How Do We Deal with Children's Questions? Semantic Aspects of Encounters between Children and Professionals in Child Institutions.

The professional practices concerning children's questions in the welfare clinic, the day care center, the school and the library in Finland are discussed in this paper. Each institution's historical background and the implicit and explicit concepts of children affecting professional behavior are analyzed. The research data include legal and statutory texts, previous research, and empirical observation. After a brief historical survey the study describes, with the help of 21 cases, encounters and interactions between adults and children. It is suggested that work development in the institutions is promoted or limited by the general objectives set in the form of laws and statutes as well as by historical factors concerning professional practice. Among institutions there is variation in attitudes towards children and in the working methods which define institutional relationships with them. It is suggested that creating an environment for children in which their own initiative is developed requires the adults to be willing to serve, to listen, and to be flexible enough to change their working habits to meet the immediate knowledge needs of the children. Of the four institutions, only the library has consistently developed practices which encourage children's initiatives. Contains 129 references. (AA)
How do we deal with children's questions?

Semantic aspects of encounters between children and professionals in child institutions

Monika Riihelä

A research project of the National Research and Development Centre for Welfare and Health (Stakes), Finland, 1996

BEST COPY AVAILABLE
Abstract

Riihelä, Monika
ISBN 951-33-0244-X

The questions set by children are treated as an indication of how they, the children, take the initiative and how they create life-controlling strategies. However, children's questions have turned out to be extremely rare in those institutions where they spend the greater part of their day. In the care, education and instruction of children, the aim is to support independent activity so why is it that children's own questions do not receive the attention of the personnel? In this research a comparison is made between four different child institutions in Finland: the professional practices concerning children's questions in the welfare clinic, the day care centre, the school and the library. Each institution's historical background and the implicit and explicit concepts of children affecting professional behaviour are analyzed. The research data includes legal and statutory texts, previous research and empirical observation. The analysis proceeds from the macro-structures to the micro level. After a brief historical survey the study describes, with the help of 21 cases, encounters and interaction between adults and children. The cases were selected from a large amount of data and the criteria for the selection have been the professionals' conscious desire to develop their own work as well as the children's active and questioning behaviour in the said situations.

The research problem is, on the one hand, the questions which adults ask children and their meaning for the advancement of cooperation, and, on the other hand, the questions which children ask, the meanings attributed to the questions by the adults and their position in the child institutions. The problems are exposed by descriptions of the work situations and analysis of conversational units. The collaboration and initiative-taking in the conversations and interactions are compared. The research is chiefly ethnographic and the dialectical method of qualitative research is applied in the analysis.

The research shows that work development in the institutions is promoted or limited by the general objectives set in the form of laws and statutes as well as by historical factors concerning professional practice. Amongst the institutions there is variation in the positive attitudes towards children and working methods which take notice of them. In the observation of individual spells of work, children are both seen and heard. However, questions from children are considerably fewer than those from adults. Small question-response episodes are governed by scripts created by adults and their questions, which direct the children. Children's questions appear in abundance when the adults concept of knowledge is dynamic and their view of learning is collaborative. Creating an environment for children in which their own initiative is developed, requires the adults to be willing to serve, to listen and to be flexible enough
to change their working habits to meet the immediate knowledge needs of the children. In the light of this research it appears that, of the four institutions, only the library has consistently developed practices which encourage children's initiative.

Based on earlier research and the analysis of the empirical material, a theoretical model has been laid out which may help in the observation of the child's subjective position both in the context of research and in practice. Key concepts that have been used are the sharing of positive power and the concepts of children and learning. The aim has been, with the help of the script metaphor, to identify the conditions permitting the child to act as subject in inter-generational interaction.

The research is part of a long-term work development research process and the results serve not only to extend the knowledge on children's questions but also to develop the practical methodology of professional work. This report is a summary of the doctoral thesis research at the department of social psychology at the university of Helsinki in June 1996.

Key words: children's questions in child institutions, equality in conversation, the concept of dynamic knowledge, children's initiative, collaboration, script-metaphor.
"Why do you have such big eyes?"
"All the better to see you with."
"Why do you have such big ears?"
"All the better to hear you with."
"Why do you have such big teeth?"
"All the better to eat you with."
And with that the wolf jumped out of the bed and swallowed poor Little Red Riding Hood.

Charles Perrault, 1697

Introduction

Children ask questions and wonder about things long before they are capable of verbally expressing their amazement. The internalisation of new things has been shown to be selective, active and to become more profound through personal processing. Independent initiative and sensitivity to interaction are important requisites for learning. Early experiences which encourage independence give children the feeling that they are in control. The independent acquisition of knowledge through independent initiative progresses through questioning and reflection. However, children's own questions have been largely ignored in work with children, in advice-giving situations and in education. Institutions are maintained for children but children's spontaneous striving for knowledge, their active development and learning, have been largely unquestioned. Children's viewpoints about their own study skills, producing their own ways of learning to learn, have up till now received little attention. As the focus of this research I have taken the questions which appear during adult-child encounters in four child-organizations; the welfare clinic, the day care centre, the school and the library.

Questioning is an activity which creates a structure for the control of one's own life and calls for interaction. By asking questions new things are worked through individual experience into a personal knowledge structure. But how do adults grasp the meanings that children incorporate in their questions? And when they are planning their own work, how do they take into account the children's knowledge needs. There are countless problems because children's thought with its flights of imagination and jumps in viewpoint is different and also far faster than the ponderous thought of adults. Children's questions are also lively and imaginative.
During my research I have often reflected on the conflicting aims of different generations. In the current study I have tried to analyze the reflections of children. These reflections are often more playful than that of adults and the points of interest can change in a flash. But is it possible to transform the reflection that is part of the child’s world into an adult scientific debate, without violating it? In comparison we can take research into children’s play because these researchers faces the same problem. The innermost character of the child’s spontaneous play is probably beyond the reach of adults and, at least until now, adult theorising has not been very successful in analyzing its delicate rhythms. Only children can appreciate the riches of the interaction of play. We can describe it, but cannot explain it in a satisfactory manner, because its understanding lies in the child’s own intentions. And we cannot sufficiently clarify the intentions, points of view, aspirations and sources of joy among children at play. They will not tell us, because from their point of view there is no sense in telling about their play activities. When collecting data I have also interrogated the children about how they relate to their own questions. I have come to realize, however, that the objects of my interest are of secondary importance to the children. Reflecting on passed events is meaningless to children, who are busy facing an enormous amount of new things every day.

As with play, the meanings of children’s questions are often unattainable to us adults. The problem is the same concerning the intentions that influence interaction between educator and educated. The intentions of the educator are just about distinguishable whereas those of the child are much less accessible.

As far as I know there has as yet been no research done on the subject of children’s questions in interaction with professionals. The way children ask questions, particularly fundamental questions about life, has been studied from numerous points of view but the aspect of the answers given by people trained in the treatment of children has not been studied. The lack of interest presumably stems from two myths. The first is the myth of the unselfish intentions of the professional helper and the second is the myth of children’s lack of development and their inadequacy in relating to adults. These two myths feed each other and have thus remained constant very long. It is believed that the child, in order to develop, needs knowledge and skills which are given by the adult. Thus the education given by the adult becomes the strength which carries forward the development of the child and transforms his limitations into abilities. The developmental needs to do with the fields of care, treatment, skill diagnostics, education, teaching and children's culture have largely been founded on the validity of these two myths. The development of educational methodology based on the evaluation of children has also largely had the effect of strengthening the myths. Because the institutionalization of the child’s daily life has rapidly increased during the last few decades and the number of professionals has grown, their influence on the child's daily life has also grown. These topics have been the subject of considerable research recently.
Since children's questions are so rarely dealt with in traditional professional child work, I have had to choose very carefully the people to help me gather the material for this research. The professionals who have taken part in this work have all been chosen because they are interested in developing their own work. One of the day care centres and all the three schools have previously taken part in earlier development projects. The aim of the development work has been to find more child-centred methods and to identify the points of conflict which hinder self-development. In their work, people generally aim to emphasize the subjective role of the child but find this very difficult. The objective of this research is not only to clarify the issue of children's questions, but also to offer a reflective surface for the professionals in much the same way as action research helps to develop work. Thus the events described here are not typical of average work situations but form part of the ongoing development work. They form a part of an in-depth awareness process.

The intention of this research was to investigate what professionals aim at in their interaction with children, how they deal with children's questions and how the interaction evolves. This report is a summary of the research (Riihelä 1996).
I Starting points - the pleasures and problems of encounters

Children's questions in daily life

For a long time I have been intrigued by the fact that the thousands of questions asked by children in the home and family environment do not appear to get asked in an institutional setting. When answering a child's questions, the home educator may feel that he or she is playing an important role in the child's life, but an institutional educator rarely faces these questions and thus does not have this support in the construction of his/her professional identity. I start from the pretext, prevalent among linguists, that the richest elements of interaction occur within everyday communication, and that institutionalized conversations involve a more limited field of human communication (Huuskonen 1992 13, Raevaara 1993 11). In familiar and informal situations, many different ways of expressing oneself are freely available. It is typical of institutional language that only particular types of turns and sequences are in use. To form a background, I have here selected a few examples from the everyday home life of a child before attempting to trace them in institutional life.

"Where have you hidden my mother?"

The grandparents of two-and-a-half-year-old Tomas have come for a visit and they are sleeping with him in his bedroom. The rest of the family are also at home and, early in the morning, Tomas' younger sister starts to cry. Tomas wakes up, gets out of bed, turns to his grandparents and says, "Where have you hidden my mother?". He marches out of the room and spends the rest of the night with his parents and sister. It should perhaps be pointed out that, in his own home, Tomas decides for himself who sleeps with whom. He did not even wait for an answer to his question.

"Will you buy me this Lego fleet?"

Three-year-old Kassu is looking at a Lego brochure when he turns to his grandmother and says: "Look Grandma, will you buy me this Lego fleet?" But his grandmother has just bought him a Lego electric train, in the package of which he found the brochure. "We won't use the word 'buy' for a while now", says Grandma poignantly. Kassu replies promptly, "Oh, I didn't use that word".
At that point Kassu leaves the Lego brochure on the floor and concentrates on developing his game with the train set. Before bedtime his grandmother surreptitiously throws the brochure in the rubbish. For the next three months Kassu does not make a single buying request to his grandmother.

When I was discussing this later with Kassu's grandfather, we expressed amazement at the ability of a three-year-old to deal with such a complex pattern of interaction and to make such a broad interpretation of a brief message. Hidden behind three brief lines of communication was a surprising number of meanings. While waiting for his grandfather to assemble the train set, the flight of thought of the three-year-old created new exciting games based on the new image in the brochure. The following intentions can probably be implied in Kassu's question: 'I think this fleet looks exciting. I think it would be nice to play with it and invent new games and adventures. Surely you agree with me, Grandma, that this fleet would be a very suitable present for me right now. I think you should go to the shop and buy this fleet for me.' The sharp tone in Grandma's voice makes Kassu raise his eyes from the picture in order to check the expression on the adult's face.

The change of direction in the three-year-old happens instantaneously: 'Sorry, Grandma, of course it was extremely nice of you to buy me this train set. I shall not ask you for another present for a while.' My own sharp answer was based on the following thoughts: 'Do you not realize, my dear, that I almost went too far already by buying you this expensive train set that you wanted, even if it is neither Christmas nor even your birthday. It makes me unhappy to see that you are not content with this train that you asked me to buy a week ago. It worries me that you might become a consumer instead of enjoying playing and stories and just being together. I will not buy you any more toys until Christmas, is that clear?'

"What is the Government going to do about shortening the queues for heart by-pass operations?"

On United Nations Day in 1992, children were seen performing on television when the Chairman of the Finnish Parliament held a full session for 9-12 year old children. This was the first parliament for children that had ever taken place in Finland. The adults followed approximately the normal formula of a full session and the children were able to ask questions. It was encouraging to see that the Ministers took the children's questions seriously and answered them in a business-like manner, just as if they were answering questions set by adult Members of Parliament. However, in the television news broadcast that evening, the reporters found it difficult to take the children's questions seriously. They would have preferred questions which were directly related to the life of children and they suspected that the questions had been formulated by adults. One reporter based his suspicions on the question: "What is the Government going to do about shortening the queues for heart by-pass operations?" I do not believe that you
can use this question to prove that the children had not created their questions themselves. In the appalling queue for by-pass operations there are people who have children and grandchildren. It is easy to understand how this can affect the lives of children. The fact that adults possibly reformulated some of the questions suggested by the children does not mean that children would not have many good, topical and difficult questions to ask of adults. Freese (1992) and Tizard et al. (1983) have shown that among the first questions asked by children there are many that concern basic problems about life and the world, including complex thoughts about what is right and what is wrong. The criteria for inclusion in the children's Parliament had varied from school to school. Questions were sent in beforehand and a parliamentary group of civil servants had gone through them and arranged them in the most appropriate way. Nevertheless, this first children's Parliament was an encouraging start in developing responses to children's questions at public venues.
II Theoretical background:
Children's questions as the focus of research and work

Research hypothesis

The existing experimental work and research which concentrates only on the practices of traditional pedagogical institutions does not appear to offer any new perspectives on the problems of child-adult encounters nor on the phenomenon of the disappearance of children's own questions. The focus of this research has been directed not only at the practices in schools and day care centres but also on child welfare clinics and the children's department of libraries. All four institutions were examined from the point of view of children's questions.

I am presuming that the questions posed by children are of utmost importance to them for discovering the sources of knowledge, for combining personal experience and information from other children, adults and books and for learning thoroughly how to comprehend things.

The following problems were the focus of my research:

a) The intentions of the professionals in their relationships with children.
   Why do adults, while working with children in the service sector (clinic, day-care centre, school, library) ask the children questions? What is the aim of the questions and what do they hope to achieve?

b) The reactions of the professionals to children's questions.
   How do child professionals react when a child asks a question? What kind of question-response chains arise from the questions asked by children?

c) The essential characteristics of the child-adult interaction.
   What is the relationship between children's questions and adults' questions? How does the interaction differ when the initiator is either the child or the adult?
Research method

The problem posed in this research was the place and semantic aspects of children's questions in child research and in the work-place. I observed each organisation and work-place on different levels, from the activities as determined by the society, as written in laws and statutes, to face-to-face situations. I question, to borrow the words of Maijaliisa Rauste von Wright and Johan von Wright (1994 91), in which unit of each level can be found the organisation's resistance to change which affects learning. I evaluated the historical changes which have occurred in the child's subjective position in each institution. I analyzed from the point of view of the research problems the relevant action strategies which are officially determined in the four institutions as well as the dominant professional behaviour. Each institutional analysis was sounded against the analysis of the empirical data collected.

In the hermeneutical structure of the research I move the analysis from macro to micro structures. Firstly, I focused on the meanings existing in the institutional activities. Conclusions reached in this analysis were drawn on when working on the empirical data. The empirical data was divided up case by case, then according to individual initiatives and finally into dialogue question-response sequences. (See Figure 1).

Figure 1. The levels of analysis
I moved from the general to the particular, starting from afar and coming ever closer to
the actors in the interaction - child and adult - using a similar systemic theoretical logic
to Bronfenbrenner (1979) when he divides man's actions into ecological systems. I was
not searching for unambiguity in the meanings of child-adult interaction, rather I am
trying to approach the matter on a new level. Thus new viewpoints on all sides of
interaction emerged and the characteristics of shared activity were revealed.

Outlining theories for child-adult interaction (see pp. 26-27) leads to a demand
for a method which enables the move from concrete, case-bound meanings to abstract
generalisations. Since the attribution of meanings is always, by its nature, a qualitative
process (Feldman 1987), I have adapted a process dialectic method for qualitative
research in which the research premises are oneness, all factors' dependency on each
other and the production of knowledge always being subject-subject relationship
(Eneroth 1992 174). Here the phenomenon under observation is the meaning given to
children's questions by child professionals. In my search for qualitative features in the
data I have also used quantitative classifications so that the structure of the data and the
units' of observation inter-relationships are more clearly delineated (Alasuutari 1993
169-170).

The treatment of theory, method and data adheres to an identical model which
proceeds from distance to close up. The research method is really ethnographic and the
analysis interpretative (Rizzo et al. 1992). Because children are my main interest, the
choice of method is also supported by the result found in much child research which
indicates that children, by nature, use classifications based on meanings much more than
has previously been estimated. This being so, what is especially needed is knowledge
about the surroundings and situations in which children operate so that we may compre-
hend and interpret children's behaviour (Karrby 1990 13). The choice of this method
offers an excellent opportunity to use script theory. Katherine Nelson (1986) has
adapted script theory, with its theatrical metaphors, for special use with children's
activities.

The crucial tools in the analysis of the data are the meanings in the scripts,
episodes and question-response chains. I have generally created the categories in the
empirical data out of the categorisation principles found in the data. The units of
observation are the professionals' functional expectations of all the participants as well
as the requisites used in the situation, i.e., the equipment with which it is intended to
achieve the objective. By requisites I mean not just the materials which are used but
also people, who may not immediately be perceived as clients. I view the data from five
levels.

On the first level I have compared the different laws and official dokuments that
organize the work in the four institutions on a general level.

The second level is made of the observational and interview data from the
work-place which I have tried to describe. In these I have concentrated on the external
features of child-centred approaches and considered the children's enjoyment.
Individual conversational situations, in which both adults and children have actively participated, form the third, case-based analytical level. I have focused on 21 cases: five each from the child welfare clinics and the day care centres, seven from schools and four from libraries. I have gone through these conversations sentence by sentence, linked them with the participants actions, reconstructed the feelings of the moment and interpreted the participants', especially the professionals', intentions, using the script metaphor.

On the fourth level, I concentrated on the initiatives which emerged from the episode analysis of the transcribed conversations. I have focused on the initiatives which direct the action in the episodes and on the collaboration, that is the reciprocity in the proceeding interaction. In this way I interpreted the meaning for the interaction of the semantic factors.

On the fifth level I concentrated on the individual dialogues. I reflected on the meanings of the questioning and responding and on the place of questions in the interaction. I used discourse analysis as a frame of reference for the sections of question-response chains and on the meanings of questions and answers (Potter & Wetherall 1987 49-53, 169). At the level of episodes and question-response chains I have treated the empirical data uniformly. I have subjected the phenomena emerging in the different institutions to the same analysis. It is my argument that although each institution has its own function, history and professionalism, from the child's viewpoint there is little to distinguish them. The children's activities are not spontaneously differentiated according to the sector or service organisation. In theory, seven-year-old John or Anna could, during the course of one day, visit the welfare centre early in the morning, attend the morning session in school, spend the afternoon at the day care centre, and visit the library in the evening. The fact is that the child's activity does not directly change with the function of the particular service. Since the different institutions serve the same children, they can be compared with similar child-based criteria.

Learning in institutions

The smallest integrating unit which reflects the cooperation between child-client and child-professional (i.e. persons working with children) is the question-response chain. Nevertheless the qualities of interaction and the meanings reflected therein can be observed from a more general level. The distinguishing features of each institution will be specified by looking at the texts concerning the relevant laws, statutes and professional behaviour.

I began at the social, sociological level with a short historical and cultural survey in which I analyzed changes in content and their permanence. I continued by examining the significance that the laws concerning child institutions have had on the
child-adult relationship. I also dealt with the professional components, that is the meanings given to professional work in relation to the child-client activities.

In this examination of children's questions as activities related to their need for knowledge, I took as my starting point various concepts of learning and previous related research and literature. Children's need for knowledge was examined as a part of their educational process. The field of the spontaneous interaction between professional and child was problematised, as well as what possibilities the children have to bring out their own knowledge and action interests and to what extent their own activities evoke a response.

How the children's knowledge needs are responded to from the point of view of professional action is naturally linked to the duties which have been given to the institution. Also of importance is the workers' own concepts of, above all, children's learning but also how they see the relationship between the task and their view of learning. Since the duties of the institutions in question concern children's growth, development and learning, I have started with the adults' concepts of learning. Recent research has brought out new information about learning concepts such as the discovery of a collaborative component in learning. Several researchers have identified the collaborative nature of learning (Bruner 1990, Cole & Cole 1989 202, Engeström 1987, Riihelä 1989, Lehtinen 1989, Niemi et al. 1992). New things are always learned in relation to something or somebody's viewpoint. Learning is not just related to finding the right alternatives but rather to a going through of alternative, mistaken and impossible solutions and working them out together. Thought processing and the adaptation of new concepts to already existing concept systems, taking into account personal and group experiences and observation, are all turning out to be much more complicated than previously thought. It is thus clear, on all levels of work, that:"The choice of learning concept means at the same time important controlling decisions on the progress of the educational process" (Rauste-von Wright & von Wright 1994 159).

I perceive the relationship between development and learning as follows: whilst developing, the organism also learns and whilst learning, develops. Nevertheless I do not believe that learning is an activity which principally takes place in school. The logistics of learning are the same wherever that learning might take place. On the other hand, the external framework of learning activities in school certainly do often differ widely from the framework encountered by the child in libraries, day care centres and welfare centres.

I have examine the learning concepts with the help of the meanings and processes produced together by the different actors. Timo Järvillehto (1994, 1995) problematises learning as a function of collaboration, in which the defining factors are the results of the activity, in this case the results of cooperation. The problem in comprehending learning and teaching comes, both in theory and practice, of analyzing them using cause and effect logic, and of ignoring the reality which is being created by two or more actors, where both are teaching and learning.
I will attempt to describe the texts which control the activities of the institutions and the professional practice in terms of the actors' cooperation, in search of the extent to which the workers allow children to participate in the interaction. When considering interaction it is necessary to ask on whose terms the cooperation proceeds and what are the results. In this way we can examine the mechanisms of the use of power.

The institutions have many things in common. From the children's point of view they are places which can be visited, sometimes even on the same day, and meet friends and adult professionals. The workers have in common the children and an interest in their development, learning and education. The institutions are distinguished by their own special duties. Training for the duties takes place in different systems and the work is done under different professional labels. The productivity of the work is also measured differently: in the clinic and library it is often measured in terms of the number of clients, whereas in the day care centre it is the satisfaction of the parents and in school it is the achievements of the children.

Questions and answers in dialogue

Many researchers have taken the viewpoint that the individual's questions are an expression of the need for thought. But seeing questioning as a part of interaction is a relatively new way of structuring inquisitiveness. In conversation analysis (Drew & Heritage 1992) the assumption is that the idea and meaning of a question takes shape in the interaction (Raevaara 1993). Correspondingly, one may think that the child's question springs to life when it is briefly an important part of the interaction, when it stops another person, peer or adult in order to consider the problem presented by the given question. It could even be claimed that if the question cannot be expressed interactively, it loses its meaning.

What kind of position should adults give to children during instruction and education so that their development proceeds instead of being stifled? I will briefly examine the question from two points of view, the background being the ideas of Piaget and Vygotski. Both perceive the child as responsible for the construction of his or her own world (Piaget 1932/1988, Vygotski 1931/1982). Nevertheless the original premises differ from each other. According to Piaget, learning is individual - "I" comes first. For Vygotski learning is essentially social - "we" come first. The former viewpoint means in practical terms that the growing person has to be socialised. The latter viewpoint leads us to the conclusion that socialisation is not necessary for the growing person because at the basis of learning is an inborn capacity for interaction.

Both ways of thinking see children as active participants in the construction of the world but the relationship between individual and communal is seen differently. In the Vygotski way one could think that the social group encourages its members to act
according to the manner of the group whereas, for Piaget, the individual person, the growing child, operates according to the current stage of development. Certainly the social environment also has an influence but it is not as crucial as the limitations set by the developmental stage.

The matter can be made more concrete by considering the apparent underlying reasoning behind children's questions. When studying the cause and effect relationships in natural phenomena, the small child reflects on new matters whilst simultaneously listening to the meanings of language and words. The child seeks to reconcile them to both natural phenomena and to human interaction and play with words. When studying the stages in the growth of a tree in the coming spring (one of the cases in this research), the children survey, with help of metaphor, the way that people conceptualise cause and effect relationships. The conceptualisation process includes logical thought, familiarity with the relevant laws of nature, the stages in the historical shaping of knowledge, the underlying myths and the imagined reality and, finally, play and humour as the salt of interaction. I will take one example from the data to show the numerous possibilities in the levels of thought at which the child's mind may be moving.

During the study of leaves the teacher talks about mouse ears. The child asks for clarification: "Mouse holes?". I interpret the child’s question as trying to resolve whether the adult is using concepts in her speech which describe natural phenomena (such as mouse hole = nest) or whether she is using human concepts of nature (small spring leaves are commonly known as mouse ears). A little later in the same discussion the child describes the signs of leaves on the tree in the autumn by saying that the tree has eyes. The teacher clarifies: "Buds?" (= "do you actually mean the word bud instead of eye?"). (In Finnish the word are similar, bud = silmu, eye = silmä). With this question the adult is giving the message that the child had used the wrong word and the child, slightly annoyed, responds with the complicated remark: "The tree wakes up out of your glasses." This example made me think that the child had possibly come to the following conclusion: If we can call a small leaf a mouse ear then why could we not call the autumnal sign of the leaf an eye or glasses since they are looking, the whole winter through, for when the spring will break. (There is an abundance of similar examples, for example, Tjukovski 1975.)

Reaching into the mental images of the child is difficult as Margareta Rönneberg (1989 7) emphasises in her discussion on children's culture. She points out that people's needs only sometimes coincide but those between children and adults hardly ever do.

Children often like just what adults dislike. Like many others Rönneberg calls for a similar growth in child studies as there has been in women's studies. The problem is, however, that whilst women are ready to do research on women, children are not likely to be interested in child research. Problems of generation differences are more difficult to overcome than those of gender differences. The exercise of power carried out by adults over children is more difficult to see than that between men and women.
Amongst child researchers the significance of answers in interaction has awaken little interest. In linguistics, conversational analysis has shown that "Everything that takes place in discussion both forms the context and reshapes the context... In this way the speech turn is defined as a question by the joint activity of the questioner and the receiver rather than simply the syntactic expression or the speaker's intention." (Raevaara 1993 6-7.)

Tizzard et al. (1983) studied children's questions occurring in conversations between different generations in a variety of circumstances. One interesting result, from the point of view of my research, was that children at home ask ten times more questions than they do at school and that the parent at home answers children's questions more frequently than adults in a work environment. Bertrand's research (1991 120) clarifies, among other things, children's questioning behaviour and adults' responses in museums. One of the more significant findings was the adults' unwillingness to answer children's questions.

An interest in research into children's questions has awaken in the last few years but the set of problems formed by the chain of questions and answers seen as a joint activity has not yet been studied. Questions and answers have been treated separately from each other as well as from the related activity (Cazden 1970, Torrance 1970, Endsley & Clarey 1975, Heath 1982, James & Seebach 1982, Graesser 1985, Nix 1985, Pressley & Forrest-Pressley 1985, Murphy 1991). In practical work with children it has often been emphasised that answers should not be given too easily (Freese 1992 63). On the other hand, in traditional pedagogy it has been considered important to give a proper response.

Research has also shown the influence of receiving answers on learning and on the development of questions (Pollock 1924, Ross & Balzer 1975, Ross & Killey 1977, Pressley & Bryant 1982, Tizzard et al. 1983, Pierce 1990, Bertrand 1991). Because in practice many children's questions are difficult to answer (Östman 1990, Schaller 1993), several books supplying answers to children's questions have been published which are aimed at child care workers and teachers. Related to this area is research into children's problem-solving strategies (Bruner & Haste 1987) but it does not necessarily concern the current study. The aim here is to shed light on the importance of the answer to the questioner and to the interactive process but it is clear that the field requires considerably more research.
The fate of child-client questions in earlier research

Earlier studies have shown that, as in other institutional discussions (Drew et al. 1992), the questions of child-clients are also disregarded because the professional interactive practices, which concern posing questions and work performance, take place on the initiative of the professional.

The studies have concentrated on the significance of adult questioning strategy on the progress of children's learning processes. Children's questions as a function of the development of thinking skills has also been in focus of many studies. The developmental stages in the form and content of children's questions has also been an issue as well as their relationship to the stages of learning. The third main area of attention has been on the development of question classification strategies.

As separate phenomena, questions have been studied and examined as the achievement of a certain intellectual level, as indicators of creativity, as the progressing control of linguistic forms, and comparisons have been made between questions of different age groups, different social classes and different situations. To some extent children's questions have been studied as a linguistic unit of discussion, forming an adjacency pair with the response.

Children's questions have rarely been approached in the same way as adults'. The child's question as a natural source for the expression of curiosity has been ignored. It is not expected of children that their questioning would express a certain petition to their discussion partner and that every question, regardless of its form or content, would be of importance to the questioner (even if it is a child) and would demonstrate active participation in an interactive situation.

The formation of institutional question-response chains has not previously been related to the importance of different levels of collaborative activity. Working with children (and often also with adults) is rarely seen as a joint or collaborative activity between professional and client. However, in child research, by relating the child's actions to age and intelligence quotient, the child's position as the subject of his own actions is often underestimated. In comparable adult research, age and intelligence are usually irrelevant. Children are not seen as responsible for their own questions in the same way as adults. It is thought that children's questions are more dependent on age and learning ability rather than on a personal quest for knowledge or a wish to participate in the conversation.

It is my view that much of the previous research into children's questions ignores the child as questioner mainly because the child's action is separated from its connections and the question is examined without the interaction to which it belongs.
The roots of this research are in development projects

The problem that this research is dealing with, that of the lack of children's questions in conversation between children and workers with children, has taken shape through years of trial and error. I here present the paths of the research interests.

In our schoolwork development project (Riihelä 1989) we came up against the usual problems that meet developers. When we tried to give space to the child's individuality and questions we soon noticed that the obstacles blocking changes in the established methods were things which were often considered self-evident. This included such concepts as the nature of knowledge, the child and learning, teaching and institutions. It also included various group phenomena such as the influence on the teaching-learning processes of the relationships between children and between teacher and pupil. It was many years before the discovery of preliminary marginal conditions for questions to be heard.

The issue of children's questions came up in the action research on group learning in the school environment (ibid. 91) but, despite trying, we did not stop with them. The objective was to find points of convergence between the work of teachers and of school psychologists and also to look at factors in the group learning of children, taking the subject point of view. During the research period I was working as a school psychologist and also as a special teacher (one year period) and researcher.

I started my research work in 1982 with nine 8 to 9-year-olds in a remedial class where I was the teacher. Studying the effect of the group on individual learning. I wanted to clarify the changes and developmental changes which occurred in the group. I had gained experience of groups over a long period in my work as a school psychologist and in free-time club activities. But making conclusions about what happened in groups was extremely difficult. The interaction in an established group was full of levels and nuances. Feelings swung about and interpretations clashed. During my research travels I have often stopped to wonder whether it is possible to scientifically describe the rich life of groups without making unforgivable interpretation mistakes about a member's behaviour. The following examples will illustrate these thoughts.

When I began as a remedial class teacher I was bewildered by the children's dejection, depression and their unwillingness to start working with each other or with me. Having failed to disperse the children's troubles I decided to go deeper with them into the labyrinths of depression. I started the new day as normal. When I noticed that my attempts at being cheerful met no echo, I lay down on the floor, sighed deeply and said, "This is boring". I encouraged the children to join me on the floor, "because everything is anyway pointless and hopeless. Nobody learns anything. Nothing in school
means anything. You can't do anything with anybody." The children began to furtively laugh because I was admitting that I couldn't do anything in the face of their apathy.

The worst of the depression was over. The following morning I gave up talking and played the tape of Marketta Saarinen's Lebanese song which began with the words: "Brighten up, boys, brighten up. You've already lain around too long, brighten up." The children, who had already got into the habit of starting the lesson with the world's grimmest expression on their faces, looked at me with their mouths twitching with laughter. One of the boys still tried to attain the familiar and secure feeling of depression and uselessness by waving his hand and saying: "Don't!" The familiar round of failure took on humorous features. We did not drag ourself onto dry ground out of the bog of depression but we leapt to the pinnacles of laughter. Without knowing the singer personally I am still grateful to her and her song for relieving, in such a special way, the atmosphere of our remedial class.

I have described the stages of this period of work and research in the way that it rests in my mind. The interaction was tangible. Feelings and events were abundant. However, I am still unable to say what was actually moving then in the minds of the children. Nor do I know what memory they have of that situation. I am a prisoner of my own interpretations. I still doubt whether it is possible to objectively clarify the essential issues to do with intercourse.

Research into small-group study continued in school for another seven years and continues to this day as development work in various day care centres. For the entire time one of the instruments of research has been sound and video recording. This operates like a microscope and has enabled the immortalisation of events in their time. In the first stage, three work groups collected data and discussed it with a researcher. Initially the participants were the remedial class children, the researcher and, later, four school psychologists, six primary school teachers and their pupils. Three years later there was also a school psychologist and three first and second grade teachers and their pupils. The basic viewpoint was that in the teaching-learning relationship everything affects everything else so it was not worth trying to separate any sectors from the whole as this would destroy the possibility of deepening the viewpoint of the phenomenon itself. The vision was to discover the subjectivity of the actors within the interpsychic context of teaching and learning.

The research strategy was to produce a change in the children's learning process. We tried to develop, out of teacher-centred teaching, tools which would support learner-centred teaching. The objective was to study this phenomenon of change. However, since the learning process is not only linked to form but also to methods of teaching it is also necessary to discuss the teaching content with the participants. The concept of time was selected as the subject of study. We considered what the relationship was between the concept of knowledge in question-based teacher-led teaching and that of child-centred, child research-based group learning. This led us deep into
pedagogical, interactional routines which are also very personal. Encroachment on this area can be very insulting for adults.

During the development years, the time concept was analyzed very broadly. Important primary elements of the time concept in early education were specified. Children’s time concepts were analyzed by interviewing 7 to 8-year-old schoolchildren and interview methods dealing with the concept were developed (Riihelä 1991). The collaborative components of learning were gone into and, in particular, what demands are put on task setting if one takes into account this collaborative activity. The differences between individual study tasks and group tasks were also studied. In the analysis stage of the extensive material I tried to classify the developmental stages and interactional processes of the small schoolchildren study groups. The study activities of permanent small groups differs qualitatively from that of temporary groups. At the end of my research I concluded: "As my research progressed, one condition alter another has been revealed to do with the group study of the time concept. New perceptions made with the children have shaped the research approach. The viewpoint concerning children has most clearly changed during the research. When starting the pilot study in spring 1985 it was written in my research plan that the teaching situation is true to its intentions if 'the child wants the same thing as the teacher hopes for, i.e., if the child understands the task which has been set and happily works with the adult.' --- This viewpoint ignores the child’s wishes and needs. The curriculum was changed so that, amongst other things, questions posed by the children were the starting point. During the research it was, nevertheless, still not possible to resolve how the children's questions and interests could be made to have a broader influence on the choice of teaching content." (Riihelä 1989 75)

Between 1984 and 1985 our group of school psychologists tried to find an interview method which would enable children to tell adults their own thoughts and experiences in the way that they perceive them. The key question arose as to how the adult would make a start. The interview situation was started by encouraging the child to tell a story and illustrate it. The child was told that the adult was working as a secretary who would, word for word, record the child's story. In other words, the child firstly presents to the adult a certain construction of his or her own thoughts which are recorded there and then. (Riihelä 1991 29)

Using traditional psychological testing and interview methods we failed, in the group learning research, to get sufficient information about what the children thought about time. An appropriate interview pattern was gradually found in which children were given the chance to reflect on their own thoughts and concepts and became eager to make them public. This took the form of Time Cards. In the time card method the adult conveys his or her own interest to the child. The principle task for adults during the interviews is to precisely record both the stories the children have been asked to tell as well as the children’s explanations for the order in which, to their satisfaction, they have put the Time Cards.
Nevertheless, the cards and the instructions are still adult-led. Children's thoughts about time may after all be quite different from what adults are used to and, in that case, the Time Cards will fail to catch that particular child's thoughts and empirical world of time. What was left to consider was the kind of environment which would develop children's own choices and questions.

Children also ask each other lots of questions. But in every moment of a group's activities reciprocal message are occurring on many levels and with such intensity that the observational capacity of an observer does not suffice to record individual elements of the communication. In 1983-1984 it became clear (in my capacity as a remedial class teacher) that children's group activities are impossible to understand by observation or by coding individual activities because there are lost not only many joint activities which are of significance to the whole, but also the interspsychic meaning of the action. Later on, when video-tapes of the classroom were analyzed, it was shown that adults acting as observers in the situations continuously interpreted incorrectly what they saw and heard.

In 1985-1986, the school psychologist and teacher group developed and tested a teaching programme for the time concept. Background material consisted of information from and analysis of children's interviews as well as considerable material dealing with the time concept, including school books and encyclopedias. The sub-sectors of the time concept became clear as well as the order in which they should be taught to seven to eight-year-olds. Time concept tasks which involved group work also had to be found. A ten-lesson programme was worked out which included three small-group tasks. The lessons and group work situations were put on video-tape. Nevertheless, for no lack of trying, the teaching programme left out children's questions.

We came up against many problems. Since the time of John Dewey (1910) similar problematic areas have occupied researchers and reformers. Traditionally, things to be taught have been shaped in the teaching in such a way that studying requires overwhelming input from an adult. It is a prerequisite of the teaching programme that the adult gives knowledge, in certain portions, to the child. The adult also has to say what the child must do with these portions in order to internalise the knowledge. There is no place for the child's own concepts, experience or working habits. It is also considered irrelevant to the teaching situation what knowledge and skills the child might have already acquired. How can the matter to be taught be shaped in a way that children can question the new knowledge in their own way and using their existing store of knowledge. Teaching materials traditionally call for a major contribution from the adult in the teaching situation. It is as if knowledge goes through the adult and a triple role falls upon the teacher: to be the educator of tomorrow's people, to distribute knowledge and to be an eager, personal motivator of study. Children are left to be motivated by the personality of the teacher, swallow the given knowledge and operate according to the rules set by the adults. Since children must grow into tomorrow's people, they must today already act rather as if they were like the adults' ideal.
The video tapes revealed the surprising truth to all those adults who had been involved in the development work. They considered themselves permissive and democratic educators, teachers and psychologists. The adults were of the opinion that in their own work they allowed the children plenty of space to bring out their own affairs and that they let the children make many decisions about what happened in the class and amongst the children. Everybody (myself included) spoke more than they thought they spoke. The recorded sections, nevertheless, showed that they all interfered in the children's activities more than had thought. All behaved in a more authoritarian manner than they thought they did. Nobody was able to exploit the children's own questions in their teaching.

In the same year, however, the first important concepts which were preliminary to the concept of time were discovered (movement, change and rhythm) as well as the first teaching units which had to do with the time concept: the movements of light and shade, the changes between night and day, the personal historic character of time and the temporal rhythms of nature.

The year 1986-1987 was spent gathering research data. However, much of it was a waste of time. Comparison between the test class and the control class did not bring out much additional information. The study included three test classes plus three control classes and the teachers' evaluations. As regards the control classes, I realised whilst gathering the material that it would not be very comparable. Every single school class is its own world. There is no common identity. Similarly, there were major interpretative differences between the teachers' evaluations.

Next year went on analyzing the data. I was looking for chains of argumentation in the small-group work but I failed to find a method which would help to have made them comparable. I ended up by giving points to events in the small-group activities. This material was treated with statistical analysis, testing for differences between different combinations. The result was both bewildering and crushing. Forcing group activities into small numbers is an easy way of simplifying complex human behaviour. From the new numbers which emerged from the mathematical formulae I could not identify much in the children's activity. Nowadays new winds are blowing and enumerating human behaviour has partly fallen into the background. Nevertheless, that year I found the constituents which enabled me to continue my search for children's questions.

It is necessary to reflect upon one's own activity. Hidden truths which appear self-evident have to be gone through. Furthermore, much more information about the intercourse amongst children has to be dug out. Many misconceptions dominate children's group activities. In permanent groups there is not a particular number of roles to be divided, which the children would get hold of and behave according to that role. The way children operate in groups is tightly bound with the age and developmental stage of the group and, above all, with the kind of task they are performing. What is the group's relationship with the community in which it is operating? In their common activities children are more social than adults are in theirs. What's more, in their group
activities children are more joyful, more playful, more inventive and quicker than adults. (Karlsson 1990, Strandell 1994 b.)

These observations for their part refute many basic educational and pedagogical assumptions and make some stages of teaching and advisory work worthless or even harmful in terms of children's development; particularly in terms of the concepts children have about themselves as learners.

My experience with under-schoolage educational institutions began when I transferred, in 1990, from the school world to that of day care and early education, namely to the National Research and Development Centre for Welfare and Health (Stakes), formerly the National Board of Social Welfare. Questioning the relationship between children and professionals continued in Kirkkonummi and elsewhere. The year-long Etsikko Project (Riihelä 1993 a) sought an integrated child-based pedagogy for preschool and elementary education. The work continued in spring 1991 in, amongst other places, the continuing education centre of Vantaa, part of the University of Helsinki, in the form of further education in preschool and elementary education.

But the issue of children's questions has not left me in peace. As the problem had not been solved during the small-group research, I decided to continue.

My move three years ago from the school world to that of early education has also given me the opportunity to familiarize myself in a new way with the meaning of play in a child's life and learning. If, ten years ago, the inner core of my research and work was the bringing up and educating of a child into a 'decent citizen', then today it has changed into an emphasis on the present moment, a search for the reciprocity of interaction, a respect for children's mutual world and the discovery of the conditions for sustainable interaction between man and nature, in early education and in school as well as in the social, health and cultural services.

Taking meanings as the focus of research

In this research I analyzed the interaction between the child and the adult in child institutions based on the dialogical background of questions asked by children and answers given by adults. For this reason a theoretical framework was needed within which it was possible to distinguish the meanings given to the interaction. Institutions were founded to further the development of children. However, I did not investigate that change in children as a continuous development caused by the actions of adults and visible in their behaviour but my aim was to shed light from various viewpoints onto the meanings of the actions in child-adult interaction. I developed various theoretical concepts by initially examining the ideas of George Henrik von Wright, Jerome Bruner and Margareta Rönnberg, who have, each in their own significant way, opened up the
child's viewpoint. These scientists question the "know-all" attitude of many researchers and educators and call for a more humble attitude towards the developing person.

Georg Henrik von Wright (1993 139) looks at historical developmental trends and how, in the 18th century, Newton's laws of mechanics had far-reaching influences on the models and paradigms that dictated the way human sciences and education were conceived of and explained. Education became a science about which one could make predictions. At the same time, the child, who was the object of the education, was pushed aside as an element of no significance. This can be said about many schools of thought prominent in the 20th century. Tests, assessments and so on are based on assumptions on the predictability of behaviour. Cause and effect relationships are sought for and practices that make the predictions come true are based on these.

Bruner (1990 70) emphasizes the need to change the target of developmental psychology from offering explanations to describing the character of the mind and its processes, the construction of meaning and reality, and history and culture as mind-makers. According to Bruner, psychology necessarily becomes, in trying to solve these questions, cultural psychology, which has to go beyond the conventional aims of positivist science with its reductionism, causal explanations and predictions. Bruner emphasizes that holding on to cause and effect explanations is simply an obstacle to the comprehension of how people interpret their world and how researchers interpret their interpretations. Similarly, Bronfenbrenner (1993), who has been instrumental in pushing developmental psychology towards an understanding of man's development within its context, is of the opinion that the verification stage of science has been emphasized for too long at the cost of inventiveness or creativity.

As a researcher of culture, Margareta Rönnberg (1989 179-180) is interested in children and it is based on their opinions that she forms severe criticism of educators:

"The same kind of philosophy of growth that characterizes capitalism has crept into child psychology and education. The most extreme opinions related to this "child capitalism" emphasize the importance of an earlier school starting-age and a more pedagogical pre-school. This would be beneficent in terms of the investment in the children through faster intellectual growth in each child, increased productivity, maximum efficiency and an earlier specialization within the human machine... Success and development myths exist also on the level of the individual, where man is said to be constantly rising (Piaget)... As in fairy tales, developmental psychology is impregnated with the heroic myth of being strong on one's own, particularly if the child is helped by magic gifts like quality culture and pedagogical toys."
Meanings in interaction

The theoretical framework of this research was developed using the thought and language structuring of Lev Vygotski (1982) as a reference (Wertsch 1985). Many researchers, including Ingleby and Rizzo et al. (1992), have been, both theoretically and empirically, looking for the content of the term “social constructionism” which would take into account, not only the natural situation which occurs in a meeting between a child and an adult, but also all the different levels of meaning that are formed in such a situation. In my study I have carefully specified certain levels of meaning where the child is a client. As opposed to many studies dealing with child development and learning I did not analyze the actors as individuals but I took as the unit of analysis the meanings in the interaction. I did not analyze individual actions but visible elements in the relationship. I believe that the things that children and also adults do or leave undone as well as the whole extent of their activity should be primarily understood in terms of the meanings that are created in the interaction. Whether these meanings are created collectively or through individual processes is not a question of significance to this research. One way or another, meanings are formed within the space between the individuals (see Strandell 1994b and Alasuutari 1993 41). What is important in this process of forming meanings is to notice who has the opportunity to provide the meanings and in what kind of an interaction, mutual or one-sided, are the meanings created that direct the situation. I am looking for characteristics in the interaction with which I can describe the role of the parties and the relevance of their actions. As a tool I have chosen the concept of script as it has been described by Katherine Nelson (1986 17). I am nevertheless well aware of the problems caused by the overuse of theatrical metaphors which Billig (1987 10-13) amongst others has analyzed, for example, the allusion to a static performance and its expectations. I perceive Nelson’s use of the concept of script as a way of attaining the metalevels of interaction.

On setting out on an encounter with other people, each of us carries conscious and unconscious expectations of the coming situation. Expectations and predictions affect both our own behaviour as well as that of the others in the same encounter. During the encounter, one participant may observe the other’s script whereas another may be so intent on his or her own purposes that they fail to recognise the other person’s expectations. The daily encounters of one generation naturally includes a lot of script clarification, for example, in the form of small talk. The encounter can then proceed either according to the script of just one of the participants or with both sides exchanging ideas about their own scripts and interpreting that of the other. The intention of this exchange of ideas is to create the elements of a joint script which is satisfactory to both in the given situation. In this sense I see the concept of script as a
useful tool for analyzing the elements of interaction whether it concerns legal texts or confidential dialogues.

In trying to understand the lack of children's questions in institutions as a phenomenon connected to the meanings in interaction, many of the individual characteristics which are traditionally seen as important in child developmental and educational research, such as age, gender, social class and ability structure, here remain secondary. The approaches of functional theoretics, which emphasise interpsychic factors, and linguistics, which emphasises the interactiveness of conversation, offer my own research the greatest potential for analyzing and understanding the fate of children's questions in institutions. When the context of the question changes, so do the meanings. Independent of age amongst other things, a person adapts his or her own behaviour to suit the demands of the situation. In the adult-made educational and teaching models of children's social habits, these matters remain unnoticed. I start with the assumption that the child's action is affected more by the situation itself and by what happens therein, rather than by personal characteristics that may be measurable. In an excellent way Nelson (1986 231-241) has described how, in new situations, children concentrate first on clarifying for themselves the expectations and demands of the other participants. Only when these are understood do the children start to give their own active input even in studying circumstances.

Giving meanings to a relationship between two or more persons is the generalization of thought that I carried from one level to another in this material, as the nucleus of the problem, the core. It was thus a question of both the way the actors think, the meanings they convey and the social construction. Thinking in words gives rise to meanings and through these meanings the interaction is created which, further, has an effect on thinking and on the subject under discussion. With the help of the question-response chains in the interaction we can go into the scripts and these may be modified and developed through argumentation. The prerequisite for the creation of communication is a certain system of devices. The successful analysis of this system is dependent on what factors are chosen to describe the communication. Frequently the kind of elements that are chosen are those that have lost their interactive properties. In this work I concentrated on units in which the properties of the communication factors remain undivided. In institutional practices communication is traditionally dominated by the professional ambitions of adults. If these are examined as individual acts, attention is drawn towards periods of action. Often these periods consist of tasks which are given by adults, performed by children whose performances are then evaluated by the adults. The adult operates as a subject who evaluates the target of his or her work, which is the child, the object. The splitting up of interaction into elements separates the action from the actors, the social pattern and the meanings given to the communication by each party.

However, choosing the giving of meanings as the unit of analysis opens up a way of solving the problems of encounters between children and adults as subjects. To
quote Vygotski's (1982 19) formulation, at the core of the interaction between child and adult lie the meanings of the relationship and this is where the subjectivities of both child and adult meet, with their expectations and questions.

When a child-client meets a child professional (i.e. someone who works with children), the smallest common unit which preserves interactive aspects is the question-response chain. I used these chains in my analysis of the meanings of the relationship between child and adult. I started by observing from a general level the interactive qualities and their meanings reflected in the scripts. Gradually I moved from the periphery to the core of the communication.

By opening up different points of view I proceeded with the development of theory from general to more detailed aspects of encounters between child and adult. I started with a brief historical and cultural overview of the changes and constants of meanings. I proceeded to child institutions and deal with the significance of relevant legislation for the child-adult relationship and the professional component, the meanings given to professional work in terms of the actions of the child clients. After this I moved on to the individual, psychological component to observe the expectations behind the interaction, the scripts. The next step was to move in the terrain between the two actors that consists of initiative and collaboration. Finally I examined the conversation, the structures of the dialogue and the background concepts of knowledge and the transmitted message.
III The historical background and purposes of institutionalised interaction between child and adult

In western culture childhood is seen as a matter belonging to the family and as a period during which socialisation takes place (Alanen 1992 137). However, concepts of childhood and the child's position are not the same everywhere nor are they consistent historically. Philippe Ariès was one of the first historians to describe the changes in the conceptions about children, thereby opening up the discussion on the history of childhood (Ariès 1979). Ariès states that the current concept took shape at the end of the seventeenth century. The development began in the upper classes but with the generalisation of the nuclear family and education it came to cover the whole society. Children came to be seen as constituting a distinct age-group with its own physical and mental characteristics differentiating it from adults. This led to children being separated from the adult world and a culture, including literature, began to take shape which was meant for children but was produced by adults. A belief in the child's innocence and purity was born which in turn led to two other kinds of aspirations. Children should at once be protected from the damaging influence of adults as well as being prepared for adult life with the help of education and discipline. This conception of the child as naive and the movement of childhood down to the lower social classes where they were to be tended by servants (Shavit 1990) happened during the eighteenth century with the development of the miniature, intimate family-life world. On the other hand, the moral welfare of children, which took shape in children's institutions and literature, started to develop out of the centralised European governments' need to control the minds of the growing population.

Jerome Bruner (1990 137), in his search for the roots of cultural psychology, identified the problems arising from the development of control mechanisms between generations. He states that no matter how we interpret the development of historic forces, they take on human meaning and appear in the language and literature. Zohar Shavit (1990) has compared, in an excellent manner, the changes taking place at the time of the story of Little Red Ridinghood with the contemporary changes in the concept of the child.

The analysis of power structures is one way to locate the child's position in different institutions. Modern needs to control children has been studied, for example, by analyzing institutional talk. The use of language in school has been amply researched (e.g. Anward in Sweden 1983, Pedro in Portugal 1981). Similarly, an interest in the language of day care centres (e.g. Strandell 1994 a, Hedenquist 1987 9) has
emphasised how the linguistic interaction between teacher and pupil, both in school and
day care centre, represents a very special form of activity. The essential features of this
language appear at different periods and in different parts of the world. For example,
the Iranian film "A friend in trouble" (Kiarostami 1987) is an excellent fictional
description of a different cultural setting where, as in the west, there exists an almost
insurmountable gulf between the worlds of child and adult. The adults in this film are
not interested in the matters and ideas put forward by the children. Indeed, the film
speaks strongly for an improvement in the child's station in just those countries where
children's physical and educational rights are fulfilled but where the child barely means
anything as a person.

Institutional practices are guided by rather contradictory purposes, whose objec-
tives defeat each other. The similarities and differences between child and adult institu-
tions have not yet been clearly analyzed. However, at the same time as the adult-client's
position has been more and more emphasised, there has also been talk of children's
rights. Nevertheless, compared to the adult, the child has been subordinate to the
practices of the institution in two ways: he is both a child and a client. In fact, there are
further differences between the generations. Children spend on average considerably
more time as clients in institutions than adults. How this vast growth in recent decades
of child institutionalisation will affect their development and their conception of the
shape of human interaction, are questions which remain to be answered.

Since it can be assumed that close interactive relationships deepen if the par-
ticipants both give and receive response to their needs, there has begun a demand for
the child's voice to be heard. However, in order for the child to achieve a leading role
in the interaction, it is necessary for the other side, that is the adult, to feel the need to
get something worthwhile from the collaboration. Because my interest lies in children's
own questions, I aim to expose, particularly in their respect, how the objectives of child
institutions allow space for children's autonomy and opinions.

Institutions for children

History and culture bear with them certain general reflections which the individual is
obliged to deal with when solving problems. The formation of the power relationship
between adult and child has a long historical plot.

I deal with the developmental trends in child institutions on insofar as they shed
light for this research on the formation of meanings in child-adult relationships. Panu
Pulma (1992 58-60) analyses the history of child institutions by problematising the
professional control mechanisms which affect children. For the majority of children
childhood was determined by the family cycle and social class until the standardizing
school system came along which affected the whole age group. In Finland this hap-
pened as late as in the 1930s. Of course, the idea of institutions had come to Finland in the seventeenth and eighteenth centuries as efforts in practical application. The beginning of the eighteenth century saw the organisation of a citizens' society bringing with it professional practices which affected children's development and their circumstances. More and more specialised associations began to direct their activities at children. Thus began, for example, day care centres, playground activities, school meals and mother and baby homes. The school system developed differently because from the start it was a national-municipal public organisation. The school network evolved into the development of a new kind of professionalisation. The library system was also growing as another form of public enlightenment. The psycho-physical guidance of small children, which had begun in the 20s and 30s, gradually became the principal duty of many workers in day care and schools who had specialised in children's education and medical and psychological diagnostics. Diagnostics, classification, psychologising and medicalising took over the place of social criteria very firmly after the 1950s. It has been observed that adult clients in health care, guidance and so on, also underwent the same kind of squeezing by the force of professional knowledge (Drew & Heritage 1992 50).

Another, perhaps more unexpected, viewpoint on the growth in the use of power has been put forward by Ennew and Morrow (1994 66). The child professions are frequently dominated by women and it may well follow from this that when women's research and women's positions are emphasised, the child's voice becomes even more suppressed. In Ennew and Morrow's opinion, researchers have, to an amazingly small degree, taken account of the rights of children in matters concerning themselves and they refer to article 12 of the agreement on children's rights. They point out the need for development in research methods in terms of observing children's rights (ibid. 66).

The use of power can also be problematised by analyzing the concept of socialisation. Professional work with children is generally seen as a promoter of socialisation. Alanen (1992 84), however, points out that the term, originally covering social reality, began to be used to describe an individual internalisation process. He stresses that in theories of socialisation the child is defined negatively and is in a way shut out of the social group into which he is supposed to gradually integrate as a result of socialisation. Reducing socialisation to internalisation dismisses the nature of the social process of which children are a part (Bardy 1994 c).

One of the recent trends in the industrialised countries is that the spread of day care has meant that parents' control over their children's lives has decreased and its place has been taken by institutional views of children and childhood (Näsman 1994 187). This has awoken a wide polemic about the position of children and childhood as a social phenomenon has become a target of active international research (e.g. Qvortrup et al. 1994). This research has brought about many new bases for asking questions about childhood and children's rights (e.g. Bardy 1994 b). However, I do not intend to go into these further in this study.
One possible hindrance to practical development work in child institutions may arise from the habit of preferring to look ahead, to bear in mind the child's future as an adult, rather than to look back. This means we may forget or ignore the historical bases of behavioral norms as well as the longstanding attitudes and because they are phenomena which we take for granted, they are difficult to question. Recent visions of development emphasize the child's position, the fact that the child should be visible (Kananoja 1994) and that the child should play one of the main roles (Kuronen 1994 a 56). Thus the ties with the past may be easily forgotten and their lack of problematisation may prevent the development of new professional tools. I will briefly present the institutions which belong in this study, mainly dealing with the content and committee reports of the relevant legal and statutory texts as well as some research studies which have guided professional work. The focus of the analysis is the view of children's development and learning which is implicitly reflected in the texts in question. In other words I am looking at the child's position in professional practice.

Fostering health in the welfare clinic

Since 1926, in emphasising health and welfare, the welfare clinic and other services have been developed for expectant parents (Memorandum of the welfare clinic action development committee 1984 4). The National Health Act of 1992 defines the framework for the work of the welfare centres. The work includes the dissemination of knowledge, offering help in child care and upbringing and guidance for parents so that the child has favourable possibilities for good health and development.

In the welfare clinic the professional follows and evaluates the children's development. For their part, the children perform tasks which help in the evaluation. The work does not give children the possibility of autonomous activity in their interactions with the adults. The work is done on the adults' terms. Other activities are of no significance because the children are not seen as experts on their own development or learning.

Value is placed on the opinions of the parents in the evaluation of the quality of the work. As in research done in other kinds of day care (eg. Niiranen 1987, Huttunen 1989, Lahikainen & Rusanen 1991, Välimäki 1994), research done in aid of developing welfare clinic activities has also taken into account, as one measure of quality, the satisfaction of the parents. Nevertheless, in developing the services, there has been no delving into the expertise of either parents or children. The aim in the child welfare clinics is to promote good growth and upbringing by supporting the parents in the family (Kiviluoto 1985 40; Vakkilainen & Järvinen 1994 43, 59, 89 151). In the clinic the child's capacities are evaluated at birth by taking precise measurements, at five years of age with a picture-word test and by a school maturity test at six years of age. Medical viewpoints have, in particular, taken a strong foothold from the first steps in life in
both maternal concepts and in western culture in general. This expertise which affects all aspects of life inadvertently conceals the individual's personal concepts and will to control one's own life, be it parent or child.

In the science of care the child's position has not been clarified. In his research, Kuronen (1992, 1994 a, 1994 b) has emphasised children's own concepts of their marginal position in the work of the clinic: "... both the child's coming to the clinic as well as the child's examination nevertheless depends on the adults. The staff of the clinic try in all ways to avoid hurting the parents in order not to endanger the client relationship." (Ibid. 1992 235.) This carefulness with the client relationship concerns not only the welfare clinic but has also been observed to be general in other health and hospital care (Drew & Heritage 1992 45-47).

Certainly, development plans do stress listening to children (Vakkilainen 1994 11; Kiviluoto 1985 34-39). However, since the objective of the welfare clinic is also to pinpoint parents and children with special support needs, the professional's attention is readily attracted by perceived weaknesses in the child and listening to the child does not take a central place in such a context (Korkiakangas 1984 13). Thus the surveying work in the clinic puts an emphasis on problems and the main stress is on the recognition of symptoms.

Care and protection in preschooling

The physical helplessness of children and parental employment, in which children cannot take part, have furthered the development of complete day care. It is emphasised in the Day Care Act (1973) that the home should be supported in the task of upbringing. This is the way to support the child's balanced personal development. It is further defined in the Act that the objective is to promote the child's physical, social and emotional development and to support the child's growth to shared responsibility, fostering peace and the environment we live in.

In other words, the duty of the adult in the day care centre is to take care of, educate and support the children. Education also includes offering the children experiences. For their part, the children have to carry out the set tasks, behave, play and study. In professional day care practice there is space for children's own activities in the interaction with adults in the areas of play and study. There is an interest in what the children experience and how they feel. The children have this opportunity also because the days are long in the day care centre, sometimes as much as ten hours in the day, so the adults have the time to listen and discuss with the children. The main stress, nevertheless, lies, as in the clinic, on activities dictated by the adults. The children's parents also have a say in the activities but there remains space for shared activities to take place on the children's own terms.
As in the welfare clinic, day care also emphasises support for the family upbringing. Day care centres were first organised for those children whose parents were considered incapable of socialising their children adequately. But the development of day care has also stressed the creation of under-schoolage child-centred pedagogy from Friedrich Fröbel (1826) onwards (Hänninen & Valli 1986, Salminen & Salminen 1986). Ways have been sought to support the creativity of children and, more recently, their learning (Niiranen 1987, Rusanen 1990, Kauppinen & Riihelä 1993, Valimäki 1994, Brotherus et al. 1994).

It has nevertheless been observed that educational and training institutions have produced results other than those which are publicly defined. The educational sociologist Basil Bernstein (1975) believes that modern preschool pedagogy is an invisible pedagogy. It is based on internal (invisible) rather than external (visible) control. The teacher organises the framework for children's play. Within this framework, it is true that the children can largely regulate their own movements and social relationships. It can nevertheless be said that in the education it is more a question of social organisation and its requisite power-game than the organisation of the learning process itself (e.g. Neill 1968, Christie 1972, Kuusinen & Leskinen 1988, Broady 1987). The children have to comprehend the invisible laws of the organisation and to obey without too much questioning.

It has been shown that children are quick to observe and skilful in understanding the invisible messages in social activity (Feldman 1992, Strandell 1994 b). One can generalise and say that children also learn the contradictions of interaction from the way they are worked with. For example, the losers in the official educational system learn that they cannot learn. These regularities of invisible pedagogy have been observed in all institutionalised seats of learning regardless of the children's age (Pramling 1990, Kärby 1992). The teaching moments in the day care centre construct the same kind of stifling principles as in school. Children are taught to concentrate on what the adults say. Children have to wait and ask their turn to speak, unlike the adults. The children are given, for example, identical copying tasks which the adults use to estimate their different levels of coping. In such situations children learn how precisely the comparison is done. They need do nothing more than peep at their neighbour's paper to know exactly what their own position is in this competition.
Question-based teaching in school

Traditional school, preschool and health education are still based largely on the ideas from the age of enlightenment. According to these beliefs, children are "not-yet-human beings" who need developing for their coming adulthood (Verhellen 1993 51). Since as far back as Dewey (1910) attempts have been made to change this image in order to better meet the development of interrogative thinking, but these efforts have met little response in day to day education and guidance.

The Comprehensive School Act (1983) defines the task of school as the endeavour to educate a student to be balanced, fit, responsible: independent, creative and cooperative. The school should, furthermore, teach moral and good behaviour and should provide sufficient necessary knowledge and skills.

The schoolteacher's duty is to train and educate and the child's duty is to learn. The question whether space is left in school for activities with adults to take place on the terms of the child largely depends on how the teacher in practice figures the relationship between teaching and learning. If learning is seen to be the outcome of teaching, then all activity will take place on the terms of the adult. However, if the adults' teaching and the children's learning are distinguished from each other emphasising the subjectivity of both parties and if the basic premise is that children learn as a result of their own research work, then space remains for interaction on the children's terms. Nevertheless, because of the compulsory nature of school, the emphasis is on the terms of the institution.

In the classroom it is taken for granted that the professional acts as the initiator. Normal pedagogical discourse has three sections. The teacher's initial question is followed by the student's response which is finally evaluated by the teacher. This form of discourse has been shown to be common to all work with an advice and guidance orientation (Drew & Heritage 1992 39-42). Question-based teaching methodology, which is founded upon teachers' questions and students' responses, has been criticised in much research for weakening the child's learning activity (see Bertrand 1991 26-31). When the teaching methodology consists of practice and repetition, the children practice just those concepts which the teachers offer. The connection between concepts and reality are usually obvious to the teachers but to most children they remain invisible (Pramling 1990). A wider viewpoint presupposes that the educator is ready to problematise the matters to be taught. The educator should be prepared to understand the child's world over and over again. Together with the child, the educator should create an intersubjective meaning for the situation (Bruner 1987) which would be related to the matter being taught.

In our own field research (Riihela 1989, 1991, 1993 a, b, 1994 a, b, Karlsson 1990, Karlsson & Riihela 1991) we have problematised the children's collaboration, pedagogical child concepts and we have emphasised the importance of the children's
activities with each other. However, in the development work it has been repeatedly shown that there are countless invisible threads tied to institutional traditions in the minds of child professionals intent on change.

Although our knowledge of children and learning has changed this new knowledge is not immediately transferred into professional practice. In terms of the curriculum (The Bases of Planning Pre-school Education 1994 and the Principles for Curriculum Planning in Comprehensive Schools 1994) a different attitude prevails today towards the knowledge to be transmitted to children from that of ten years ago. It is no longer the essential thing to give the right knowledge nor to guide the child to the source of that knowledge but the emphasis is now on the deliberation and reflection on the knowledge structures and the learning environments according to cooperative theories of learning.

Enlightenment and encouragement in the library

Libraries in Finland already have a history of more than 200 years. Library acts and statutes (1986, 1992) do not separately mention children as library users but it is stated that the purpose of the library is to meet the general need for culture, knowledge and recreation, to support study, the independent acquisition of knowledge and literary or artistic pursuits. The libraries do, however, prepare annual plans for their service ideas as regards children. The service idea of the library which took part in this research was as follows: "Habituating children and young people to reading and using the library, extending their independent reading pursuits and guiding them in their search for knowledge." Thus the library serves the need for literature, be it adult or child. The library professional offers guidance in the area of literature and children can ask their own questions. The emphasis is on the client's thirst for knowledge.

Children's library work has actually developed since the 1960s when the service principle took a foothold. "The general current educational ideals were evident in the way the libraries defined the objectives of their activities ... (but) the different nature of the objectives of school and library were brought out early on. The library had to support and extend school knowledge and they were expected to attract and entertain children with their material" (Teinilä 1990 167). The aim was to eliminate regional differences in library services and the objectives could be traced to general cultural and informational objectives (ibid. 168). Considering that still in the 1950s in many libraries children only had the right to go into the adults' area at specific times, nowadays they are library users in their own right.

The education of professional librarians differs significantly from that of the other institutions in this study. Literature for children and young people is studied but not the theories dealing with encountering children or their development. The guiding principle is: "The librarian is the child's guide in the world of knowledge and life.
Children ask about and show interest in things which adults disregard. The information service of children's libraries is creative work which presupposes a genuine interest on the part of the worker. When a child wants to know whether time and space are different things, the adult's experience of children and current research are put to the test. Children have the right to the answers to their questions" (Teinilä 1990 172). The function of children's libraries is to activate children's independent and autonomous behaviour in the field of culture (ibid. 1990 170).

I shed light on these aspirations with concrete examples from my interview material. A librarian talks about her work: "I never say that such and such a book is bad. Certainly I do it in that I don't utterly praise something if I don't think it's good. Adults' and children's tastes are often totally opposed. And at certain ages books are devoured at an enormous rate. This shouldn't be disturbed by criticizing the child's choice of books. It isn't so important that the child understands the book in just the way that I do."

In a study into the production of books for children and youth and its connections with library collections, Teinilä (1987 12) compares the emphasis on the teaching of literature in schools with the library's rules for forming a collection and shows that in school one talks of pluralism whereas in the library one talks of variety and impartiality. In the selection of books for the library, this has resulted, amongst other things, in a collection which matches fairly well the general production of books (ibid. 127). This is one indication of the child being treated as a client in the library.

There has also been an attempt to facilitate children's transactions in the library. In the classification of books in the children's department, three principles have been adhered to for all books: the writer, the book and the series. Picture books have also been classified according to the illustrator. Classification of non-fiction is still subject-based and for novels key-words have partly also been used. Children may thus have many different ways of remembering the book they want but the work is still possible to find.

Finns are major consumers of libraries and Eero Ojanen (1994) describes appositely the library as the concretization of a broad social dream, in which everybody is equal and each may find his own individual way. The library is also by its nature collective. Thus it offers an idea for finding harmony in man's longings towards both collectiveness and individuality.
Changing the paradigms from question-based direction and teaching to question-based learning

It is natural that the significant paradigm change, which is currently affecting the concept of learning, is not yet visible in the legal texts concerning pedagogical institutions. Learning is now been seen as speculative interaction, a close association between people, nature and culture (Järvillehto 1994 166-167). These new ideas are causing conflicts between the dominant directives and the demands of practical work. Understanding, the internalisation of information, occurs through reflection and problematisation and is essentially linked with the ability to form questions. In order to develop, an individual's questions require a response, a joint effort to formulate a collective question-response chain. Why, then, is it that the official pedagogy is badly set to serve the collaboration of question-based learning? Lelimuskallio (1991) went through her work curricula and noticed that the objectives speak of developing the pupils' problem-solving skills. "Is the problem and its basic question formation generally seen as axiomatic? Is this like jumping clear over one stage to consider more the solution to the problem rather than recognising and defining the problem itself?" (Ibid. 61.)

Empiricism already became the dominant viewpoint 300 years ago (see Rauste-von Wright & von Wright 1994) when John Locke published, in 1693, his work Thoughts concerning Education, in which he describes the child as tabula rasa. Locke describes the child's mind as weak and limited and only capable of receiving one message at a time. In terms of really young children he says that the less reason they have, the less one should give way to their will. Children lack good judgement and therefore require limits and discipline (Locke 1693).

Another pedagogically influential thinker, who strongly emphasised adult guidance, was Comenius. In his work Mutterschule (1628), he takes a stand on the basis of play and his ideas are still today part of the normal pedagogy of day care. "Children should not be prevented from playing because it is only with the help of play that children can be led to action.... Children must be allowed to be as busy as little ants, to carry, pull, organise and reconstruct things, systematically and sensibly, by showing them how they should play, because they cannot yet anyway be ordered to do useful work."

Lönqvist (1992 359) brings out in his research the way in which even apparently child-favoured play pedagogy ignores the child's own needs for play. Lönqvist's point of interest is the toy and he problematises toys which have been developed by adults in relation to toys developed by children. "The concept of toy in our western
culture is more or less a product of an adult viewpoint which is formed by the adult community's concept of children, objects and the relationship between them. In children's handling of objects for their own play needs, the toys acquire another dimension which often goes unnoticed by the adult. As with children's own play objects, children's questions, arising from their own need for knowledge, can be seen as moving in spheres which will remain hidden from the adults.

Ingrid Pramling (1990 99) describes attempts at overcoming these dilemmas between pedagogy and children in her analysis of a situation in which a day care teacher makes the problem of concepts and reality more comprehensible to the children. "The teacher reads a story about Lillebeth, who wants to be a circus rider. She quite often interrupts the reading to reflect on matters to do with learning. She asks: 'Who do you think is the better rider, Lillebeth or her father?' All the children reply that Lillebeth's father rides better because he is bigger (older). The children believe this even though in the story the father does everything but ride. The teacher then asks Maria, who rides herself, who she thinks is the better rider; Maria herself or the teacher. Maria thinks the teacher is better because she is older. The teacher explains that she has only once sat on a horse's back and asks how often Maria rides. A lengthy conversation follows in which the other children's views on the matter are reflected. After some time Maria comes to a conclusion: 'But then I must ride better than the teacher, because I ride every week.' Maria's understanding has changed during the conversation. She has previously connected learning with age but now realises that learning proceeds through experience and knowledge. When the teacher draws the child's attention to different views of learning, she offers Maria the opportunity to discover something new from her own learning. The normal assumptions of adults, that children naturally understand the connection between learning and practice, are shown in this example to be false."

Pramling would like to see more of this kind of cogitative discussion with children. At the core of such discussions there would be various concepts and ideas to do with learning such as clarification, skill, cognition and comprehension. According to this view, both the starting point and the objective of teaching are the child's thought. (ibid. 99 and 102). However, many organisational factors of resistance to change which make learning difficult can also be found in the comparisons between the institutions.

The differences and similarities between institutions

In the following I compare the characteristics of the different institutions which help or hinder learning. The conflicting pressures in the organisation of advisory, inspectory, pedagogical or care situations do not only stem from the social level in terms of decreasing resources but also from the content of the work. In the welfare centre the
activity takes place on the terms of the professional whilst in the day care centre it is on the terms of the professional and the parents and, in addition, the children. In school the activity is on the terms of the institution but in the library it is the client's thirst for knowledge which controls the activities.

- it is the duty of the welfare centre to check that the correct care and protection is being given
- it is the duty of the day care centres to ensure conditions for care, protection and education
- it is the duty of the school to take care of education, including its control and evaluation
- it is the duty of the library to meet the need for knowledge

The different institutions also use different verbs to describe their professional work. The welfare centres advise, the day care centre offers care, the school teaches and the library disseminates knowledge of literature.

All these institutions are working in the child’s best interest but the views vary as to just what is to the child’s advantage. The activities of the welfare centre, the day care centre and the school still reflect the centuries’ old view of children and this often makes it overwhelmingly difficult for the child to get heard. The library institution has developed its work with a more modern viewpoint: children are in search of knowledge in the library for the same reason as the adult - to satisfy their curiosity.

There is one characteristic that in a certain way is common to all professionals covered by this research. Their aims include a futurological element in the sense of thoughts about what is best for the child’s future. Professional practices are regulated by ideas about the directions in which the child should be pointed. There exists a certain scheme based on what is good and what is bad for the child. People who work with children are futurologists who, through their own work, aspire to creating future structures by developing children into health-conscious, creative, whole and unproblematic total personalities, future independent users of knowledge reserves. It is difficult to create a here-and-now activity, common to both the child and the adult, since the adult is preparing the child for a future adult world, a world in which he or she already operates. This kind of future-oriented professional activity often prevents children from forming their own knowledge structures or, to quote a term from Rom Harré (1983), their own transformation stage. Children are given little opportunity to refine the controlling mechanisms of their own lives. Empirical, didactic teaching is part of the traditional relationship between child and adult. The child’s job is to perform given tasks, not to satisfy personal curiosity like the more recent direction in teaching, constructionism, emphasizes (von Wright 1992).

We can also compare this futurological orientation of work in the viewpoints on children’s station in cultural research. Margareta Rönberg (1988) states that culture
highly appreciated by children is called junk culture by certain adults. They call it a culture that seduces and only satisfies the body, the senses and the eyes but totally ignores reason, thought, reflection, doubt and morality. At the same time, however, children have always been seduced by the 'missionaries of quality' but through other means. Children have been seduced to act against their 'better will' and to believe in the adults' insistence that through diligence, rationality and obedience they will have a chance of a much more valuable future than that offered by superficial, fleeting pleasures.

According to Rönberg, adults demand that children's literature should be personal, unique, reflective, assertive and, in a responsible way, educational. The children expect "camaraderie" from their cultural experiences: everyday events, fun, joy, inventiveness, noisiness and naughtiness and a non-educational content. Adults emphasize characteristics like distance, separateness and individuality whereas children prefer cultural events, the meanings of which can be built up in groups, not alone or uniquely.

What is the significance of the profession for the collaboration between children? What is the institutions' value assumption concerning interaction between adult and child? I deal with the effects of laws and professional practice. I also analyze the institutions' view of the child as well as the child's responsibilities and rights.

Children's rights and responsibilities.

The rights and responsibilities of children have been scarcely spoken of. When we make comparisons between different institutions, clear differences emerge in their professional practices. In Table I I analyze professional duties according to the rights and responsibilities they accord to the children.

At the welfare clinic it is the children's responsibility to submit themselves to assessment. They have, however, the right to perform tasks in their own way and receive educational and health advice via their parents. At the day care centre the children's responsibility is to obey rules and to submit to being brought up and prepared for entry to school. The children's responsibilities also include spending the days safely while parents are at work. Their rights include play and the comradeship of a group of children as well as the right to care and pre-learning.

The school is the only institution that has specifically defined a responsibility for the children, that of learning, which in practice means compulsory education. They cannot stay away from school without permission. Another responsibility is to submit to evaluation which compares them to their peers. Thus, there is not the liberty, given by the welfare clinics, to perform given tasks in one's own way. The students have to study according to a curriculum and follow the rules of the school. They have the right to learn and to make friends with their own age group. In the library the children's
responsibility is to follow the rules of the library and their rights include the use of the services provided by the library institution.

Table 1  Children's rights and responsibilities in different institutions

<table>
<thead>
<tr>
<th>Responsibilities</th>
<th>Clinic</th>
<th>Day care</th>
<th>School</th>
<th>Library</th>
</tr>
</thead>
<tbody>
<tr>
<td>to be evaluated</td>
<td>x</td>
<td>-</td>
<td>x</td>
<td>-</td>
</tr>
<tr>
<td>to be educated</td>
<td></td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>to be taught</td>
<td></td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>to follow rules</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rights</th>
<th>Clinic</th>
<th>Day care</th>
<th>School</th>
<th>Library</th>
</tr>
</thead>
<tbody>
<tr>
<td>to carry out tasks in own way</td>
<td>x</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>to play</td>
<td></td>
<td>x</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>to make friends</td>
<td></td>
<td>x</td>
<td>x</td>
<td>-</td>
</tr>
<tr>
<td>to be taken care of</td>
<td></td>
<td>x</td>
<td>(x)</td>
<td>-</td>
</tr>
<tr>
<td>to pre-learning and learning</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>to be served</td>
<td></td>
<td>-</td>
<td>-</td>
<td>x</td>
</tr>
</tbody>
</table>

This comparison of the institutions shows that only one unit, the library, functions on the principles of service. The other units, like the health care centre and the school, bypass the subjective position of the child or, like the day care centre, give the children only limited rights to act on their own terms in interaction with an adult.

What is the child's task in relation to the adults' professional practices? The development of a child is seen, in advisory and educational institutions, as a function of the tasks created by adults. Children's actions are separated from the essence of interaction, the dialogue and the expectations behind the dialogue. Only the library has an expectation of independent action from the children. All the institutions naturally work under the assumption that the workers operate with professional skills and ethics.

In the following I focus on the extent to which changes in the child's position are visible in legal documents as well as generally in professional practice. I assess the child's position along three dimensions. For the first dimension (a) I take the concept pair which reflects the change which took place in the eighteenth century (Ariès 1979 and Shavit 1990): the child has to be protected from the evil of the adults' world - the child requires development according to the demands of adulthood. With the second dimension (b) I define whether the child is the target of assessment or service. The third dimension (c) describes the child's position as a subject or as the object of the professional's work.
a) The child requires protection - and/or requires development:
The child is innocent and requires care and protection - the child has deficiencies and requires development and training;

b) The target of assessment - the target of service:
The child’s chances of influencing the work content are small - the child can personally participate in shaping the work content;

c) The child’s position is as a subject - or object:
The child is a passive receiver of stimuli whose development can be assessed and predicted - the child is an active architect of his or her own life whose development cannot be accurately predicted.

In the clinics it is the task of the nurses and doctors to assess the child’s development and the background assumption is that children will develop with age towards the state of adults’ development. The professional must carefully follow the child’s development and upbringing which means that the child is in the position of object as the target of the work. More recently the child’s role as subject has also been called for in the clinics.

In the day care centres the task of the workers is to organise activity for the children which matches their stage of development. What is being protected is simultaneously being developed which leads to a rather contradictory situation. Children are innocent and in need of care but, at the same time, they have to be educated because they lack something (Hakkarainen 1990 244). The child is not defined as the subject in terms of the daily life of the day care centre but is the target, the object, of the professional. The child is enforced to attend school which, by its nature, clearly distinguishes this institution from the others. On the other hand we can see this enforcement to attend school as a personal right to education which thereby emphasises the child’s rights and position as subject.

The school assessment system traditionally emphasises the correction of weaknesses in the child. The aim of the activity is to educate and develop the child. Thanks to the Behaviourist teaching methodology the child is treated as the target of the professional’s work and is seen as a receiver of given knowledge. The new comprehensive school curricula, which nowadays (1996) are formulated by each school, are supposed to be set according to newer views of learning. However, so far one unsolved problem in the new development work is the continued tight division into subjects. Another is the general demand to retain the traditional evaluation of students’ achievements. Thus the irreconcilable conflict between new teaching methods and old student evaluation persists, which prevents the broad introduction of child-based methodology. Of the four institutions treated here, only the school gives the child an actual role and calls him a pupil.
The basis of the library service is the client's thirst for knowledge and both child and adult are in the subject position of the client. They both have the chance to seek their own way into the world of literature. The library tries to develop the child, but this development is not nearly as emphasised as it is in the other institutions.

Table 2  Comparison of the child's position in the different institutions

<table>
<thead>
<tr>
<th></th>
<th>Clinic</th>
<th>Day care centre</th>
<th>School</th>
<th>Library</th>
</tr>
</thead>
<tbody>
<tr>
<td>protect</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
</tr>
<tr>
<td>develop</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
</tr>
<tr>
<td>assess</td>
<td>x</td>
<td>(x)</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>serve</td>
<td>x</td>
<td>(x)</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>subject</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td>x</td>
</tr>
<tr>
<td>object</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

As we can see in Table 2, on a general level, all three dimensions can be found in each of the four institutions. The clinic and the school resemble each other the most in their assessment and diagnostic duties. The day care centre differs in that protection and development are equally emphasised. The library differs from all the others although its objective is similar - the growth of the child's own initiative and all-round personality.
IV The empirical data - in search of adult and child companionship

Organizing the work with children

The external framework and atmosphere organised by the staff in different work-places created a warm and child-friendly feeling. However script analysis of the interaction indicated how the expectations, which the staff member has of the children's work, nevertheless often create the opposite, adult-centred atmosphere.

An atmosphere of hurry is one characteristic which all the child-institutions share and this also emphasises the adult-centredness. You often hear professionals sighing that there is never time to do everything one wants because one is in such a hurry and that there are so many things that have to be done with the children, so much that has to be taught.

With the exception of the library, all the cases are structured and planned in detail by adults. However, the dialogue turntaking between adults and children is clearly evident in all cases. All the professionals give the children a chance to speak. In all the cases, with the exception of the developmental assessment part in the welfare clinic, they are eager to meet the children's need for knowledge.

Nevertheless the children's need for knowledge is not evident in all the scripts. In fact in this data it comes to the fore in two day care centre cases, briefly in two classroom situations, in all four school psychologist childgroup meetings and in three library cases. In one welfare clinic case there are several indirect questions from the child while he organizes his own drawing activities.

One route to the child's world can be found in the no-man's land between traditional working methods and the search for the new. In order to make the child perform tasks set by the adults, soft approaches are applied. These include encouragement, excitement and concern about whether the child is able to perform. The children are asked to remember, and they are given tasks, instruction and orientation.

In this material the most child-centred strategies for action included leaving the child to solve problems, offering checkpoints, answering questions, narration, following-up the child's deliberation with answers, specification through new questions, and reading at the child's request. For their part, the children make suggestions, experiment, express their own needs for knowledge, ask questions and deliberate.

Only criticism, reprimands and interruption will silence the children. Because the main script of the welfare clinic concerns the child's developmental assessment, the
child's position there remains that of a bystander. In the same way, in scripts where the knowledge of the child is being assessed (as in the daily routine of day care centres and schools) the child remains on the sidelines.

There are naturally many ways to show children that one is expecting questions and initiatives. One way is to ask how things are going but this is a very adult way of starting a conversation and children seem not to be very interested by it. Another way is to give a task such as drawing or a group task and then withdraw as they accomplish it. Children are also tempted by questions calling for action and there are many examples in the present data in which the results, from the children's point of view, differ widely from each other.

Three principle types of scripts can be distinguished. 1. The situation is controlled by the professional, who uses tasks and questions which have been carefully structured beforehand. 2. The adult allows the situation to progress according to both his or her own script and to the children's scripts. 3. The professional orientates the work according to the children's scripts.

The adult's control in the situation being established can be seen in this data in two types of expectations. The first is reflected in the adult's question: How do I get the child/children to cooperate with me so that they will do what I want? Such situations can be seen in the testing tasks in the welfare clinic, in the giving of health advice and in the school classroom. In other situations there may be two or more criss-crossing scripts. Even though the welfare worker gives her small client space to operate in, the pressures of her work prevail so that a common forum of talk and action is not able to develop. The day care worker leads the children indirectly towards her own objectives. Her own questions, which interest several children, in the end prevent them from introducing their questions into the situation. The school teacher's script includes both teaching and educating as well as keeping order to avoid chaos.

The second type of expectations are seen when, alongside her own script, the professional also allows the children space to shape the situation. The adult may use the child's own words in her speech or interpret the child's feelings, such as when the welfare worker appreciates the child's anguished state and the situation ends in the way the child wishes. In the day care centre there are two cases in which the workers develop the children's talk with leading questions and even get the children to bring out new hypotheses. These are all apt examples which demonstrate the problems of question-based pedagogy.

Another example of this type can be seen in which the classroom teacher begins by offering the child the chance to shape the situation with his own reflections but, in the middle of the child's discussion, the teacher changes strategy and retrieves control. The school psychologist is also on the way to achieving the child's script. Temporarily moving on the same level, the adult moves onto a sidetrack when the child heads elsewhere. New practices may be learned by withdrawing. This allows the children a
certain freedom for their own thoughts. It appears to be difficult for the adult to understand the thread and logic of children's conversation.

A further situation may also be included in this type. In some cases, the professional waits for the child to combine his own play with elements of what is supposed to be learnt. The teacher has obviously combined her own teaching objectives with the child's play objectives. From this a new concept is born, playful education and educational play. This is not, however, a question of didactic play, in which the teacher sets off and guides play in such a way that playful elements are introduced into the matters to be taught. The games are the children's own, initiated and developed by them. Only the topics of the game, the world of birds, are the same as the study themes planned by the professional. The children create new viewpoints on the points which interest them.

Examples of the third principle type of script are particularly found in the library although there is also one example in the day care centre. The library work is organised in such a way that the workers find their way into the child's world. They move together in the same time and space, both physically and on the level of speech. Even the tenses used in the sentences follow those used by the children. The children move into the field of adults' knowledge whilst the professionals seek out the wishes of the children. In the day care centre a visiting mother succeeds in achieving a similar atmosphere. She continues the child's pondering with her own answers and adapts her speech to that of the child. She does not pose a single question of her own to the children because she is not pressured by time. Neither is she bound by the objectives and purposes of the day care centre. She is at the child's disposal. And this prompts the question: Are not the child professionals at the children's disposal after all?

Finally, I would like to draw attention to the question of the use of requisites. The specification of equipment shows that the professionals have prepared themselves well for their tasks. They have forms, papers and books. The seating arrangements have been planned beforehand. The child's happiness has been anticipated with toys, drawing materials and objects of study. The mothers bring their children as objects of advice and discussion.

In contrast, the children are lacking in equipment, that is, equipment chosen personally by themselves. Of course, in the library the children have a personal card which has, however, been given to them by the library. In the same way, books and other personal material given by the school can be seen as the child's own equipment. At the welfare clinic the drawing produced by the child forms part of his or her equipment. At the day care centre, the children have brought things back from a forest outing which they found of interest. However, the children do not, in one single case, take part in the definition of uses for this material. This lack of participation in the construction of their environment is also evident in the fact that the children do not help in planning the seating arrangements. In the bird study, in which autonomous play and study are combined, the children are free to move according to the demands of the game in a
spacious room. In the library the children are also able to spontaneously seek out their own corners.

Initiatives made by adults and children

On making an initiative the individual introduces to the group his or her own interests, thoughts and experiences. Through this personal contribution he or she attempts to influence the actions and events within the group. Child institutions are, by their nature, all created by adults and therefore function on their terms. Thus it can justifiably be said that all initiatives taken by children occur only within the framework of adult initiatives. The initiatives for professional encounters between adults and children are taken by the adult in day-care centre, school or clinic. This is also even true of the library, since adults have created the library environment which the child will use only after someone has first shown him the way. The initiative for the encounter is taken by the adult and it can be used for many different purposes.

Nevertheless, as this research shows, it is possible to broaden the field of child-centred initiatives and the scope of children's questions by changing the professional profiles and attitudes of persons working in the field.

The adult initiators were mothers, kindergarten teachers, child care workers, classroom teachers, school psychologists, healthcare nurses, doctors and librarians. The child initiators were pre-school pupils in day-care centres, pupils of the two first primary school grades and clients of the welfare clinic and the library.

Each case was divided into episodes and the initiatives were particularly examined: who takes the initiative and what kind of meanings are observable in them. The initiatives were related to the collaboration in the action, to whose terms the action continues on and whether the action is controlled by individual or collective efforts. The 21 cases occurring in the four institutions have been divided into smaller units, episodes. This produced a new level of analysis that describes actions. Individual topics in themselves do not explain differences in conversation. Nelson & Seidman (1984 51) refer to those forms which are used when knowledge is produced and transmitted: "By definition, conversation takes place around a shared topic. Conversational episodes are defined in terms of topic shifts, which begin and end each episode. Thus shared topics are necessary to sustained dialogue. However, conversations around shared topics vary in both coherence and length. Topic itself cannot explain these variations, because the occurrence of variations in topic length suggests that certain informational contents are more supportive of discourse than others. It is likely that some forms of knowledge provide a more fertile basis for topic sharing than do others."

In 88 episodes of the data were found 21 cases. Some cases form one unified episode, others are divided into several, at the most 13, episodes. The cases are not of
equal length, and the number of participants varies. Thus the amount of episodes per case is not comparable. A new episode is created by a verbal or action (game) related initiative, which differs in subject matter from the previous one. Since the action takes place in groups there are often other concurrent episodes within one episode. A certain episode can be re-activated after many other episodes and an earlier plot can continue. The episodes can be characterized as topic-related chains of activity.

The initiation of a chain of activity can be a question, a suggestion or the beginning of a conversation, action or game. I have noted initiatives made by adults and those made by children separately. A chain of activity, an episode, also includes those responses given by the other participant(s), that include proof of active listening, demands for clarification or the continuation of an ongoing plot, etc. The only directions that the chain can take are the one desired by the initiator, on his or her terms, or as an equal subject-subject process. The definition of an action that happens on the terms of one single participant is that he or she alone controls, interrupts and directs the flow of interaction and does not tolerate digressions.

The results of the analyses show that in the day-care centres and schools children continue initiatives taken by other children clearly more often than adults. It appears that children act between themselves even when an adult is in direct interaction with them. Only in the clinic do we find some initiatives taken by adults which the child refuses to continue. Otherwise children always develop initiatives taken by adults whereas the adults continue an episode only when they have been the initiator (see, eg., Strandell 1994 b).

There are clear differences between the institutions. The library has the highest ratio of child-led initiatives to adult-led (8/2). The ratios in day-care centres (8/18) and welfare clinics (12/26) is roughly equal, adults taking the initiative about twice as frequently as children. The frequency of child-led initiatives is lowest in schools (3/11). The library is the most advanced institution concerning the acknowledgement of children's initiatives and the difference between the library and the other institutions is marked.

When we compare how initiatives are divided by episode type to how they are divided into initiatives by adults or children, it can be seen that the activities in the library follow the children's initiatives the most. The overall division in the day-care centre also follows more closely the children's initiatives whereas in the school and in the welfare clinic they more closely follow the adult's initiatives. It can be concluded from this that the activities in the library and the day-care centre more closely resembles the children's initiatives, whereas the emphasis in the school and clinic lies more in the activities of the adult.
Social activity and the degree of collaboration

The quality of activity in the episodes were examined, in particular the degree of collaboration as seen from the child's point of view. I have evaluated collaboration according to on whose terms the action has proceeded.

Collaborative activity ranges from being in the sole hands of one of the participants to being genuine interaction where the action occurs mutually between the participants. I also emphasise in my research the significance accorded by the professional to the child's own initiative. Generally child institutions have as one of their objectives the encouragement of the child's own initiative. But this can only be achieved by giving space for the initiative, joint planning and realisation. But how do you bind together the meanings shaped by the different viewpoints? If one is simply encouraged to allow personal initiative but the conditions for it are not actively provided, it is doubtful whether autonomy will develop.

I interpret initiatives as divisions of activity in such a way that the person who takes the initiative for a moment takes control of the action. I examine the action for its degree of collaboration. The data falls into three main groups: 1. the action proceeds in episodes only on the terms of the initiator (in 36 episodes); 2. the action proceeds on the terms of the professional but becomes an event on the terms of both professional and client (19 episodes); 3. the action proceeds on the terms of all involved in a balanced interaction (33 episodes).

The degree of collaboration is at its highest in the library. The action in the day care centres falls equally into all the classes. In the clinics and school the emphasis is on actions on the terms of a single person and the controlling role of the professional is stressed. Examples from the classes:

1: Doctor: What day care centre do you go to? Tiina: There in V. Doctor: Right. And from the same event:

2: Doctor: Now then, Tiina, come and tell me what you've drawn. Tiina: (concentrating on gathering her papers together) I will do this first. The doctor waits until Tiina comes to sit down to talk about her pictures. Tiina: There is a tree and a coconut and a plesiosaur, a plant-eating plesiosaur. Doctor: What kind of animal is it? Tiina: It lives only in water. Doctor: Have you seen it on telly? Tiina: (starts to lengthily describe how they watch videos and there is a little Tossu and so on).

And still from the same event:

Professionals and children create joint scripts relatively most in the library and least in school. In the welfare clinic, of the child initiatives five progressed only on the child's terms, five were balanced interactions and two changed on the adult's terms from an event action into joint action. In the day care centres six of the child initiatives were balanced action and two were on the child's terms. In the school two of the child initiatives continued on the child's terms and one continued as joint action. In the library seven of the child initiatives continued as balanced interactions and one remained on the child's terms.

At the core of question and answer interaction

Questions in the data

What is the meaning of a question? What is the purpose behind questioning? What induces the children to ask a hundred questions? And what gets the adults to ask so many questions (178), nearly twice as often as the children? (See Figure 2.) In child research, question types have been classified almost exclusively according to their form and the aim has been to find out at what age children start to use a particular type. In my research I am not interested in these questions but I am after the meanings of questions and the situations in which they occur. I have classified questions according to their function (see Kearsley 1976).

Figure 2  Children's and adults questions

The majority of the children's questions are directly concerned with the situation which the adult has created and, by questioning, the child is clarifying the meaning of things. Children often use sentences which are not in question form although they are using them to ask about or draw attention to something. They begin as follows: Guess
what...? or D'you know...? Another question group consists of hypothesis setting and testing. In this data this appears mostly in the time tasks children perform in small groups in school, but it also appears in the studies of leaves and birds.

Adults' questions are usually longer than children's and the following types are found. The type of "small talk" questions which affect the atmosphere or, to use Margareta Rönneberg's (1989) term, are "enticing", are not concerned with the matter in hand but are chiefly meant to lighten the atmosphere, make contact and show the child that the professional is especially interested in just him or her. These appear most in the diagnostic scripts.

Children's questions and responses given

The categorisation of the question-response chains which follow children's questions is based on my research material. To summarize the findings I would point out that the adult's share in the question-response chain differs widely from the way children express themselves. Only the adults produce the following dialogue functions: evaluation, evaluation question, evaluating conversation, response with encouragement, preventing response, interruption, warning, judgement, encouragement, naming, encouragement to solve a problem and giving instructions. More briefly, children are inspired to ask questions only in those situations in which adults do not use interactive functions from the above list, apart from the last two. In other words, a child's reflection is arrested by an adult's hidden evaluation, encouragements, naming, preventions, interruptions, warnings, judgements and pedagogical or diagnostic questions. Children's questions are barely seen in these question-response chains because the adults are giving the message at the same time as asking a question that they are very stealthily moving towards that kind of concept which they want to teach the children. And the children's attention goes on guessing what the adults mean and what they have in mind.

With their short questions, children are orienting themselves to finding out just what is the "name of the game" in a particular situation. The adult's phrase "I just meant" and, in another situation, "Soon", clearly tells the child who is going to control this situation and who is going to wait. Amongst other things these are hidden evaluating messages. In the background is the positivist logic of psychological testing which presumes that instruction has to be the same for everybody in order for the results to be comparable. The same phenomenon appears in the time concept in the instructions for small groupwork. Nevertheless, in this case the children's questions burst out when the professional withdraws to the side from the controlling role.

Ex. 1. Jukka: When you go into space in a rocket, can you die? Vesa: Of course you can! Children's shouting and hubbub: When you go to the stars... when you turn, just steer..... Teacher: Now then, try and do it so that when you talk in class, not everybody...
talks at the same time. Try to listen. Always when somebody else says something, the others should be quiet. And now we will finish with this subject.

Ex. 2. Jeppe waves his hand. Teacher: Well, Jeppe, what is it? Jeppe: Just that those bags are suns. Teacher: Oh. Tomi: They are not! The teacher interrupts and carries on with the next task.

When we read these two examples it is impossible not to ask what would have happened if the teacher had not interrupted the children's discussion. How can space be given for children's questioning and reasoning when there are thirty of them in the same room? What alternative strategies are at the disposal of the professional? When children get interested and start dealing with problems, their voices become raised and their physical movement increases markedly. An adult works by sitting in one place, often quietly alone and any noise interrupts concentration. The ways that children and adults work are so different that it occasionally come to mind that maybe they should not be working together in the same space. They only appear to disturb each other.

Question-response chains

Normal day-to-day conversations and expert-client conversations differ widely from each other. In this research, there occur question-response chains between professional and child as well as between child and child. In a couple of cases it occurs between mother and child. In search of the meanings given to dialogues I used Bullard & Schirmer's (1991) characterisations of classroom dialogues in relation to ordinary conversation. Similarities between these two types of conversations there certainly are but the differences are marked. Both display the pattern of turntaking but in the classroom the opening is always made by the teacher whereas in ordinary conversations both sides make openings in turn. Furthermore, in the classroom the teacher sets the subject to be dealt with whereas either side may take this role in ordinary conversations. More differences can be seen in the temporal organisation of the conversation. With reference to Mehan's (1991) observations made in 1985, the aforementioned researchers distinguish three stages in classroom discourse. These consist of the opening which is usually the professional's question, followed by the client's response and closes with the professional's assessment. The evaluation is not directed at the here and now situation but it is intended to support the professional's activities external to this situation. In school, the students' achievements are treated in relation to the teaching being given as well as in comparison to the achievements of peers. In ordinary conversation, evaluation is intended for the on-going situation and it often appears in feedback, encouragement and complaints. The dialogue is divided into two-part question-response sections.

Long, uneven, two-part question-response chains, without the third adult-evaluation part, arise usually in connection with longer themes. A three-part section, with adult's question, child's response and adult's evaluation of child's response, is not
always necessarily verbalised in speech. The third part may equally well be hidden and operate as the adult's metacognitive process which regulates the interaction. By this manner the adults plan the next speech turn or, from a long term point of view, their own pedagogical and diagnostic tasks. However, these hidden intentions of the adult are also transmitted to the children, (compare other theories) at the latest when they notice that the adult is not following their track of thought and there is nothing for it but to find out where the adult's conversation is leading to and what is meant to be done. Uneven two-part chains also arise in short conversations. In the library it is possible for question-response chains to occur which flow on a service basis when the professionals treat children as clients.

In addition to an embryo conversation, there are other examples of fluid conversations. In the following we see questions and answers from the bird project in the day care centre (G= girl, B= boy, T= teacher):

Ex. G1. (answering another child): You mean these? G2.: Yes T.: Oh yes, there was that one. G1.: Would you take this? B1.: I would take these, they're the sharpest of all. G4.: I'd take these. G6.: I'd take one like this. (in play language). T. (answering and nodding): Mm.

B1.: What's that? T.: (Reading from a book) It's a sparrowhawk. T.: (continues reading)

B1: (asking about a picture in the book): Where's the bullfinch's foot? T.: It isn't shown here. It's a bit like that one (shows the book)

B1.: Whose is this? T.: It belongs to a bird of prey because it's got such sharp claws.

G2.: Is it that a hawk or what? T.: It doesn't say

G2.: These look awful T.: Yes, it's actually a mallard's foot. They only look strange. G1.: Looks like this. G2.: I wonder if I'd dare to touch something like that?

The skills of eight-year-olds in conversational turn-taking are demonstrated well in the following example from school where four boys are discussing hourglasses. I have presented this conversation in columns with one speaker's lines in each column. This is the best way to show the principles behind the four boys' turn-taking. The boys also allow space for the teacher to interrupt although the instructions presented failed to significantly advance the boys' work.
Into

Looking at a big hourglass: *What's this one?*

Julka

Handling it. *Let's see!*

Juni

*It's a clock!*

Jonna

*It's a clock!*

*How can you tell the time with this?*

*Is it a light-clock?*

Puts it to his ear: *I'll listen to see if it ticks*

Also looking and listening

Also looking and listening *it's not*

Still listening ticking.

*Be quiet, and soon after: Puh, it sure isn't ticking.*

Takes the hour-glass:

*OK I'll look at this*

Puts the hour-glass into another position: *Let's wait!*

Talking about the hour-glass: *An hour is up when that has spilled through. Takes the hour-glass from Into and puts it on the table: Let's wait!*

Look, *it's sugar! Hey, it's falling!*

All the boys concentrate on watching the hourglass. An adult brings a waterdial to the table:

*Right then, now I will tell you. These are all clocks.*

Shows a sun-dial in the form of a stick in the middle of a plywood board: *Is that too?*

The adult continues to give instructions: *In those days when people didn't have clocks like these (shows her watch), they had things like these (shows the clocks on the table).*

Yes I know. *That candle clock is a kind of Chinese invention which also smelt.*

The adult speaks to Into, who is standing at the end of the table: *Go over there.*

Goes and sits

Showing two hour-glasses: *Let's see which wins if they both start at the same time.*

The adult continues giving instructions and also lights the candle: *Now you can guess how you can tell the time with these.*
And still one short example of a fluid conversation, in the library.

Boy: Do you get a fine for this? Adult: No, this is from our side. Not for this, you don't get a fine.

Dialogue divisions and episode openings

The majority of the children’s questions occur in episodes which concern a request for factual information in which the questioner asks for previously unknown information. Others occur in situations of request or discussion. There occurs only one question by a professional which is classified as an adult-initiated episode concerning a request for information. This question was as follows: "Tomorrow we’re making a trip to the zoological museum where we will actually see butterflies. What do you want to find out about them there?" Thus especially in school but also in library, in carrying out small group tasks, children initiate new episodes in their search for new information.

The majority of the adults’ questions in the day care centre are requests for information which the adult actually already knows. Requests and information-giving is frequent in the welfare centres.

In the welfare centre the majority of children’s questions occur in child-initiated episodes. However, the conversations they initiate are, as it were, outside the official programme. In the adult-initiated episodes children are not expected to ask questions but to perform things and supply answers.

In the day care centres children’s questions occur in adult-initiated episodes and the episodes they themselves initiate are short situations of two or three lines. The one exception to this is a situation where a girl, in the midst of some leaf research, develops a story about the division of labour of the lunch-time assistants.

In school, children’s questions are also found in adult-initiated episodes with the exception of the one already described on page 56 when the boys are involved in the clock research. The other child-initiated episodes are short but they differ from those in the day care centre in that they deal with the issue at hand. In day care centres children can act freely, talking and asking questions, but, nevertheless, the programme proceeds according to the plan of the professional. In school the professionals openly tell the children the purpose of their actions and also what they are meant to concentrate on.

In the library almost all the episodes are child-initiated and this is also where the children’s questions occur. However, they differ from the questions in child-initiated episodes in the welfare centre in that they mostly form the child-client work which the professionals carry out in the library. The children supply the content and direction to the adults’ work. Adults’ questions in the library are clarifications or extensions of the children’s questions.
Another numerical analysis also reveals interesting qualitative differences. Looking at children's questions in relation to the total amount of individual speech turns and actions, we see that in the welfare centre 6%, in the day care centre 8%, in the library 13% and in the school 23% of all the speech turns are children's questions, requests or indirect questions. In spite of the fact that in the school situation collaboration remains at more authoritarian level than in the other institutions, this has not prevented the appearance of situations in which children's questions are both seen and heard. It also shows us in which direction we should move if we want to encourage school-children to take the initiative. It is a question of developing the planning process so that the child genuinely takes part, both in terms of content and form. The decision made (beforehand) by the professionals involved in this study to remain silent as much as possible, clearly helped the children in their joint argumentation. If it were possible to adopt, with the children, the kind of natural, two-part style of dialogue, at which the library professionals are so skilful, the situation in the group would change radically. The conversational style of an institution reflects that institution's function, but this is not the whole truth. The educational function of the library staff is basically the same as that of the school, day care centre and welfare centre; every professional strives to produce an active and caring citizen. Furthermore, institutions are not laws of nature but social constructions in which the interaction is bound up with the time, the place and the people concerned.

The questions of children and adults

In this section I have searched for further clues by examining the data also from a quantitative point of view. As justification for my selection, I believe that in this way it is possible to discover some structures which are typical of this data. I refer here to Perti Alasuutari's discussion (1993 169) in which it is pointed out that in this way we may discover how certain items of observation, in this case the relationship between children's and adults' questions and the link with the activities' degree of collaboration, are correlated (ibid. 172).

In each institution there was one case where there were no children's questions. In eight of the cases the number of children's questions was considerably larger than those of adults: in five cases adults' questions number considerably more than children's and in four cases the number of children's and adults' questions was almost the same. The degree of collaboration was formed by taking the dominating character of each case according to the frequency and length of the episode. When we numerically combine the cases of children's and adults' questions where there is a higher child representation with those in which there is a higher adult representation, there appears a certain typical conversational interaction. (See Figure 3.)
Children ask questions in dialogues which are more fluid in nature, whereas adults present their questions to the children in the broken, multi-layered dialogues which contain a lot of adults' questions, evaluations and directions.

Children's questions are mostly found in balanced interactional situations. Where adults' questions appear a lot, part of the situations progress on the terms of the initiator (i.e. usually an adult initiator), part begin on the terms of the professional but are transformed into collaborative, balanced dialogues.

Children ask and are given answers in different scripts

Children yearn for information. In most cases the adult will give them the information they want but there are other ways. In this material there are examples of how an adult interrupts a dialogue without having given an answer, asks a counter question, attempts to further the mutual problematization among the children by remaining silent, gives information, recounts personal experiences and clarifies the child's question. Children use questions which indicate a desire for reflection as well as knowledge. To these questions the adult responds with counterquestions, by comparing and searching for knowledge and by offering his or her own knowledge and experience.
The third type of children’s question found in the data reflects the desire to understand what the adult has said or meant. To these the responses have been counter-questions or clarifications.

Some of the answers given by the adult break off the interaction whilst others continue it and lead to reflection. Those that break off the interaction include giving out knowledge, interrupting the questioner’s speech and counter-questions. The responses that increase interaction include staying silent in a group of children, clarification, recounting one’s own knowledge and experience as well as making comparisons and a genuine search for knowledge.

My aim has been to examine the conversations from the point of view of the three aspects of productive conversation described by Blank (1988). These three aspects are relevance, usefulness and coherence. Do the scripts contain elements which allow the children to experience the matter in hand as their own, as relevant, useful and coherent? In a coherent conversation the adult considers a matter, not just on her own terms, but also gives the child the space to participate in formulating the problematisation. A productive conversation observes the needs of all the participants.

However, in child research, for example, there is rarely discussion of the child’s possible needs in the interaction produced for the research. Lehtovaara’s study (1992) offers interesting aspects on the problems of discussion when the questioner is an adult attempting to analyze the child’s self-image. Lehtovaara first gives the child a written test paper to complete which measures the self-image. Then he interviews the child individually on two occasions. On the first occasion the questions are based on the answers given in the test paper whereas the second time the adult chats with the child, without referring to the form, about how he or she experiences him or herself in relation to other people. The children’s test answers do not appear to measure what they think about their self-image. This is partly because they do not understand the words in the way the test writer had intended.

I will now consider, institution by institution, the position of children’s questions and need for knowledge in the different scripts.

The child as discussion partner in the welfare clinic scripts

The professionals at the welfare clinic make sure that they receive answers that conform to the test instructions. Based on the children’s answers they estimate in which areas the child’s development is successful and in which areas it is not. The nucleus is thus formed by certain features in the child’s development such as vocabulary, knowledge of colours and repetition. These features are dealt with by the adult in a manner which is unhistoric and not bound to a particular situation. The viewpoints of the children also have no meaning. This may be a reason why the nurse uses a large amount of small
talk. It may be a way of trying to make the child feel significant after all. Small talk is defined here as material which is not part of the test paper questions.

The core of the problem here is the static way of looking at developmental features: a feature is either present or absent. If the child fails to name a colour, this feature is considered to be lacking, and problems at school are forecast. These scripts are not laid out in the work of the welfare clinic but elsewhere and they tightly standardise just what subjects can be dealt with in the conversation. The nature of the task does not give the child the right to participate in the development of the conversation. How useful the child feels to the conversation to be, depends on how the situation is understood. The matter itself, that is the child's own developmental features, is hardly a very relevant topic of conversation for the child. The script also gives no space for the adult to discover what the child has come to get from the welfare clinic or what information about his or her own growth the child might be missing. The idea of knowledge about children's growth, health and sickness could become more dynamic, more subtle and the child's position more subjective.

The second main area of responsibility for the welfare clinic is in giving advice. A prerequisite of advisory work is a relationship of trust between client and professional. However, in child welfare the emphasis is on parental advice and it is often forgotten that even five-year-olds are in many aspects the architects of their own lives. For example, talking about the dangers of small objects would offer the opportunity to consider together how the mouth can be used to study different surfaces. Equally it could be clarified what the relationship is between the human throat and small toys instead of giving the hidden order: "Will you pick up your toys so that your little brother does not put them into his mouth?"

Other scripts are to be found in the welfare clinic material. When the doctor at the welfare clinic examines the physical condition of the child, he also considers it important that the child is at the forefront during the visits. He asks the children to draw and talk about their drawings so that "I can get a natural start to the situation and the child can express things the way he or she wants to". Nevertheless, the theory of static features related to developmental evaluation, described earlier, can be glimpsed even here, for instance in the question, "Which colour do you like?" With some exaggeration it can be said that black colours and uncontrolled lines may signify problems or lack of development. The child's participation in the discussion stops there and then but in those moments when he or she is part of the process of shaping the matter in hand, the speakers are moving in the same landscape. Things can be made more interesting for children by asking what they want to know.
The child as discussion partner in the day care centre scripts.

The situations in the day care centres which took part in this research did not tie in with the kind of skills evaluation that we see in the welfare clinics although this is fairly common in traditional pre-school activities. When the purpose of pre-school is seen as the development of school readiness, attention is paid to the same kind of skill-measuring activities as in the welfare clinic. At this moment evaluation of the children is the prime issue and their potential for influence is small. The cases in the present research represent a cross-section of the development work which has been long searching for ways of giving space to children and reducing the adult's exaggerated role in conversations. This has been tried with the help of a variety of scripts. In one situation the teacher asks the children to remember previous investigations, presumably in order to awaken their interest and arouse questions related to the museum they are going to visit the following day. The question “Do you remember...?” does not, however, seem to awaken the children’s curiosity. They are looking into the past, just as the teacher asks them to do, and this leads them into reminiscing so that they fail to develop questions about the forthcoming trip. I believe that teachers are taught to follow this routine of ‘first the tuning, then the conversation’. The adult presents many questions but the children do not express their own needs for knowledge.

One probable reason is that the adult does not give the children enough time but moves too quickly from memories to thinking about the following day. The researchers and professionals who have developed child-based pedagogy are clearly in general agreement that one of the more important points is to give children time to reflect, experiment, ask and make mistakes. However, maintaining a feeling of hurry is linked, in our culture, to many values which are seen as positive. A busy person is an effective person and effectiveness can demonstrate our significance and professionalism. The opposite of hurry is frequently seen as inefficiency and laziness. But the opposite of hurry could be seen as prudence and the pursuit of cooperation. Rather than showing efficiency and professionalism, hurrying with children often leads to tension, thoughtlessness and the incapacity to listen to and hear children's knowledge needs.

The hurry script is avoided in the case of the bird study. The teacher has made a determined effort to minimize her own speech and the giving out of ready-chewed information. She has searched for scripts which, by building a conducive learning environment, support the interplay between the children's own play and learning activities. In order to learn about this the teacher has carefully listened to the children talking. It can be said that she has started to study the thoughts of the children. Through their reflection she has aimed at creating a learning situation and environment which work in the interest of the knowledge level and activity of the children at that particular moment. The children study whilst they play and reflect on the things which interest them. They are a part of developing the progress of the conversation. However, the data
shows that even here it would be possible to give the children a bigger say in the planning of their own day.

While analyzing the scripts I also examined the props or equipment that the professionals used in their work. I showed that in all cases the children's role in procuring the equipment, or any objects used in learning, was non-existent. Everything is prepared for the children. They have absolutely no part to play in the creation of the equipment and environment in which they spend the days and years of their childhood. With the help of personal articles (from home, outside or elsewhere), the children could bring their own world into their education in a concrete manner and enthusiasm into their play and study. The children's parents could also participate in this construction of their environment.

In another day care centre case, the children study leaves, how they change in the autumn as well as the embryo stages of a human baby. Different approaches are used in these conversations. The teachers ask the children to look, study, report and ask. One professional uses Socratic questioning techniques, another tries to inspire the children to study with her questions and a third gives the children information from a book and allows them to question a mother and her unborn baby. Using question-based pedagogy it is possible to have conversations with children which they experience as relevant and useful as long as the teacher has ensured that the subject is of interest to them. But the collaborative element of the conversation suffers because the use of this method presupposes that only the teacher knows in advance what insights are intended to be achieved. The teacher has the keys to the conversation in her hand.

In this data, in the example of the leaf study, the adult has a certain idea of what the leaf contains: veins, and the water and nutrients that pass through them. She also knows what the leaf needs in order to develop. Indeed, at the core of the conversation is the adult's desire to take the children's ideas seriously. But the leaf contains so many different fascinating things that the adult is far more aware of than the child and so, because of the children's lack of knowledge, their role in the conversation remains secondary. Just when the child is about to start thinking, the adult introduces new information and the analytical learning process is interrupted and there is no more scope for questions. All the examples show the same tendency: when the adult poses questions and purposefully directs the handling of the subject, the children's own questions disappear.

The expectant mother acts differently and does not even start a conversation. During the short chat she asks the children not a single question. Thus the children's questions bubble forth. So many questions come and they deal with such difficult things to do with the unborn baby that the children would need the help of an expert to consider and answer them. In practice, this would mean that when children's questions in child institutions are set free, there would be the need for different types of experts as work colleagues. Their usefulness, however, would depend on whether they are more interested in satisfying the children's need for knowledge than demonstrating their own
expertise. Simply knowing a lot is not enough. In addition there has to be the interest in giving children time to form questions, study and discover.

The child as discussion partner in the school scripts.

The school data in this research does not represent typical school work but is actually a small part of project run by teachers and school psychologists into children's group work. Three situations have been recorded in the classroom and four in peaceful group rooms. Common to all adults is the occasional fear of chaos which I would like to call the professional's anxiety about losing control. There have been many attempts in school work in history to develop the children in a more positive direction. But if children are to be given more say, the professional has to conquer this fear of chaos and of losing control of the teaching. Hytönen's analysis (1993) of the dilemma of child-centred education describes well the pressure conflicts of these intentions and they also affected the progress of the school situations in the present data: "Above all, child-centred educational theory ignores the need to reach a balance within the spectrum of children's varying activities. This balance between activities should be achieved, possibly not daily or even weekly, but at such intervals that the teacher has a clear picture of where each child's educational process is going - - There must be a distinction between helping the children to analyze for themselves matters of interest and leaving the children alone with their targets of interest." (Ibid. 25-26.) In other words, children should not be left alone but should be helped to analyze and encouraged to learn. There of course is a conflict in that there exists no individual knowledge about each child's readiness and will to strive for himself and solve the learning problems he faces. Instead the teacher is obliged to guess when she should come forward "to help the child to analyze and to encourage to learn". When a teacher constructs her teaching so that there is a confidential interactive relationship with each child, she will have to solve the said dilemma repeatedly during each class. One solution to this difficulty allows the teaching to be organised so that the children reflect on things between themselves, ask questions and search for answers. I have dealt with the child's position in school in more depth in earlier research (Riihela 1989).

When we compare the school and the welfare clinic, we find certain common features, particularly in the use of scripts for making evaluations. The welfare clinics use growth and development measures and schools use tasks which evaluate the progress of learning. Nevertheless, the school professionals have defined and planned, in advance, more extensively and in more detail, those situations in which the children are supposed to gain knowledge. This conscious and methodical system gives the child scope to ask questions as long as the adult stands aside, remains quiet and allows the children to develop their conversations amongst themselves. There are examples
amongst this data of the way children problematise matters amongst themselves: how, by asking and responding, they make their way towards a solution to a given problem.

I would guess that, of the institutions in this research, the school has the greatest difficulties in developing its working methods so that they would recognise the children's knowledge needs and respond to them. The scripts at different levels are more strongly tied to the objectives of the institution itself in the school than in the other institutions.

The child as discussion partner in the library scripts

I have observed two kinds of scripts in use in the library. The most common is the response to the children's desire for knowledge and their participation in the question formation. The second approach aims at familiarisation and encouragement in the use of the library. Examples from the library offer a lot of hints to the other institutions in their development of new child-centred conversation scripts. One of the more important starting points is to see the children as clients with their own experiences and needs. These knowledge needs arise out of the things which the children are learning. They reflect on themselves, their relationship to people and other phenomena. They consider the laws of nature and the omnipotence of their imagination. And they want to learn, to change and to enjoy. What I missed in the library were the children's self-made stories, magazines and books and their participation in the library environment of knowledge and equipment acquisition. Until children's own culture and own creations are officially recognised and children's own texts are called children's literature, the libraries could furnish the children's department with shelves for collections of children's own texts.

In conclusion

Ingrid Pramling (1994 50-52) lists six key points that should concern any educators in developmental work. They require knowledge about the way children think and their methodological skills must be developed. They must be aware of the fact that children learn from each other and should thus try and promote conversation and reflection in concrete situations. They should bring to the fore the differences in the ways children think and provide them with opportunities for enriching experiences, through which the children can develop their own understanding. Ingrid Pramling points out that in order for the children to discuss and reflect, adults have to show interest through asking questions or being enthusiastic.

The different scripts also show different conceptions of the nature of knowledge. How is knowledge born? Who gives birth to it? Where does it come from? Who needs knowledge? The questions about the theory of knowledge from their own challenging
field in the renewal work of professional practice. But in addition, the potential for a new kind of problematisation is offered by the discovery of small children's capacity to form ideas, "theories", about another child's mind (Feldman 1992). They understand their conversation partner's intentions much better than can be said out loud. Sometimes they notice something which the adult is not aware of. An example of these hidden intentions are the terms which are used to label children in the different institutions. These names probably reflect the meaning of the different scripts and they offer the professionals one route to research and analyze their own work.

Finally I would like to emphasise the clear link between what in the institutions seems to control the small daily dialogues and the job definition as officially set in the laws and statutes. Many of the scripts used in the welfare clinic, the day care centre, the school and the library are directly traceable to set duties of the institution. This is natural - or is it? But current development work in welfare and education is hampered when the statutes emphasise the empirical learning and teaching concepts of adult knowledge and planning control in child institutions (with the exception of the library) at the cost of the children's own action. The conflicts which prevent organizations from learning lie between the socially operating prime empirical objectives and the objectives of the development work going on in the field close to the children. The concepts of children, learning and the nature of knowledge which are hidden in the laws and statutes, should be closely examined and changed so that the desired accentuation of the child's subjective position in practice would become more widely possible.

Results summed up into 10 points

1) Regulations affecting children

Even in Finland, a country with a highly homogeneous culture, the different institutions differ significantly in their concepts of children and their learning. The position of the child is defined differently in the institutions. In the library statutes children are not mentioned at all and yet, according to this research, the library workers have had the greatest possibilities to develop the practices concerning children. Those working in welfare, care and educational establishments operate within a framework of child-targeted regulations, whereas the library, part of the cultural sector, stresses the child's initiative and desire for knowledge. In the welfare clinic, the day care centre and the school the empha-

---

1 In school, children are "my pupils" or "your pupils". In the day care centre, they are "our children" or "your children". In the library, they are "our customers" or as seen from the adult side "your customers". In the welfare clinic they are customers.
sis is on what the adults see as best for the children. In the library, children
know themselves what they are looking for.

2) Limitations to cooperation

The influences of the laws and statutes concerning institutions are apparent in
practice at work and even extend to the smallest snippets of conversation
between two people. The worker's possibilities for noticing the children, for
hearing them and building cooperation with them are limited by many invisible
barriers. In other words, when specifying the institutional objectives it would
also be necessary to assess what position they offer the child.

3) Child-attending adult-centredness

At first glance it appears that institutions for children are quite child-centred
with their toys and miniature furniture. The professionals who work there are
also friendly and attentive towards the children. However, with the exception of
the library, the working methods and practices disregard the children's questions.
In welfare, care and educational work it seems to be difficult to allow space for
children's questions. This issue can also be attributed to the objectives pre-
scribed in the official documents. It would appear that longstanding development
work does not necessarily increase children's potential for initiation.

4) Scripts dealing with the control of and cooperation with children

Three types of professional scripts were found in the data of this research: 1. a
detailed script laid out by an adult in which the objectives, methods and result
are planned in advance. 2. The adult leaves some space for children's proposals
in the script. 3. The adult plans the encounter with the child and out of this
emerges a conversation and activity which is developed together. In the first
type of script there are few children's questions, in the second there are more
and in the third there are a lot. The children receive the most responses to their
questions in the third type of script.

5) Institutionalised equipment

The selection of equipment has self-evidently become the prerogative of the
professional. The equipment has been institutionalised. Part of the professional's
knowledge is transmitted through the tools of study, play, observation and
advice. These tools are tests, forms, pre-made hobby and teaching tasks, and so
on. Children's possibilities for personally participating in the planning of their
environment would increase if the professionals would construct the framework for their activities together with the children. With respect to equipment, all four institutions operate in an emphatically adult-centred way. It seems as if the environments meant for children are everywhere pre-planned and ready-made.

6) **Invisibility of children's questions**

Children's questions are difficult to hear partly because they are frequently short and indirect. They are often also seen as troublesome and disturbing to the planned programme. The children's desire for knowledge and their questions only emerge in certain scripts.

7) **Expert and layman meet on expert's ground**

The analysis of adults' questions reveals, among other things, that a so-called "pedagogue" question-type has developed as the outcome of many historical stages for the purposes of advice and education. This binds the conversations with children into an institutionalised form. By this I mean that the professional's question is not spontaneous but planned in advance. The question is not asked because an answer is wanted for something as yet unknown, but because the intention is to both teach and evaluate the child with one and the same question. These questions stop the flow of children's own questions. If, instead, they are encouraged to ask questions, it offers the children time to study, seek out, make mistakes and discover.

8) **Children's questions emerge from collaboration**

Space for children's questions seems to be found best where the concept of knowledge in the professional's work is dynamic and the view of learning cooperative. Children ask questions when the adult-child dialogues are balanced and resembling everyday conversations instead of emphasising adults' knowledge, as in client-directed institutionalised conversations. Children's questions are noticeably scarcer in conversations which emphasise adult knowledge.

9) **Beyond the visible through dialogue**

The means of conversation documentation, which has here been applied as the analytical method, i.e., classifying the conversations (a) by situation, (b) by topic according to the initiator and (c) in question-response chains, could be a tool for research and development work in professional practice and its related beliefs.
10) **On the track of child-professional joint scripts**

As a result of this research, a theoretical model of the production of actors' joint scripts, with the hope of improving the child's position in child research and professional practice. Children's participation increases when the professional sees children as active persons, directing their own learning. The creation of a joint script also presupposes the concept of knowledge as a dynamic process. If we, in addition, listen to the expectations and intentions of the participants, the ground is laid for the production of joint scripts. The reinforcement of the child's subject position could be characterised as the search for the adult and child's common story.
V Theoretical study of the child's position as subject

One of the current challenges for child research is to strengthen, both on a theoretical and practical level, the position of the child. The problems are not only theoretical but they are also social and connected to the exercise of power and they are partly written in the laws and statutes. Generally, in child theorising as in professional practice, the life and development of the child is examined separately from the broad field of interaction in which the self grows. In the course of my research many new ways of examining the position of the child have emerged. I present here, through the combination of different theories, a new kind of theoretical discussion on the child's position as a subject. Furthermore from this theoretical framework I make some practical proposals for action which might help to improve the child's position.

I have studied and interpreted child-adult encounters in four child institutions - the child welfare clinic, the day care centre, the school and the library. I have additionally examined children's questions in the context of the meanings attributed to them by adults. The various institutions have different duties and this has permitted the comparison of professional orientations. The main work of the welfare clinic is to foster the child's health while the day care centre provides care and education, the school provides education and the library promotes culture.

In creating a theoretical framework for the child's position as subject I have made use of concepts such as power and its distribution, knowledge and the child view, sociality and the language of child-adult exchange. In this exchange children's questions are an expression of the subject position as well as being key elements in the balanced dialogue.

The power concept can be seen, according to Pirttilä (1993), as positive or negative. The methods of a negative exercise of power are permission, order and prohibition. On the other hand, a positive exercise means the ability to achieve results. However, the concept of positive power is not unproblematic. There are many views about how results can be achieved with children. The distribution of positive power is tied to the different understanding of knowledge: which mechanisms are seen to be central in the production of knowledge, in other words, how one thinks that results are achieved. This includes the view of the child as well as ideas about the nature of the processes which bring about development and growth. These in turn affect the formation of the child's position as subject or the child's falling into the object position.
Effects of the knowledge concept

The theoretical background of the concept of knowledge is reflected in practice in conversations with children. When adults concentrate on discovering similarities between children based on age and developmental level, they are looking for consistent regularities that connect the children to each other. Contributory factors in the use of power include the evaluation of one of the participants. In this way, by their own orientation, the adults are ignoring the child's position as subject. The child becomes an object of study and the target of the work in practice. The concept of the child and learning is thus based on the idea that the child develops and learns mainly due to the adult-controlled action. Children's development and learning are thought of as a rising developmental trend according to the estimated age. Child and learning concepts which emphasise differences and the child's own individuality are based on the view that learning and development take place as a result of each person's personal activity and that it occurs not in a vacuum but in collaborative interaction. This interaction is created with the knowledge and skills of every individual. These different child views also guide viewpoints of welfare, learning, education and teaching. A background factor is the concept of the nature of knowledge: how man forms knowledge about himself and his environment (see, eg., J. v. Wright 1992 and Rauste v. Wright & v. Wright 1994).

In principle a dialogue can be thought of as emphasising the child and adult parts (the exercise of power as a right and responsibility) in three different ways, as we see in Figure 4.

Figure 4. Dialogue

a) \[ \text{Child} \rightarrow \text{Adult} \]

b) \[ \text{Child} \rightarrow \text{Adult} \]

c) \[ \text{Child} \rightarrow \text{Adult} \]
In Figure 4 (a) the adult plays a controlling role; information passes from the adult to the child and the child plays the part of the receiver. The adult does not, to any marked degree, plan her action to meet the child's thoughts and feelings. This situation particularly occurs during examinations, testing and in question-based pedagogy. In (b) the child plays the controlling role and the adult does not try to influence the situation with her own contribution. In (c) both the adult and the child take the other into account while building a collaborative situation. In my research, situations were found in all the institutions in which adult and child treated the matter in mind with the needs and individuality of both in mind. In (c) the subject position of both child and adult is also emphasized in the fact that the actors in the interaction presume both personal input and the use of the subject position.

Aspects of encounters

The meanings of a two-party encounter depend not only on the exercise of power, the concept of knowledge, the social context and the principles of turn-taking in dialogues but also on the existing intentions and expectations. I have analyzed my data with the aid of the concept of the script metaphor. I have considered what expectations adults have of children and how they reveal it publicly. Adults create scripts in their own institutions which define the relationships between child and adult. In other words they control what kind of activity is possible. The children's own questions, that is their knowledge interests, are possible in certain kinds of scripts but not in others.

However, for a deeper understanding of conditions for child-adult encounter, it is also necessary, in addition to examining adults' scripts, to look at the scripts created by children (see Nelson 1986, 231). In my own data there is not a great deal of activity occurring amongst the children. But those few periods in which children act amongst themselves give a good indication of the way they construct joint chains of argumentation. I would suppose that deeper study of dialogues between children would open up improved potential for seeing the significance of the child's position as subject.

In their research on the play of under school-age children Nelson and Seidman (1984 68-69) used the script concept to describe how children's personal experiences were organised in their games. The scripts formed pieces of action which were organised around objectives. These defined the roles of the actors and the stages. In their research Nelson and Seidman observed that under school-age children in fact talk about their experiential knowledge in the form of screenplays or scripts. The children use their knowledge about actions and events in order to maintain the comradely interaction. The action-packed play contained complex and varied talk. The children's personal variations on the theme of the game were taken as part of the joint play and the game took on new forms and content. In this manner a new way was developed of
collectively dealing with the theme in question. These new collectively-produced behaviour forms of speech and action are internalised by their adoption. The scripts affect how children interpret and remember stories and daily events. Nelson and Seidman assumed that conversation with small children succeeds (becomes a balanced dialogue) when the participants use the same script-knowledge in their discussion.

If we use these observations about the formation of script knowledge amongst children for the construction of adult-child interactions, the action script shared between the parties is emphasized. (See Figure 5).

*Figure 5. The encounter and the creation of a joint script*

Interaction containing questions and responses still does not, in itself, create the potential for achieving fresh knowledge and results. Children and adults bring their own scripts with them to the situation which help them analyze the situation and clarify the demands which, amongst other things, the other participant is setting. The development of events which observe each other's subject position requires the creation of a joint script based on the individually offered hints. This is a natural progression in informal encounters. However, in institutional speech behaviour it does not usually happen. From the point of view of children, however, the situation becomes problematic when they are treated as the target of examination or professional work in the welfare clinic, the day care centre, the school and the library, for this is where they spend most of their time, healthy, aware and eager to learn. In the case of small children it is often a question of games and their development. The professionally-created, official, institutionalised scripts reduce the children's rights to act spontaneously as subjects in their own daily lives alongside the adults who have been trained especially for them.
Joint scripts are created in peer groups amongst members of one's own generation (see Figure 6). As in Nelson's research (1984, 1986) my own data had examples of children's quick and personal way of creating a mental image of a new situation. All the group members could make their own contribution to this image formation. Correspondingly, adults also create their own peer groups in which script knowledge takes shape. Social interaction, sensitivity to listen and a readiness to take part in developing scripts which are individual and collaborative, within peer groups and between generations. The scripts criss-cross at many levels and are in reciprocal dialogue. The elements in the formation of the children's subject position include the view of children as active individuals guiding their own learning, the view of knowledge as a dynamic process and, at the base of these viewpoints, listening for expectations and intentions and the production of a joint script. The key question remains: who produces results and with whom are results produced? Briefly, one could characterise the reinforcement of the child's subject position as the search for the professional adult's and child's common story.

The child as tacit client

When comparing child institutions with adult institutions it can be said that both children and adults are subordinate in their relationship with the professional. However, children are subordinate in yet another way. They are not even seen as clients. The clients are their parents and the children themselves are "tacit clients" in the background. The library is an exception where, since the 1960s, the activities have been developed with the viewpoint that the child is a client. In other child institutions the general practice in evaluating the quality of work is nowadays to ask the opinion of the parents in the welfare clinic, the day care centre and the school. Children's concepts are
not of interest. It is true that in some schools children are also being asked to evaluate the work of the school.

In my research I have sought ways of getting children's activities and their knowledge interests to become part of the professional's work. Some new tools have been found which help professional development.

In the laws and statutes concerning institutions there is little explicitly said about the child's position as subject. Activity is structured for adult decision-making and the children are the 'material' which is shaped by the professional practitioner. Furthermore, children are not generally expected to participate in the decision making or the knowledge production. With certain exceptions, the creative work of children does not enrich that activity which is organised and developed in places specially created for them.

The work of the institutions reflects different child concepts. Legal documents and established professional practices reveal assumptions about the child, the adult's place in the child's world and the responsibilities for the child's development. The institutions differ from each other but at the same time share similar features. In spite of apparent uniformity at a higher level, practice in different situations varies and the same worker may use many different strategies in regulating interaction.

What concerns child research also concerns the development of the practice of listening to children. In The Agreement on Children's Rights (1993) Article 12 stresses that children should be heard in matters which concern them. The aim is to develop and confirm this practice so that children will have their say. However, particularly in difficult situations where one is forced, for example, to resort to juridical measures, it is likely that children will be heard by being asked countless questions. Once more it should be emphasised that, with their questions, adults often place children in a difficult situation and, if anything, prevent them from expressing their opinion rather than helping them to be heard. Methods should be developed which will help to guarantee children's rights and chances to consider matters for themselves and to express their viewpoints in their own way.

The children's hundred questions.

It is not always easy to hear or understand the questions of children. They ask them in as many different ways as adults. They use direct and indirect forms. They persuade with their questions and they question with their persuasion. They invite you by their questions to discuss with them and they reflect and wonder at times with a thousand questions. The adults' manner of relating to their questions often resolves whether children continue to develop their questions or whether they stop asking. Children's questions are quietened by adult responses, by both positive and negative evaluation, by pedagogical counterquestions and particularly by adults' own questions which assess
children's knowledge and skills. Children's reflections and questions are in abundance just there where adults also reflect and question, wonder and err.

In linguistics it is pointed out that in normal conversation the question gets its meaning from the response (Raevaara 1993). In institutionalised conversations adults' questions reduce the unit of conversation and hinder the development of question-response pairs. The structure of child-institution interaction could be changed so that we would find a way towards normal conversational modes. Let the children's voices be heard and clear a space for their individuality.

The meanings contained in the questions can be examined on many levels. The viewpoints of both adult and child must be chosen. In this research children's questions have been related to their context and to the institutional script created by adults. When children pose questions, the questions have meanings for the children themselves. They are presenting their personal wishes. But in presenting the questions to another, the children also want to influence that other person. The same applies to adults' questions. They have their own meaning from the point of view of a personal quest for information but in addition they have an interactional function the intention of which also is to influence the other party.

However, in addition to these meanings, the receivers also give their own meanings to the question. The receivers ponder over the purpose of the question, wondering why the question was posed and what the expectations are, and so on. Questions always have both an intra- and an inter-psychic meaning.

The aim in institutions is to consciously promote the children's linguistic development but some structures in the institutional scripts actually prevent the generation of balanced, fluent conversation and, simultaneously, falsify the concept of language. Normal conversational language, which is rich and complex, is placed in a secondary position and the professional interactional style, which is leading, question-based and persuasive, is seen as symbolising developed language. These problems have become particularly apparent in the teaching of hearing-impaired children (Bullard & Schirmer 1991 243). It is necessary to examine children's own scripts in order to get a grip on the issues which are lacking in professional practice and which prevent children participating in the interaction.

As I have already pointed out, children create scripts amongst themselves and independently construct their interaction. In dealing with scripts, the following levels, at least, should receive attention: The adults' adoption of the institutional script, the children's own scripts, the situation script and how the participants share the joint situation-bound scripts.

The official objective of the child welfare clinic is stated thus: "The fostering of somatic health which was earlier emphasised and is often still in the fore, easily makes an object of the child. We should not forget to notice children and get them to be, in their own way, equal conversational partners with their own hopes, joys, expectations,
fears and ideas. The child should become one of the principal characters during the visit to the welfare clinic."

(Memorandum of the Welfare clinic... 1984 100).

However, the prerequisite for becoming one of the "principal characters" is mutual interaction. In the welfare clinic children could, through discussion, offer knowledge about themselves in the same way that the welfare workers offer their expertise and time to the children. But it is useless to make the welfare workers give children the principal role as long as meanings which underestimate children in the adult-child relationship are built into all the instruments (laws, tests, developmental follow-up).

The developmental forms used in the welfare clinics should be renewed with consideration of the kind of child developmental theories and knowledge concepts upon which they are based. In their present form they create a primitive moment of teaching to the children. They are presented with standardised tests and the answers are analyzed without telling the children the results of the evaluation.

Questions are at the heart of interaction. In our normal daily conversation we use questions to give the other person the chance to influence us and our concepts. In the care and educational work of day care centres and schools, we use pedagogical, pilot and Socratic questions which do give students the chance to influence themselves and change their own concepts. But questions can also be harnessed to the subordinating use of power. In the daily routine of day care centres and schools, unlike clinics and libraries, professionals frequently encounter children in groups. One-to-one dialogue is seldom possible. Another problem arises from the tradition of question-based teaching which presupposes that the teachers pose educational questions to the children. In order to improve the children's position, different types of strategies should be found.

Spontaneous scripts take shape on three different levels: between children, between adults and between children and professionals. The combining of these three levels in the work process would further the emphasising of the child's position.

Of the institutions studied in this research the library appears to be the only one with the kind of general service principle which makes the children visible and audible. Although the tasks of the institutions differ greatly from each other, the central question nevertheless remains about what the children learn in their doings with the child professionals. In the library they learn that their questions are valued just as they are. They learn to take the initiative and they learn a fluent and rewarding conversational style which belongs to being a library client and resembles normal conversation. They also learn to act independently. The children learn precisely that which the staff want to teach them, in contrast to the other institutions. It does not often occur to the welfare clinics that children might learn something during their visits. In pedagogical institutions, day care centres and schools, children have to largely learn the set-you-guessing techniques of adults' thoughts.

Since all the conditions for balanced conversation between children and adults already exist in the library it should be possible to progress and change, for example, fairy-tale hours into children's story clubs, organise writers' clubs for school beginners
and philosophy clubs for the bigger questioners. These kinds of ideas have already been tried.

Changes in dialogues could also be sought by considering the external features of activities, such as seating arrangements and the tools being used. Who decides and who has the right to choose, for example, the study tools or the research tools and toys in the day care centre? The analysis of child professional questions and observation of the sections of conversation and the exposure of criss-crossing scripts would further the discovery of the subject position of children. Independent and socially-aware learning is generated by processing personal knowledge and by forming questions - it is the natural way of learning for the small child. The same basic structures can also be seen in the working methods of adults.

**Children teaching professionals**

Finally I would like to give the floor to three children - Kassu, Heidi and Tuuli. Kassu's countless questions, in this case while watching a Moomin video, have helped me spot the numerous viewpoints which attract the attention of the smallest child when watching fairy-story videos. Heidi's and Tuuli's story, on the other hand, is an excellent example of the fostering of the child's position in day care pedagogy. The girls are passing the time in preschool. They have settled themselves on the floor around a large piece of paper with their felt-tip pens and are starting some joint creative work. They are drawing and telling, in turn and simultaneously, their bird story. Sirkka, their kindergarten teacher, puts their story into written form. The situation has been put on video and reconstructed.

**Kassu's questions**

At home watching the video, for perhaps the ninth time, of the troll scene from the Moomin story: "Why does that troll's skirt move like that? What does the skirt do?" "Why doesn't the troll come in even though it's so lonely? Doesn't it want to?" "Why does the troll say grrr to Alice? Why is it cross with Alice?" Why doesn't the troll knit its eyebrows when it's angry, like I do?"

The first times we watched the trollness of the troll without a whisper, hand in hand. Then the questions began. The three-year-old viewer dug deeper and deeper into the telling of the story. Layer by layer he brought out all the diversity which the Moomin story-makers have put, wittingly or unwittingly, into the cartoon series. The nuances in the music, the changes in colour, the thoughts of the characters and their relationships, the changes in the days and the seasons. "Is night falling soon?" "Is it spring or autumn now, when the snow melts?"

And the adult sits by in amazement. I noticed that Kassu did not want to watch the same film or listen to the same story again and again for the sake of repetition, a
feeling of security or ritual. He apparently did it because he wanted to clarify for
himself every single viewpoint which he could find in the narrative.

Heidi's and Tuuli's bird family

This is an extract taken from the creative process.

Heidi suggests to Tuuli: Shall we tell something about this. Tuuli: I don't know. Heidi: I would. Tuuli: Just the two of us then. Heidi: Yes. Tuuli: You're lots quicker. The girls carry on quietly drawing. Tuuli draws a face on the moon and a woolly cap. Sirkka asks the girls: Are you making a text together? Girls: Yes. Sirkka: Hm. I'll write here Heidi and Tuuli. Sirkka: Who's starting? Heidi whispers to Tuuli: You start. Tuuli: whispers: OK. Sirkka: Hm. Tuuli: The moon laughs at the red bird. Tuuli draws and Sirkka writes it down. Tuuli watches Heidi: Now you. Heidi: The sun smiles at the green bird. Sirkka and the girls laugh. Tuuli: From the rainclouds come... Sirkka: Hm. Heidi: From the black cloud comes... Tuuli: A yellow bird sends snow all over the bullfinch. Sirkka repeats it to remember it. Tuuli: A green lapwing. Tuuli draws. Heidi responds to Sirkka's questioning look: The stripe bird wonders... Heidi: The mouth... Tuuli: The green lapwing says caw. Heidi continues after Tuuli's encouragement: Flower comes up... Tuuli: Two little birds are... Heidi: And then that starling wonders... Tuuli draws. Heidi: A black flower grows. Tuuli: The red bird is just... Heidi: When the rain starts there comes a green...

The girls carry on drawing. Tuuli: On top of a yellow rock... Heidi smiles and says: On top of a yellow rock stands a cat. Tuuli: In the grass stands a black rabbit... Heidi: The cat wags her tail... Tuuli: The rabbit is eating. Heidi: The moon wonders when... Tuuli: draws at the same time and says: The fir tree grew... a nest. Heidi: In the tree had grown... Tuuli: The moon rocks the nest. Sirkka: The tree? Tuuli: The moon! Heidi, it's your turn. Heidi: The fir tree is... Tuuli: A little house... Heidi: Next to the fir tree... Tuuli: An orange star... Heidi: The cat tried... Sirkka repeats it. Heidi: Yes Tuuli: The bird got away. Heidi: The cat didn't care... Tuuli: That bird got... Heidi: In her tail the cat had... a little crown. Tuuli: Snowflakes began to fall. Heidi: And the moon laughed... Tuuli: Different coloured hailstones Heidi: The starling said to the bullfinch... Sirkka: Beware of the yellow bird, wasn't it? Heidi: Yes. Tuuli: Hailstones began to come... And suddenly lilac ones. Heidi: Into the sky comes one... Tuuli: The story ends here. Sirkka: Thanks. The girls smile contentedly. Sirkka: Has this story got a name? Heidi: Yes, it has. Tuuli: Yes. Heidi: The bird family. Tuuli: The bird family. Sirkka: Fine, thank you. Will you put the felt tips away then? Sirkka: Interesting details. Tuuli smiles: We had a terribly long story. Sirkka: Well, this long. Sirkka shows the paper. Heidi: Have to do it on two papers.
THE BIRD FAMILY

THE TREE LAUGHS AT THE RED BIRD.
THE SUN SMILES AT THE GREEN BIRD.
FROM THE RAIN CLOUD COMES BLACK AND BLUE WATER
FROM THE BLACK CLOUD COMES RED LIGHTNING
A YELLOW BIRD SENDS SNOW ALL OVER THE BULLFINCH.
A GREEN LAPWING WONDERS ABOUT THE MOON
A STRIPE BIRD WONDERS ABOUT THE YELLOW BIRD
THE GREEN LAPWING SAYS CAW.
A FLOWER COMES UP THE GRASS GROWS
TWO LITTLE BIRDS ARE ABOVE AND BELOW THE STARLING
AND THEN THE STARLING WONDERS ABOUT THE FAT BIRD
THE BLACK BIRD IS THE YELLOW BIRD'S BABY
THE BLACK CLOUD IS PALE BLACK WHICH GETS BLACKER
WHEN IT RAINS, AN AWFUL POOL COMES ON THE GRASS
ON TOP OF A YELLOW ROCK IS A FLOWER AND A BUG
ON TOP OF THE YELLOW ROCK STANDS A CAT.
IN THE GRASS IS A BLACK RABBIT, THE CAT WAGS HER TAIL IN JOY
THE RABBIT IS EATING A CARROT STARTING FROM THE GREEN END
THE MOON WONDERS WHEN THE SUN SMILES
A FIR TREE GREW NEXT TO THE FAT BIRD, ON TOP IS A NEST
IN THE TREE HAD GROWN PINK APPLES
THE TREE ROCKS THE NEST, THE FIR IS AWFULLY SMALL
A LITTLE HOUSE WAS NEXT TO THE FIR TREE, IT WAS RED
NEXT TO THE FIR WAS A STAR AND TWO STARS
AN ORANGE STAR WAS NEXT TO THE BLACK BIRD
THE CAT TRIED TO CATCH THE BIRD
THE BIRD GOT AWAY.
THE CAT DIDN'T CARE ABOUT THE RED MOUSE
LUCKILY THE BIRD GOT TO THE SAFETY OF ITS OWN NEST
IN HER TAIL THE CAT HAD A LITTLE FLOWER
AND THE RABBIT HAD A TULIP FOR A CROWN
SNOWFLAKES BEGAN TO FALL AND THE MOON LAUGHED
WHEN BLUE AND BLACK RAIN FELL FROM THE SKY AND
MULTI-COLOURED HAILSTONES.
THE STARLING SAID TO THE BULLFINCH BEWARE OF THE YELLOW BIRD
IT WILL SEND SNOW OVER YOU
HAILSTONES BEGAN TO COME, BLUE AND RED AND SUDDENLY LILAC
INTO THE SKY COMES ONE BLACK STAR
THE STORY ENDS HERE
Bibliography


Alasutari, P. 1993.
Laadullinen tutkimus. Tampere: Vastapaino.

Aramvard, J. 1983.
Språkbruk och språkutveckling i skolan. Lund: Liber.


Bardy, M. 1994 a.

Bardy, M. 1994 b.
The manuscript of the 100-Years project: Towards a Revision. In Childhood Matters - Social Theory, Practice and Politics. (Ed. Qvortrup et al.) European Centre Vienna: Avebury.

Bardy, M. 1994 c.
Lapsuuden kasikitjoitus. Julkaisematon tutkimussuunnitelma.

The Bases of Planning Pre-school Education. 1994.

Bernstein, B. 1975.


Opetus varhaiskasvatuksessa. Juva: WSOY.

Actual minds, possible worlds. Cambridge Mass.: Harvard University Press.


Caedén, C. 1970.
Children's questions: Their forms, functions and roles in education. Young Children. 25, 202 - 219.
Chaloner, L. 1931.

Om skolan inte fanns. Stockholm: W&W.


Comenius, J. 1913 (1628/1642).

Peruskoululaki 27.5.1983/476.

Laki lasten päivähoitosta 19.1.1973./36


Answering young children's questions as a determinant of their subsequent question-asking behavior. Development psychology, 11. 683 - 687.


Lapset ovat filosofeja. MLL. Jyväskylä: Gummerus.

Fröbel, F. 1826.

The psychology of questions. Hillsdale. NJ: Lawrence Erlbaum Associates.

Hakkakainen, P. 1990.

Harré, R. 1983.
Personal being. Cambridge, Ma: Harvard University Press.

Harré, R. 1983.
Social being. Great Britain: Biddles Ltd, Guildford.


Päällekkäispuhunta perhekeskusteluilussa. Helsingin yliopiston suomen kielen laitoksen pro gradu-tutkielma.


Ajattelu alkaa ihmetyksestä. Ryhmätyöstä yhteistoiminnalliseen oppimiseen. Helsinki: VAPK.


Kuronen, M. 1994 b.


Kärby, G. 1990.


Locke, J. 1693.
Some thoughts concerning education. London.


Memorandum of the finnish welfare clinic action development committee. 1984.

Terveyskasvatustutkimuksen kehittäminen Suomessa 1900-luvulla. Helsinki.
Murphy, T. L. 1991.


Summerhill kasvatuksen uusi suunta. Tapiola: Weilin + Göös.


Lukemishäiriön kognitiivinen tutkimus ja diagnoosi. Turku: Turun yliopiston psykologian laitos.


Pedro, E. 1981.
Social stratification and classroom discourse. Lund: Liber.

Piaget, J. 1932.
The language and thought of the child. New York: The Humanities Press.

Lapsi maailmansa rakentajana. Juva: WSOY.

Pierce, J. 1990.
The more they ask, the more they remember: Variables related to preschoolers' memory for answers to their own questions. Child Study Journal, v20 n4 279 - 286.


Pollock, C. A. 1924.
Children's questions as a basis of what to teach in general sciences. Education Research Bulletin, 3. 3 - 6.


Pramling, I. 1990.
Barn och inlärning. Lund: Studentlitteratur.


Childhood matters - Social theory, practice and politics. European Centre Vienna: Avebury.


Oppiminen ja koulutus. Juvu: WSOY.


Aikakortit, tie lasten ajattelun. Helsinki: VAPK.

Riihela, M. 1993 a. 

Riihela, M. 1993 b. 


Riihela, M. 1994 b. 

Riihela, M. 1996. 

Ethnographic methods and interpretive analysis: Expanding the methodological options of psychologists. Developmental Review 12, 101 - 123.


Rusin, E. 1990. 
Skitkul! Om sk. skräpkultur. Uppsala: OffsetCenter.


Shavit, Z. 1990.  


Strandell, H. 1994 b.  


Teinilä, L. 1990.  

Tizzard, B., Hughes, M., Carmichael, H. & Pinkerton, G. 1983.  

Torrance, E. 1970.  

Tjukovski, K. 1975.  
Från två till fem år: Om barns språk, dikte och fantasit. Översvåla: Tofters tryckeri ab.


Myten om framsteget. Helsingfors: Söderström.


Vygotsky and the social formation of mind. Cambridge, Mass: Harvard University Press.

Östman, I. 1990.  
I. DOCUMENT IDENTIFICATION:

Title: HOW DO WE DEAL WITH CHILDREN'S QUESTIONS?
Semantic aspects of encounters between children and professors in child education

Author(s): MONIKA RIIHELA

Corporate Source: Stakes Box 220 Helsinki Finland

Publication Date: Sept. 1996

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC System, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce the identified document, please CHECK ONE of the following options and sign the release below.

Sample sticker to be affixed to document

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

MONIKA RIIHELA

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Sample sticker to be affixed to document

"PERMISSION TO REPRODUCE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY

MONIKA RIIHELA

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Level 1

Level 2

or here

"PERMISSION TO REPRODUCE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY

MONIKA RIIHELA

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Sign Here, Please

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: MONIKA RIIHELA

Printed Name: MONIKA RIIHELA

Address: Box 220 Helsinki Finland

Telephone Number: +358 (9) 396-2120

Date: 24.8.1996

Position: Project Chief

Organization: Stakes
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of this document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents which cannot be made available through EDRS).

Publisher/Distributor: STACO

Address: BOX 220 00531 HELSINKI FINLAND

Price Per Copy: 92 Pone

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name and address of current copyright/reproduction rights holder:

Name: 

Address: 

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

ACQUISITIONS DEPARTMENT
ERIC/EECE
805 W. PENNSYLVANIA AVE.
URBANA, IL. 61801

If you are making an unsolicited contribution to ERIC, you may return this form (and the document being contributed) to: