical, logical and psychological totality.

These three concepts build up a rather complex network of relations. It is not possible to deal with the problem of an ethical ideal without taking into account the logical and psychological aspects. The logical, the ethical and the psychological are not parts of a totality separable from one another. In the planning of teaching, we cannot proceed by first taking into account e.g. the logical requirements for teaching materials and processes and then connecting them with the ethical problems. In practice, in connection with an analysis or a reform dealing with the real state of affairs, we proceed exactly as described. We weave a partial net, the theoretical interrelations of which are not revealed.
It would be unfortunate if the analyses of the world view and the view of man in curriculum theory were to split up as a result of abandoning analysis as a totality because of regarding it as too complex and demanding. We aim too directly to overcome the ethical, logical and psychological aspects and lose the possibility of a relative analysis of the prerequisites themselves. The problem is very concretely felt in practical conflicts about the relations between general didactics and subject didactics. In practice it is naturally much easier to talk about the specific than to discuss what is more generally meant by the concept of didactics.

The same problem also becomes apparent in the form of the heading of the present paper, i.e. the role of the curriculum in the formation of the world view. We have to analyze what we mean by the concept of the curriculum. When we see a concrete written plan on paper, we can deduce that the plan will influence the world view of those who have compiled it as well as that of those who will read it or aim at realizing it by means of the prerequisites included in it. Also in this context, the components of the ethical, logical and psychological totality will present themselves differently depending on what the analytical capacity of the person asking the question has connected the problem with.

The curriculum will in no way influence the world view of the pupils if a more or less well-planned teaching and a learning process is absent. Didactics at its most general level is then the theoretical implication of the curriculum. Herbert was not totally wrong in dividing pedagogy into planning and methods. However, he did not pay sufficient attention to the theoretical consequences of the duality.

What kind of difficulties arise as a result of the conceptual separation of contents and methods? The contents and the method are not separate from the logical, ethical and psychological aspects. The choice of reasonable contents and suitable teaching methods are possible only when the psychological aspect, e.g. the psychological learning horizon of the pupils of a certain age, is also taken into account. Technical duality is possible in practice, but in relation to theoretical underpinning we meet with conceptual problems. In functional and theoretical studies of the didactic processes, progress towards the definition of a learner’s psychological horizon at the level of
the curriculum has also been made. We thus realize that the problems of curriculum theory and the basic theory of didactics are linked in the ideal state also from the point of view of individual psychology.

Examining the psychological aspect of the curriculum theory solely from the point of view of individual psychology is not, however, a sufficient starting point. When the curriculum is being discussed as formative influence on the world view, variation in individual psychological horizon has to be presupposed as well as the relationship of this variance to the potential and the social part of the ethical aspect possible in a given situation. The ethical aspect does, at its most general level, refer to the relative existence of value structures. In practice we can of course act by forcefully offering a certain ideology or value structure without heeding its logicality or the ability of an individual to internalize thinking of an action in accordance with the values in question. We certainly achieve educational outcomes, but a theoretically generalizing structure is not created on the ideal level. Local considerations are not at the core of the discussion on curricular theory when it comes to questions of the world view. A conception which is relevant in explaining the mechanisms of the formation of a child soldier's world view in Iran has to be equally relevant in the explanation of the creation of the world view of a Finnish child. Considerations relating to curriculum theory thus presuppose a general educational and theoretical structure, i.e. a theory of education.

This must not, however, be misunderstood to mean that the curriculum problem should not be dealt with until a comprehensive theory on education is ready. On the contrary, the curriculum is a most practical concept in the discussion and with its help the real existence of many phenomena and facts in the social praxis can be proved. Even in its abstractness it is a most concrete tool for building up a theoretical foundation for education. The politico-logical aspect of curriculum theory also makes it an interesting social problem. It is regrettable that the sphere of the social sciences is not interested in the curriculum.

When we discuss the impact of the curriculum on the world view, the theoretical examination focuses in the direction of teaching contents. The concept of the world view would de-
mand a comprehensive analysis, because from the philosophical point of view it is a most integrated concept. It brings together the partial components on the basis of which the planning of teaching proceeds. In the world view, different emphasis is given to aspects such as values, facts, the society, the individual, materialism and religion depending on the ontological and gnoseological foundation on which the conceptual space and experience of the formation of the world view is based. The concept of the world view and that of the world are often differentiated from one another. The difference between these terms is defined with the help of the logicality aspect of the curriculum. Logicality here refers particularly to the verifiable truth dimension on the basis of existing knowledge. The concept of the world view is thus connected with the concept of science.

This approach, when deduced correctly, is the starting point for the world view structures contained in the curriculum of school teaching. The conception of the world for its part refers to the component of individual psychology and to the variation in the ontological and gnoseological foundation, where the general anthropological analysis does not have systematic scientific and philosophical foundation. The construction of the curriculum on a scientific basis presupposes a general anthropological and philosophical foundation.

Because the curriculum, through the teaching given according to it, is a document which aims at certain effects, it should be possible in the solution of the problem to start out from the postulation of a consciousness directing (teaching) existence (being). The postulation presupposes synchronic analysis of the concepts of education, teaching and growth. Here the ideal analysis of the curriculum is then significantly linked with the deduction of educational theory.

What concerns the curriculum, also concerns the postulants of the consciousness space of the teacher. Otherwise we cannot understand the connection between the action of the teacher and the plan at the ideal level. When we talk about the curriculum ideal, we then talk about the teacher ideal at the same time. The teacher ideal cannot in this context be understood as some concrete set of characteristics which would define the features of a good teacher. The teacher ideal must be understood as a horizon of the realization of the curricu-
lum. In everyday life we say that the teacher realizes the curriculum. The theoretical survey of the teacher ideal will reach in practice. We are then concerned with the relations and the problems of the command and transmission of the world view within curriculum theory.

The teacher ideal can be compared to a key, by the help of which the curriculum look containing the world view will open up horizons which can be reached by the pupils. The mechanism in the opening of the lock is explained by the theory of general didactics. A theoretical foundation is thus provided for general didactics. The foundation cannot be mechanistic in nature, but it must include those value premises which rise from the ethical, logical and psychological totality of the curriculum ideal, by means of which the reversion of general world view relations takes place so that the internal and external horizons can be reached. The areas of planning and methods are locked into an inseparable whole in analysis of the ideal level. No theoretical explanation of the world view is a curriculum without a didactic component. The explanation of the world view must be undertaken, however, so that the reversion is logically possible.

In practice no curriculum can constitute the mental characteristics of pupil and clarify the horizon of the world view. Only an educating and teaching deed will influence in this direction. In practice the teacher has in the background of interaction with pupils his or her own beliefs about the world and the nature of man and on the degree of clarity of which depends how well he or she can reach the pupils and help in developing their understanding. Existential phenomenological philosophers and dialectic surveys of pedagogics have thoroughly analyzed the problem of consciousness. Regrettably little of this theory has been transmitted to basic didactic theory and curriculum theory. Even less has naturally been transmitted from theoretical thinking into didactic practice.

At the end of the present paper I will draw attention to some points which I regard as important for the definition of the curriculum ideal especially from the point of view of general didactics.

Firstly, there is no reason to mystify human growth in connection with the curriculum problem. The specific nature and position of human growth can be relatively well defined.
from the starting points of anthropology and philosophy. A clear structure can be created for the dynamics of society and culture. Special emphasis must then be laid upon the universality and multi-disciplinarity of the analysis. In this investigation, we enter a road on which we must explain the levels of the physical, organic and spiritual being of man, which must be contained in the definition of the concept of growth. The present state of research in the natural sciences offers a solid basis for the description of physical and organic levels. The problems of spiritual growth are more difficult to grasp, but existential and phenomenological philosophy creates a picture of those relations which have a potential to the spiritual space of an individual when defining the general nature of human activity and intentional activity.

In connection with this analysis it will be possible to deal with the relations between the individual and society. The phenomenological approach has been successfully applied in psychiatry. The transference of this viewpoint to the outlining of the basic theory of the didactic component in the curriculum would be the right way to understand the laws of didactic interaction and the symbolic function of teaching. It would seem that psychological and neurophysical knowledge has not been applied to the development of the didactic ideal. The potential of empirical knowledge in these disciplines is, however, quite considerable. The concept of man created from these premises is not based on any ready-made "ism". The end result will be a relative reality of the conceptual categories and their relations. An understanding of the potential possibilities of proceeding, choosing and emphasizing the teaching material or the didactic processes in reality related to time and place will result. This kind of analysis will presuppose the abolition of the present. This kind of analysis will presuppose the abolition the abolition of the present. This kind on analysis will presuppose the abolition of the present form of school organization from future analysis.

In the category of life known to us, the position of the individual as the only clearly intentional creature which is also seen in the forceful way of man's interference with the content-related preconditions of nature, is exceptional. All the individual relations to nature and to external reality are always in some way investigative and explanatory. This process
In human nature is not dependent on will. From the point of view of structuring the ideal of the world view, the relationship of the individual with surrounding reality has become even more important. His exceptional consciousness and acted relationship to reality places him, already in his very existence, under ethical obligations.

The general relation to the ethics of nature will be the most significant principle in the production of the curriculum. The ethical obligation in its most severe interpretation means an imperative necessity to protect life and a necessity to understand the totality which is the basis for one’s existence. Man’s ethical obligation and practical consciousness are at present in significant contradiction. A futurological aspect must then be attached to the study of the curriculum, by means of which it will become possible to control the conflict. Besides having an ethical relationship with nature, the relationship must also be based on the category of social existence. The school system is the central institution for the ethical study of existence. Understanding the necessity of the ethical existential relation is not possible without a logical and psychological basis for knowledge. Ethical existence must be found in the ideal of science. For this reason we must demand autonomy for teaching, for the school - from compulsory education to the university - is build upon the interpretation of the same scientific ideal.

The question of whether the curriculum in general should influence a pupil’s world view has been implicitly answered e.g. in the comprehensive school law. The aims set up in the law expressly reflect the world view. The logic of achieving the goals and the relationship of what is expressed in the goals to the reality surrounding them have, however, been left aside. A theory on the planning of teaching also implies theorizing beyond reality. Realistic conditions arise beside the analyses of the ideal and inevitably call for an analysis at the level of reform. I hereby put forward a proposal for the establishment of a large working group under the auspices of the Academy of Finland for speeding up a multi-disciplinary study of this matter which would compile a draft version of "a shadow curriculum" particular for the needs of the comprehensive school.
References


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