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ABSTRACT

The purpose of the study was to describe Finnish children's conceptions of aspects of the adult world and the development of the structure of children's thinking. Ninety boys and girls between the ages of 5 and 10 were interviewed individually. Each child was asked a minimum of 15 questions in each of the following subject areas: 1) war and peace; 2) power and practice of power; 3) deviating groups: prisoners, mentally ill, bums, and the rich; and 4) protection of nature. Questions asked were mainly concerned with a knowledge of facts, but some also required evaluation and value judgement. Following a brief introduction, the report presents a description of the children's conceptions in the four subject areas and points out the similarity of and differences in the ideas of the different age groups. Observations on the children's conceptions and a comparison with earlier studies are made. Interview questions and children's answers to each question in different age groups are included in the appendices. (Author/RM)

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Children's Conceptions of Adult World

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CHILDREN'S CONCEPTIONS OF THE ADULT WORLD

by

Tapio Nummenmaa

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Tapio Nummenmaa

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1. INTRODUCTION

Two worlds

The expression 'the child's world' sounds very nice. It reminds us of certain pleasant things such as excursions to the shore in summer, the sun, dolls, hockey sticks - and of the parents looking at all this with a sweet smile. This is not, however, the whole story. The situation of the child has a number of additional elements. There is also sorrow in his life. Further, besides being a child he is on his way to adulthood, and while doing this he is forming his conceptions of the adult world that he will share one day. The idea he gets may not please him - which very often is the case nowadays. There is a gap between generations, each having a world with thoroughly different conceptions and evaluations.

The child is dependent on adults. Consequently, they have power over him, which is exercised for example by trying to influence his conceptual thinking and its content. In a systematical fashion this takes place through formal education. It can be decided what is offered to the child, and which elements at least must be included in his picture of the world. Such a system does not question what primarily interests the child. Teaching contents are decided upon first, and interest must follow. There is, however, another source of information available - children's books, cartoons, and similar "cultural trash". This system does not question whether the material is of any essential help in forming the child's picture of the world. If he finds this material interesting (which is measured by the amount of sale (so much the better for the system. 'Interest' is the keyword of this system, but the usefulness of the material is completely incidental. There is a third possibility, which is material primarily prepared and intended for adults, such as that provided by the mass media. Although the school is the only instance providing children with information systematically, the effects of the latter two cannot be underestimated. The present investigation is concerned with matters which are at least partly included in the material offered to children, but conceptions of which are probably formed more or less incidentally.

'The adult world' is rich in elements. At the moment it is rather sinister. Take any newspaper, and you will find discord, hate and suffering. There is war, hunger, pollution of nature, fight for power. The effective information media hammer all this into our consciousness rather violently and quickly. Such is one aspect of the world of today that the child enters through the process of

Purpose of the study

The purpose of the study is to describe children's conceptions of some of the darker features of the adult world, such as war and peace, power and the use of power, some deviating groups, and the present problems of nature protection, which have all been frequent topics of discussion in these days, especially in the general mass media. The purpose was thus to show, although rather indirectly as no attempt was made to trace the origin of children's knowledge or conceptions, how much of the above may have entered children's consciousness. The aim of the investigation can be considered twofold: first, to describe the conceptions children have formed of the said matters, in other words, what is the content of their conceptions, and secondly, to describe the development of the structure of children's thinking.

The purpose of the study may be illustrated by the following examples. Children were asked what, in their opinion, people should do to keep nature (earth, water and air) pure. Three answers were:

- 1) "It will if it rains."
- 2) "If the air is dirty they take the dirt off from the air with a sort of dirt aeroplane, and from the water with a water boat, and from the earth they take it with a sort of robot which has a sort of bigger pot where they put it."
- 3) "That you don't junk things in the water and don't put all such stuff in the air, and don't drive cars, and factories - that nobody works in the factories and - but it'd be nice if they went to the factory 'cause then you can get food."

All three were 5-year-old boys. The first boy does not really know what he has been asked. He has observed that some places get clean when it rains, and he is talking about the rain. The second boy is not very well informed, either, as was shown by the rest of his answers. He decides to solve the question at an imaginative level, and makes up for each element a suitable device, which solves the whole problem. The third boy is more clearly speaking to an adult, dealing with the problems and thoughts of an adult. The verbal structure of his expression is perhaps not the best possible, but that of his thinking is unambiguous. The solution he presents is not completely simple; factories will not cause pollution if people do not go to work there, but if they do not, there will be problems of livelihood.

Even this limited collection of answers is enough to give us an idea about the theme of the present investigation. Firstly, the content of children's conceptions can be described; secondly the structural changes in thinking can be dealt with, and thirdly; the imaginative elements of conceptions can be analysed. The report concentrates on the content of conceptions, whereas the
 ages and imaginative elements are discussed more briefly.

Procedure

A list was composed of the questions to be presented to the children (Appendix 1). The list consists of four parts called "War and Peace", "Power and Practice of Power", "Deviating Groups", and "Protection of Nature". A minimum of 15 questions were formulated for each subject area. They were mainly concerned with a knowledge of facts ("how things are"), but some also required evaluation and value judgement.

The material was gathered by interviewing each child individually. The questions were presented in a numerical order, tape-recorded, and afterwards transcribed word by word. To keep the interviewing situation natural, children were not pressed to answer or give an opinion on every question. If the child told the interviewer that he did not know, the latter simply moved to the following question.

The number of children was 90, and the distribution of age and sex is shown by the following table.

Sex	Age group					
	5 - 6		7 - 8		9 - 10	
	N	Average age	N	Average age	N	Average age
Boy	15	5;8	15	7;9	15	9;9
Girl	15	5;9	15	7;9	15	9;10

The youngest subjects came from small Kindergarten-type play-groups which meet about twice a week and the two older groups from an elementary school in the center of Tampere. The children of the middle group were first-graders, those of the oldest group third-graders. The groups are referred to in the text or tables by either ^{age} or class level; for example, children aged 5-6, or pre-school children; children aged 7-8, or first-graders, etc. Those chosen for interview do not form a random sample. It could be said that they are 'ordinary' town children. As far as the generalizability of the results is concerned, the significance of this is an open question. The author's personal view is that the general characteristics of the content of conceptions as well as observations on their structure could well be generalized over and above the studied groups. Results concerning minor details probably cannot be generalized, as the regional circumstances and composition of the subjects of the study are in many respects so decisive that generalization would be less reliable.

The analysis of the data is simple enough to be left without further explanation. It will be described in Chapter II, where the results are presented. Children's answers were tabulated by two persons in the following way: the first person (the author) went through the material, drew up the principles of classification, and obtained the distribution of answers; then the second person (Mrs. Rouhiainen) did the same, independently and using the same principles of classification. A general comparison revealed rather similar distributions of answers. The discrepancies between the results may be due to the fact that as the second processor had a ready-made classification system available, it was easier for her to perceive all the different aspects of each of the answers. The distributions of the answers presented in Appendix 2 are based on the classification of the second processor.

Of the presentation of the results it can be mentioned that Chapter II, which presents the material, includes no evaluation of the results, nor does it deal with any of the few earlier investigations. This was done to let children's own thinking come out as clearly as possible. For the same reason all tables are given separately in Appendix 2. Contrary to the normal practice, they are referred to by giving the number of the table in question in the margin. Chapter III gives a summary of the results, some comments, and information on previous results. The structural changes in conceptions are also discussed. Chapter IV contains a brief analysis of the imaginative elements in children's answers.

2. CHILDREN'S CONCEPTIONS: DESCRIPTION OF CONTENTS

General

This chapter describes children's answers to the questions presented to them. The description is divided into four sections corresponding to the parts of the list of questions used in the interviews, and, with some exceptions, the questions are given in the same order in which they were originally presented.

Two principles were followed in the treatment of each question or subject matter. First, it is not the purpose only to present the most typical and frequent answers; an attempt is also made to show what kinds of less common conceptions occurred. Secondly, the similarity of and differences in the ideas of the different age groups are pointed out, although the comparisons are not based on any statistical method.

The description includes some examples of children's answers. The purpose of these is to eliminate the typical danger of a presentation using classification and analysis, namely that too one-sided and colourless an impression is given of children's thoughts and ideas. The examples have been chosen intuitively; yet certain principles have been followed. An attempt was made to include in the presentation answers of both boys and girls from each age group. Both typical and unusual answers appear in it - of these the latter seem to be more numerous. The examples were picked from the answers of different children, but it was not a rule that only one example should be chosen from one child. For the sake of clarity, some punctuation, mainly commas, were added to the original answers.

The chapter contains no summaries of children's ideas about war and peace or other themes, because it was in any case necessary to give them in Chapter III in connection with the analysis of results, and repetition was undesirable. A reader who is mainly interested in the summaries can find them in the following chapter.

War and Peace

For quite a few children in the two youngest groups the word 'war' suggested nothing particular - of course it must also be kept in mind that the question was the first one presented to them. Many of the youngest (5-6-year-old) children who answered this question mentioned that there is shooting and bombing (with guns, aircraft), and that people get killed. These two viewpoints also appeared combined:

"That's when they shoot and other people get killed." (G 6)²

¹ To facilitate the presentation, the number of the table given in Appendix 2 referred to in the text is given in the margin of this particular part of the text.

The figures in brackets indicate the number of children in the different age groups who failed to answer the question. The first figure in the brackets refers to the youngest group, the second to first-graders, and the third figure to third-graders. This makes it unnecessary to discuss or mention separately in the text the number of those who gave no answer, unless there is some special reason for doing so.

² Without exception, all of the cited answers are complete. The sex of the child whose answer is cited is indicated by G (girl) or B (boy), and the age by the appropriate number of years.

Associations naturally include different types of guns, soldiers, etc. In some answers "houses are destroyed" - a detail worth mentioning, as houses appeared in many other answers as well; during the war they are destroyed, during peace they are built or repaired. A couple of the youngest mentioned Africa or Biafra. A boy or girl who told that he/she was "then" so young that he/she cannot remember, was referring to the Finnish wars. Such references to the native country occurred in some other answers, too, although rather incidentally. The answers of the first-graders resemble those of the preschool children; the only difference is that some of the former were a bit longer. In the following example a first-grader describes our recent wars:

"That all kinds of people are shot and - all sorts of cruel things - bombing and breaking - and the war breaks out when - uh - if Finland won't give the - what was it - Karelia or something - if she doesn't give it to Russia - and then she didn't give it to Russia and then they started the war and - it was Russia who won it and then they had to give away that Karelia." (B 7)

The answers of the third-graders were different, two thirds of them emphasizing that war is some kind of controversy between two countries or states, or the attempt of a state to take territory from another state. Most of the others give the same kinds of answers as the youngest children; only the way of expression is in some cases slightly different:

"Well I get the idea of some war enthusiasts who are cracking their machine-guns there." (B 9)

0,1) What is actually done in war? Regardless of their age, the children suggested shooting, bombing, fighting, killing and dying. Escape and bomb shelter were also mentioned, but all these aspects were not necessarily included in one answer. Two examples:

"That you must have arms - and you must be careful and so that you won't get killed." (B 5)

"They kill people." (B 9)

Further ideas expressed in individual answers were breaking windows, training to shoot, starving, marching, etc. Intergroup differences were negligible - but the youngest children perhaps suggested destruction of houses more often than the other groups.

3,1) Children do not fare very well in war, either. In the wars of the preschool children, children generally get killed, or at least wounded, and the first-graders thought the same. The answers are, however, rather calm, and only some are gloomy.

"They are shot and they die." (G 6)

"It's a dirty trick - they can be shot point-blank, straight through the belly. It's a dirty trick." (B 7)

In the answers of the oldest groups children often have it bad, too, but a new type of answer occurs: people go to the shelter or even to another country, for example to Sweden. Some say that people starve to death, are taken prisoner or lose their father and mother, or get lost themselves. In their drawings of war the children would have emphasized the same. The most popular themes would have been soldiers (very often shooting), arms, guns, bombers, even dying people. The following answer was not at all unusual.

"Well, I'd draw lots of people shooting, and guns, and other people dying." (B 5)

Houses, mostly destroyed, would have been drawn by about half a dozen children. Examples of some individual themes are houses, pirates, a fire-engine, a child, escaping people, even policemen. A curiosity worth mentioning was that the two fighting parties generally would not have been drawn in one picture (frequencies 1,1,2), which is also the case in real war photos. The groups' answers differed very slightly.

The war leader is naturally some kind of commander or general. The school-children often suggest an officer, at least of the rank of colonel. In all groups some suggestions varied from ordinary soldier up to captain. Some of the youngest thought the commander was a policeman; Indian Chief and Owner were also mentioned. For some children the war leader was a Great Person, and some of the oldest mentioned a King. Two persons were mentioned by name, Nasser of Egypt and

"It was - well, I've heard it many times, I just can't get it now, it's like the one in Finland - yes, Mannerheim, he was commanding the Finnish team." (B 9)

But where and why do wars start? And how do they break out? All kinds of causes were suggested, and the answers of the different groups were different. The pre-school children gave a remarkable variety of answers; war just starts, soldiers come, soldiers start shooting around, a country attacks, some country wants to get another country, or it steals, or there is no food, or the king commands. In general, there seemed to be no special feeling of dispute; in this respect war breaks out almost in a social vacuum.

"When they start shooting and there are explosions, and some people die - and some people are so old that they come to the age when they start being soldiers." (G 6)

The majority of those first-graders who gave an answer - more than one third of them did not - express the main idea that "men" or some individuals start fighting or quarrelling. Only some emphasized that the dispute concerns two countries, or that one country wants to have something that the other country does not want to give. One of the children of this group gave the order, first rebellion, then war. In the oldest group the most common idea was a dispute between nations or countries; yet other types of answers were also presented, resembling those of the younger groups.

"Well, just now they could start a war - or no I don't think they would just any of these days - although they could, you know, as they have all those arms races - and then those disputes they have between countries, and boundary marks." (B 9)

The thought was also expressed that there will be no war if the other country gives in.

"War starts when - for all kinds of reasons, like - if the other country doesn't give in - I mean so that it can't occupy - like Russia when she occupied Czechoslovakia, but then Czechoslovakia gave in and didn't start any war." (B 7)

8,3) Who decides or tells if there must be war? As the youngest had no idea how wars generally break out, the question was somewhat difficult. The most usual answers were 'president' (some other ruler), 'war chief', God or Jesus, or 'soldiers' (army), 'Police' was mentioned a couple of times. The commands of the leader may be described in vivid detail:

"There is a commander uncle who decides that now they must march with their rucksacks bouncing." (B 5)

In the middle group both the police and the powers of Heaven get less support. The 'State' was suggested five times, as was the more ambiguous 'those who decide':

"Well all them folks who decide at a meeting." (G 7)

The answers of the older children were concerned with various titles of rulers - president, king, or just 'ruler'. 'Government', 'council' and 'war commander' also appeared to have power; two or three children had the opinion that the breaking out of war is not decided by anyone.

7,4) The question if there is war going on "now" in any part of the world (winter-spring 1970) yielded many ^{kind} of answers. The war actually going on at that time was the Vietnam war, and the different groups indeed gave this example

(frequencies 2,7,11). One person mentioned Cambodia, another Laos. Egypt, Israel or Jordan were also mentioned (1,1,7), as well as the Biafran war, which by the time in question was already over. (2,1,2). All groups suggested Africa a number of times. A considerable number of the youngest group thought there was no war going on anywhere at the time. The general attitude expressed by all groups was that there might very well be war somewhere, as there always is.

"There may be war anytime, any second there might be one, if there are naughty people who come into a country." (G 5)

The youngest in particular located their wars in Paris, in the west, in Italy, or even in Helsinki. One of the third-graders mentioned Australia, one of the first-graders Italy. It is impossible to judge whether their ideas were based on current news on riots, or on something else. A great many children, however, mentioned some kind of war that had at least recently been waged; more accurately, this was done by about half a dozen of the youngest, one third from first-graders, and about two thirds from third-graders.

The children were also asked whether war could also come to Finland. In the youngest group the answers were rather evenly divided, the two older groups with a two-thirds majority held it possible that in principle war can spread anywhere, thus also to Finland.

"I'm not so sure about it any more cause when Finland and the Soviet Union made the war contract they said that they made a peace treaty." (B 9)

The children were also asked what we could do to prevent war. The youngest groups had very little to say, but ^{we} must remember that their notions of the outbreak of war were rather vague. Six of the youngest children thought that nothing could be done, whereas three children said that they would emigrate. Other solutions offered were to fetch soldiers, ask Jesus, tell the police, defend oneself, build solid houses. Among the first-graders the solution of "being nice", not fighting, not quarrelling was dominant. A couple of children propose that we should have good relations with other countries and help them; cf. the following response in which mutual effort is manifest.

"We wouldn't quarrel with the state and it wouldn't quarrel with another state." (G 7)

In the older groups this view is dominant, some children mention the Unite

1(7,4,1) When war is first talked about for a long time and then the term "peace" is introduced it is understandable that many children point out that then there is no war or it is over: or the fighting is ended, for instance:

"Peace - it means that the country is all right again and the broken houses are whole, not in pieces as during the war and people are in peace and they needn't be at the front." (B 10)

The differences between the groups are not great; the youngest tend to emphasize the fact that happiness prevails while the older groups characteristically consider good international relations important. In some individual answers people spend every day at the summer cottage, nothing happens, people can be free, Indians smoke the pipe of peace or the like.

2(1,0,0) Almost complete agreement exists as regards the desirability of peace; this was asked mainly as a control question.

3(7,5,4) The variety of actions during peace is larger than during the war. People clean and build houses, are friends, give parties, lead nice and quiet lives, live an ordinary life. They refrain (particularly the middle groups) from shooting and bombing. In some cases preparations for war are mentioned; people build shelters, practise shooting and make war material. The general tone of responses is much the same in all groups, although the oldest group, of course, gives more structured answers. This can be illustrated by comparing two answers in which the idea of house-building occurs.

"More houses are built." (B 5)

"There are all sorts of new things and the world is modernized so that more houses are built and this town is modernized." (B.10)

4(11,15,6) The ways of avoiding or preventing war were discussed above. Peace - understandably - can be preserved in the same way. The youngest children find the problem difficult. Many kinds of answers were given: people must not fight of fuss, the Father in Heaven is invoked, parents bring up their children to be obedient, peace can be requested, people can hide, etc. In the middle groups the responses "not fighting", and "not quarrelling" are frequent; other types are: people should not make revolutions, they should believe in God, the police should decide. The oldest group bring up first and foremost good international relations, which can be achieved also by helping other countries or visiting them.

5(2,1,2) The picture of peace, i.e. one children would draw, is much more complex than the picture of war; there are no dominating motifs corresponding to guns and soldiers. People - ordinary people - would often be drawn and they might look happy;

"People who look kind; such people who laugh." (B 8)

People can be in peace or do various kinds of chores, they often can walk in the street, and go out shopping. Many children would draw houses. The youngest children have two distinguishing characteristics. One of them is the fact that the idea of war persists and they would again draw soldiers, a bomber in the sky, guns and other military scenes. The other is the use of subtle, indirect descriptions of peace. A few illustrations may suffice:

"I'd draw a white flag and put there all people are eating." (B 5)

"Well, I'd draw a night and then it would be quiet and everybody would be sleeping." (B 5)

"A girl and her mummy." (G 5)

"A house and summer and then I'd put there some grass and stones and then a small, you know a white carpet which people can lie on." (G 6)

"A cat would walk and drink milk." (G 6)

Power and use of power

The first questions in this field were connected with the concept of power (20,9,2) and general use of power. The term "power" is in itself strange to most of the youngest children; two thirds cannot answer anything, some answers take up such things as property, a big house, or "taking everything to oneself", thus ownership in general. Some answers are rather incomprehensible, many first-graders find it hard to answer, too. One half of those who answered and thus almost one half of the entire sample equates power with property. Three say that it means that one "can command" and two think that power means arbitrary use of force, "you can even kill," or "you can break a house". The third-graders' responses are almost evenly divided into three categories: "one has property", "one can command" or "one is President, King or other ruler".

The youngest group, the Kindergarten children, indicate that there are, in (3,1,0) the main, three groups in Finland which can decide on important matters. These are the President (or gresigrent or Kekkonen), the police, and the Father in Heaven (or God or Jesus). Some scattered responses mention the rich, father and mother, other relatives and the Prime Minister. The state occurs in two answers. Of the first-graders one half mention the president (or the name Kekkonen, or even more familiar Urkki). Other responses are diverse: the parents, our Heavenly Father, the king, offices or bureau, etc. In the oldest group almost everybody mentions the President, although a few mention the cabinet, Helsinki in general, or Koivisto (who was then Prime Minister).

If the situation is narrowed down to Tampere only the youngest children think that it is the police or Jesus (or God or the Heavenly Father) who decide what can be done. Together these make up one half of the whole group. Mother and father and the janitor are also powerful. The president and the state also get scattered votes. The first-graders find the question difficult - to judge by the large number of don't know-answers. The responses are scattered. The vagueness of the nations is evident in the following answer:

"Anything one wishes, Finland is a free country - the police and the janitors who decide." (B 7)

In the oldest group various municipal organs are familiar: city council, the mayor (or the name Paavola). Mother and father and the President are occasionally mentioned, the police seldom.

Little power is possessed obviously, by those who do not have much of it. It is interesting to see what these opposites of the President, the rich, and the police are. Among the youngest children the following are common: the poor (10 answers), Finns or ordinary people (6 answers) and children (4 answers; one child mentions the children of Biafra). In scattered responses various categories come up: negroes, military commander, criminals, witches, and Jesus. The majority of responses in the first-graders' group are "ordinary people" or "ordinary Finns"; half a dozen mention the poor, and there are further a few scattered responses. The same holds true of the older children but now half a dozen reveal a completely new type of response: the president, minister, MP, or the mayor. A few examples:

"Those who serve them, like in factories. When they work there they don't have much influence there." (B 7)

"Ordinary people who have them ordinary jobs." (G 9)

The children were also asked what the term "law" means. The youngest children do not know and most of them say so. The older groups interpret the law as something that commands something and which must be obeyed; some point out that the law also lays down punishments.

"If somebody does something wrong he is taken to the court but if he doesn't then he obeys the law." (B 7)

Another, and somewhat vague, question concerned the problem: what happens if somebody does something he should not do? This question was presented after the question which asked about who can control people's doings in Tampere. The answers were naturally influenced to some extent by the preceding answer. The groups do not differ very much. On the whole the consequences do not seem very positive; most children think that people are put behind bars or in prison,

possibly taken to the court and fined, or generally speaking punished. In some - exceptional - cases "shooting" and "may be killed" are mentioned. The oldest group sometimes mentions the legal process. Only one child analyzes separately the possibility of being not caught:

"Well, if nobody notices it nothing happens, but if it is found out he may get fines or may be taken to the police-station." (B 9)

A few questions dealt with school; it was not so much that these responses would reveal anything surprising but to see how the answers are motivated. When the children were asked who decides that children must go to school the youngest 22(1,4,3) generally mention "parents", "teacher" or "police", although the police in some cases just enforce the law:

"If they won't go, then the police grabs them by the neck and takes them to school." (B 5)

In the first-graders the police disappear and only one third mention the parents or the teacher. They are replaced by various organs of the state: President, state, law, town, etc. The majority of the oldest children mention the National Board of Schools.

Schools exist for the purpose of learning. This is an almost unanimous opinion. The first-graders emphasize the three R's: reading, writing, arithmetic, while the third-graders give more emphasis on a more general objective; 23(1,1,0) occupational considerations also come up. Below is given an example of both trends.

"One learns to count and read and write." (G 7)

"Because one learns well so that when one gets older one won't be unemployed; when one goes to school one can get a job and one won't be poor if one can get a job." (G 7)

24(0,0,0) Almost all children share the view that it is the teacher or principal who rules at school. But it is more difficult to say why. An exceptionally large 5(15,18,10) part of all groups do not answer the question. Where there is an answer the contents are something to the effect "the teachers always command", "the teacher is there" or "there is nobody else". Some children think that there would be no success with the tasks ^{if} the teacher did not keep order. Below are two answers of this kind:

"Because at school one can't do what one wishes and one must listen to the teacher and one wouldn't learn to read or do other things if one only talks and fools around and the teacher can't say a word." (G 5)

"If the children had all the power in this school there would soon be broken windows and black eyes." (B 9)

The phenomenon may be a coincidence but attention can anyway be called to the fact that in the answer of the 5-year-old child the opposite of "teacher power" is the freedom to do anything one wishes while for the 9-year-old child it was "child power". A couple of third-graders put the teachers into the larger framework of the National school administration; the teachers have their own rules and regulations to obey.

The home is the territory of parents. It can be noted that almost always both parents are mentioned: the answer may be "parents", "father or mother" or 26(0,0,0) "father and mother". When only one parent is mentioned, mother alone occurs with half a dozen pre-school children and father more often with older children. When the family make decisions children's opinions are often asked, at least 27(0,0,0) sometimes, for most of the children. In both of the two younger groups 7 children think that children are never or almost never asked. If children want something their parents do not want -

"It's not very nice, cause the child doesn't feel good, either." (G 7)

In cases like this the parents are seldom opposed. In these exceptional 28(6,7,2) cases it may be as follows

"So, that it may happen that a child takes something without asking while the others are away, like shopping." (B 5)

"Then the parents must give in or do something." (G 9)

But this happens only exceptionally. Different schools of opinion exist even in the cases in which the parents have the final word. The most usual case is that the parents only say no or the like. In the two youngest groups half a dozen children are spanked at once if they disagree with their parents, in the older group there is one such case as well. There may be arguments and quarrels and sometimes the children are angry. Sometimes the father starts explaining:

"Well, when I want something and mother or father don't give it to me I always ask why I can't get it, you know, then father starts explaining that it may be too expensive or it is no good or something." (G 9)

If the children were allowed to have free decision on two things which would be nice they would mostly want to get some things - sometimes they would do 29(4,3,1) something which is specified more closely like being out, doing nothing, going some place with father etc. Older children mention more often abstract things, although concrete things are the most important in all groups.

30(2,25) At the end of this section the children were asked what they are afraid of. In all groups approx. one third say that they fear nothing. The traditional fear of the dark and fear of various animals are clearly seen in the youngest children.

Such animals are snakes, crocodiles, lions, elephants, bears, eagles, elks, angry dogs, and scratching cats. In some scattered answers children are afraid of bums, dying, the witch, Indian attack, and the fire. In the middle group there are slightly more children than in the youngest groups who maintain that they are not afraid of anything, and the fear of animals disappears. Many kinds of fears are mentioned: concrete physical fears such as the fire, car-crashes, accidents, sinking boat, illness etc. Two children mention quarrels and punishments. In the oldest group the fears are otherwise similar but social fears become more evident: punishment, mother gets angry, school tests and failure in them etc.

"If one has done something wrong and then one ought to tell about it but one daren't." (G 10)

In each group some children mention the fear of war.

Deviating groups

Prisoners

Prison means roughly the same for all children; bad people (done something naughty, bad etc.) or crooks and thieves are put into prison. Some children - 31(3,1,0) particularly the older ones - emphasize that one cannot get out of there or that one must stay there for a definite time. One child says that children are not taken there.

"Prisons are places where naughty adults are put, but children are left alone." (G 5)

Some children mention concrete characteristics: iron or chains are examples of this.

"Such an iron thing in which the police always keep them." (B 5)

It is not particularly pleasant in the prisons. The younger children 32(3,4,3) consider the food in prison poor if there is any food at all. The furniture is also poor. There is not much to do: people just stay there, read newspapers, talk, sing or yell. Sometimes prisoners try to escape. The older children have a somewhat different idea of prisons in that they think prisoners often work, clean up, sew, etc.

"Some work - it's terrible - terrible." (B 8)

Prisoners may also - the idea occurs occasionally in all groups - be sad or think of their evil deeds.

"They think why they've done evil." (G 9)

The reasons for being sent ^{to} prison are similar in all groups. Some crimes have been committed even if in the youngest group the idea is more often expressed by saying that they have "been naughty"; in the older groups the same expression may occur but often also expressions like "broken the law". Of different types of crimes theft is most frequently mentioned, then murder, drunkennes and drunken driving (only one case). A few children in each group say that the criminals are put in prison so that they would learn to live better but the dominant idea is punishment for wrong-doing.

The question can be raised whether people change in prisons. The youngest children think that there is often little change. When there are changes these may often be only physical; prisoners get older or otherwise look different. Changes can occasionally be great:

"Yes, when they get out they look totally different so that their mothers won't recognize them any more." (B 5)

Eight children in the youngest group think, however, that prisoners become better in prison. In the middle group - first-graders - the idea of improvement occurs often; in fact, it is the commonest answer.

"Well, one would think that after they have been there so long they would not start stealing again or be as bad as before." (G 7)

Some children of this group think that it depends: some change and some do not. This type of answer is dominant among third-graders but all other types are also represented. Most express the matter in these words - "it depends on the case" - but some elaborate their answers. Some children think that it depends on the person, some on the punishment.

"They may change if the punishment is severe enough so that they'll understand what they are up against. Some young boys, when they have got an easy punishment, they believe that next time they'll get away as easily, so they'll go on in the same way." (B 9)

There was only one child, a 9-year-old girl, in the whole group who thought that one can become worse:

"They won't change much, they may even get worse." (G 9)

The youngest children think almost unanimously that it is the police who decide who is put in prison. The sheriff, president and even crooks are mentioned in a few answers. In the middle group, too, the police dominates, but a few suggest "the state" and one child "the law". In the oldest group one half of the children mention the police, one half justice, legal processes, or the law. Is it right to put people in prison? The youngest children are fairly equally divided in

three categories: it is not right (no reasons), it is right (no reasons) and it is right, because one must not do wrong. Among the oldest children the last category is prevalent. In the school-children's answers a few qualified viewpoints are expressed: "sometimes yes sometimes no."

Mentally ill

A mentally ill person is rather a strange concept to the youngest children, perhaps also to the first-graders. One half of the youngest group say that they do not know what the word means. One half of those who answered say that the person is ill. A few say that the person is crazy, does not do nice things, etc. Irrational actions are described in one answer, one child says that mentally ill people have "no sense in the head" and one child says that they have brain damage. First-graders' answers are similar. A few answer something in the style of "they sing and talk to themselves", "they do not know what to do," or

"Like he doesn't understand what he says or then he walks in a funny way and his legs twist funny-like." (G 7)

The older children do not give real definitions either, but their answers include a few aspects which are related to the concept of mental illness or mental deviation: They have no sense, ill in the head etc. (13 answers), retarded or feeble-minded (2) nervous breakdown or the like (4).

Generally the children think that a mentally ill person cannot be recognized by outward appearances but in all groups there are a few who maintain that they can without giving any reasons. Some subjects in all groups explain that they are recognized by their conduct not by their looks.

"You can't know him by his looks but you can by his behavior." (B 5)

"Sometimes you can know when he has a certain look but often you can't - only when he starts asking or saying something." (B 7)

"You can't know them very well by appearances but by how they behave." (B 9)

"Yes, you can 'cause they are such that they don't do things like other people do them." (G 9)

When - and this occurs seldom - the children consider that there is some purely physical characteristic this may be some peculiar facial expression, voice or white cheeks.

For further assurance the children were also asked if mentally ill people do something that other people do not do. The youngest children often do not

know, or say that they do not, or say that they do without further explanations.
 39(5,0,1) Approximately one half of them tell about various crazy actions: breaking windows, driving a car anywhere, shouting and bawling. In the older groups reasoned answers are more frequent - part of them mention stealing, fighting and the like, slightly fewer answers describe lacking contact with the world or various crazy actions. Two examples:

"Yes, they do - they don't understand very well what they do." (B 8)

"Well, yes they are somewhat different and do things different - well they may not do some work different but when they talk it's like they don't understand what they say, you see." (G 9)

In all groups the majority think that mental illness can be cured. It may
 40(2,1,0) be questioned what this opinion means in general and among the youngest in particular since they did not really know what the word means - this may be a case of some kind of general tendency to agree. Some first-graders point out that the cure depends on the case:

"Yes, they can be cured if the case is not serious; they can be cured by some medicines or they may get better on their own." (B 7)

In the oldest groups one third of the children point out that they cannot always be cured or that the worst cases cannot be cured.

In the youngest groups the votes are equally divided when the question is
 41(5,1,0) put as to whether it is obligatory to stay in a mental hospital, and the same holds true of the third-graders. The first-graders generally think that it is obligatory. Reasons are seldom offered; sometimes it is said that the worst cases must stay there.

Who sends people to mental hospitals? Three agencies are central: the police, the doctor (and nursing personnel) and the relatives. The youngest
 42(11,8,6) group favour the police more than the others, the middle group the medical profession and the oldest group emphasize the role of the relatives. In some scattered answers the youngest may mention "uncle register", ambulance driver, the person himself, head of the mental hospital; the middle group may say "the state", "the law", "the president"; the oldest group may mention municipal administrative agencies: the town or town council.

Bums

The questions concerning "bums" were phrased using the Finnish equivalent of the word bum ('puliukko'), since other, more official terms, "vagrant",

"drifter", "homeless alcoholic", might have been unknown to the children. The
 43(3,0,0) word "puliukko" on the other hand was familiar to most of the children. Part
 of the children do not obviously distinguish between people who are drunk
 occasionally and those who are alcoholics living in want; this must be borne
 in mind when the results are analyzed. A bum drinks liquor (or beer) and/or is
 drunk. Let us look at a few examples to see how this idea is expressed.

"If one has drunk so terribly much one becomes a drunkard." (G 6)

"He is so drunk that he doesn't understand very much." (G 8)

"He drinks all kinds of stuff so that he gets drunk." (G 8)

"It's a man or a woman, mostly a man, who drinks all kinds of strong
 stuff and doesn't get rid of its hold but must always drink." (B 9)

It is difficult to establish what is the drink that children think of and
 how continuous this drinking is thought to be. These traits have not been analyzed
 any closer. A few complete their definitions by saying that bums walk in the
 woods or similar places.

Becoming a bum is fairly simple: if one drinks alcohol or beer one becomes
 a bum. The two younger groups do not go any deeper. In the older group one
 44(5,7,2) half of the children give a similar answer. Half a dozen specifically point
 out that drinking has become a habit, and half a dozen children say that their
 chums must have persuaded them or set a tempting example. One child brings up
 the misuse of medicine as a possible cause.

Are people angry at bums? Yes, almost all children think so, and rather
 many - particularly school children - explain or justify their answers. At this
 45(0,2,2) point too, it is difficult to tell to what extent the children have thought of
 drunk people in general. A very common reason for being angry is the fact that
 bums drink alcohol, roughly ten answers in all groups. But otherwise the answers
 are varied.

"Yes, they are angry - bums piss in the doorways and leave alcohol bottles
 anywhere and then they beg sometimes, some have come to our house, too.
 When we were living in a wooden house a bum came to ask for a loaf and
 when my sister came he threw the loaf at the bookstore window." (B 7)

The selection is great: they do evil, cause fires, kill birds, beat children,
 harass, break, steal, drive cars when drunk, beg, are put in prison, intrude,
 make children afraid, etc. There are only slight differences between the groups.
 The majority of children in all groups think that bums do not work. Half a
 dozen in all think that they may work. The older children's answers are more
 often qualified than the younger children's: some work some don't. Explanations
 46(6,6,2) or reasons seldom occur. Some point out that they could not get a job, others
 say that they may have worked before they became bums, but these answers are few.

The living quarters of bums are as varied as the causes for people's anger at them. Part of them live in houses or hovels which are usually in bad shape. Each group has half a dozen answers of this kind. Some bums do not live in any
47(6,4,2) place. The older children often say that they live in woods or in the streets. Other possible places: staircases, boats, attics, parks, caves, prison, the street, refuse containers, dumps, under bridges, and at home. In the oldest group half a dozen children place the bums in a home for bums or some institution. A few examples:

"They live in some places, sometimes they sleep on benches, and their home is such that there isn't room for many; well, it may be a haystack or they have stolen a home from somebody and then they are put into prison." (B 5)

"In some litter boxes or in some doorways." (G 7)

"They live either at home or they are put into a bum sanatorium or something." (G 9)

A bum may become normal again, although the youngest think not - in this
48(0,3,1) group there are a dozen answers of this sort, in other groups only a few. Affirmative answers are generally quite qualified. The qualification is generally that a bum may become normal if he does not drink. In each group there are a few who think that a bum may get normal again if he is put in prison and gets sober or if he sleeps - these are obviously relatively short-term bums. A few school children say "If they are helped" or "in a sanatorium". Repent he must thinks one child.

The rich

If it is said that a person is very rich it is taken by most children to mean that he has a lot of money. He may also have property, factories, even gold. But it may take less than that: one has clothes or works hard. Half a dozen
49(0,0,0) school children add that everything is nice and beautiful or there is a lot of furniture.

"That one has a lot of power and then a lot of furniture and fine things at home and fine houses." (B 7)

"That he has a lot of money and lives in a fine home." (G 7)

"I guess he has a lot of fine things and then a lot of money." (B 10)

In the first example quoted the child says that wealth means lots of power. It may be remembered that earlier power was linked with property. The reverse

linking is done much more seldom - wealth is thus generally defined in a more limited way as money and property, besides which there may be clothes and fine things.

For further assurance the children were also asked if there are really rich people in Finland to get some idea of the size of this group as conceived by 50(3,2,15) children. A few of the youngest group enumerated some of their acquaintances, and in all groups a couple of children mentioned the President, but generally only a figure was mentioned. It can be observed that the majority of the given figures were smaller than 100. The figure 20 occurs three times but never in the form "20 families". Only six children give figures which exceed 100; the second biggest figure was 2000, the biggest 100 000.

It was generally considered to be quite pleasant to be rich - more than one half of the children in all groups said that wealth was an asset; the most usual reasons were the fact that one can buy things, even fine things, pay the rent 51(1,1,1) and other everyday necessities. The number of the answers in which wealth was considered an asset without giving any reasons was 9, 4 and 6 respectively. Drawbacks were mentioned in a few answers in each group: it is not pleasant, because others must then be poor, one gets mean etc. A boy of the oldest group makes a nice distinction:

"Well, I don't know, it may be useful in some respect but it's not good." (B 9)

A 5-year-old boy's answer showing the advantage of being rich in particular instances, too, is worth quoting:

"It's useful because if a car runs over somebody, the rich person will be in the car." (B 5)

When the children were asked if it is right that some people are rich and others are poor the picture becomes much more complicated. An unqualified 52(0,3,1) affirmative is given by 9, 4 and 2 children respectively. The majority answer in the negative; the figures for negative answers without any reasons given are 9, 18 and 14 respectively. Generally the longer and reasoned answers were negative towards there being rich and poor. These answers contained fairly many shades of opinion. Some children might say that it is good that there are rich people but it is not right that there are poor people. The idea of equality occurred fairly often in the older groups. Sometimes it was expressed so that it would be best if all were rich, sometimes so that the rich ought to give to the poor, sometimes it was considered - and this was the most common opinion - that the best situation is when "all are ordinary people". One child thought that being poor is best.

"Some are rich and for instance drunkards are poor. It's a good thing that drunkards are poor so they can't get guns or other things." (B 5)

"I think that all could be rich or all poor so there wouldn't be rich and poor; so that it would be best if all poor people became rich."

(G 5)

"All people ought to be rich and nobody ought to be poor." (B 7)

"It's nicer to be rich and not poor." (G 7)

"I guess it depends on how much one has studied. I guess it's not right; when a poor man comes into a rich house and sees everything he starts to envy the rich man." (B 10)

"All people should be equal, like." (B 10)

Although the majority think that generally speaking it is not a good thing 54(0,2,3) that some people are rich and others are poor, this does not prevent most children from saying a few minutes later that it would be nice to be rich when they get older; these answers are in a definite majority. However, there are a few third-graders who stick to their earlier view and want to be "ordinary" because it is best.

53(2,2,0) People get rich by working - at least in general, but there are three versions of this theme: one can work (unspecified), one can pick the kind of job that pays well, or one can try to be particularly diligent. The youngest chose the first alternative, first-graders the second, and third-graders chose the last alternative. The differences are not great but fairly clear-cut. It is good to save - this is pointed out by the two older groups. Saving is not always coupled with working or earning money by some other means. A few of the youngest children think that one could become rich by taking money from a bank, even by stealing it. One girl from the middle group believes that one can get rich by buying fancy clothes - after all this is a sign of wealth and by acquiring this symbol one could attain the main point. Only a few mention business or trade. Below is a description of this kind of career:

"He wants to get a job and then he would like to be manager and then he wants them to pay his salary, the workers, so that they would give him money." (G 5)

But working and saving are the usual ways.

Environmental protection

It is very difficult particularly for the youngest children to say what environmental protection is. (It will be remembered that those who did not understand the term were briefly told about the concept to make further discussion possible). For the great majority of oldest children the term means the protection of animals: animals must not be destroyed, shot or hurt. The same is brought up by five pre-schoolers. Plants are also mentioned

55(7,4,0) (frequencies 6, 9 and 9 respectively). The youngest children answer that the war does not break out, God protects or winter destroys plants, etc. The oldest children give a few answers in which industrial waste is mentioned, thus taking a modern view of the protection of nature:

"It means that those industrial and all other waste products can't get into the lakes. They should be protected and the water should go through some purification plant so it would be clean when it gets back to the lakes." (B 9)

A young boy's answer is brief and to the point:

"It means that terrible poisons don't kill them." (B 5)

A few examples of animal protection which were so frequent:

"It means that all flowers and animals are in good shape - that they don't get broken." (G 5)

"That animals must not be killed and nature and animals must be let alone." (G 8)

"It means that one doesn't shoot them or hurt them so that they die, birds and all animals." (B 9).

Only in the oldest group did all the children answer to question: what is meant by the pollution of nature? In fact the answers of the oldest are generally

5(15,10,0) related to the pollution problem: water is polluted and it cannot be used as drinking water or otherwise, air is polluted and is not fit for breathing, car engines produce exhaust gases or impurities, factories emit dirt and so on. Other factors are also brought up but these are not so prominent. Dirt and refuse, litter, i.e. garbage, belong to this group. The middle group seldom mention cars or factories, the youngest group hardly ever. The pollution of water occurs more often. The oldest children mention the pollution of air and water, the other two groups only water. The oldest group cite both factories, and cars as polluters, other groups in a few exceptional cases General littering is brought up by all groups.

Littering also comes up in the answers to the question: what is pollution like? Rather more than one half of all answers mention dirt, mud, twigs, waste 57(2,3,2) etc. A few of the youngest group also mention smoke, exhaust and poison. Among the third-graders these answers are fairly frequent: factory smoke, exhaust, oil, chemicals and the like:

"It's all them gases and exhaust from cars and then cigarette smoke and dust and then all kinds of smoke." (G 10)

"Well, it's all kinds of sticks and mercury and funny-looking water." (B 9)

The majority of pre-schoolers think that there cannot be pollution in the air. Seven of them answer "yes" without further explanation and a couple say that there may be dust, litter and such like. A few first-graders also think that the air cannot be polluted. Some say dust or "what comes down from the roofs" but most children mention chimney smoke (7), exhausts (3) and even factory waste. The answers of the oldest groups are divided between exhausts (9), factory smoke or waste (8) and a few scattered answers - bacilli, carbon monoxide, 58(0,3,0) dioxide, bad air etc. A few examples to illustrate the matter:

"Yes it can - when all litter flies up into the air and then in the windows, too." (B 5)

"Yes, factory pollution." (G 5)

"Yes, dust and soot." (G 5)

"Car exhaust can let out, now what is it again, fumes." (B 7)

"Yes, factory chimneys can let out dirty air." (G 9)

Third-graders think that the air is purest in the countryside; this kind of 59(6,9,1) answer is dominant. A typical reason is the following:

"In the forest where there aren't any cars or factories." (B 9)

Answers of this type are few in the youngest groups. Their answers are varied: when the sun shines, at home, indoors, outdoors, in America, at sea, in the sky, etc.

Can there be pollution in the water? Yes, there can, but the nature of pollution gives rise to different schools of thought. The youngest children 60(0,0,0) usually say that water can be polluted and enumerate such things as dirt, litter, cans, mud, bark, sand, etc. They enumerate such things that exist in lakes naturally but which make swimming or playing unpleasant: soil and mud or physical objects: litter, bark, etc. A few answers mention pollution of a certain colour, but it is difficult to determine what it could be.

"Yes, it can, because sand makes it or I don't know where it comes from." (G 5)

"Yes, there is such black something on the bottom and on the ground there are such green things, such awful things, and then there may such awful tacks and all such awful things." (G 5)

The middle group resembles fairly closely the youngest group but also gives differing answers. Some bring up the following train of thought:

"Yes, it can, all things that come from all ships and such oil." (G 8)

"Yes, factories let out dirt and then dirt comes into Näsijärvi-lake when carpets are washed on the shore." (G 7)

A third of the older children's answers support the litter-theory but the majority enumerate the following: factory waste water, oil from ships, sewage water, mercury, detergents, etc.

"Yes, it can, all kinds of sticks and bad water from sewers and oil and dirty water from factories." (B 9)

Most children have seen dirty lake shores, mostly the shorelines of Näsijär-
61(0,0,0) vi and Pyhäjärvi, but only very few say in what way the shore or the water has been polluted. Litter and similar things may have been seen; the form of the question does not prompt the children to elaborate their answers.

If the water is polluted many kinds of harm ensue. The predominant type of answer is that one cannot swim: one half of answers in all groups. Among the
62(4,1,0) oldest group, in particular, there occur answers such as "one can't get water" (frequencies by group 0,4,7 respectively), "one can't drink water" (3,3,6) and "fish die" (0,4,5). A few examples to illustrate the case of swimming:

"Then one couldn't swim and wouldn't get clean in that water at all."
(B 5)

"One can't go swimming and can't get pure water to drink or to make food 'cause it would taste bad." (G 5)

"Then one can't go swimming; one can go to the swimming-pool, it's always pure and dirt can't get there." (B 7)

"I don't like it. One can't swim." (G 7)

"Well, one couldn't get water anywhere and nothing to drink and one couldn't swim and couldn't do, - one couldn't play in such water - and one couldn't do anything in the water, angle or anything, and all fish would die." (B 9)

"It's difficult to make it clean. You can't swim anywhere." (G 10)

The outlook is not very good if there is a lot of pollution in the water, soil and air. The two older groups think that plants would die or at least
63(12,3,1) suffer. Animals would also often die. People would also die or get ill; getting ill is mentioned more often. Other answers are: one gets dirty, one gets thirsty, there is no food, etc. Dying or illness are the most probable outcomes. The plants would fare the worst, then animals and last - thus in the best position - comes man. It can be mentioned, however, that the destruction is portrayed in colours which are not exactly grim but matter-of-fact, descriptive. A few examples:

"When man dies out." (G 5)

"Animals would die and people and it would be uncomfortable to breathe such bad air all day long - even plants would suffer a little." (G 5)

"Well, it would be bad for people and when they breathe such bad air, they may get ill; it's dangerous for animals and fish 'cause they may die of it and plants can't live very well in the soil when it's so dirty."
(G 9)

"Well, plants may die of it and if animals eat such polluted plants they may get ill. When people breathe such polluted air they may get all kinds of bacilli and get ill, too." (G 9)

In the last answer we can already discern the idea of the food chain. When the children are asked what kind of pollution or dirt is the worst, we can observe differences between the groups which are consistent with the previous
64(8,13,4) answers; the most prominent difference is the fact that the older children give emphasis to the pollution of the air, exhausts, smoke from factory stacks and other chimneys.

The prevention of pollution follows the same line of thought. The pre-schoolers' and first-graders' answers deal with tidying up and the like. Occasional answers also take cognizance of factory wastes. As a matter of fact
65(12,6,5) the youngest children have rather little to say even as regards tidying up and and many of them talk of "protecting", "asking God for help", "can do something",
67(11,9,6) etc. The youngest children thus have few solutions if any to offer, while the middle group talk about tidying and cleaning up:

"They should clean it up and take good care of it:" (G 7)

Such answers occur with the oldest group as well, but one third emphasize the danger of factory and car wastes and suggest either cleaning or decreasing pollution. Some children appear to be well aware of the problem, they know what would be a solution and demand for it. Examples:

"When it has been said that after twenty years if everything goes on like this I mean, that all waters are polluted and such, well then all factories should be closed." (G 9)

"And those cars - many of them could be left standing 'cause they always let out exhaust fumes." (G 10)

"That they would let out their wastes somewhere else, not into the lakes, but into huge containers." (B 10)

"Well, they could invent purification plants and have less factories than before and invent such machines that factories wouldn't give out so much fumes." (B 9)

All the quoted examples were given by third-graders, but similar answers occur in a few younger children's answers.

"People could for example close those factories so that they wouldn't let out dirt and pollution." (G 5)

But as a generalization it can be said that the youngest children give fewer solutions than others, the middle group clean up and put the litter in containers and the older group install purification devices in factories and cars and even cut down their number. The differences between the groups are greater when the children are (first) asked how the pollution of nature can be prevented and smaller when (in a later question) they are asked how nature could be kept clean.

In each group half a dozen children think that nobody can order that nature 66(6,6,4) must not be polluted. Those who take the opposite view mention conservationists (frequencies 2,3,5 respectively), the President or ruler (1,4,3) and the state (2,3,7). In scattered answers the following occur: the janitor, the police, adults, God, owners, etc.

Children do not really know what to do to prevent pollution or think that 68(8,10,10) they could not do very much at least alone. Those who answer something usually mention that they would not throw out litter etc; a few think that they could clean up.

Only very few children have talked about these matters with other friends. 69(0,1,0) Some have talked about dirty waters or poisoned waters; one of the youngest children has talked with an adult and one has seen a program on TV. One child would like to talk but has no friend.

3. OBSERVATIONS ON THE CONTENTS OF CHILDREN'S CONCEPTIONS

General

The data will be analyzed in two short chapters. This chapter will concentrate on the contents of children's conceptions. The chapter is divided into four sections as the previous one. Under each subheading a short summary will first be given about the central aspects in the contents of the answers and the differences between groups. After this a comparison will be made with earlier studies, insofar as such were found. It should be pointed out that as the questions, for the greater part, inquire into matters which have not, until recently, been considered as belonging to the 'children's world', such previous studies are scarce.

War and peace

To pre-school children war is primarily an event where people get killed or shot and die. Death is also the fate of children. They have very vague notions about how a war begins; consequently, they do not quite understand how it could be avoided. There is some kind of leader who commands. About one fifth of the children could mention a war going on at the moment or a war recently fought; one half of the children think it possible that war could also come to Finland. First-graders thought that war starts because of quarrelling, which mostly takes place between men. The nature of war is the same as among the smaller children, though the contents of the answers were somewhat more varied. The war can be prevented by not quarrelling or by being nice. Officers or commanders command. About one third knew of some war actually going on, and the majority thought that war could also come to Finland. About one half of the third-graders felt that war was an international affair. It starts from a dispute between nations, and it can be prevented by maintaining good relations between nations or countries. A part of those answering, however, resemble first-graders. The nature of war is the same: killing, shooting and dying. The children's fate is not, however, quite as bad as in the wars of the smallest children; one can take cover or escape to another country. The majority think that war can come to Finland, too. - Quite briefly, war is to the smallest children its central action, shooting and killing. A first-grader sees war as a dispute which is settled that way, and a third-grader often places these actions in the framework of nations or countries.

Conceptions of peace are similar in the different groups with the exception of preserving the peace, where differences are similar to those mentioned in connection with the prevention of war. The nature of peace is that there is no fighting and that various everyday chores are done. Peace is a good thing for everybody.

Previous studies with which the present study can be compared have been carried out by Cooper (1965) and Alvik (1968), though the interviews performed by them were different to such an extent that the possibilities for comparisons remain scant. Cooper asked English and Japanese children to give associations to the words 'war' and 'peace'. The children were from different age groups and their answers differed greatly from each other. The comparisons can best be made with the eight-year-old children of that study. When the children were to respond to the word 'war', the majority of the English and Japanese groups mentioned weapons, 17 per cent of the English and 4 per cent of the Japanese mentioned countries and people; and in both groups only about 5 % mentioned action, fighting, killing etc. Peace, on the other hand, meant more often (68 per cent) social action rather than absence of war (18 per cent) to the Japanese, to the English it meant social action and absence of war as often (both about 25 per cent; in addition it meant leisure to many). Alvik's results obtained from Norwegian children were different. When the stimulus word was 'war', in the groups of 8-, 10-, and 12-year-olds about 60 per cent of the answers were 'fighting', 'killing' and 'dying'. About 40 per cent mention a dispute between nations, weapons about 20 per cent, and negative emotions are mentioned by less than 10 per cent. Three quarters of the children mentioned absence of war, and less than 10 per cent social actions when 'peace' was under consideration. These answers in both studies are answers to the association questions, to which questions 1 and 11 in this study are perhaps similar. The classification of answers in this study differs to some extent from that of the previous studies. But some rough comparisons can be made primarily as regards the school children's groups in the present study. If this is done, it can be seen that the children's answers in the present study resemble in the first place Alvik's Norwegian children with regard to war, and Cooper's English children with regard to peace. The reasons for similarities and differences cannot be explained here, they can only be observed.

Power and use of power

'Power' as a word is not familiar to the youngest children, though they have some ideas about things connected with the concept of 'power', but only if they are asked in suitable words. To school children 'power' as a general concept means alternatively three things: one has property, one can command, or one is President or some other ruler. First-graders emphasize property most; the answers of the third-graders were evenly divided into the three classes. The youngest thought there are primarily three entities which decide on important matters: The President, the Heavenly Father (or Jesus or God) and the police. School children, especially in grade III, mention the President (or Kekkonen, or more familiarly Urkki) more often, the Heavenly Father and the police are not mentioned; occasionally some cabinet ministers can be mentioned in addition to the President. As regards the corridors of power in Tampere the situation is similar - the youngest children think that the police and the Heavenly Father, parents or even the janitor are powerful. The third-graders mention various city officials. The relationship between power and property is seen when children are asked who do not have power. The poor especially do not have power neither do the 'ordinary' Finns, meaning people who have no property or who do not belong to the administrative machinery. The youngest emphasize the poor more than the others in whose answers 'ordinary' people appear more frequently.

As regards school the results do not indicate anything special: one goes to school in order to learn, the teacher rules there, primarily because there is no one else. Differences between the groups can be seen in the main reasons given for going to school: the two youngest groups emphasize the importance of reading, writing and arithmetic - these are of current interest to them - whereas the oldest children speak of general learning. Many of the oldest children realize that going to school and teachers' activities take place in a wider administrative network: the National Board of Schools is now and then mentioned.

At home parents, generally both, decide what may be done and what may not. A slight shift of power from mother to father takes place with age. Children's opinions are also taken into consideration when decisions are made, at least sometimes, and only in the two youngest groups did about half a dozen children say that they are never listened to. If the children want something their parents do not want, things are generally done according to the parents' wishes, there being hardly ever even an argument. About half a dozen children in both groups are at once smacked.

Results to which those mentioned above could be compared are scarce. Some general remarks could be made. Let us first consider the fact that God and Jesus seemed to have quite a lot of power, especially among the youngest children and also to some extent among the first-graders. According to observations made in Finland the most frequently mentioned functions of God and Jesus in children's opinion are to guard and protect; these opinions are those of 4 - 5 year olds (Haavisto, 1968). It is, however, evident that the almighty position of God is predominant in the material presented to children. According to foreign observations this aspect is clearly emphasized when children are asked about their conceptions of God (Graebner, 1964). Graebner's subjects were mostly more than 10 years old. That is why it is natural to pick up the name of such an almighty being when nothing else is known. The same is indicated by Danziger's (1958) findings: young children may say that one becomes rich through God giving money.

As regards the general use of power no such results could be found to which those of the present study could be compared. There is very little to be said about school and family either. It has sometimes been found in foreign studies that rules given by the school and teachers are approved as more self-evident than those given by the home (Gump & Kounin, 1961). According to that study, too, parents have a dominating position at home just as teachers have at school. The difference lies in that at home the dominating position can be questioned, for example by making objections. The transition, though small, towards father's greater power in the present study can loosely be connected with earlier observations as regards the fact that especially the youngest children combine the image of mother with child care and that, on the other hand, with age and at about the age 6-7 years father is perceived as stronger and more authoritarian than mother (e.g. Mott, 1954; Kagan, Hosken & Watson, 1961).

Deviating groups

Prisoners, the mentally ill, bums, and the rich (as a deviating group different from the previous ones) were special groups about which questions were asked.

Children have a rather narrow but terse conception about prisoners and being in prison: prison is a place where one is put if one has done something 'naughty' or committed a crime, and one cannot get out of there at least until definite period of time has passed. It is not very nice there, and the food

can also be rather poor. There is not much to do; just staying there, sleeping, reading, or even yelling. Older children think that prisoners are often made to work. Even though being sent to prison is mostly a punishment for something bad that has been done, some few children also have the idea that imprisonment has an educational function: they learn to behave. When it was specifically asked whether one changes in prison, the answers were mostly positive, but there were differences between the groups. The youngest group gave the most negative answers; when a change takes place the prisoners either become nicer or the change is physical by nature, the prisoners become older or different looking. Such physical changes may take place also according to the older children, but first-graders think that the change generally takes place towards a nicer personality, whereas third-graders either think the change is into a nicer personality or that it depends on the case whether any change takes place at all. Only one child (grade III) thought that one could become even worse in prison. It is generally the police who decide who is put in prison; of the oldest children one half thought it is the police and the other half suggested the law or the court. One third to one sixth of those answering think that people should not be imprisoned. No grounds are usually presented. Others think it is permissible or desirable, generally because one has done something wrong or committed a crime one has to be punished.

Of the mentally ill persons the children have perhaps the fewest conceptions - as regards the groups dealt with here. Only the oldest children actually bring out such definitions as can be connected with some kind of deviation - and this can be social or have something to do with intelligence. It is the general opinion of the children that one cannot recognize a mentally ill person by his looks; some say that he can be recognized by his behaviour. When the children are asked whether a mentally ill person does something others do not do, they sometimes mention some irrational things, but mostly they mention various violations and crimes, often in the way of brawling or disturbances like that. Although it is generally accepted that the mentally ill can be cured, the oldest children think that the worst cases cannot be. The majority, though slight in the group of the oldest and the youngest children, thinks that a mentally ill person has to stay in a mental institution. Especially a doctor, the police and relatives send a person into an institution. The youngest mentioned the police, as so frequently before, more often than the others, and the oldest mentioned relatives most often.

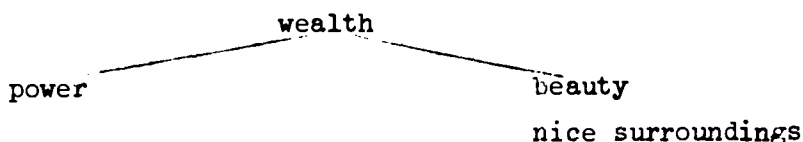
Bums are clearly familiar to almost all the children, with the exception of some of the youngest who thought that the word meant someone bald, a 'baldhead'.¹

¹Translator's note: Bum = 'puliukko'
Baldhead = 'pulipää'

A bum is a man who drinks heavily and/or continuously. Some children may, in some connections, think of 'ordinary' drunkards, but it is difficult to say anything definite about the matter. One becomes a bum quite simply: one just drinks. The oldest children often say that friends tempt one, and drinking becomes a mania. Children generally think that people are angry with bums, the reasons for this are various, usually because they are considered to cause disturbance in one way or another. They do not go to work, with some exceptions, and they live in all kinds of lodgings, seldom in actual houses etc.; woods, boats, dumps and so on are their dwellings. The oldest have some answers where hostels and sanatoria are mentioned. A bum can become normal again - generally so that he stops drinking. The oldest again have their reservations, some can, some cannot stop drinking.

Being rich means that one owns lots of money or property, even gold. Property, however, is mentioned far less frequently than money. Some representatives of the older groups say that it means 'classy', classy furniture or houses, beautiful clothes. The estimated number given of the very rich Finnish families is usually under one hundred - the President was mentioned by name a few times. It is nice to be rich when one can buy whatever one wants, or pay the rent and buy food. Generally speaking it is not thought right that some are poor and some rich, even though in the group of pre-school children opinions are roughly evenly divided. When the matter is further elaborated, equality would be best. Personally children thought, however, that it would be fun to be rich. One becomes rich by working. This can be work without definitions (especially the youngest) or work from which one gets lots of money (especially the middle group) or one has to work hard (particularly the oldest). Only a few think that trade, ownership of factories, and the like, are the actual means for getting rich. Quite a few mention putting money in the bank, the youngest also taking money from the bank.

Of the four groups dealt with in this study something can be said about the rich only on the basis of earlier studies. In the first place, it can be pointed out that when Spiegel (1950) studied children's conceptions about beautiful and ugly people, it was the beautiful people who have clothes, property and fame. Ugly people on the other hand are dangerous or the like. The words thus were not opposites. In this study power is connected with wealth and this with finery. The following connections can be observed:



The above figure is naturally a generalization. The structure in question appeared only in part of the cases. As there were only a few questions connected with these matters we cannot say anything definite about the structure of this construction in the children; it remains unclear for example, what kind of power is meant. It was not actually asked in this study what the term 'poor' means, and thus the connotations of this word could not be elicited. But what could be noted in the analysis of the concept 'power' was that the poor do not have power. Danziger (1958) had made previous observations on Australian 5-8-year-olds as regards getting rich. The youngest have, as he calls them, 'fantastic' methods like stealing, God gives, etc. From these a transition was made through working towards capital formation which occurred mostly in the form of saving or the like. The last mentioned conception began to appear in the eight - year-olds. The same phenomena were observed in this study, too. But only relatively few 'fantastic' answers occurred in the younger children, both working and saving and similar ways of accumulating capital appear also in this age group. The question why some people are rich and some poor was also brought up in Danziger's study. The youngest children again give 'fantastic' answers or think that the amount of wealth depends on how hard one works, whereas only the oldest children began to see that the term 'poor' is applied to a person who does not have or has not accumulated capital, i.e. has not saved, inherited from relatives, does not own goods he could trade etc. There was not a totally comparable question in the present study.

The protection of nature

The word 'protection of nature' is fairly unknown especially to small children. In the groups of school children a substantial part know it in the traditional sense, the protection of plants and in particular animals; it is specifically emphasized that animals should not be killed or destroyed.

The term 'pollution' is also familiar to the oldest children. The youngest think that pollution is primarily caused by littering and the like. The oldest children and especially the grade-III children give numerous answers where they mention the role of industry and cars in pollution. The youngest think that there cannot be any impurities in the air, the oldest mention smoke and exhaust. Younger children think it is trash and mud that pollutes waters; the older on the other hand think that sewers, industrial or ship garbage cause it. If water becomes polluted the worst result is that one cannot swim any more. One cannot drink the water either, and some school children say that fish die. If there are

great quantities of pollutants and dirt in water, in the soil and in the air, the consequences, too, are rather widespread: especially plants, but also animals as well as people die or at least get sick. The worst kind of pollution in the youngest children's minds are mud and trash; the oldest consider exhaust gas and factory smoke as such, too. Instructions given for the prevention of pollution follow the same lines. The youngest, if they answer at all, hope that people will not litter or soil, or that cleaning has to be done: especially the oldest often mention the prevention of pollution caused by factories or cars. It is not rare that children should want purification plants or at least to diminish the number of these polluters. Many do not rightly know if anyone can give orders that nature may not be polluted, or they think that this cannot be done. Those who reply mention most often the state, the President or nature conservationists. Children consider their own possibilities very small at least if they should act on their own. It would be possible for them not to litter; more seldom, on the other hand, to pick up litter. Only a few children have discussed these matters with their friends. Previous studies concerning this topic have not been found.

General viewpoints

Finally some general remarks should be made on what kinds of differences there are to be found in the structures of the conceptions of the different age groups. It is a wellknown fact that the development of a child's conceptual thinking is very rapid within the age interval used in this study. The meaning of the different conceptions become richer and they form a network. (Empirical observations on the changes of some conceptual contents have been reviewed; e.g. Hurlock, 1964; Nummenmaa, 1968). On the other hand the general thinking structures undergo deep changes. (The best-known theory on these changes is certainly that of Piaget; a general representation of his theoretical and empirical work is found in Flavell, 1963). In the following, only a brief survey will be made on how the differences between groups can, on the basis of the present observations, be described as simply differences in the amount of knowledge, and where again we are dealing with the fact that older children's conceptions are more differentiated than those of the younger ones.

First it can be mentioned that 'I don't know'-answers appeared both among pre-school and grade-I children to the extent of approximately 10 answers per child, though the number varies from one child to another; at any rate, one answer out of seven is on the average of this kind. Among grade-III about 5

answers were of this kind, or one answer out of fourteen. Differences occur fairly evenly in the same way in all themes of the study. The different conceptions about war and peace which occurred among the children could possibly be roughly described as differences in the hierarchical structure of thinking. The children in the different age groups answer somewhat similarly when they are asked what is done in war. But the differences are evident when the children are asked how a war starts. The youngest think that war just breaks out, the oldest speak of disputes between countries. The youngest children do know what a dispute means, and they are familiar with names of countries or nationalities; though the last mentioned has not actually been under study here, it becomes evident, because they mention these in their answers. But these different elements, nationalities, disputes and shooting, are not associated with each other within a uniform network among the youngest children. Of course the differences are partly differences in simple factual knowledge: older children, for instance, had better knowledge of what wars were going on. In this context loose references could be made to foreign studies which prove that children's conceptions about nationalities and their distinctive marks and distinguishing features develop and become organized to a greater extent when we pass from the age of 6-7 years to the age of 10-11 years (e.g. Jahoda, 1963). At the age of approx. 12 years children have fairly well formed stereotypes of the different nationalities and specified conceptions about the different qualities the nationalities possess (Zeligs, 1950).

In regard to power and the use of power it can be noted that questions pertaining to school and home brought up fewer differences between the different age groups than those connected with the more general power relationships. The questions in the first group belonged to things fairly familiar to everyone. As regards the more general power and administrative systems it can be noticed that the youngest mention very seldom any names of administrative agencies. Even the President occurs fairly seldom, whereas he is mentioned quite often in the groups of school children. When pupils in graders III and IV are allowed to write free essays, the word 'President' is among the 600 most popular words (Karvonen, Rönman, Takala & Ylinentalo, 1970). There are no observations like these about the younger children, but it can be assumed that the youngest children do not quite know the words in question. That is why they have to bring up something else when they are asked who has power over important matters in Finland and in Tampere; they mention such concrete persons as parents or the police, or when they go even farther they mention God or Jesus because they do not know any other more abstract rulers.

As regards those deviating groups of which children's conceptions were asked, the mentally ill obviously are the group of which only school children, primarily those in grade-III, have any idea. In this case these are differences in the level of knowledge. As regards bums, differences between the groups were slight. It can be noted that in the former case the object is fairly emote and usually one can get only indirect information about it, while children can have their own observations about bums and drunken people. The conceptions about wealth and poverty indicate in the first place that the youngest children do not have general principles about these matters to such an extent as third-graders; the differences, however, are not particularly great and pre-schoolers in fact give some reasons more often than grade-I pupils.

With regard to environmental protection the differences of knowledge between the groups are greatest. The smallest children know what dirt or garbage are, but relatively few can mention anything else. Industrial wastes and car exhausts and the like are familiar concepts to many grade-III children. When the answers are so different there is not much reason for further analysis of conceptual structures.

4. ON THE IMAGINATIVE ELEMENTS IN CHILDREN'S CONCEPTIONS

When the children's answers were dealt with in the foregoing, the imaginative elements in the answers were not examined. All the time we have spoken only about the contents of conceptions or of their structures quite generally. When the structures of conceptions are analyzed, the problem area can be considered to divide into two parts: we can analyze on the one hand the internal structure of subject material and on the other hand the interrelationship and connections between the subject matter and the imaginative elements. In the following, the last mentioned analysis will be made, though briefly because the problem area will be dealt with in a separate report.

What is meant when it is said that the answers can contain imaginative material? It is difficult to give a completely unambiguous answer to this and even more difficult to give any rules by means of which we could decide in individual cases whether some specific elements is imaginative or not, but generally speaking we mean by imaginative material that a child takes up such material as does not belong to the structure of the subject or resorts to chains of thought that are removed from realistic conceptions. We can give a more

concrete answer to the question by taking some examples. We can classify these answers at the same time.

When Singer and Antrobus (1963) made a factor-analytical study on day-dreaming with adult subjects they found out that day-dreams could be divided into two large groups, one of which represented thinking of a problem-solving type, the other one more loose production, which could include more personal material. (For parallel phenomena, see also Klinger, 1969 or Nummenmaa, 1970). A similar kind of classification can be applied even here. This kind of dichotomization - although in both groups we could discern different cases - has also the merit that it keeps the presentation simple.

We shall first deal with cases in which the imaginative elements are fairly closely connected with the structure of the matter in question. We are thus dealing with behaviour in which persons by means of thought aim at a realistic result or problem solving. We can distinguish several possibilities; in fact we are dealing with a variable in which the 'distance from the real world' varies. Generally speaking the situation is such that a person is asked something that he does not know, he thinks and tries to solve the problem as well as possible. We would not call every result of such chains of thought imaginative. If a child is asked what is meant when told that somebody is rich, and he or she answers that it means that he has a lot of work, the answer is not the one that is the usual meaning of the word. But there is no reason to consider the answer imaginative, partly because making this decision would demand more evidence. Let us now take some examples.

Example 1. An answer to the question: how does one become a bum?

'Well, if one has done a murder and if one is very sorry and then one decides to drink and so one becomes a bum, and when one has taken the first drink, then one may think how good it tastes and then one starts drinking'. (G 10)

Example 2. An answer to the question: what happens to children during the war?

'Well, I don't know. I guess they start beating children with axes and always kill them or what?' (B 5)

Example 3. An answer to the question: who decides if there will be a war or not?

'Well, in this town there are at least many police and such, and God is up in the Heaven, well, I guess it's the God or Jesus or somebody.' (B 5)

Let us look at these examples. The first example portrays a possible chain of events; the child imagines one possible route from a normal person to a bum. Imagination serves as a medium by means of which the question is solved. The second example is more remote from the real world. The child has the idea that children do not have it so good when there is a war, and he illustrates his idea by giving a sketch of what he thinks is a possible state of affairs. The third example is somewhat removed from this world. The child does not know how a war starts, he wonders who could decide such a thing - this is all interpretation, of course - comes to think first of the police whom he has perhaps seen directing the traffic or giving orders to people. Then he thinks that the police may not after all be powerful enough and names finally, for further assurance, the heavenly powers, which he perhaps has heard to be all-powerful. We would not say that the answer as such is realistic but the child aims at such a solution. He is working to solve a problem; he is really searching for a powerful person or being who could have the power to decide on war or peace.

We will now analyze imaginative thinking, which has the property that it does not necessarily attempt to stay in contact with the empirical world. In most cases this can be called free production. A few examples:

Example 4. An answer to the question: how does war start, how does war break out?

'Well, I have heard that when a woodpecker pecks the tree, there will be a war, or a lot of squirrels.' (G 9)

Example 5. One child answered many questions with the word 'monk'; the monk can decide in Finland on important questions, he commands in Tampere, and if somebody does something that he shouldn't then the monk commands. When he was asked what that monk was, he answered:

'The monk is commander in Finland, haven't you ever seen the monk? He orders about everybody he even tells what the police can do.' (B 5)

Example 6. An answer to the question: what could people do to prevent the pollution of nature?

'Well, one should make all kinds of machines and if nature is very much polluted and if the years go by and then we have a new development year, then we could get such animals which like to eat pollution. Then there would be less pollution, and it would come out as air, I mean such good air, and all bad air would be gathered in its stomach.' (G 5)

Example No. 4 cannot really be called free production. We are dealing with a superstitious explanation which the child has heard - this is the only explanation of this type that could be found in the material. It has been placed among free production since it utterly lacks realistic touch. In the second example (No. 5) an imaginary being is presented. The child does not even try to find a correct answer, but imagines - this is an interpretation of course - an imaginary being who has the desired qualities. The third example (No. 6) is more complicated; the child is working to solve the problem, and in such a way that the result is a tight construction. The child is fully aware that she is moving in the world of fantasy. She begins in a realistic vein and she does know what the question is about - this is revealed from her other answers - but then she comes to think of such a tempting solution that she cannot help telling it.

We will not in this connection present any exact count about the proportion of different alternatives, but we can indirectly use the material presented in chapter II. Imaginative thinking within the presented problem is naturally difficult to notice when the answer is very short; in such cases it is not always even possible to guess about the chain of thought which led to the conception. But all groups have fairly many answers of this kind. As regards the imaginative elements which in the above have been considered to be connected with realistic thinking, the type exhibited in example No. 3 seems to be most frequent in the youngest children, type No. 2 in all groups, and type No. 1 particularly in the oldest group. Pure imaginative elements of free production are fairly rare in the entire material. It occurs incidentally; such clear cases as the examples quoted above are quite rare.

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APPENDIX 1. INTERVIEW SCHEDULE

War and peace

1. Would you tell me what comes into your mind when you hear the word 'war'?
2. If some small boy or girl asked you what is done during the war, what would you tell him/her?
3. What kind of things may start a war? How does war break out?
4. Who decides if there will be a war or not?
5. Do you know if there is a war going on in some part of the world? Tell me.
6. Who commands in a war?
7. What happens to children during the war?
8. Is it possible that war would come to Finland?
9. What can we people do to prevent war?
10. If you had to draw a picture of war, what would you put into it?
11. Would you tell me what comes into your mind when you hear the word 'peace'?
12. Is peace a good thing or a bad thing?
13. What is done during peacetime?
14. What can we people do to preserve peace?
15. If you had to draw a picture of peace, what would you put into it?

Power and the use of power

16. What comes into your mind if you hear that somebody has a lot of power?
What does that mean?
17. Who in this country has a lot of power? Who can decide on important questions? What do you think?
18. Who, then, has little power?
19. Do you know what the word 'law' means?
20. What do you think, who decides what we people here in Tampere may do?
21. If somebody does something that one shouldn't do, what happens then?

22. What do you think, who decides that children must go to school?
23. Why must children go to school?
24. Who decides at school what can and what cannot be done there?
25. Why do you think it is so?
26. Who in the family and at home tells what can and what cannot be done?
27. Are children's opinions ever asked? Are children asked what they would like?
28. If children want something that parents do not want, what happens then?
29. If you were quite free to decide two things which you think are nice, what would you like?
30. Would you tell me if there is anything that you are afraid of?

Deviating groups

Prisoners

31. If some little boy or girl asked you what a prison is, what would you answer him/her?
32. What do you think prison is like? What do prisoners do there?
33. Why are people put in prison?
34. What do you think, do people change in prison? Are they different when they come out?
35. Who decides that somebody must be sent to prison?
36. Do you think it is right that people are put in prison?

Mentally ill

37. What does it mean when it is said that somebody is mentally ill?
38. What do you think, can one recognize a mentally ill person by his/her looks?
39. Does a mentally ill person do something that other people do not do? What?
40. What do you think, can mentally ill people be cured?
41. What do you think, must mentally ill people stay in mental hospitals?
42. Who decides that somebody must be put in a mental hospital ?

Bums

43. What does it mean if somebody is said to be a bum? What is a bum like?
44. What do you think, why does somebody become a bum?
45. Are people somehow angry with bums?
46. What do you think, do bums work?
47. Where do bums live?
48. What do you think, can a bum become a normal person again?

The rich

49. What does it mean it is said that somebody is very rich?
50. Are there many people in Finland who are really rich? How many?
51. Is it a good thing to be rich? Is it of any use?
52. Do you think it is right that some people are rich and some are poor?
53. What can a person do if he/she wants to become very rich?
54. Would you like to be rich?

Protection of nature

55. This year 1970 is devoted to the protection of nature. What do you think is meant when it is said that nature should be protected? (If the child's answer was vague, it was further ascertained that he/she understood the concepts 'nature' and 'protect'.)
56. What do you think is meant when it is said that nature is polluted? (It was ascertained that the child understood the question; explanations were given if needed.)
57. When nature gets polluted, what is pollution or dirt like?
58. Can there be pollution in the air? What kind?
59. Where do you think the air is purest?
60. Can there be pollution in the water? What kind?
61. Have you ever seen a dirty lake shore? Where?
62. What harm do you think would ensue if all rivers and lakes were badly polluted?

63. If water, soil, and air are very polluted, what harm would that cause to plants, animals and people?
64. What do you think, what kind of pollution is the worst of all?
65. What could people do to prevent the pollution of nature?
66. What do you think, can anyone order that nature must not be polluted?
67. Tell me, what should people do so that nature - I mean soil, water, and air - would stay clean? What do you think?
68. What could you do yourself?
69. Have you ever talked with other children about these matters? What?

APPENDIX 2. CHILDREN'S ANSWERS TO EACH QUESTION IN DIFFERENT AGE GROUPS

Before the tables are presented, it may be useful to clarify a few principles of classification. In the introductory chapter it was already explained that two judges rated the answers.

First, it must be said that if one wishes to classify the answers at all - and this cannot be avoided - one must be satisfied with fairly loose rules. In order to make the 'definition' of a class clear, the name of the class has been given in the form of answers belonging to that class. For instance, in the table which indicates answers to question 1, a quarrel between two countries is one type of answer. This has been expressed by 'nations or countries fight or wage war, quarrel over territory'. A general heading has been replaced by presenting several possible answer patterns. This has been done in order to show the classification principles and preserve something of the original tone of answers.

Rare answers, e.g. occurring only once, are generally not tabulated. In exceptional cases this has been done, particularly when these answers have obvious information value. For instance, in the table which shows answers to question 2 it has been mentioned that two subjects said that during the war people practice shooting - this has been included to show that such subsidiary themes, relevant to war, are also presented. Since, however, it would have taken a lot of space to tabulate each such answer, most tables include a class 'other answers' for this purpose. These contain rare answers, even incomprehensible ones, and sometimes such long imaginative answers that it would have been very difficult to state the gist of the answer briefly. Thus, the tables do not present all information, particularly not about rarer answers. This is remedied, however, in two ways. First, such answers have been presented in the text - Chapter II - as examples and their contents have also been analyzed to some extent. The imaginative material that appears particularly in these rarer answers is dealt with in Chapter IV in which theoretical aspects are examined. Although the tables do not include all the material, an attempt has thus been made to discuss the omitted useful material in the body of the report.

One further point has to be made. The last row of each table indicates what has been the 'total' of the answers. These figures have been obtained simply by adding up the figures in the columns. The figure obtained is thus at least 30, i.e. the number of subjects in each group. It can be greater, too, since one or some subjects can have taken up several points in their answers and in such cases the different aspects of such answers are tabulated under several

alternatives. The figure in the 'total' cell is thus a rough measure of what kinds of question have elicited simple, one - aspect answers, and what again have elicited complex answers.

The tables have titles which are in the form of the original questions as such. Table numbers are identical to those in Appendix 1.

1. Would you tell me what comes into your mind when you hear the word 'war'?

Answer	Age group		
	5-6	7-8	9-10
Don't know	9	15	2
Nations or countries fight or wage war, quarrel over territory		1	19
One shoots with guns, weapons, bombing, bombers, etc.	6	4	3
One dies, kills	4	3	4
Disgusting, dangerous, bloodthirsty, afraid, doesn' like	2	6	3
Soldiers, to become a soldier, army	3		
Houses fall down or are burnt	3		
Biafra, Africa	2		
Hunger, sick		1	1
Good, a good thing	2		
Other answers	5	3	3
Total	36	33	35

2. If some small boy or girl asked you what is done during the war, what would you tell him/her?

Answer	Age group		
	5-6	7-8	9-10
Don't know	2		1
One shoots, has weapons, bombs	17	23	15
Attacks are made, wars are fought, people are at the front, people fight	6	9	11
One dies, kills	5	5	7
People flee, to bomb shelters, take cover, one has to be careful	4	5	4
Windows are smashed, houses destroyed, things are broken	5	1	1
Life becomes cruel, one does evil, it's awful, terrible	2	1	3
The country is conquered		1	3
The other one wins			1
One starves to death, there is no food		1	1
One practises shooting	2		
One marches	1		
Other answers		3	
Total	44	49	47

3. What kind of things may start a war? How does war break out?

Answer	Age group		
	5-6	7-8	9-10
Don't know	11	12	3
A country comes to another's territory, a quarrel between nations, the other wants to have the territory of the other	3	5	22
A quarrel begins, men quarrel, get mad, are enemies	2	11	4
Soldiers come	3		
One shoots with a gun; shooting begins	4		
Another war begins; war starts	2		
It's negotiated whether a war will break out	1		1
Under kings' orders	1		
First revolution, then war		1	
Other answers	5	1	1
Total	32	30	31

4. Who decides if there will be a war or not?

Answer	Age group		
	5-6	7-8	9-10
Don't know	6	8	3
President (or Kekkonen), King, the leader of the country, the ruler	5	6	16
War chief, war leader, general	4	6	3
Captain, sergeant	1		1
Soldiers, armed forces	3		1
State		5	
God, Jesus, the Heavenly Father	3	2	
The police	2		
Law	2		
Government, conferences, council		1	3
Super powers		1	
Other answers	4	1	3
Total	30	30	30

5. Do you know if there is a war going on in some part of the world? Tell me.

Answer	Age group		
	5-6	7-8	9-10
Don't know	3	7	4
There isn't	9	5	2
There is, but don't know where	5	6	2
Vietnam	2	7	11
Cambodia, Laos		1	1
Israel, Egypt, Jordan	1	1	7
Biafra	2	1	2
Africa	3	1	2
America	1		
Australia			1
Italy		1	
Paris	1		
Helsinki	1		
Other answers	2		
Total	30	30	32

6. Who commands in a war?

Answer	Age group		
	5-6	7-8	9-10
Don't know	4	2	2
Chief, war chief, war leader, leader	15	17	11
Field marshal, general, colonels		6	8
Captain, lieutenant, sergeant, corporal	2	3	3
Officers			3
Soldiers	3		
The police, military police	3		
Other answers	3	2	4
Total	30	30	31

7. What happens to children during the war?

Answer	Age group		
	5-6	7-8	9-10
Don't know	1	3	1
Die, get wounded, are shot, are killed	24	21	13
Take cover; to a bomb shelter	1	1	9
Go to another country, flee; to Sweden		1	3
Something can happen, something bad	1	2	1
Starve to death, don't get food	1	2	2
Are taken prisoner, slave		1	1
Home is bombed, homes are destroyed			2
Are left somewhere, are left loose			2
Nothing			2
Other answers	2	1	2
Total	30	32	38

8. Is it possible that war would come to Finland?

Answer	Age group		
	5-6	7-8	9-10
Don't know	3	1	1
Could come, comes	12	18	20
Doesn't come, not now	13	10	8
Mostly to foreign countries	1		
Has been already, doesn't come	1		
No one knows, is not certain, both possible		1	1
Total	30	30	30

9. What can we people do to prevent war?

Answer	Age group		
	5-6	7-8	9-10
Don't know	7	12	4
Cannot do anything	6	1	
No shooting, no quarrelling, no fighting, being nice	3	13	6
Good relationships between nations			11
Get soldiers, defend, fight	3	2	2
Help another country, accept what the other says			3
We move to another house, country, flee,	3		
We ask Jesus, pray	1	1	
We tell the police	2		
We don't go to war	1		
Negotiations at the U.N.			3
Other answers	5	1	1
Total	31	30	30

10. If you had to draw a picture of war, what would you put into it?

Answer	Age group		
	5-6	7-8	9-10
Don't know	2		
Soldiers, may be shooting	13	14	13
Shooting, weapons, armoured cars, guns, aeroplanes	13	21	22
Dead bodies	3	3	3
Men, people, they can have horses, too	1	6	3
Commander, captain, chief, sergeant	3	1	1
Destroyed, burning houses	1	1	3
Houses		2	
Two armies	1	1	2
Those from a foreign country start the war		1	
People who flee			1
Other answers	4		2
Total	41	50	50

11. Would you tell me what comes into your mind when you hear the word "peace"

Answer	Age group		
	5-6	7-8	9-10
Don't know	7	4	1
No fighting, no shooting, war ends, we don't go into bomb shelters	9	13	24
There is peace, we live in peace, we are chums, we have good relationships, work	5	3	9
Feel good, peaceful, happy, nice or pleasant	4	8	
That war, revolution doesn't come	2	3	1
Nations have good relationships, they make peace, don't quarrel			7
Other answers	3	4	3
Total	30	35	35

12. Is peace a good thing or a bad thing?

Answer	Age group		
	5-6	7-8	9-10
Don't know	1		
Good, not bad	27	30	30
Bad, not a good thing	2		
Total	30	30	30

13. What is done during peacetime?

Answer	Age group		
	5-6	7-8	9-10
Don't know	7	5	4
No war, no bombing, no killing, no fighting, no teasing	2	11	2
One plays, works, goes to school and other everyday things	3	6	5
One builds new houses, and repairs them	2	4	4
One lives in peace, quietly, peacefully, freely	5	3	2
People are chums, and try to get on together	2	2	4
One eats, buys food	1	3	2
One needn't be afraid		2	1
One rests	3		
One practises shooting, makes war machinery	3		
People have parties, and are merry	1		1
Good relationships are maintained with other countries, negotiations go on			2
One sits properly, walks, lives	2	1	3
Other answers	3	1	3
Total	34	39	33

14. What can we people do to preserve peace?

Answer	Age group		
	5-6	7-8	9-10
Don't know	11	15	6
Nothing	4	1	
Be nice, no fighting, no quarrelling, be kind	2	6	8
No quarrels with other countries, they must be helped, agree		4	13
Be religious; God, Jesus helps	2	1	
One should not hurry, work peacefully	2		
Other answers	9	3	3
Total	30	30	30

15. If you had to draw a picture of peace, what would you put into it?

Answer	Age group		
	5-6	7-8	9-10
Don't know	2	1	2
People, children	4	8	2
People who smile, are in peace, good	1	10	4
People eat, play, walk and do other everyday chores	4	5	7
Houses are built or repaired	3	10	3
People of two countries in agreement, with each other, make peace			3
Peaceful, night, people sleep, rest	8		5
White flag, peace flag	1	1	2
Soldiers, generals, guns, shooting is practised	6		3
People search for a home, come from bomb shelters, war ended		2	2
Other answers	5	3	2
Total	34	40	35

Power and use of power

16. What comes into your mind if you hear that somebody has a lot of power?
What does that mean?

Answer	Age group		
	5-6	7-8	9-10
Don't know	20	9	2
Rich, property, big house, takes everything to himself	4	13	10
May order		3	8
Is president, king, in a high position, rules			9
May do wrong, be angry and always ahead, kill		2	1
Has conquered many countries		1	
Other answers	6	2	1
Total	30	30	31

17. Who in this country has a lot of power? Who can decide on important questions? What do you think?

Answer	Age group		
	5-6	7-8	9-10
Don't know	3	1	
President (or Kekkonen or Urkki)	8	16	27
State	2	5	1
Police	5	1	
The Heavenly Father, Jesus, God	5	2	
Father, mother, grandpa, grandma	2	2	
Those who order, war commanders	3	1	2
Prime minister (or Koivisto), ministers, government	1	1	3
Other answers	6	3	1
Total	35	32	34

18. Who, then, has little power?

Answer	Age group		
	5-6	7-8	9-10
Don't know	3	3	3
Finnish people, ordinary people	6	17	13
The poor, who haven't a home, work, food, clothes	10	6	3
Workers, janitors	1	2	1
Children, Biafra's children	4		
The old		1	1
President, minister, M.P.		1	5
Other answers	8	1	4
Total	32	31	30

19. Do you know what the word "law" means?

Answer	Age group		
	5-6	7-8	9-10
Don't know	19	16	6
It orders, it has to be followed	3	7	12
One may not do what it forbids, one may not break the law		2	2
It orders that one may not do evil		2	5
It orders fines, punishments	1	1	2
The state, president, leaders enforce it		1	3
Police keep it up			2
Other answers	7	1	
Total	30	30	32

20. What do you think, who decides what we people here in Tampere may do?

Answer	Age group		
	5-6	7-8	9-10
Don't know	3	10	4
President	2	3	3
State	3	3	4
Police	7	2	2
Law	1	4	1
Town, Tampere, men in Tampere		3	2
Mayor (or Paavola)			4
City administration, City Council			5
Father and mother	4		
Jesus, God, the Heavenly Father	8	4	
Parliament, government			2
Other answers	4	2	3
Total	32	31	30

21. If somebody does something that one shouldn't do, what happens then?

Answer	Age group		
	5-6	7-8	9-10
Don't know	3	5	
He is put in prison, jail, behind bars	8	13	16
Police come, take to the station or jail	8		4
He gets a fine, a punishment	2	2	4
He is sent to court; under the law, he is accused		1	5
A crime, he has broken the law			2
He is shot, may be killed	1	1	
There is a war	1	2	1
An accident can take place, something bad	1	2	
He is banned, Jesus punishes		2	
Nothing happens (if he isn't noticed)	2		1
Mother pulls his hair, janitor scolds	1	1	
Other answers	4	2	
Total	31	31	33

22. What do you think, who decides that children must go to school?

Answer	Age group		
	5-6	7-8	9-10
Don't know	1	4	3
Teacher, principal, school	9	5	1
Police	7		
Parents, group-ups	10	4	3
The state		6	5
National Board of Schools			12
President		3	
Town, municipality		1	4
Law	1	2	1
Government		1	2
Other answers	2	4	
Total	30	30	31

23. Why must children go to school?

Answer	Age group		
	5-6	7-8	9-10
Don't know	1	1	
One learns, learns all sorts of things, learns to do all sorts of things	10	14	22
Learns (specifically) to read, write and/or to count	11	13	6
Gets to work when big, gets a profession, to be a teacher	3	1	2
Other answers	5	1	3
Total	30	30	33

24. Who decides at school what can and what cannot be done there

Answer	Age group		
	5-6	7-8	9-10
Teacher	30	26	24
Headmaster, director, principal		9	9
National Board of Schools			3
Who orders over schools, someone higher			1
Total	30	35	37

25. Why do you think it is so?

Answer	Age group		
	5-6	7-8	9-10
Don't know	15	18	10
Teacher is there, he orders, there is no one else	8	8	13
One may not do evil things, one has to behave	4	1	
Nothing would go right if one were allowed to do just anything	2		2
People are taught there, asked	2	1	4
Other answers		2	1
Total	31	30	30

26. Who in the family and at home tells what can and what cannot be done?

Answer	Age group		
	5-6	7-8	9-10
Parents, mother and father, mother or father	20	29	25
Father	3	1	5
Mother	6		
Other answers	1		
Total	30	30	30

27. Are children's opinions ever asked? Are children asked what they would like?

Answer	Age group		
	5-6	7-8	9-10
Yes, often	16	7	8
Sometimes	5	16	22
Seldom, not much	2		
No, hardly ever	7	7	
Total	30	30	30

28. If children want something that parents do not want, what happens then?

Answer	Age group		
	5-6	7-8	9-10
Don't know	6	7	2
They won't do, may not do, do what parents want	9	8	14
Get a spanking, are birched, whipped, lashed	5	5	1
Parents forbid, won't let us	2	5	4
A quarrel, dispute starts	2		4
Grown-ups get nervous, mad	2		
Children get mad, naughty, cry, are cross		2	2
Children can take without permission	1	1	
Parents have to give in			1
Other answers	3	3	2
Total	30	31	30

29. If you were quite free to decide two things which you think are nice, what would you like?

Answer	Age group		
	5-6	7-8	9-10
Don't know	4	3	1
Get some things specified by name	8	15	12
To be allowed to do something, specified	4	3	
To be allowed to be out	5	1	
To be allowed to be lazy, have a holiday	2	1	2
Learn something		2	
Do things as one pleases	2		3
Travel, go to the ice-rink	2	3	3
Become rich, get money	2	1	3
Get food, live just like now		4	2
Peace in Finland, no war		1	2
I had my own home, father and mother, friends			4
Would be good at school, would become a good athlete, or the like			4
Other answers	5	2	5
Total	34	36	41

30. Would you tell me if there is anything that you are afraid of?

Answer	Age group		
	5-6	7-8	9-10
Don't know	2	2	5
There is nothing	7	11	10
Animals, specified by name	9		2
Dark, cellar	4	1	4
War	3	6	3
Crooks, naughty men, a bad person	3	2	
Being teased	2	1	1
Get run down by a car, an accident, fire, explosions	2	4	1
Bad dreams		2	
Punishment, being sent into the corner		2	
Bad conscience, father or mother angry			3
Something happens to someone close or oneself	1	1	1
Other answers	3	4	5
Total	36	36	35

Deviating groupsPrisoners

31. If some little boy or girl asked you what a prison is, what would you answer him/her?

Answer	Age group		
	5-6	7-8	9-10
Don't know	3	1	
Naughty people are put there, bad people, people who do bad things	8	12	12
Crooks, thieves are put there	7	7	9
One is taken there, caught	3		1
It is made of iron, it has iron bars	2	2	3
It is a jail	4		
One cannot get out of there	1	1	3
There are people who are prisoners		2	
One is taken there when one drinks liquor		2	
One is taken there if one has broken the law		1	3
One has to stay there for a definite time		1	3
Other answers	2	1	1
Total	30	30	35

32. What do you think prison is like? What do prisoners do there?

Answer	Age group		
	5-6	7-8	9-10
Don't know	3	4	3
Sit, sleep, rest, speak, sing	9	5	8
Work, clean, sew, are busy with something		13	10
It's dark, a few pieces of furniture, not nice	5	2	3
May escape, try to escape	4	3	
Cannot get out, doors locked, can stay there	4		
Don't get food, drink, food bad	4		1
It is gloomy etc.	2	3	4
Cannot get out before a definite date	1		2
Look at newspapers, read	1	1	1
Other answers	4	2	4
Total	37	33	36

33. Why are people put in prison?

Answer	Age group		
	5-6	7-8	9-10
Don't know	2	2	
They do evil	15	13	10
Have committed a crime, broken the law, done what one should not	2	3	12
Thief, steals	6	4	4
Drunken driver	1		
Done a murder, a murderer	3	2	2
Drunk		2	1
Are nasty, naughty	3	2	
Learn to be better, so that won't do it again	1	2	3
Other answers	1	2	1
Total	34	32	33

34. What do you think, do people change in prison? Are they different when they come out?

Answer	Age group		
	5-6	7-8	9-10
Don't know		1	
No	12	3	2
Nicer, won't do it any more	8	13	8
Some change, some don't, perhaps		5	13
Yes, they change	4	3	1
Look, different, skinny, grown older	4	1	2
No longer drunk, doesn't drink any more		2	
Can become worse			1
Other answers	2	2	3
Total	30	30	30

35. Who decides that somebody must be sent to prison?

Answer	Age group		
	5-6	7-8	9-10
Don't know	1		
Police, chief of police, police commissioner	24	22	13
Trial, lawyer, judge			10
Law		1	5
The state		3	
President	1	1	1
Commander of prison, chief	1	1	
Other answers	5	2	2
Total	32	30	31

36. Do you think it is right that people are put in prison?

Answer	Age group		
	5-6	7-8	9-10
Don't know			3
No	12	10	5
Yes	10	11	3
Yes, one may not do evil	8	5	15
Sometimes yes, sometimes no		3	3
Yes, if one drinks liquor		1	
Yes, if one commits many crimes			1
Total	30	30	30

Mentally ill

37. What does it mean when it is said that somebody is mentally ill?

Answer	Age group		
	5-6	7-8	9-10
Don't know	13	15	2
Has no sense, does silly things, sick in the head, doesn't understand	1	4	13
Nervous breakdown, too much strain			4
Does evil (can do good things, too)		3	
Retarded, feeble-minded			2
Sick, has to go to hospital	8	5	3
Brain damage	1		1
Does irrational things, has visions	1		1
Violent deeds		2	2
Crazy, mad	1	1	
Other answers	5	1	2
Total	30	31	30

38. What do you think, can one recognize a mentally ill person by his/her looks?

Answer	Age group		
	5-6	7-8	9-10
Don't know	6	4	3
Cannot recognize	12	14	14
Yes, a little	5	7	3
Different appearance, strange looks		2	3
Can be recognized by behaviour, manners	2		4
" " " " voice; speaks badly, strange things	1	1	2
Sometimes	1		2
Other answers	3	2	
Total	30	30	31

39. Does a mentally ill person do something that other people do no do? What?

Answer	Age group		
	5-6	7-8	9-10
Don't know	5		1
No	8	1	1
Yes, he does, sometimes	8	12	14
Shouts, yells, fights, bad, doesn't obey, teases	1	8	5
Takes other people's things, steals		3	5
No sense, irrational things, doesn't understand	2	1	3
Smashes windows, things; drives a car to just any place	3		3
Is not like ordinary people		2	
Is drunk			1
Other answers	4	3	
Total	31	30	33

40. What do you think, can mentally ill people be cured?

Answer	Age group		
	5-6	7-8	9-10
Don't know	2	1	
No	6	6	5
Yes, they can	15	15	10
Yes, sometimes, not the worst cases	1	5	10
Medicine is given; is taken to a doctor	5	2	3
Not well quite yet	1	1	
Perhaps			2
Total	30	30	30

41. What do you think, must mentally ill people stay in mental hospitals?

Answer	Age group		
	5-6	7-8	9-10
Don't know	5	1	
No	11	4	9
Yes	13	24	12
Sometimes yes			5
If wants to get well		1	1
If all has gone wrong			1
If badly sick	1		
Not all			2
Total	30	30	30

42. Who decides that somebody must be put in a mental hospital?

Answer	Age group		
	5-6	7-8	9-10
Don't know	11	8	6
Doctor	5	6	7
Father, mother, relations, relatives	1	3	6
Police	5	1	1
Attendants in mental hospitals, nurse	1	5	2
Head of a mental hospital, chief of hospital	1	2	
Other answers	6	7	9
Total	30	32	31

Bums

43. What does it mean if somebody is said to be a bum? What is a bum like?

Answer	Age group		
	5-6	7-8	9-10
Don't know	3		
He drinks, is drunk	18	29	29
Walks in the forest, sleeps in the street, no home		3	5
Crashes, takes apart, does evil, steals, lights fires	3	5	
No sense, something wrong in the head	1	2	
Dirty clothes	2		
Hair is off	3		
Other answers	4	2	4
Total	34	41	38

44. What do you think, why does somebody become a bum?

Answer	Age group		
	5-6	7-8	9-10
Don't know	5	7	2
Because he drinks	20	23	14
Because friends tempt			6
Drinking becomes a habit, a mania, doesn't get rid of it			5
No home, wife divorces			2
Other answers	5		2
Total	30	30	31

45. Are people somehow angry with bums?

Answer	Age group		
	5-6	7-8	9-10
Don't know		2	2
No	9	1	4
Yes, people are, at least a little	7	4	5
Sometimes people are, sometimes not		2	2
Yes, if he drinks	1	8	1
Yes, if he teases others, calls names, disturbs, does evil	4	5	5
Yes, destroys, smashes	2		2
Yes, when he begs	2	2	
Yes, and take him to jail, to prison	2	4	2
Yes, when he leaves empty bottles in doorways, pisses	1	3	2
Yes, when he steals	1	1	2
Yes, wife bawls			2
Yes, when he sleeps in parks			2
Yes, he can light fires	1	1	
Children despise			1
Total	30	33	32

46. What do you think, do bums work?

Answer	Age group		
	5-6	7-8	9-10
No	19	26	21
They couldn't, they wouldn't get, they would be sacked	4	1	1
No, they have no money at all	2		
Some do, some don't, perhaps, not much	2	1	7
Yes, most do	4	2	1
No, if he is drunk; yes, if not	1		
They do some chores	1		
Total	33	30	30

47. Where do bums live?

Answer	Age group		
	5-6	7-8	9-10
Don't know	6	4	2
Nowhere, in the woods, in the park, in the street	7	13	19
In trash cans, dumps, under boats, or under a bridge	1	5	6
In hay cottages, houses, huts	8	6	7
In doorways, attics, cellars	3	1	1
At home	1	3	2
In homes for bums or apartments or institutions	1	1	5
Other answers	3		1
Total	30	33	43

48. What do you think, can a bum become a normal person again?

Answer	Age group		
	5-6	7-8	9-10
Don't know		3	1
No	14	4	5
No, if he drinks	1		
Yes	4	3	
Yes, if he doesn't drink	6	13	12
Yes, if he can become sober, he is put in jail to sober up	2	2	1
Yes, if he is cured, helped, is put in a sanatorium		2	4
Sometimes yes, sometimes no, perhaps		2	4
Other answers	3	1	3
Total	30	30	30

The rich

49. What does it mean when it is said that somebody is very rich?

Answer	Age group		
	5-6	7-8	9-10
Money, lots of money	21	20	23
Property, houses, factories	3	6	7
Gold	2		
He has clothes	2	4	2
Beautiful home, classy, good home		4	2
Can buy anything	1	1	2
Power		2	1
Has worked hard		2	1
Other answers	9	7	1
Total	38	46	39

50. Are there many people in Finland who are really rich? How many?

Answer	Age group		
	5-6	7-8	9-10
Don't know	3	2	5
No	3	2	
Not many, some	3	2	5
Some acquaintances or friends mentioned	5		
President, emperor, rulers	2	1	3
1	1	2	
2-9	5	4	8
10-19	3	3	4
20		1	2
21-100	3	6	3
101-2000	1	3	1
About 100 000	1		
Yes, quite many		4	1
One half is, the other is not		1	
Total	30	31	32

51. Is it a good thing to be rich? Is it of any use?

Answer	Age group		
	5-6	7-8	9-10
Don't know	1	1	1
No	9	4	6
Yes	8		2
Yes, one can buy what one pleases, even something classy, pay the rent etc.	7	14	14
Yes, one is not left without food, one can buy food		7	2
Ordinary is fine, neither rich nor poor		1	1
Other answers	5	6	5
Total	30	33	31

52. Do you think it is right that some people are rich and some are poor?

Answer	Age group		
	5-6	7-8	9-10
Don't know		3	1
No	9	18	14
Yes, sometimes	9	4	2
Rich is nicer than poor	2	1	
It's good that there are rich people, not good that some are poor	3	1	
Not good that there are poor people	1		1
The rich should give food to the poor, too, money, a chance, a break	2		3
All people should be alike, poor or rich, ordinary	1	1	5
All should be rich	1	2	2
Poor is better	1		
Other answers	1		2
Total	30	30	30

53. What can a person do if he/she wants to become very rich?

Answer	Age group		
	5-6	7-8	9-10
Don't know	2	2	
Work	9	3	5
Do such work as gives lots of money		5	2
Work hard, diligently		2	9
Put money in bank, save, save money	5	13	10
Take from bank	4		
Be good at school, study	1	1	5
Sell	1	2	
Start a business, a factory, become director of such	1		2
Steal	2		
Win	1	1	1
Other answers	4	2	2
Total	30	31	36

54. Would you like to be rich?

Answer	Age group		
	5-6	7-8	9-10
Don't know		2	3
No	9	5	4
Yes	15	22	17
Yes, so that I could get a car, etc.	2		
Enough money, not rich, but average			4
Other answers	4	1	2
Total	30	30	30

55. This year 1970 is devoted to the protection of nature. What do you think is meant when it is said that nature should be protected? (If the child's answer was vague, it was further ascertained that he/she understood the concepts "nature" and "protect".)

Answer	Age group		
	5-6	7-8	9-10
Don't know	7	4	
We protect animals so they won't die, we don't shoot them	6	15	22
Flowers, plants taken care of, so they wouldn't die	6	9	9
No litter			4
We should keep off the grass		2	2
We protect, must protect, take good care of	2	1	
So we don't pollute water, air		2	1
No poisons that kill	1		
Industrial wastes should be purified			1
Other answers	9	5	1
Total	31	38	40

56. What do you think is meant when it is said that nature is polluted? (It was ascertained that the child understood the question; explanations were given if needed.)

Answer	Age group		
	5-6	7-8	9-10
Don't know	15	10	
Water, sea pollutes, gets dirty, cannot be drunk, fish die	4	5	7
Air becomes dirty, polluted, cannot breathe	1		8
Flowers, plants die, don't grow well	2	1	1
Animals die		1	
Dirt, exhaust comes from car motors	2	1	8
Dirt comes from factories, from factory chimneys	1	3	4
Trash, garbage		4	4
Gets dirty, mud	3	6	6
Other answers	3	1	2
Total	31	32	40

57. When nature gets polluted, what is pollution or dirt like?

Answer	Age group		
	5-6	7-8	9-10
Don't know	2	3	2
Dirt, mud, dust, sand, soil	10	8	9
Black, brown, white, grey	6	5	1
Trash, twigs, etc.	3	6	5
Water dirty, things thrown into water	4	4	6
Factory smoke or fog	1	3	6
Exhaust gas	1		5
Factory dirt	1	1	
Oil			3
Chemicals, quicksilver		1	1
Other answers	4	2	7
Total	32	33	45

58. Can there be pollution in the air? What kind?

Answer	Age group		
	5-6	7-8	9-10
Don't know		3	
No	17	4	
Yes	7	4	3
Dust, smog, sand	2	5	4
Fog		1	2
Smoke, from chimneys		7	2
Smoke from factories, factory pollution	1	2	8
From cars, exhaust		3	9
Carbon-dioxide			4
Carbon-monoxide			2
Cigarette smoke			2
Other answers	3	4	4
Total	30	33	40

59. Where do you think the air is purest?

Answer	Age group		
	5-6	7-8	9-10
Don't know	6	9	1
In the country-side, in the country, far from towns	1	4	20
In heaven, in the sky, in space, above clouds, higher up	5	6	1
Inside, at home	3		2
Outside	1		
At sea, over water or a lake	1	1	1
Clean everywhere	2	1	
Nowhere in the world	1	2	1
In towns		2	
Where cars don't move			3
When the sun shines	2	1	1
In Finland	2	1	
Other answers	7	4	2
Total	31	31	32

60. Can there be pollution in the water? What kind?

Answer	Age group		
	5-6	7-8	9-10
Litter, dirt, cans etc.	8	18	9
Soil, mire, mud, slime, sand	5	1	1
Black	6	2	1
From sewers; factories let out waste water or wastes		3	10
Oil, boat steam, soot, fuel	1	4	4
Detergents, when carpets or laundry are washed		3	1
From flowers, trees, tree trunks	2		1
Yes, there can be	4	3	4
Yes, so that people cannot swim	2	1	
No	2		2
Other answers			4
Total	30	35	37

61. Have you ever seen a dirty lake shore? Where?

Answer	Age group		
	5-6	7-8	9-10
No	6	7	3
Yes, sometimes	4	3	1
Yes, somewhere at the shores of lake Näsijärvi	5	6	15
Yes, somewhere at the shores of lake Pyhäjärvi	1	5	6
Somewhere else in Finland	13	7	5
Abroad	1	1	
On TV		1	1
Total	30	30	31

62. What harm do you think would ensue if all rivers and lakes were badly polluted?

Answer	Age group		
	5-6	7-8	9-10
Don't know	4	1	
Cannot swim	15	14	17
Cannot get (clean) water, bad water comes out of pipes		4	7
Cannot drink water	3	3	6
Cannot wash	1	1	4
Fish die		4	5
Birds, plants, animals die	1	1	2
Man dies, gets sick, ill	1	1	1
Cannot fish, angle	1	1	4
Nothing	3	1	1
Other answers	6	4	4
Total	35	35	51

63. If water, soil, and air are very polluted, what harm would that cause to plants, animals and people?

Answer	Age group		
	5-6	7-8	9-10
Don't know	12	3	1
Die, cannot live, feel bad	3	5	5
Man dies, gets sick	3	4	9
Animals die, get sick	3	6	12
Plants die, get sick	4	12	17
Man, clothes, get dirty	2	3	
Animals get dirty	3	1	
Plants get dirty	2	1	
Cannot breathe	1	2	5
Wouldn't get water, couldn't drink, couldn't get food		5	4
Dangerous, bad	1	2	2
Nothing		1	
Other answers	6	3	5
Total	40	48	60

64. What do you think, what kind of pollution is the worst of all?

Answer	Age group		
	5-6	7-8	9-10
Don't know	8	13	4
Smoke, from chimneys, from factory chimneys		1	7
Exhaust gas			3
Poisonous, poisons	2	3	
Oil, gasoline	1	2	4
Of which one dies	1	2	
Sand, mud, clay, dust	6	3	1
Litter, garbage	3	4	2
Pollution of water		3	
Cigarette smoke			2
Other answers	9	3	8
Total	30	34	36

65. What could people do to prevent the pollution of nature?

Answer	Age group		
	5-6	7-8	9-10
Don't know	12	6	5
Dirt, pollution is washed, cleaned away	4	7	3
Guard, protect, prevent	2	4	4
Litter to the dump, hut; live tidily	2	6	3
No waste water from factories into lakes		2	2
Shut down factories, decrease their number	1		5
Drive less by car, clean exhausts, electric cars			6
No garbage or litter into water		2	5
Nothing can be done	3		
Other answers	6	4	4
Total	30	31	37

66. What do you think, can anyone order that nature must not be polluted?

Answer	Age group		
	5-6	7-8	9-10
Don't know	6	6	4
No	7	6	4
President, ruler	1	4	3
Chiefs, leaders, officials, minister	1	1	3
State, town	2	3	7
Owner of a lake, flowers or of a forest	3		2
Law	1	2	
Protector of nature, animals, etc.	2	3	5
God	1	1	1
Janitor	2	1	
Other answers	4	3	2
Total	30	30	31

67. Tell me, what should people do so that nature - I mean soil, water, and air - would stay clean? What do you think?

Answer	Age group		
	5-6	7-8	9-10
Don't know	11	9	6
One should not litter, throw garbage etc.	3	9	9
Clean, by different means	7	5	5
Not throw dirt into water	2	5	3
Factories stop, decrease	3		3
Not drive a car much, make cleaner cars	2	1	4
No waste waters into lakes from factories	1	2	2
No steam, smoke from chimneys		2	2
No fires		3	1
Nothing can be done	2		
Other answers	5	4	5
Total	36	40	40

68. What could you do yourself?

Answer	Age group		
	5-6	7-8	9-10
Don't know	8	10	10
Nothing, nothing alone	9	3	5
No dirt into water, live tidily, trash into barrels etc.	4	9	10
Take care of plants and animals	2		
Clean out dirt	2	1	1
Other answers	5	7	4
Total	30	30	30

69. Have you ever talked with other children about these matters? What?

Answer	Age group		
	5-6	7-8	9-10
Don't know, don't remember		1	
Haven't spoken	21	25	18
Sometimes, a little	2	2	4
Of waste water, pollution, poisonous qualities of waters	2	1	3
Have spoken with a grown-up	1		
Have seen on TV	1		
Other answers	3	1	8

Not drive a car much, make cleaner cars	2	1	4
No waste waters into lakes from factories	1	2	2
No steam, smoke from chimneys		2	2
No fires		3	1
Nothing can be done	2		
Other answers	5	4	5
Total	36	40	40

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	5-6	7-8	9-10
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Answer	Age group		
	5-6	7-8	9-10
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Haven't spoken	21	25	18
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Of waste water, pollution, poisonous qualities of waters	2	1	3
Have spoken with a grown-up	1		
Have seen on TV	1		
Other answers	3	1	8
Total	30	30	33

Tiivistelmäkortti

Ab

Nummenmaa, Tapio (1971) Children's conceptions of the adult world. Kasvatustieteiden tutkimuslaitoksen julkaisuja 91, Jyväskylän yliopisto.

Tutkimuksen tarkoituksena oli kuvata lasten käsityksiä sodasta ja rauhasta, vallasta ja sen käytöstä, -eräistä poikkeavista ryhmistä, sekä luonnonsuojelusta. Tutkimukseen osallistui kaikkiaan 90 lasta, jotka oli mielivaltaisina ryhminä valittu Tampereelta. Lapset edustivat ikätasoa 5-6, 7-8 ja 9-10 vuotta, ja kutakin ikätasoa kohti oli 15 tyttöä ja 15 poikaa. Tutkimus suoritettiin haastattelulla. Vastaukset nauhoitettiin ja kirjoitettiin myöhemmin nauhoilta sanatarkasti. Kaksi henkilöä kävi vastaukset lävitse ja luokitti ne. Luvussa II esitellään tulokset siten, että vastaukset käydään lävitse kysymys kysymykseltä, pyrkien tuomaan esille missä kohdin eri ikäryhmien vastaukset ovat samanlaisia ja missä erilaisia. Esitystä on havainnollistettu esimerkein. Luvussa III tarkastellaan lasten antamia vastauksia siten, että ensin esitetään yhteenvedot siitä, miten eri ikäryhmät mihinkin asiaryhmään kuuluviin kysymyksiin vastasivat, ja myös tarkastellaan joitakin aikaisempia tutkimuksia. Näitä tosin löytyi aika niukasti. Käsitysten rakenteiden yleisiä piirteitä on myös lyhyesti kuvattu. Käsityksiin sisältyneitä kuvitteellisia aineksia on analysoitu luvussa IV. Erotellaan kuvitteellinen ajattelu probleematyypin puitteissa ja vapaa kuvitteellinen produktio, ja tarkastellaan lyhyesti kummankin esiintymistä vastauksissa.

Nummenmaa, Tapio (1971) Children's conceptions of the adult world. Institute for Educational Research, Jyväskylä, Finland.

The purpose of the study was to describe children's conceptions of war and peace, power and the use of force, and the protection of nature. In the study, 90 children had been arbitrarily chosen from different age groups 5-6, 7-8 and 9-10 years old boys. The research method used was interviews. The answers were recorded and later literally copied through the answers and classified. The answers are dealt with one by one through the answers and classified. In the study, the answers of different age groups are similar and different. The answers illustrate the presentation. In the study, the answers are dealt with so that a summary of the answers of different age groups answered the questions in the same fields, and also some previous studies in the same fields, were quite scarce. General conceptions have also been described within the conceptions have been described. Imaginative thinking in the free production are separated in the answers is briefly dealt

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Abstract card

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protection of nature. In the study participated 90 children who
had been arbitrarily chosen from Tampere, the children presented
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boys. The research method used was interviewing. The answers were
recorded and later literally copied in writing. Two people went
through the answers and classified them. In chapter II the an-
swers are dealt with one by one to find out where the answers in
different age groups are similar and where they differ. Examples
illustrate the presentation. In chapter III children's answers
are dealt with so that a summary is given on how the different
age groups answered the questions presenting the various subject
fields, and also some previous studies are brought up. These how-
ever, were quite scarce. General traits in the structures of
conceptions have also been described briefly. Imaginative elements
within the conceptions have been analyzed briefly in chapter IV.
Imaginative thinking in the framework of problem solving, and free
imaginative production are separated, and the presentation of each
in the answers is briefly dealt with.

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