A FURTHER CROSS-CULTURAL COMPARISON OF CHILDREN'S

JUDGMENT OF PARENT-CHILD CONFLICT IN GERMANY,

FINLAND, ENGLAND AND THE UNITED STATES

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THESIS

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ABSTRACT

This study was an analysis of Story No. 4, The Ink Spots, Series A, of the Anderson Incomplete Stories. Story No. 2, The Lost Meat, had been analyzed in a previous study, and it was possible to make comparisons between the two analyses and further evaluate the Anderson Incomplete Stories as a measuring instrument of intercultural differences.

Samples used were from data collected in Birmingham, England; in Helsinki, Finland; in Harburg and Munich, German; and in Knoxville, Tennessee, U.S.A. Subjects were 1,227 children in the seventh school year in these cities.

Children's stories were coded in two ways: by four defined levels of outcome (integration, domination-resistance, ambiguous, or domination-submission); and by categories representing the psychological themes in the stories. In Story No. 2 there were 33 categories for thought, feeling and action by the child-character and 46 for the mother-character. In Story No. 4 there were 37 categories for thought, feeling, and action by the child-character and 53 categories for the mother-character.

Aims were to analyze Story No. 4 and make sex and socio-economic comparisons in category clusters and outcome levels, and these same comparisons in cross-cultural samples, and to make comparisons of Story No. 4 with Story No. 2.

Reliability of coding showed percentages of agreement ranging

from 93.5% to 100%.

The Birmingham sample was highest in the two outcomes of spontaneity of the child, integrative outcome and domination-resistance. It was lowest in ambiguous outcomes. That is, human relations in Birmingham were more clearly defined by these children in their stories. Helsinki was significantly different from all other samples in ambiguous, unstructured outcomes of the stories, indicating a low order of communication, and significantly lower in domination-submission. Hamburg, Munich and Knoxville were alike in all four outcomes and showed no significant differences among themselves.

More boys showed ambiguous, unstructured outcomes than girls in all five samplings, the differences being significant in four. More children in the high socio-economic groups showed integrative outcomes in both Story No. 2 and Story No. 4, the differences for Story No. 4 being significant in Hamburg and Munich. More children in the low socio-economic groups had ambiguous outcomes than in the high groups in all samples, the differences being significant in Helsinki, Hamburg and Munich.

Analyses of the data showed that in completion of the stories children were sensitive to the structure of the stimulus material. There were two structural differences in the two stories that showed effects in the analysis of the data. Story No. 4 had a question after it: "How do they both feel about it?" Calling attention to both the mother and the child seemed to account for higher numbers of integrative outcomes, higher percentages of constructive behavior by both the

mother and the child and higher frequencies of anxiety than were found
in Story No. 2, while themas of domination and submission were lower
in frequency. Second, in Story No. 4 the mother enters just as Susan
finds herself in a predicament. There was less opportunity or necessity
to tell truth or lie, and there were much lower frequencies of both
tells truth and tells lie in Story No. 4.

The girls wrote longer stories with wider variety of themas than
boys. As Heter found in Story No. 2, girls gave higher frequencies
in category clusters of constructive behavior by mother, submission, and
anxiety. Consistently in all five samples girls were high in constructive
mother category clusters; with the exception of Helsinki, constructive
behavior by the child; and, with the exception of Knoxville, child tells
lie. For all five samples girls had higher frequencies of anxiety and
submission, the differences being generally in the same direction as
for Story No. 2, and six of the ten differences for these two categories
being significant.

Analysis of data for socio-economic levels showed that children
from the high groups generally wrote longer stories. They had consistent-
ly higher frequencies of integrative outcomes (as in Story No. 2), the
differences in Hamburg and Munich being significant. The high groups
had consistently higher frequencies in the category cluster of construct-
ive behavior by the mother and, with the exception of Helsinki, construct-
ive behavior by the child. Children in the high group had higher fre-
quencies of tells lie in Birmingham and Helsinki. Children in the
low group had higher frequencies of tells lie in Hamburg and Munich,

the difference in Munich being significant. Socio-economic levels in
the four cities were exactly reversed for <u>child</u> <u>tells</u> <u>truth</u>. Children
in the high socio-economic group had high percentages of <u>tells</u> <u>truth</u>
in Hamburg and Munich, while <u>tells</u> <u>truth</u> was found more frequently in
Birmingham and Helsinki among children at the low socio-economic level.
Children in the low groups tend to write shorter stories.

Hamburg and Munich were significantly different from each other
in category clusters of <u>constructive</u> <u>behavior</u> <u>by</u> <u>the</u> <u>mother</u>, <u>truth</u>, <u>lie</u>,
and <u>anxiety</u>, supporting the findings for Story No. 2, which leaves open
the question of a German national character.

Knoxville stories reveal more initiative and personal integrity
in the child and more respect for the child for both Story No. 2 and
Story No. 4. Knoxville children showed the highest percentage of <u>tells</u>
<u>truth</u> and the lowest percentage of <u>tells</u> <u>lie</u>. They showed high attention
to the child in having highest percentages of <u>constructive</u> <u>behavior</u> <u>by</u>
<u>Susan</u>, and lower attention to the mother in having next to lowest
percentages of children with themas in the <u>constructive</u> <u>behavior</u> <u>by</u>
<u>mother</u> category cluster. Munich and Hamburg were lowest in frequency
for <u>constructive</u> <u>behavior</u> <u>by</u> <u>Susan</u>, and Hamburg children, who gave little
attention to <u>constructive</u> <u>behavior</u> <u>by</u> <u>the</u> <u>child</u>, were highest in fre-
quency of <u>constructive</u> <u>behavior</u> <u>by</u> <u>the</u> <u>mother</u>. Evidence shows that
according to the children's stories highest frequencies of <u>truth</u> and
lower frequencies of <u>tells</u> <u>lie</u> were accompanied by milder punishment
and milder forms of parental domination in Knoxville. <u>Admonishment</u>
<u>about</u> <u>future</u> <u>behavior</u> ranked first in frequency and <u>admonishment</u> <u>about</u>
<u>past</u> <u>behavior</u> ranked third. In all the other samples <u>scolding</u> ranked

first among the types of domination. Admonishment did not rank high in any of the other samples and scolding did not rank high in Knoxville. It was pointed out that admonishment represents chiefly disapproval of some kind of behavior. Scolding and physical punishment represent an attack on the child himself.

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I. INTRODUCTION

This study is part of a research program being carried on by
H. H. Anderson and G. L. Anderson (2, 3). The program is cross-
cultural in nature and is designed to investigate, through analysis
of children's written responses, the kinds of interaction that
take place between children and their peers, their parents, and their
teachers. The approach has been to present children with a projective
device, the Anderson Incomplete Stories (see Appendix B), and ask
them to write down their own conclusions for the stories. This pro-
cedure has been carried out in classrooms of selected public schools
in the German cities of Karlsruhe, Braunschweig, Hamburg, and Munich;
in Helsinki, Finland; in Drammen, Norway; in Stockholm, Sweden; in
Birmingham, England; in Mexico City and some rural areas in Mexico;
and in Knoxville, Tennessee.

Analyses have been made of data on Story No. 2, The Lost Meat,
Series A, from Karlsruhe, Germany, and from Mexico City by Anderson
and Anderson (3), Anderson (2) and Geierhaas (6, 7). Geierhaas
has dealt with problems of reliability of the children, the trans-
lator, and the coder. Heber (8) has also analyzed data from Story
No. 2, The Lost Meat, and has made sex comparisons, socio-economic
comparisons, and cross-cultural comparisons of responses of children
from German, English, Finnish, United States, and Mexican cities.

The hypotheses being investigated by Anderson and his co-workers in the research program of which this study is a part are:

1. Children brought up in an extremely authoritarian and dominating culture (Germany) are different in their interpersonal relations from children in less dominating (more democratic cultures.

2. As compared with children in a more democratic culture, children in the more authoritarian culture will show significantly higher frequencies of responses of: anxiety, lying, cheating, deception, punishment, daydreaming (fantasy unrelated to reality), escape from reality, ambiguous unstructured relating, conformity, guilt, and submission in fantasy conflict situations.

3. Children in the more authoritarian culture will also show significantly fewer responses of honesty, sense of fair play, social problem solving, communication, action, spontaneity, cooperation and integrative behavior (working together).

4. When outcomes of interpersonal conflict are classified according to levels of increasing authoritarianism or domination, the distribution of outcomes for German children will be skewed at the bottom of the following levels of human relating:

   a) Integrative, problem-solving
   b) Domination-resistance
   c) Ambiguous, unstructured, indecisive
   d) Domination-submission. (2)

Heber found in his analysis of Story No. 2, The Lost Meat, that significantly more children in Knoxville and Birmingham gave responses portraying the child in the story as telling the truth than did children in Hamburg and Helsinki. The tells truth thema also appeared significantly more often in the Hamburg and Helsinki stories than in the Karlsruhe, Mexico City and Munich stories. For the response portraying the child as telling a lie, the order of samplings was reversed, with Munich stories having significantly more of this response than the other cities. These results were consistent with the hypotheses.

The greater number of children giving _lie_ themas which Heber found in the Munich stories was thought to account for the fact that the stories from Munich contained significantly fewer responses of _submission_ than any of the other samplings, since stories with themas of _lie_ or _deception_ did not usually contain themas of _submission._

Domination themas were found to be significantly more frequent in Birmingham than in the other samplings, while Karlsruhe had the least frequent _domination_ themas. However, the domination in Birmingham was accompanied by a high frequency of _resistance_ themas and a low frequency of _submission_ themas. The Karlsruhe sample contained a high frequency of _submission_ and a low frequency of _resistance_ themas. Resistance is a higher level of response to domination than is submission; it is still spontaneous and communicative, whereas submission is close to psychological atrophy. Thus the pattern in Birmingham was as a whole at a higher level of response than that in Karlsruhe.

On the thema of _constructive behavior by Michael_, Birmingham and Hamburg were significantly higher than Munich, Knoxville, and Helsinki, which in turn were significantly higher than Karlsruhe and Mexico City. On the thema of _constructive behavior by mother_ and on stories with _integrative outcomes_, Hamburg, Helsinki, and Birmingham, in that order, were significantly higher than Karlsruhe, Munich, and Mexico City. The results from these three clusters of themas are consistent with the other clusters of themas which represent high levels of spontaneous relating (_tells truth, resistance_) in that Karlsruhe,

Munich, and Mexico City had the lowest percentages. These results and consistencies strongly support the hypotheses.

The Present Study

Aims. The aims of the present study are: (1) to analyze Story No. 4, The Ink Spots, Series A, of the Anderson Incomplete Stories, from data collected in Birmingham, Helsinki, Hamburg, Munich, and Knoxville; (2) to compare outcomes of stories for these samples; (3) to make a comparison of results from Story No. 4 with results from Story No. 2 obtained by Heber (8), using the stories from the Birmingham sample for sex comparisons and socio-economic comparisons; (4) to find the comparative responses of children in each sample to several category clusters of themas; and (5) to study the types of domination mentioned by children in each of the samples.

Subjects. This study is based on data obtained from 1,227 children in the seventh school year. The distribution of subjects in the five samples by sex, socio-economic level and location are given in Table 1. The samples are essentially the same as those described by Heber (8) in his study with the exception that the Karlsruhe and Mexican samples have been omitted and the middle socio-economic group in Hamburg is smaller.

Methods and procedure. The methods of collecting and coding the data have been reported by Anderson and Anderson (2, 3), Geierhaas (6, 7), and Heber (8).

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For purposes of statistical treatment of the data, each child's story is coded according to themas having psychological significance. The thema categories for Story No. 2 have been listed by Geierhaas (6), along with the description of units used for coding and classifying of stories as to outcome. The categories used for Story No. 4 are to be described under Chapter III of this study.

In addition to coding of themas into categories, each story is judged as to general outcome and is assigned to one of six mutually exclusive outcome classifications. These are described under Chapter IV of this study.

In the tabulating of the coded themas it frequently happens that in a given story there are several themas for the same category. In the treatment of data in this study multiple tallies have been disregarded and unless specifically stated otherwise, frequencies refer to numbers of children. Within category clusters each child is counted only once.

TABLE 1

DISTRIBUTION OF NUMBERS OF BOYS AND GIRLS
BY SOCIO-ECONOMIC LEVEL

Location	BOYS Socio-Economic Level				GIRLS Socio-Economic Level				Total
	High	Middle	Low	All	High	Middle	Low	All	
Birmingham	156		64		122		53		395
Helsinki	36	40	27		38	40	27		208
Hamburg	36	57	30		33	53	37		246
Munich	36		37		48		43		164
Knoxville				93				121	214
Total									1227

II. RELIABILITY OF CODING

As reported above, considerable effort was made to analyze Story No. 2, The Lost Meat, before analysis was made of Story No. 4, The Ink Spots. The writer has participated with the Andersons, Geierhaas and Heber in revising the coding categories for Story No. 4.

Reliability of coding Story No. 4 was first established between the writer and Geierhaas on a sample of Karlsruhe stories, and after a lapse of 23 days established again on a sample of English stories. The following percentages of agreement were obtained: 93.5% on categories and 95.5% on outcomes for the Karlsruhe sample, and 96.6% on categories and 100% on outcomes for the Birmingham sample.

Since this thesis was to involve a comparison of Story No. 2 and Story No. 4 for the Birmingham sample, and since Heber had coded all the Birmingham children's Stories No. 2, it was desirable to determine if the writer could code the Birmingham stories reliably with Heber. Reliability between the two was established with 97.6% agreement on categories and 95% agreement on outcomes.

III. COMPARISON OF CODING CATEGORIES FOR STORIES NO. 4,

THE INK SPOTS, AND NO. 2, THE LOST MEAT

In the design of the Anderson Incomplete Stories it was desired to have two stories presenting a potential conflict between a child and his mother. Story No. 2, The Lost Meat, involves a boy and his mother, and Story No. 4 involves a girl and her mother.

The English texts of the two stories are as follows:

Story No. 2, The Lost Meat.

Michael's mother sends him to the store to get one pound of wieners. On the way home he puts the package of meat on the edge of the sidewalk and plays for a short time with his friends. A shepherd dog darts forward quickly, claws half of the wieners out of the package and rushes away with them. Michael wraps up the remaining wieners and takes them home.

What does Michael say to his mother?
What does his mother do?
How does Michael then feel about it?

Think about these questions, then finish this story quickly with a few sentences.

Story No. 4, The Ink Spots.

Susan[1] is sitting in the living room working on her homework. Suddenly she remembers her mother's new coat. She wonders how she would look in it. When taking the coat off she notices that she had got some ink spots on her mother's new coat. Just as Susan is trying to wipe out the ink spots her mother enters the room.

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[1]The name of the girl used in Knoxville in 1953 was Elizabeth. The name was changed to Susan for the Birmingham stories in 1954 because it would be shorter for the children to write.

What does her mother say?   How do they both feel about it?
What does Susan say?   What does each one do?

Think about these questions and _finish_ this story quickly with a few
sentences.

Abbreviated titles of the coding categories as revised for Story

No. 4 are the following:

Categories for Susan

IW Tells truth spontaneously, the whole truth
ID Tells truth spontaneously, in detail
2W Tells truth after conflict, anxiety, after fantasy lie (whole truth)
2D Tells truth after conflict, anxiety, after fantasy lie (in detail)
3W Tells truth delayed, after question, scolding, punishment (whole truth)
3D Tells truth delayed, after questions, etc. (in detail)
4W Tells truth spontaneously after lie (whole truth)
4D Tells truth spontaneously after lie (in detail)
5W Tells truth after lie, extorted (whole truth)
5D Tells truth after lie, extorted (in detail)

6   Delays explanation, facing reality
8   Plans fantasy lie or deception
9   Lies after weighing the circumstances or after question, after fantasy lie
10 Lies spontaneously, deception

11 Constructive action and speaking by Susan
11x Constructive action by Susan _and_ the mother
12 Makes spontaneous restitution
12x Restitution by Susan and the mother
13 Constructive thinking and feeling by Susan
13x Constructive thinking and feeling by Susan and the mother

14 Hostile, aggressive action, speaking by Susan
14x Hostile, aggressive action, speaking by Susan and mother
15 Hostile, aggressive feeling, thinking by Susan
15x Hostile, aggressive feeling, thinking by Susan and mother
17 Regrets telling truth

19 Anxiety, emotion, fear
19x Anxiety, emotion, by both Susan and the mother
21 Tension reduction
21x Tension reduction by both Susan and the mother
22 Begs, requests, leniency, pardon, forgiveness, sympathy

23 Submission: action, obeys
24 Submission: thinking and feeling (non-communication)
24a Susan regrets telling lie
25 Voluntary, spontaneous promise to mother (communication)
26 Promises herself, vows, (non-communication)
27 Promises after punishment, scolding, admonishing and forgiving
28 Negative statement pertaining to Susan, concerning some socially
    unacceptable act

Categories for the Mother

41a Mother perceives from Susan: something is wrong, suspects
41b Mother perceives from non-Susan: something is wrong, suspects
42 Mother questions: fact-finder, calls Susan for questioning
44 Mother communicates to Susan her distrust, accuses her
45 Seeks, or gets outside verification of facts
      a) Communication to Susan
      b) Non-communication
      c) Without seeking, "Deus ex machina"
46 Mother behaves vaguely
47 Feeling of disbelief

48 Mother becomes or feels angry, excited
49 Miscellaneous, unhappy emotion, cries, feels sad

52 Mother accepts Susan, action (communication)
53 Mother's positive feeling, "understands"
54 Mother believes truth

55 Mother believes lie or deceptive maneuver

56a Deprivation of food (after Susan told truth)
56b Deprivation of food (no evidence of truth or lie)
56c Deprivation of food (after Susan told lie or deception)
58a Deprivation of playtime (after truth)
58b Deprivation of playtime (no evidence)
58c Deprivation of playtime (after lie)
60a Restitution under duress (after truth)
60b Restitution under duress (no evidence)
60c Restitution under duress (after lie)
62a Physical punishment (after truth)
62b Physical punishment (no evidence)
62c Physical punishment (after lie)
64a Mother tells father (after truth)
64b Mother tells father (no evidence)
64c Mother tells father (after lie)
66a Punishment by father (after truth)
66b Punishment by father (no evidence)

66c Punishment by father (after lie)
68a Susan sent to bed (after truth)
68b Susan sent to bed (no evidence)
68c Susan sent to bed (after lie)
70a Miscellaneous punishment (after truth)
70b Miscellaneous punishment (no evidence)
70c Miscellaneous punishment (after lie)
72a Scolding (after truth)
72b Scolding (no evidence)
72c Scolding (after lie)
73 Susan sent to store, or to get material for repair

74 Mother makes restitution

75a Mother admonishes, re past behavior (after truth)
75b Mother admonishes, re past behavior (no evidence)
75c Mother admonishes, re past behavior (after lie)
76a Mother admonishes, threatens, re future behavior (after truth)
76b Mother admonishes, threatens, re future behavior (no evidence)
76c Mother admonishes, threatens, re future behavior (after lie)

77 Mother shows tension reduction
78 Mother forgives Susan (power relation)
81 Negative statement of mother's unhappy feeling or act

A preliminary attempt was made to code Story No. 4, The Ink

Spots, using the same category definitions which had been developed

for Story No. 2, The Lost Meat, simply substituting for the name

Michael the name of Susan. Psychological differences in the two

stories soon became apparent, however, which called for revision and

addition of categories. For example, one question asked after Story

No. 2 was "How did Michael then feel about it?" In Story No. 4 there

was the question, "How do they both feel about it?" This question

resulted in many statements in the children's stories which included

both parent and child behavior in one tally unit. This type of

statement occurred very infrequently in Story No. 2, and when it

did it was coded by giving a tally in the mother category and a

tally in the Michael category, two tallies for one verb unit. It was thought that the statistical results would not be invalidated by this treatment, since its occurrence was so rare.

In Story No. 4, however, the problem had to be dealt with more directly, as these "both" statements were fairly frequent. If "both" was given two tallies, one in the mother category and one in the Susan category, there would be inflation of the data which would be unwarranted according to the definition of units as one tally for each verb unit.

Accordingly, separate categories for these statements were set up. Categories in which it was possible for a "both" statement to occur were supplemented by a separate category with an "x" after it for identification. For example, after category 11, constructive action by Susan, category 11x was inserted to include the child's statements of constructive action by Susan and the mother. Similarly, "x" categories were added to categories 12, 13, 14, 15, 19, and 21. In the analysis of data, constructive action by Susan included tallies in category 11, plus the tallies in category 11x. Similarly, constructive action by the mother included tallies in category 52, mother accepts Susan, action (communication) plus tallies in category 11x, constructive action by Susan and the mother.

There are differences in response to the given content of Story No. 4 which are brought about by the degree of development of the narrative, or the point at which the givens are terminated and the child must proceed.

In Story No. 4, unlike Story No. 2, the mother has entered the picture when the child is in the midst of his misdeed so that some of the categories in Story No. 2 providing for activity before the child faces the mother are unnecessary. This is the case with category 18, Anxiety, emotion, before meeting the mother; this category has, therefore, been dropped from the manual for Story No. 4. In those rare cases where the storywriter alters the givens to create anxiety before the child faces the mother, it is coded as 19, Anxiety, emotion, fear.

Another difference in responses occurs because in Story No. 4 the storywriter might easily presume that the mother can see the facts about the ink spots there before her. The significance of truth and lies in this story is therefore somewhat altered from that in The Lost Meat story. There was at first some confusion in coding when Susan was represented as telling a part-truth only (i.e., telling her mother that she just wanted to try the coat on but not saying anything about the ink spots), for it often seemed that the author may have been presuming that the mother already knew the truth. It was decided, then, that except in those cases where it was evident from the context that Susan was trying to deceive, the child should be given the benefit of the doubt, and part-truth would be coded the same as truth. Category 7, part-truth only has been omitted from the manual for Story No. 4.

Category 16, Displaced emotion was used in Story No. 2 when Michael became angry at the dog which had taken the meat. There was no similar agent in Story No. 4, and this thema was not found in any of the samples. Category 16 was therefore deleted from the manual for Story No. 4.

Confusion and unreliability in the Mother categories was encountered in coding 43a, Mother scolds, uses verbal domination or abuse before truth or lie, and 43b, Mother uses physical domination before truth or lie. One coder might infer that the author of the story perceived the truth as self-evident, and code verbal or physical domination at the beginning of the author's story in one of the categories for verbal or physical domination after truth or lie (categories 56 through 72, and categories 75 and 76); while another coder might say that Elizabeth had not actually said either the truth or a lie and code it as 43a and b, domination before truth or lie. The confusion was resolved by omitting categories 43a and b and adding a third choice, to each of the verbal and physical domination categories, namely, Domination with no evidence as to truth or lie. The numbering and lettering of the domination categories was changed for greater conven- ience. In Story No. 2, for example, categories 56 and 57 were

56, Deprivation of food (after Michael told t ruth)

57, Deprivation of food (after Michael told lie).

In Story No. 4 this became

56a, Deprivation of food (after Susan told t mth)

56b, Deprivation of food (no evidence of truth or lie)

56c, Deprivation of food (after Susan told lie or deception).

A source of unreliability in Story No. 2 had been the difficulty in differentiating between category 49, Miscellaneous, unhappy emotion (communication) and category 51, Mother's negative feeling, feels sad (non-communication). These were supposed to separate, among other

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things, communicated from uncommunicated behavior. But to draw a
line between communicated and uncommunicated behavior was often very
difficult. For instance, "The mother looked sad" can mean that those
around her know how she looks and she is communicating her feelings,
or it can be meant as purely subjective feelings of the mother. It
requires an inference to code the statement as either 49 or 51.
Category 50, Mother cries, is closely related to 49 and 51, and it
seemed that there was little to gain from coding this one particular
thema separately. Hence 49, 50, and 51 were combined into 49,
Miscellaneous, unhappy emotion, which includes both communicated and
uncommunicated behavior.

IV. OUTCOMES OF STORIES

Each child's story was classified according to the outcome of the story as a whole. The outcome classifications have been defined by Anderson and Anderson (3) and abstracted by Geierhaas (6) as follows:

"I, Integrative: Problem-solving Outcome

The solving of the problem. There must be evidence of high spontaneity in both the mother and her child; also of harmony and working together, active communication and evidence of mutual confidence. For harmonious cooperation there must be active communication in the place of mere thinking and fantasy.

"D-R, Domination-Resistance Outcome

A process of hostility and aggressiveness. There must be evidence of mutual hostility, active tension, signs of working against each other; the mother's hostility can be expressed in the form of domination (punishment, scolding, exacting promises), that she uses, and the child's resistance need not be expressed orally or by action but simply on the thinking and feeling level.

"A, Ambiguous, Indecisive Outcome

There is lack of closure, low level of communication, story is essentially unstructured. There is little or no interaction between the mother and the child. Problem has not been faced, and no attempt has been made at its positive or negative solution. Relation between parent and child little changed at end from that at beginning. The experience did not serve as a basis for social learning.

"D-S, Domination-Submission Outcome

Authoritarian person makes the decisions, has the answers. Child merely submits, conforms, obeys. These stories show mother's domination and Michael's subsequent submission. Child accepts mother's verdict, submits to mother's ideas, punishment, and often expresses his submissive acceptance in the form of a promise, vow, or submissive action.

"D, Domination, with no statement of resistance or submission

"S, Submission, with no statement of domination."

Subdivisions of _submission_ and _domination_ were used by Geierhaas and, although tabulations have been made the data are not treated by these subdivisions. In this study the outcome defined as _domination-submission_ will include _domination_ outcomes with no evidence in the story of resistance or submission, and _submission_ outcomes with no evidence in the story of domination.

Results

The results of these classifications are shown in Table 2 as total numbers and percentages for the samples from each city.

The mass of the percentages of outcomes fell in the two lower levels, _ambiguous_ and _domination-submission_ outcomes, where communication is generally one-way or altogether lacking. For four of the five samples, the largest percentages of outcomes were in the _domination-submission_ classification. By contrast the Helsinki sample showed significantly fewer _domination-submission_ outcomes than any of the other samplings. The highest percentage of children in Helsinki wrote stories with _ambiguous, unstructured_ outcomes. Furthermore, the percentages of _ambiguous_ outcomes for the Helsinki sample were significantly higher than percentages of _ambiguous_ outcome for any of the other samples. There were significantly fewer _ambiguous_ outcomes in the sample from Birmingham than in any of the other samples.

Without exception, the percentages of _domination-resistance_ outcomes were lower than the percentages of _integrative_ outcomes. The Birmingham sample, in addition to having fewer _ambiguous_ outcomes than the other samples, had significantly more _domination-resistance_ outcomes and significantly more _integrative_ outcomes than the other samples.

TABLE 2

OUTCOMES OF STORY #4. FREQUENCIES AND PERCENTAGES FOR CHILDREN IN
EACH OF FIVE CITIES IN THE OUTCOMES OF THEIR STORIES CLASSIFIED
ACCORDING TO OUTCOMES OF I (INTEGRATIVE, PROBLEM-SOLVING),
D-R (DOMINATION-RESISTANCE), A (AMBIGUOUS, INDECISIVE),
AND THE SUM OF D (DOMINATION), S (SUBMISSION),
AND D-S (DOMINATION-SUBMISSION)

Outcome	Birmingham N	Birmingham %	Helsinki N	Helsinki %	Hamburg N	Hamburg %	Munich N	Munich %	Knoxville N	Knoxville %
I	90	22.8*	32	15.4	30	12.2	21	12.8	29	13.6
D-R	25	16.3*	12	5.8	13	5.3	12	7.3	7	3.3
A	73	18.5*	93	44.7*	84	34.1	55	33.5	59	27.6
D, S, and D-S	207	52.4	71	34.1*	119	48.4	76	46.3	119	55.6
Total	395		208		246		164		214	

*Significantly different from the percentages of other population samplings
at the same level of outcomes, by chi-square test, at the .05 level or
better.

Discussion

Birmingham outcomes were significantly different from the out-
comes of the other samples in three of the four outcome classifications.
Though the amount of _domination_ and _submission_ shown in Birmingham
was similar to that of Munich, Hamburg, and Knoxville, the amount
of _ambiguity_ was significantly less than that of the other samples,
while the amount of _domination-resistance_ and _integration_ shown were
significantly higher than the other samples. As mentioned in the
introduction, Heber also found that Birmingham stories contained sig-
nificantly more _resistance_ than the other samples.

In a culture tending more toward a democratic than an authoritar-
ian atmosphere one would expect more spontaneity, more social problem-
solving in conflict, more initiative and individual particiption
even in the form of resistance in conflict. The Birmingham children
have put these characteristics into their stories.

In _domination-submission_ outcomes the Birmingham children were
second only to the children in Knoxville in percentages, which is
not consistent with the hypotheses concerning findings in a democratic
culture. The percentage of children in Birmingham who wrote stories
with _domination-submission_ outcomes was not significantly different,
however, from the percentages of children in Hamburg and Munich.
Further understanding of this apparent inconsistency is given in the
discussion of cross-cultural comparisons and of types of domination.

Helsinki differed from the other samples in having significantly
lower percentages of _domination-submission_ and significantly higher

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percentages of ambiguous outcomes, while the percentages of domination-resistance and of integration in Helsinki were not very different from percentages in Munich, Hamburg and Knoxville. Heber, too, found the Helsinki sample in Story No. 2 lower than the other samples in the category cluster of domination themas. The history and traditions of Finland indicate that it is a land of a freedom-loving people, who have a high sense of personal responsibility, honesty, integrity and respect for the individual person. Their respect for the individual may even be confused with a cautiousness in communication which in this study is expressed in the significantly higher outcomes of ambiguity and which is furthermore inconsistent with the hypotheses about high participation in a democracy. In the outcomes of their stories the Finnish children have revealed human relations between the mother and child which, though low in domination and low in submission, are also low in communication. The Finnish children are second only to Birmingham in integrative or problem-solving outcomes and, though higher in frequency than Knoxville, Munich and Hamburg, in that order, are not significantly different from the children in these other samples.

The relative frequencies of outcomes for Munich and Hamburg were quite similar to each other. Heber, in his cross-cultural comparisons of clusters of themas, found that in many clusters Munich and Hamburg were significantly different from each other, leading to the conclusion that the concept of a German national character is not necessarily valid. It will be found in a later section of this thesis that the analysis of categories for Story No. 4 yielded results for

Munich and Hamburg similar to Heber's results with Story No. 2. The coding by categories is a finer, more detailed analysis and brings out differences in specific themas. Coding by outcomes is a more gross measure and is not sensitive to some of the differences revealed in the analysis of categories.

On the other hand, the coding of categories is a more static analysis of the process of relating, with little or no regard for time, sequence, or evolution of human relations as the story unfolds. The outcome when coded as domination-submission is probably static in the manner revealed by coding separate categories. If the story moves toward a constructive, integrative end, it can be filled with themas of domination, lying, evasion, or resistance up to the point of release in the story into an integrative relating.

Knoxville had the greatest number of domination-submission outcomes, quite contrary to the hypotheses and expectations.

V. THE BIRMINGHAM, ENGLAND SAMPLE

Sex Comparisons in Story No. 4 and Story No. 2

Categories by which Story No. 4 was coded have been grouped

into clusters of themas as described below.

Constructive behavior by mother

    11x Constructive action by Susan and the mother
    12x Restitution by Susan and the mother
    13x Constructive thinking and feeling by Susan and the mother
    52   Mother accepts Susan, action (communication)
    53   Mother's positive feeling, "understands"
    54   Mother believes truth
    74   Mother makes restitution

Constructive behavior by Susan

    11   Constructive action by Susan
    11x Constructive action by Susan and the mother
    12   Makes spontaneous restitution
    12x Restitution by Susan and the mother
    13   Constructive thinking and feeling by Elizabeth
    13x Constructive thinking and feeling by Susan and the mother

Susan tells truth

    1W Tells truth spontaneously, the whole truth
    1D Tells truth spontaneously, in detail
    2W Tells truth after conflict, anxiety, after fantasy lie (whole truth)
    2D Tells truth after conflict, anxiety, after fantasy lie (in detail)
    3W Tells truth delayed, after question, scolding, punishment (whole truth)
    3D Tells truth delayed, after questions, etc. (in detail)

Resistance

    14   Hostile, aggressive action, speaking by Susan
    14x Hostile, aggressive action, speaking by Susan and mother
    15   Hostile, aggressive feeling, thinking by Susan
    15x Hostile, aggressive feeling, thinking by Susan and mother
    17   Regrets telling truth

Anxiety

19 Anxiety, emotion, fear
19x Anxiety, emotion, by both Susan and the mother
21 Tension reduction
21x Tension reduction by both Susan and the mother
22 Begs, requests, leniency, pardon, forgiveness, sympathy

Submission

23 Submission: action, obeys
24 Submission: thinking and feeling (non-communication)
24a Susan regrets telling lie
25 Voluntary, spontaneous promise to mother (communication)
26 Promises herself, vows, (non-communication)
27 Promises after punishment, scolding, admonishing and forgiving
28 Negative statement pertaining to Susan, concerning some socially
     unacceptable act

Domination

56a Deprivation of food (after Susan told truth)
56b Deprivation of food (no evidence of truth or lie)
56c Deprivation of food (after Susan told lie or deception)
58a Deprivation of playtime (after truth)
58b Deprivation of playtime (no evidence)
58c Deprivation of playtime (after lie)
60a Restitution under duress (after truth)
60b Restitution under duress (no evidence)
60c Restitution under duress (after lie)
62a Physical punishment (after truth)
62b Physical punishment (no evidence)
62c Physical punishment (after lie)
66a Punishment by father (after truth)
66b Punishment by father (no evidence)
66c Punishment by father (after lie)
68a Susan sent to bed (after truth)
68b Susan sent to bed (no evidence)
68c Susan sent to bed (after lie)
70a Miscellaneous punishment (after truth)
70b Miscellaneous punishment (no evidence)
70c Miscellaneous punishment (after lie)
72a Scolding (after truth)
72b Scolding (no evidence)
72c Scolding (after lie
73 Susan sent to store, or to get material for repair
75a Mother admonishes, re past behavior (after truth)

75b Mother admonishes, re past behavior (no evidence)
75c Mother admonishes, re past behavior (after lie)
76a Mother admonishes, threatens, re future behavior (after truth)
76b Mother admonishes, threatens, re future behavior (no evidence)
76c Mother admonishes, threatens, re future behavior (after lie)

The number of children in each sample who gave one or more responses in each of these clusters was counted; that is, no child was counted twice in any one cluster. The number of children in each cluster is then expressed as a percentage of number of children in the total sample. Table 3 shows the numbers and percentages of boys as compared to girls who gave responses in each cluster for Story No. 4 and for Story No. 2 (adapted from Heber's study). Numbers and percentages of children's stories coded at the four levels of outcomes are also shown in Table 4. Only integrative outcomes were reported for Heber's study of Story No. 2.

As seen in Table 3, of the eight category clusters for Story No. 4, about Susan and her mother, the percentages of girls were greater in seven clusters and significantly greater in five. For Story No. 2, The Lost Meat, which concerned a boy and his mother, of the same eight category clusters, percentages of girls were higher in seven clusters and significantly higher in one cluster.

In Story No. 4, the thema cluster which showed the greatest difference was submission, where the girls had significantly more responses than boys at better than the .001 level by chi-square test. Other themas in which girls gave significantly more responses than boys, at the .01 level, were resistance, anxiety, constructive behavior by Susan, and constructive behavior by mother. Two of the significant differences between boys and girls in Story No. 4, in

TABLE 3

BIRMINGHAM, ENGLAND: NUMBERS AND PERCENTAGES OF BOYS AND OF
GIRLS WITH THEMES CODED IN EIGHT CATEGORY CLUSTERS, AND
ACCORDING TO CLASSIFICATION OF OUTCOMES OF
STORIES NO. 4 AND NO. 2

	Story No. 4				Story No. 2[1]			
	Boys		Girls		Boys		Girls	
Category Cluster	N	%	N	%	N	%	N	%
Susan tells truth	113	51.4	82	46.9	127	57.4	103	58.2
Susan tells lie	51	23.2	46	26.3	61	27.6	62	35.0
Resistance	28	12.7	43	24.6*	46	20.8	33	18.6
Anxiety	180	77.3	156	89.1*	120	54.3	108	61.0
Submission	76	34.6	113	58.9*	87	39.4	118	66.7*
Domination	146	66.4	130	74.3	171	77.4	141	79.7
Constructive (child)	64	29.1	76	43.4*	15	6.8	28	15.8*
Constructive (mother)	120	54.6	122	69.7*	31	14.0	33	18.6

Outcome

Integrative	41	18.6	49	28.0*	10	4.5	8	4.5
Domination-resistance	17	7.7	10	4.6	(Not	reported	by	Heber)
Ambiguous	51	23.2*	22	12.6	"	"	"	"
Domination-submission	111	50.5	94	53.7	"	"	"	"

| Total N | 220 | | 175 | | 221 | | 177 | |

*Significantly higher than the freq. for the other sex by chi-square test
at the .01 level or better.

1
 Data for Story No. 2 adapted from Heber (8)

the category clusters for submission and constructive behavior by mother were more frequent in Story No. 2 for girls, though not significantly so. The theme cluster of resistance was different in Story No. 2, where more boys gave resistance responses than girls.

The distribution of truth themes in the two stories was in opposite directions for boys and girls, the boys being higher in Story No. 4, and the girls higher in Story No. 2. The distribution of lie themes and domination themas was in the same direction for both stories, the girls being higher in both, though these differences were not significant.

In Story No. 4, the girls gave significantly more integrative outcomes than boys, while in Story No. 2 there was no difference between boys and girls.

Ambiguous outcomes in Story No. 4 were significantly more frequent for boys than for girls. For domination-resistance and domination-submission outcomes boys and girls were not significantly different.

Discussion of Sex Comparisons

In seven of the eight clusters for Story No. 4, and in seven of the eight clusters for Story No. 2, frequencies for girls were higher. This is consistent with well-known observations that girls develop verbal facility earlier and are generally superior to boys in verbal fluency. It will be reported later that girls tended to write longer stories than boys. In writing more, the chances are greater that girls will supply a greater variety of themas, which seems to have been the case in Table 3.

In Story No. 4, the five category clusters in which girls were significantly higher than boys were: constructive behavior by mother, constructive behavior by Susan, resistance, anxiety, and submission. The fact of five significant differences related to the story about a girl and her mother in contrast with only one significant difference in the story about a boy suggests that girls may have been more involved in Story No. 4 than in Story No. 2.

There were large differences in several of the category clusters between the level of percentages of response for Story No. 4 and Story No. 2.

Both boys and girls gave much higher percentages of response for Story No. 4 to the category clusters constructive behavior by mother, constructive behavior by the child, and anxiety than for Story No. 2. The differences in structure of the two stories accounts in part for the differences in these category clusters. These are the category clusters in which many "both" themas were given in the children's stories. For example, if the child wrote "The mother and Susan both felt sorry about the ink spots," tallies were counted for Susan and for the mother.

Lie and truth category clusters were lower in percentages in Story No. 4 than in Story No. 2. This was probably because the children who completed the stories often assumed that the mother in Story No. 4 could see Susan wiping the ink spots out of the coat and at once knew the truth, so there was not as much need for Susan to tell either the truth or a lie. In Story No. 2, however, there was a time interval

between the loss of the meat and meeting the mother. The children who wrote the stories had to make up some way for the mother to find out about the lost meat, and it was usually by having Michael tell her, either truthfully, or with a lie.

Submission and domination category clusters had lower percentages in Story No. 4 than in Story No. 2. This, too, may be because the structure of Story No. 4 and the nature of the questions asked after it were conducive to more themas of constructive behavior and to fewer of submissive and dominative behavior.

Integrative outcomes were more frequent for Story No. 4 than for Story No. 2. This is probably because working together of mother and child is called forth by the questions, and working together often results in problem-solving. a part of the definition for integrative behavior.

In all these changes in percentages except in the truth and resistance clusters, the relationship of responses between boys and girls remained constant; where the girls were higher in response than boys in the clusters for Story No. 2, they were also higher in Story No. 4. This consistency attests to the reliability of the Stories as a measuring instrument.

In the truth cluster, boys were higher in percentage of response in Story No. 4, and girls were higher in percentage of response in Story No. 2, but differences were small and not significant.

There was an inconsistency in the resistance cluster, where boys' responses were higher in Story No. 2 and girls' responses were significantly higher in Story No. 4. Boys tended to show more resistance
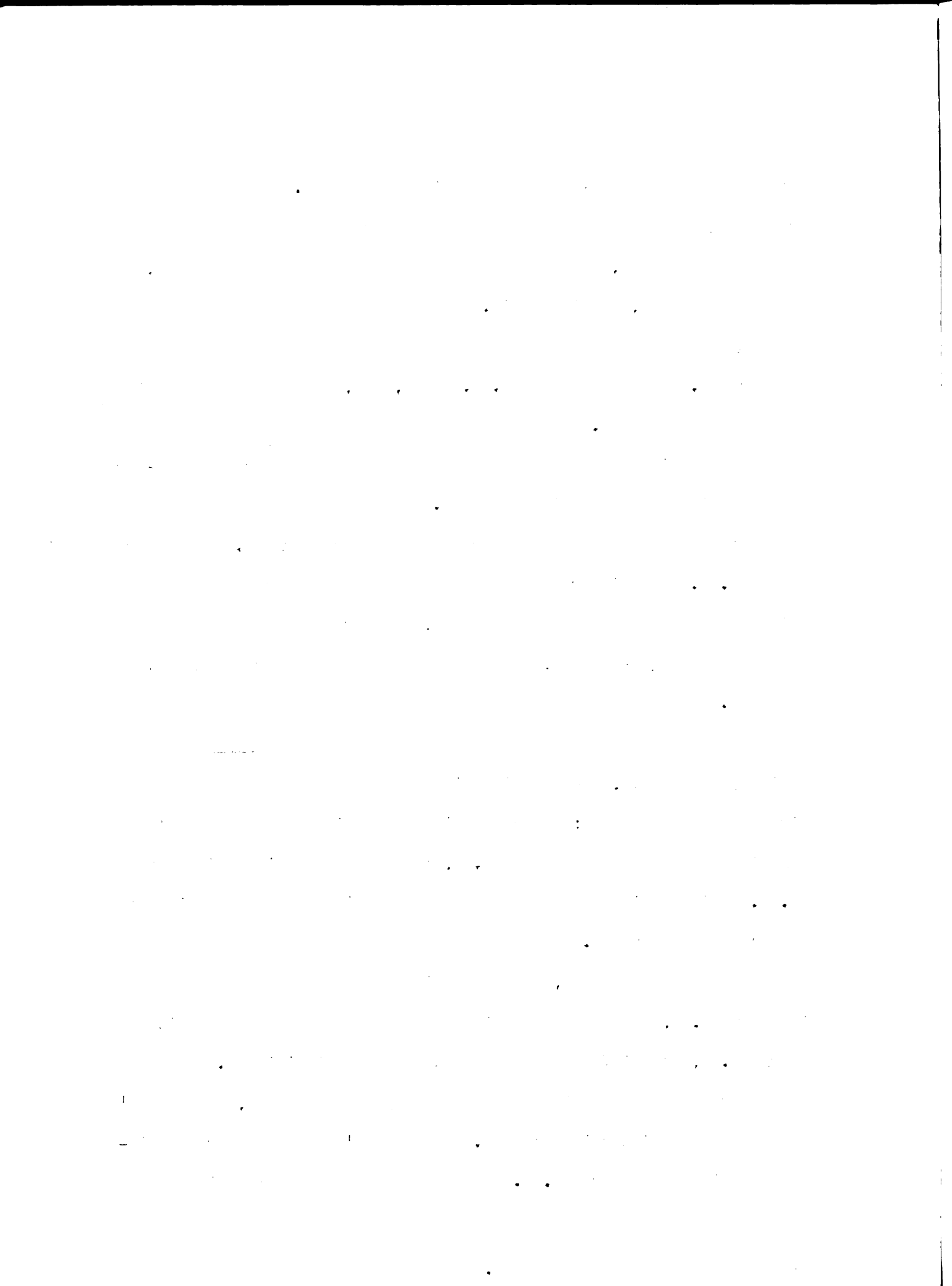
in a story about a boy and girls showed more resistance in a story about a girl. It is noted, however, in Table No. 3, that in the outcome of domination-resistance in this story about a girl the frequencies were higher for boys, though the difference was not significant.

Socio-economic Comparisons

Table 4 gives the numbers and percentages of children from high and low socio-economic levels in Birmingham with themas coded in the several category clusters, and according to outcomes for Stories No. 4 and No. 2. As seen in Table 4, the high socio-economic group gave higher percentages of response to all the clusters of themas except the truth cluster. For Story No. 4 in one category cluster, resistance, the high socio-economic group was significantly higher at the .001 level, by chi-square test. In another category cluster, child tells lie, the high socio-economic group was significantly higher at the .10 level. Stories of children in the high socio-economic group were more frequently given integrative, domination-resistance, and domination-submission outcomes.

The low socio-economic group was higher in percentage of response only in the lie cluster. More ambiguous outcomes were given in the low socio-economic group.

The differences between high and low socio-economic levels found by Heber in Story No. 2 can be said to be consistent with the differences reported in Table 4 for Story No. 4. The three significant differences reported by Heber are confirmation of differences in the same direction for Story No. 4. The inconsistencies in socio-economic

TABLE 4

BIRMINGHAM, ENGLAND: NUMBERS AND PERCENTAGES OF CHILDREN FROM
HIGH AND LOW SOCIO-ECONOMIC LEVELS WITH THEMAS CODED
IN THE SEVERAL CATEGORY CLUSTERS, AND ACCORDING
TO OUTCOMES FOR STORIES NO. 4 AND NO. 2

| | Story No. 4 | | | | Story No. 2[1] | | | |
| | High | | Low | | High | | Low | |
Category Cluster	N	%	N	%	N	%	N	%
Constructive (mother)	173	62.2	69	59.0	54	19.3*	10	8.5
Constructive (child)	104	37.4	36	30.8	36	12.9*	7	5.9
Child tells truth	130	46.8	65	55.6	162	57.9	68	57.6
Child tells lie	75	27.0	22	18.8	84	30.0	39	33.1
Resistance	62	22.3*	9	7.7	67	23.9*	12	10.2
Anxiety	233	83.8	93	79.5	162	57.9	66	55.9
Submission	128	46.0	51	43.6	144	51.4	61	51.7
Domination	196	70.5	80	68.4	217	77.5	95	80.5
Outcome								
Integrative	65	23.4	25	21.4	15	5.4	3	2.5
Domination-resistance	21	7.6	4	3.4	(Not reported by Heber)			
Ambiguous	45	16.2	28	23.9	"	"	"	"
Submission, Domination, and Domination-sub-mission	147	52.9	60	51.3	"	"	"	"
Total	278		117		280		118	

*Significantly different from the other socio-economic level at the .05
level or better, by chi-square test.

[1]Data for Story No. 2 adapted from Heber (8).

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TABLE 5

BIRMINGHAM ENGLAND: NUMBERS AND PERCENTAGES OF CHILDREN WITH THEMES
CODED IN EIGHT CATEGORY CLUSTERS, AND INTEGRATIVE OUTCOMES,
OF STORIES NO. 4 AND NO. 2

Category Cluster	Story No. 4		Story No. 2	
	N	%	N	%
Constructive (mother)	186	47.1	64	16.1
Constructive (child)	140	35.4	43	10.8
Susan tells truth	194	49.1	230	57.8
Susan tells lie	97	24.6	123	30.9
Resistance	71	18.0	79	19.8
Anxiety	326	82.5	228	57.3
Submission	179	45.3	205	51.5
Domination	276	69.9	312	78.4
Integrative outcome	90	22.8	18	4.5
Total N	395		398	

31.

comparisons between the category clusters for Story No. 4 and Story No. 2 are small and represent non-significant differences.

In general, there were more children in the high socio-economic level than were found among the children in the low socio-economic level giving responses in the several category clusters. Exceptions represented only small and non-significant differences.

The differences between Story No. 4 and Story No. 2 in levels of percentages with clusters which were noted and discussed under sex comparisons are also apparent in the socio-economic comparisons.

Story No. 4 - Story No. 2 Comparisons

Table 5 gives the total frequencies and percentages of responses in all the clusters of themas and in integrative outcomes for Story No. 4 and for Story No. 2 for the Birmingham sampling. Percentages for Story No. 4 were significantly higher at the .001 level, by chi-square test, for the thema clusters constructive behavior by mother, constructive behavior by the child, and for integrative outcomes. Percentages of response for Story No. 4 were significantly higher at the .01 level for the thema cluster anxiety.. Thema clusters in which percentages of response were loer for Story No. 4 than for Story No. 2 were: tells truth (.02 level), tells lie (.05 level), submission (.10 level), and domination (.01 level). Results of only one thema cluster, resistance, were not different at any level of significance.

Discussion

There were significant differences between Story No. 4 and Story No. 2 in frequency of response in all clusters of themas except

one. Some of the reasons for the differences have been pointed out
in the discussion of sex differences. It is to be shown later that
for the most part the differences occur consistently in all the samples,
so that the relationship of each sample to the other samples is fairly
stable from one story to the other, within each cluster of themas.

The stories are structured differently and they evoke different
responses from the children. In Story No. 4 the mother is already
present, the truth is practically self-evident. As long as there is
no chance of evading, the situation demands that something be done to
rectify it. This is not the case in Story No. 2, where Michael is
alone when he discovers his dilemma -- there is greater opportunity
to take devious routes to a solution. This difference in the nature
of the Incomplete Stories accounts in part for the fact that so many
children responded differently to Story No. 4 than they did to Story
No. 2.

VI. CROSS-CULTURAL COMPARISONS

Category Cluster: Constructive thinking, feeling, and action
by mother. Table 6 presents the numbers and percentages of children
who wrote themas of constructive behavior by the mother in each of the
five samples for Story No. 4 and Story No. 2. Hamburg children gave
the highest percentage of response, and it was significantly higher
than the Knoxville and Munich samples at the .05 level or better. The
order of the samples from highest to lowest percentages of response
is exactly the same as that found by Heber for Story No. 2. Heber found
the percentages of response in Hamburg, Helsinki, and Birmingham
samples to be significantly higher than the Knoxville and Munich
samples, at a .05 level or better.

TABLE 6

NUMBERS AND PERCENTAGES OF CHILDREN IN EACH OF THE SAMPLINGS
WITH THEMAS CODED IN THE CATEGORY CLUSTER, CONSTRUCTIVE
THINKING, FEELING, AND ACTION BY MOTHER
FOR STORIES NO. 4 AND NO. 2

| | STORY NO. 4 | | | | STORY NO. 2 | | |
City	Size of Sample	N	%	City	Size of Sample	N	%
Hamburg	246	139	56.5	Hamburg	281	54	19.2
Helsinki	208	102	49.0	Helsinki	209	35	16.7
Birmingham	395	186	47.1	Birmingham	398	64	16.1
Knoxville	214	99	46.3	Knoxville	217	21	9.7
Munich	164	72	43.9	Munich	165	10	6.1

Category Cluster: Constructive thinking, feeling, and action by Susan. The numbers and percentages of children who wrote themas of constructive behavior by the child in Story No. 4 and Story No. 2 are shown in Table 7. The absolute level of percentages is much higher for Story No. 4 than for Story No. 2. None of the differences between samples was significant in either story. The rank order of samples from highest to lowest percentages was different in the two stories.

TABLE 7

NUMBERS AND PERCENTAGES OF CHILDREN IN EACH OF THE SAMPLINGS
WITH THEMAS CODED IN THE CATEGORY CLUSTER, CONSTRUCTIVE
THINKING, FEELING, AND ACTION BY SUSAN
FOR STORIES NO. 4 AND NO. 2

	STORY NO. 4				STORY NO. 2		
City	Size of Sample	N	%	City	Size of Sample	N	%
Knoxville	214	79	36.9	Birmingham	398	43	10.8
Birmingham	395	140	35.4	Hamburg	281	27	9.6
Helsinki	208	71	34.1	Munich	165	13	7.9
Hamburg	246	78	31.7	Knoxville	217	14	6.5
Munich	164	49	29.9	Helsinki	209	9	4.3

Category Cluster: Susan tells truth. Table 8 shows the numbers and percentages of children in each sample who wrote themas of Susan tells truth, for Story No. 4 and Story No. 2. All the samples except Munich showed for this category cluster fewer responses in Story No. 4 than in Story No. 2, but the differences were not large nor significant. The percentage of response in the Knoxville sample was significantly higher than the percentage for any of the other samples at the .05

level of significance by chi-square test. The percentage of response
in the Munich sample was significantly lower than the percentages
in the Birmingham, Hamburg and Knoxville samples. In Story No. 2,
the rank ordering of samples by percentage of response, from highest
to lowest, was Knoxville, Birmingham, Hamburg, Helsinki and Munich.

TABLE 8

NUMBERS AND PERCENTAGES OF CHILDREN IN EACH OF THE SAMPLINGS
WITH THEMAS CODED IN TH E CATEGORY CLUSTER, SUSAN TELLS
TRUTH, FOR STORIES NO. 4 AND NO. 2

City	STORY NO. 4 Size of Sample	N	%	City	STORY NO. 2 Size of Sample	N	%
Knoxville	214	130	60.7	Knoxville	217	140	64.5
Hamburg	246	127	51.6	Birmingham	398	230	57.8
Birmingham	395	194	49.1	Hamburg	281	148	52.7
Helsinki	208	89	42.8	Helsinki	209	104	49.8
Munich	164	64	39.0	Munich	165	58	35.2

Category Cluster: Susan tells lie. The percentages of children
in each sample who wrote themas of Susan tells lie are shown in
Table 9. In all samples there were lower frequencies of response
in this thema for Story No. 4 than for Story No. 2. In both stories
Munich was significantly higher than all the other samples in frequency
of child tells lie themas. In Story No. 2 Hamburg was found to be
significantly higher than Helsinki and Birmingham and these in turn
were significantly higher than Knoxville. In Story No. 4 Hamburg and

Birmingham were significantly higher than Helsinki and Knoxville in
frequency of response of child tells lie. Knoxville was lowest in
both samples.

TABLE 9

NUMBERS AND PERCENTAGES OF CHILDREN IN EACH OF THE SAMPLINGS
WITH THEMAS CODED IN THE CATEGORY CLUSTER, SUSAN TELLS LIE,
FOR STORIES NO. 4 AND NO. 2

City	STORY NO. 4 Size of Sample	N	%	City	STORY NO. 2 Size of Sample	N	%
Munich	164	61	37.2	Munich	165	106	64.2
Hamburg	246	68	27.6	Hamburg	281	123	43.8
Birmingham	395	97	24.6	Helsinki	209	68	32.5
Helsinki	208	35	16.8	Birmingham	398	123	30.9
Knoxville	214	30	14.0	Knoxville	217	42	19.3

Category Cluster: Resistance. In Table 10 are shown the frequencies
and percentages of children in each sampling who wrote a thema of
resistance for Story No. 4 and for Story No. 2. For Story No. 2 the
Birmingham sample was significantly higher in frequency than the other
samples. For Story No. 4 Birmingham had the highest frequency, but
it was not significantly higher than any of the other samples except
the lowest one, Knoxville. It was significantly different from Knoxville
at the .05 level by chi-square test. The order of ranking of samples
was different for Story No. 4 than for Story No. 2 but did not contra-
dict the one significant difference found in Story No. 2.

TABLE 10

NUMBERS AND PERCENTAGES OF CHILDREN IN EACH OF THE SAMPLINGS
WITH THEMAS CODED IN THE CATEGORY CLUSTER, RESISTANCE,
FOR STORIES NO. 4 AND NO. 2

| | STORY NO. 4 | | | | STORY NO. 2 | | |
City	Size of Sample	N	%	City	Size of Sample	N	%
Birmingham	395	71	18.0	Birmingham	398	79	19.8
Helsinki	208	34	16.4	Hamburg	281	29	10.3
Hamburg	246	28	11.4	Knoxville	217	20	9.2
Munich	164	18	11.0	Helsinki	209	18	8.6
Knoxville	208	15	7.0	Munich	165	12	7.3

Category Cluster: Anxiety. The frequency and percentages of

response in each sample for the category cluster of anxiety are shown

in Table 11 for Story No. 4 and Story No. 2. The absolute level of

the percentages was much higher for Story No. 4 than for Story No. 2.

In Story No. 4 the Birmingham sampling had a higher percentage of

response than the other samples, significant at the .10 level by

chi-square test. The percentage of the Helsinki sample was higher

than the Hamburg and Knoxville samples, significant at the .02 level,

and the Hamburg and Knoxville samples in turn were higher than the

Munich sample, significant at the .01 level. For Story No. 2 the

Birmingham sample had the highest percentage, but it was not signif-

icantly higher than the Hamburg and Helsinki samples. Birmingham,

Hamburg and Helsinki percentages were significantly higher than the

Munich percentage for Story No. 2, and the Munich percentage was

in turn significantly higher than the Knoxville sample. The significant differences found in Story No. 2 for this cluster, where Munich was significantly higher than Knoxville in percentage of response, was contradicted in Story No. 4, where Knoxville was significantly higher than Munich in percentage of response.

TABLE 11

NUMBERS AND PERCENTAGES OF CHILDREN IN EACH OF THE SAMPLINGS
WITH THEMAS CODED IN THE CATEGORY CLUSTER, ANXIETY,
FOR STORIES NO. 4 AND NO. 2

City	STORY NO. 4 Size of Sample	N	%	City	STORY NO. 2 Size of Sample	N	%
Birmingham	395	326	82.5	Birmingham	398	228	57.3
Helsinki	208	160	76.9	Hamburg	281	152	54.1
Hamburg	246	164	66.7	Helsinki	209	110	52.6
Knoxville	214	140	65.4	Munich	165	63	38.2
Munich	164	81	49.4	Knoxville	217	28	12.9

Category Cluster: Submission. The frequencies and percentages of children who gave a response of submission in Story No. 4 and in Story No. 2 are shown in Table 12. The frequencies were all much higher for Story No. 2 than they were for Story No. 4. The Birmingham sample gave a higher frequency of response than the Knoxville and Helsinki samples, which in turn gave higher frequencies than Hamburg and Munich. Differences were significant at the .01 level by chi-square test. For both stories, the Knoxville and Helsinki samples were significantly higher than the Munich sample in frequency of response to the submission thema. The significant difference found in Story No. 2 was therefore not contradicted in Story No. 4.

TABLE 12

NUMBERS AND PERCENTAGES OF CHILDREN IN EACH OF THE SAMPLINGS
WITH THEMAS CODED IN THE CATEGORY CLUSTER, SUBMISSION,
FOR STORIES NO. 4 AND NO. 2

| | STORY NO. 4 | | | | STORY NO. 2 | | |
City	Size of Sample	N	%	City	Size of Sample	N	%
Birmingham	395	179	45.3	Knoxville	217	124	57.1
Knoxville	214	72	33.6	Helsinki	209	115	55.0
Helsinki	208	68	32.7	Hamburg	281	148	52.7
Hamburg	246	53	21.5	Birmingham	398	205	51.5
Munich	164	32	19.5	Munich	165	74	44.8

Category Cluster: Domination. Frequencies and percentages of

response of the children in the five samples with a thema of domination

are shown in Table 13. The frequencies of the Birmingham, Munich and

Hamburg samples, in that order, were significantly higher at the

.05 level than the frequencies of the Knoxville sample, which was in

turn higher than the frequency of the Helsinki sample, significant

at the .001 level. For Story No. 4, also, Birmingham was highest and

significantly higher than all other samples in frequency of response;

there were no other significant differences. In this cluster, too,

the significant difference found in Story No. 2 was not contradicted

by results of Story No. 4.

TABLE 13

NUMBERS AND PERCENTAGES OF CHILDREN IN EACH OF THE SAMPLINGS
WITH THEMAS CODED IN THE CATEGORY CLUSTER, DOMINATION,
FOR STORIES NO. 4 AND NO. 2

City	STORY NO. 4 Size of Sample	N	%	City	STORY NO. 2 Size of Sample	N	%
Birmingham	395	276	69.9	Birmingham	398	312	78.4
Munich	164	108	65.9	Knoxville	217	141	65.0
Hamburg	246	159	64.6	Hamburg	281	171	60.9
Knoxville	214	116	54.2	Helsinki	209	121	57.9
Helsinki	208	78	37.5	Munich	165	93	56.4

Table 14 gives for Story No. 4 the average number of thema tallies
per story in each of the samples, according to sex groups, socio-
economic groups, and, for the Munich and Hamburg samples, sex compar-
isons of Stories No. 4 and No. 2. In all of the samples, girls wrote
longer stories than boys. In all of the samples except Hamburg, the
high socio-economic group wrote longer stories. In Hamburg and Munich,
girls wrote longer stories for Story No. 4 than for Story No. 2. In
Munich, boys wrote longer stories for Story No. 2 than they did for
Story No. 4. In Hamburg, boys wrote slightly shorter stories for
Story No. 2 than they did for Story No. 4.

TABLE 14

AVERAGE NUMBER OF THEMA TALLIES PER STORY FOR STORY NO. 4 IN
EACH OF THE SAMPLES ACCORDING TO SEX GROUPS AND
SOCIO-ECONOMIC GROUPS; FOR THE MUNICH AND
HAMBURG SAMPLES. SEX COMPARISONS OF
STORIES NO. 4 AND NO. 2

Sex Comparisons

	Boys	Girls
Birmingham	9.8	15.5
Helsinki	5.6	8.1
Hamburg	7.4	10.1
Munich	4.7	8.8
Knoxville	6.5	7.6

Socio-economic Comparisons

	High	Middle	Low
Birmingham	13.0		10.7
Helsinki	8.2	6.4	5.8
Hamburg	8.9	9.9	6.8
Munich	7.1		6.9

		Boys	Girls
Hamburg	Story 4	7.4	10.1
	Story 2	7.0	9.3
Munich	Story 4	4.7	8.8
	Story 2	5.6	6.6

Discussion of cross-cultural Comparisons

One question which might come to mind about the Anderson Incomplete Stories, and about any projective device, for that matter, is, Do the children give consistent responses from story to story in the series? Another question: Do children make up a plot for one story, and then just repeat the same plot in the rest of the stories?

A partial check on these questions was made by comparing the outcome level of Story No. 2 for each child with the outcome level for his Story No. 4. In the total sampling of 1,227 children, there were 292 children whose outcomes for Stories No. 2 and No. 4 were coded at the same level. This means that the preponderance of the children did not repeat the same story for Story No. 4 that they had written for Story No. 2.

Now the question arises, If children write different stories from one to another of the Anderson Incomplete Stories, can there be consistency in the results? The data in Tables 7 through 14 indicate that there was consistency.

Tables 7 through 14 have presented numbers and percentages of children in each of the samplings with themas coded in the eight category clusters, for Stories No. 4 and No. 2, respectively. In comparing the percentages of the samples relative to each other, it was found that the results for Story No. 4 were in general agreement with the significant results found for Story No. 2, with only one exception.

The following statements may be made for both stories:

(a) In constructive behavior by the mother, Hamburg, Helsinki, and Birmingham had higher percentages than Knoxville and Munich;

(b) In child tells truth, Knoxville had the highest percentage, and
Munich had the lowest percentage;

(c) In child tells lie, Munich, then Hamburg, had the highest percent-
ages, and Knoxville had the lowest;

(d) In resistance, Birmingham had the highest percentage;

(e) In anxiety, Birmingham had the highest percentage;

(f) In submission, Knoxville had the highest percentages for Story
No. 2 and second highest in Story No. 4; Munich had the lowest in
both stories;

(g) In domination, Birmingham had the highest percentages, and Helsinki
had the lowest percentage for Story No. 4 and the second lowest
for Story No. 2.

The one contradiction occurred in the anxiety category cluster,
where Munich percentages were significantly lower than Knoxville for
Story No. 4, and Knoxville percentages were significantly lower than
Munich for Story No. 2.

Consistencies as numerous as these support the proposition that
the children in a sample may change their stories individually, but
when the results of the whole sample are taken at once, those char-
acteristics which differentiate the sample from other samples are
maintained from story to story.

Further support of this proposition was found in the analysis of
sex differences in the Birmingham sample in Chapter V of this study,
where the differences between boys and girls were for the most part
maintained from Story No. 2 to Story No. 4.

The changes in the levels of the percentages for many of the category clusters from Story No. 2 to Story No. 4 appeared here in all the samples as it did in the analyses of Birmingham sex comparisons and socio-economic comparisons. To review the discussion of reasons for the changes in levels, the constructive behavior by the mother, constructive behavior by the child and anxiety category clusters were thought to be raised in The Ink Spots story by the many statements in the children's stories involving behavior of both mother and child. The truth and lie clusters were thought to be at a lower level of percentages in The Ink Spots story because the storywriter begins at a point where the mother can be construed to know the truth already, whereas in The Lost Meat story the mother has to be informed in some manner about what happened.

The domination and submission clusters were lower in level of percentages because the structure of Story No. 4 and the questions asked after it are conducive to more themas of working together of mother and child and consequently less domination and submission.

It may be noted that the resistance category cluster remained at the same level in both stories. The factors which operated to change the levels of the other clusters did not affect this cluster.

Just as the differences between boys and girls for the Birmingham sample were maintained for the most part in spite of the shift in levels of percentages for the category clusters, so also the relative positions of the cultural samples were well maintained.

Birmingham. The analysis of category clusters for Birmingham has shown that for both stories the Birmingham sampling falls near

the middle of the range of percentages with respect to the other samplings in constructive behavior by mother, truth, and lie clusters. In Story No. 4 Birmingham came second to the highest in constructive behavior by the child, but differences in this cluster were not significant. Themas of constructive behavior, of truth, and of lie are not differentiating factors for the children in the Birmingham sample. This neither confirms nor denies the hypotheses about behavior in a democratic culture.

The Birmingham children gave the highest frequencies of response for category clusters for resistance and domination in both stories. This is consistent with the results for outcomes discussed in Chapter IV. The Birmingham sample had the highest frequency of domination-submission outcomes and was second only to Knoxville in domination-submission and was not significantly different from Munich, Hamburg, and Knoxville in domination-submission outcomes. The resistance shown with highest frequencies by the Birmingham children is a higher level of relating to domination than submissive behavior shown by children who do not resist.

In the category cluster of anxiety, the Birmingham sample had the highest frequency, contrary to the hypotheses. Included in the anxiety cluster is category 22, begs, requests, leniency, forgiveness. Statements in which Susan said she was sorry or that she did not mean to do it were coded in this category. This type of statement was very frequent in the Birmingham sample and is probably the reason Birmingham was highest of the samples in this cluster.

In Story No. 2 the Birmingham children gave second to the lowest frequencies of response for the category cluster for <u>submission</u>. In Story No. 4, contrary to this finding and to the expectations set up by the hypotheses, the Birmingham sample was the highest in frequency of <u>submission</u> themas. Included in the <u>submission</u> cluster is category 24, <u>submission</u>: <u>thinking</u> and <u>feeling</u>, in which were coded statements that Susan was sorry that she had spoiled her mother's new coat.

One section of Hypothesis No. 3 in Chapter I states, "Children in the more authoritarian culture will...show significantly fewer responses of...sense of fair play...," which statement implies that children in a democratic culture will show more responses of fair play. Story No. 4 is different from Story No. 2, because the new coat in Story No. 4 is a personal property of the mother's, something which she doubtlessly values. If the child writing the story possesses a "sense of fair play," he will probably portray Susan as showing concern over having harmed someone else's property. If the storywriter showed no concern over what was done, it would be construed as a pathological attitude.

It is not really surprising, therefore, that children in the democratic cultures wrote stories containing themas of Susan saying she was sorry or feeling sorry about getting ink spots on the mother's coat. It is part of the tradition of democracy of sensitivity to the feelings of others and responsibility for one's own acts, or "sense of fair play."

Categories 22 and 24 each need to be subdivided into two dif-
ferent categories because two different kinds of psychological values
are included in 22 and 24. One value is an independent, responsible
recognition of error on the part of the children combined with a motive
of not repeating it; spontaneity is high and fear is low. In the other,
which is also coded in 22 and 24, fear is high and spontaneity is low,
and therefore the attitude does not represent responsible behavior,
but conformity and avoidance of punishment.

Helsinki. The Helsinki sample, like the Birmingham sample, was
for the most part near the middle in rank with respect to the other
samples, in percentages of response for categories of constructive
behavior by the mother, constructive behavior by the child, child tells
truth, and child tells lie. These themas do not differentiate the
Helsinki sample, which again neither confirms nor denies the hypotheses
about a democratic culture. Further, the category cluster of resistance
did not differentiate the Helsinki sample.

In the category cluster of anxiety the Helsinki sample was second
only to Birmingham and was significantly higher than Hamburg, Knoxville
and Munich in Story No. 4. This is consistent with the large number
of ambiguous outcomes found in the Helsinki sample, as pointed out
in Chapter IV. The traditionally low-communicative nature of human
relations in the Finnish culture is thought to be related to the
ambiguity.

In the submission category cluster, the Helsinki percentage was
in the middle of the samples, being significantly higher than Hamburg

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and Munich. In the domination cluster Helsinki was significantly lower than all the other samples at the .001 level. It was found in Chapter IV that Helsinki was significantly lower than the other samples in frequency of domination-submission outcomes. The analysis of categories suggests that among the Helsinki children, though parental domination is low, there is again the "sense of fair play" or responsibility felt by the child for spoiling the mother's new coat. Responsibility should not be confused with submission. There were many tallies in category 24 for the Helsinki stories, which resulted in a fairly high percentage in the submission category cluster.

Hamburg and Munich. In the analysis of categories for Story No. 4, Hamburg and Munich were found to be similar to each other in some respects and quite different in others. The percentages of response in the constructive behavior by the child, resistance, submission, and domination clusters were almost identical, which is consistent with the findings for outcomes, where these two samples were very much alike at all levels of relating. In the constructive behavior by the mother, truth, lie, and anxiety clusters Hamburg and Munich were significantly different from each other.

Truth and lie category clusters did not bear very much relationship to the outcomes of the Stories No. 4 and No. 2. This is not to say, however, that amounts of truth and lie were unrelated to the patterns of human relationships within a culture. Where there is more permissiveness of parents in a culture and more spontaneity, there is likely to be more telling of t ruth by the children, since

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they need not fear retaliation when they have made a mistake. But the structures of Stories No. 2 and 4 are such that the truth-telling or lying usually comes near the beginning of the story, and it is what develops after that in the story that determines the outcome.

The fact that Munich and Hamburg were alike for the cluster of constructive behavior by the child in Story No. 4, ranking as the lowest two of all the samples, while Hamburg was highest and Munich was lowest in rank for the cluster of constructive behavior by the mother, with significant differences between them, suggest differences in parent-child relationships in the two cultures. In Hamburg, it would seem to the child-authors that the parents were prone to solve the problems for their children when things went wrong more frequently than in Munich where the children did not take initiative in making amends for damage they may have caused. In Munich, like Hamburg, the children did not seem to take initiative, but neither did the parents initiate constructive behavior.

In the domination cluster the Munich and Hamburg percentages were significantly higher than the Knoxville and Helsinki samples, and in the submission cluster they were significantly lower than the Birmingham, Knoxville and Helsinki percentages. The categories composing the submission cluster are child categories. When a sample is found to give themas of domination in large numbers of its stories, it means that the children who wrote the stories have given these themas to the mother character in the story. When few of the stories in a sample contain themas of submission, it is the children who wrote the stories

who projected little such behavior onto the child character in the story. In Munich and Hamburg, which are assumed to be authoritarian cultures, the children reflected the greater activity of the authority, the parent-character, by giving the mother more themas in their stories and by giving the subordinate, the child-character, fewer themas.

Knoxville. The pattern of constructive behavior in Knoxville for Story No. 4 is in contrast to that for Munich and Hamburg, and in fact is directly opposed to the pattern in Hamburg. The Knoxville percentages rank highest in constructive behavior by the child and second to lowest in constructive behavior by the mother, being significantly lower than Hamburg in the latter category. Apparently in Knoxville the children took relatively more initiative in constructive problem-solving and the parents took less initiative, in this story. This is consistent with hypotheses about individual responsibility and spontaneity in a democratic atmosphere.

At the domination-submission level, too, the pattern was opposed to that in Hamburg and Munich. Knoxville was significantly lower than Hamburg and Munich in percentages for the domination cluster and significantly higher than Hamburg and Munich in the submission cluster. The children in the Knoxville sample showed that the activity of children assumes more importance to them, because more of them gave themas in a child category cluster and fewer of them gave themas in the corresponding parent category cluster.

As has been found consistently in analyses of Story No. 2 (2, 8), so in Story No. 4, the Knoxville sample had the highest percentages of truth and the lowest percentages of lie clusters in its stories. This finding adds to the evidence that in the Knoxville culture, as compared

with the other cultures represented, there may be more telling of truth and less telling of lies.

The amount of anxiety shown by the percentage for the Knoxville sample was significantly more than that shown by the Munich percentage in Story No. 4. In Story No. 2, Knoxville was significantly lower than all the other samples, including Munich. This was thought to occur because Knoxville was the only sample (except Mexico City) which is not still laboring under the economic dislocation caused by World War II. This interpretation seems to be denied by Story No. 4 results. However, as was pointed out above, the categories in the anxiety cluster included themas which should not be called anxiety. The anxiety percentages in Story No. 4 are therefore not really comparable to those in Story No. 2. The categories need re-defining and recasting in order for the anxiety cluster to be comparable for the two stories.

Length of Stories. Table 14 gives the average number of tallies per story for boys as compared to girls in each sample, for high, middle, and low socio-economic groups in all samples except Knoxville (which could not be subdivided by socio-economic groups), and for boys as compared to girls for Story No. 4 and Story No. 2 in Hamburg and Munich. It is seen that the Birmingham children averaged more tallies per story than any of the other samples. The stories from Birmingham were long and contained greater variety in their plots than the other samples. They more often had good closure than stories from other samples.

The significantly higher percentages of integration and domination-resistance outcomes for the Birmingham sample may be related to the length of their stories. In general, stories which were short more often had ambiguous outcomes.

The processes of democracy require that through two-way communication problems be worked over until a solution is reached, and this takes time. It would be expected, then, that in a culture high in integrative problem-solving there would be more verbalization and communication.

VII. CROSS-CULTURAL SEX COMPARISONS

Table 3 in Chapter V and Tables 19 through 22 of Appendix A give the data of which Table 15 is a composite. Table 15 shows whether girls or boys are higher in frequency of response in each category cluster and outcome level for each of the five samples for Story No. 4. The letters B and G are used to indicate boys or girls. If the same sex was found to be higher in Story No. 2 as it was here, the letter B or G is underlined.

Girls were higher than boys in 30 of the 40 category clusters. In the Birmingham sample girls were higher in seven of the eight clusters; in Hamburg they were higher in all the clusters.

Differences were in the same direction for Story No. 2 as for Story No. 4 in 28 out of 45 category clusters plus integrative outcomes.

The category clusters showing a definite trend toward sex consistency were:

Constructive behavior by mother, where girls were higher in all samples and in three of the five samples significantly so;

Constructive behavior by Susan, where girls were higher than boys in four of the five samples and significantly so in the Birmingham sample;

Susan tells lie, where girls were significantly higher than boys in four of the five samples;

Resistance, where girls were higher than boys in four of the five samples and significantly so in the Birmingham sample;

TABLE 15

CROSS-CULTURAL SEX COMPARISONS. RECAPITULATION OF DIFFERENCES
BETWEEN BOYS AND GIRLS FROM TABLES 3, 19, 20, 21, 22

"B" designates a higher percentage of boys, "G" designates
a higher percentage of girls. "*" indicates that the difference
was significant at the .05 level or better, by chi-square test.
A line under "B" or "G" indicates that the same sex was also
found to be higher in Story No. 2.

Category Cluster	Birming-ham	Helsinki	Hamburg	Munich	Knox-ville
Constructive (mother)	G*	G	G	G*	G
Constructive (child)	G*	B	G	G	G*
Child tells truth	B	G	G	G	B
Child tells lie	G	G	G	G	B
Resistance	G*	B	G	G	G
Anxiety	G*	G*	G	G*	G
Submission	G*	G*	G	G*	G*
Domination	G	G	G	B	G
Outcome					
Integrative	G*	B	G	G	B
Domination-resistance	B	B	G	G	B
Ambiguous	B*	B*	B	B*	B*
Domination-submission	G	G*	B	G	G*

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Anxiety, where girls were higher than boys in all of the samples and significantly so in three of the five; and

Submission, where girls were significantly higher than boys in all of the five samples and significantly so in four of the five.

As explained previously under the discussion of sex differences in Birmingham, the higher frequency of responses by girls to this story may be due to the greater ease for girls of identifying with the character in a story about a girl.

The trends in Story No. 2, The Lost Meat, which most strongly supported the findings in the Ink Spots Story were in the category clusters of submission and anxiety, where girls were higher than boys and differences in some samples were significant. For the rest of the category clusters, boys responded with higher frequencies more often than in Story No. 4, which could be predicted if it is easier for boys to identify with the boy in Story No. 2 than it is for girls.

The boys were higher than girls in number of ambiguous outcomes to stories in all five samples and significantly so in four of them. The girls were higher than boys in four of the five samples in number of domination-submission outcomes and three of the differences were significant. The boys' stories more often had less closure than the girls' stories. The closure which the girls gave their stories was more often in the domination-submission level.

Integrative and domination-resistance outcomes showed no consistent trends of one sex having more stories in these outcome levels.

VIII. CROSS-CULTURAL SOCIO-ECONOMIC COMPARISONS

Table 16 is a recapitulation of Table 4 in Chapter 5 and Tables 23 through 25 in the Appendix and indicates the socio-economic group which gave the highest frequency of response to each thema cluster and outcome level for Story No. 4. "H" means the high group had the highest frequency, "M" means the middle group gave the highest frequency, and "L" means the low group gave the highest frequency. Where both high and middle groups were significantly higher than the low group, but not significantly different from each other, it is indicated by H-M*. If all three groups were significantly different from each other, it is indicated by an asterisk beside both of the two highest ones in order, as H* L*. If the same group was found to be higher in Story No. 2 as it was here, the letter is underlined.

The high or high-middle socio-economic group was higher in frequency of response or in outcome level in 32 of the 48 comparisons. Sixteen of the differences were significant.

The consistent trends were in the following category clusters: constructive behavior by mother, where the high socio-economic group was higher in all four samples, one of the differences being significant; resistance, where the high or high and middle socio-economic group was higher in three out of four samples, and the middle socio-economic group was higher in the fourth, two of the differences being significant; and domination, where the high and middle socio-economic groups were higher in all four samples, one difference being significant.

TABLE 16.

CROSS-CULTURAL SOCIO-ECONOMIC COMPARISONS. RECAPITULATION OF DIFFERENCES BETWEEN HIGH, MIDDLE AND LOW SOCIO-ECONOMIC LEVELS FROM TABLES 4, 23, 24, 25

"H" designates a higher percentage for the high socio-economic group, "M" for the middle socio-economic group, and "L" for the low socio-economic group. "H-M*" indicates that high and middle socio-economic groups were both significantly higher than the low group. "H* L*" indicates that the high socio-economic group was higher than the low socio-economic group, which in turn was higher than the middle socio-economic group. "*" indicates that the difference was significant at the .05 level or better. A line under "H", "M" or "L" indicates that the same socio-economic group was also found to be higher in Story No. 2.

Category Cluster	Birmingham	Helsinki	Hamburg	Munich
Constructive (mother)	H	H	H*	H
Constructive (child)	H	M	H	H
Child tells truth	L	L	H-L*	H
Child tells lie	H	H	L	L*
Resistance	H*	H	H-M*	H
Anxiety	H	L	M	H
Submission	H	H-M*	M*	H
Domination	H	H-M*	M	H
Outcome				
Integrative	H	H	L	H*
Domination-resistance	H	M	L	H
Ambiguous	L	L*	H* L*	L*
Domination-submission	H	H-M*	M* L*	H

The high socio-economic group was higher in _integrative_ outcomes in three of the four samples; one difference was significant. The low socio-economic group was higher in all four _ambiguous_ outcomes, and three of the four differences were significant. The socio-economic groups did not show consistent trends in _domination-resistance_ and _domination-submission_ outcomes.

Twenty out of 36 of the category clusters and integrative outcomes showed the same group to be highest in frequency in Story No. 2 as in Story No. 4.

It is interesting to note in Table 16 that in the _truth_ and _lie_ category clusters, where one socio-economic group was highest in _truth_, the other group was highest in _lie_. The cluster of _child tells lie_ is not necessarily a reciprocal of _child tells truth_. It has been found in the other studies (2, 8), however, that frequently these clusters reciprocate each other. The consistency of the responses made to the measuring instrument is supported by these findings.

Table 16 shows that in _domination_ and _submission_ category clusters the same socio-economic groups gave the highest percentages in all samples. That is, where the high socio-economic group was highest in _submission_ in Birmingham, Helsinki and Munich, it was also highest in _domination_. In Hamburg the middle socio-economic group was highest in these two category clusters. It would·be expected that _submission_ would be associated with _domination_ when the _domination_ is very strong and severe and the child's spontaneity is relatively low.

Heber (8) found that the middle socio-economic groups in Helsinki and Hamburg did not give percentages of response to Story No. 2 that

were significantly different from the other socio-economic groups.

In Story No. 4 the middle socio-economic groups were in some cases different from both the high and low socio-economic groups and did not fall in between the high and low groups in percentages of response. In Helsinki the middle socio-economic group was highest in domination-resistance outcomes. In the Hamburg sample the middle socio-economic group was highest in category clusters of anxiety and domination. In outcomes of ambiguity and domination-submission the Hamburg middle socio-economic group was significantly higher than either the high or low socio-economic groups.

IX. TYPES OF DOMINATION

When the coding system for analysis was designed, provision was made for finding what types of punishment were most frequent in the samplings being studied. Categories were provided for several specific types of domination, and tallies were given in the appropriate categories whenever a child's story mentioned a particular type of punishment or domination. The results are given in Table 17 as the percentages of children in each sample giving responses in each of the domination categories. The percentages in each category are not necessarily mutually exclusive, because a child may have mentioned two or more types of domination and would then be counted in each type he mentioned. Category 64, Mother tells father, is not included in the cluster of themas of domination, but it is included in Table 17 as a matter of interest in the frequency with which children in the different samples brought the father into the story.

From Table 17 several observations can be made:

Deprivation of food was mentioned as punishment more frequently in
Birmingham than in the other samples.

Deprivation of playtime was more frequent in the Hamburg and Munich
samples than in the others.

Restitution under duress was more frequent in the Birmingham, Hamburg
and Knoxville samples than in the Helsinki and Munich samples.

Physical punishment was more frequent in the Munich and Helsinki
samples than in the others.

TABLE 17

STORY NO. 4. PERCENTAGE OF THE TOTAL NUMBERS OF CHILDREN IN THE
FIVE SAMPLINGS GIVING THEMES OF DOMINATION OF THE CHILD,
AND PERCENTAGES OF TOTAL NUMBERS OF CHILDREN IN EACH
SAMPLING GIVING THEMES IN TWELVE CATEGORIES OF
DOMINATION

In the percentages of total domination each child is counted only once even though he may have given themes for two or more categories of punishment or other domination.

In the percentages for each category a child is counted only once, though the same child may be counted in more than one category.

| Type of Domination | Percentages | | | | |
	Birmingham	Helsinki	Hamburg	Munich	Knoxville
Total domination	69.9	37.5	64.6	65.9	54.2
Deprivation of food	2.5	0	0	.6	.9
Deprivation of playtime	2.5	1.9	4.1	8.5	1.4
Restitution under duress	21.0	3.4	16.3	7.3	14.0
Physical punishment	7.6	11.1	4.1	14.0	6.1
Mother tells father	4.6	1.4	2.4	1.8	1.4
Father punishes	3.8	.5	.8	.6	.5
Susan sent to bed	15.7	.5	5.7	.6	2.8
Miscellaneous punishment	8.6	7.2	4.9	3.7	7.5
Scolding	27.6	18.3	48.8	34.8	6.1
Susan sent to cleaners	6.8	2.4	8.1	3.0	1.9
Admonishment (past behavior)	15.2	5.8	4.1	1.8	10.7
Admonishment (future behavior)	9.9	2.4	4.1	1.8	17.8

Mother tells father was most frequent in Birmingham and second most
frequent in the Hamburg sample.

Punishment by father was more frequent in the Birmingham sample than
in the others.

Susan sent to bed was most frequent in Birmingham and second most
frequent in Hamburg.

Miscellaneous punishment was more frequent in Birmingham, Knoxville
and Helsinki than in Hamburg and Munich. Statements like "The mother
punished Susan" were coded here.

Scolding showed a wide range, with large differences between the frequencies of all samples. The Hamburg frequency was highest, then Munich,
Birmingham. Helsinki, and Knoxville. in that order.

Susan sent to store (or cleaners) was most frequent in Hamburg and
next highest in Birmingham.

Admonishment concerning past behavior was most frequent in Birmingham
and next most frequent in Knoxville.

Admonishment about future behavior was more frequent in the Knoxville
sample than in any of the others, and in the Birmingham sample was
second.

Table 17 shows the amount of each type of domination in a sample
relative to the other samples, but it is difficult to tell from this
table which types of domination were most prevalent within a given
sample with respect to those most prevalent in the other samples.
The types of domination were therefore ranked according to their
frequency in each sample. The rankings are shown in Table 18. In
Table 18 it can be seen that:

Deprivation of food was not a relatively prevalent form of punishment

    in any of the samples.

Deprivation of playtime ranked high only in Munich.

Restitution under duress was a relatively prevalent form of domination

    in all the samples, especially in Birmingham, Hamburg, and Knoxville.

Physical punishment ranked high in Helsinki and Munich. The ranking

    of the father as an agent was quite low in all the samples.

Susan sent to bed was a prevalent form of punishment in Birmingham

    and Hamburg.

Miscellaneous punishment ranked fairly high in Helsinki and Knoxville.

Scolding was the most prevalent form of domination in Birmingham,

    Helsinki, Hamburg, and Munich. It was not very prevalent in

    Knoxville.

Susan sent to the store was fairly prevalent in Hamburg.

Admonishment about past behavior ranked fairly high in Knoxville,

    Birmingham and Helsinki.

Admonishment about future behavior ranked highest as a form of domina-

    tion in Knoxville, and it was not very high in the other samples.

    It should be borne in mind that the figures in Table 18 are

independent of the total domination in each sample; that is, the rank

of one for scolding in Helsinki and Birmingham does not mean that

there is as much scolding mentioned in the Helsinki sample as there

is in the Birmingham sample. It only means that of the total kinds

of domination in the Helsinki and Birmingham samples, scolding was

the most prevalent in both. As a reminder, the total percentage

of domination which was found in each sample is given at the top

TABLE 18

RANK ORDER OF TYPES OF DOMINATION WITHIN EACH OF THE FIVE SAMPLES TAKEN FROM TABLE 17

	Rank Orders				
Type of Domination	Birmingham	Helsinki	Hamburg	Munich	Knoxville
Total domination (per cent)	69.9	37.5	64.6	65.9	54.2
Deprivation of food	11.5	12	12	11	11
Deprivation of playtime	11.5	8	7.5	3	10
Restitution under duress	2	5	2	4	2
Physical punishment	7	2	7.5	2	5.5
Mother tells father	9	9	10	8	10
Father punishes	10	10.5	11	11	12
Susan sent to bed	3	10.5	4	11	7
Miscellaneous punishment	6	3	5	5	4
Scolding	1	1	1	1	5.5
Susan sent to cleaners	8	6.5	3	6	8
Admonishment (past behavior)	4	4	7.5	8	3
Admonishment (future behavior)	5	6.5	7.5	8	1

of each column in Tables 17 and 18.

Discussion of Types of Domination

In Chapter IV, in the discussion on outcomes of stories, it was found that Hamburg, Munich, and Knoxville were very much alike in outcomes. The question was raised as to whether or not the domination-submission in a more democratic culture is the same as the domination-submission in a more authoritarian culture. Some insight into the answer to this question may be gained by comparing figures for Hamburg, Munich and Knoxville in Table 18.

In the Knoxville sample, admonishment about future behavior ranked first and admonishment about past behavior ranked third. In all the other samples, scolding ranked first. Furthermore, admonishment did not rank high in any of the other samples, and scolding did not rank high in Knoxville. Admonishing is a milder form of domination than scolding, and this is one clear difference between domination in the Knoxville sample and in the other samples.

From the evidence of several of the findings it is proposed that the domination of parents in Knoxville is of a milder form than the domination of parents in Hamburg and Munich. Admonishing usually has reference to the act of the child; scolding has reference to the child. Physical punishment may have reference to the behavior but by definition is addressed to the child as a person. The data suggest further that the submission of the children in Knoxville is different from the submission of children in Hamburg and Munich. It is marked by high acceptance of the ethical code including telling the truth,

accepting the blame for one's own mistakes, and taking initiative in making amends for those mistakes.

The specific findings which supported this interpretation include (1) the high ranking of admonishment and of restitution under duress as two of the most prevalent kinds of domination in the Knoxville sample; (2) the significantly high percentage of response for the Knoxville sample in the tells truth cluster of themas, and the low percentage of response in the tells lie cluster of themas; (3) the fact that the Knoxville sample showed the highest percentage of response in the constructive behavior by Susan category cluster but next to the lowest percentage of children with themas in the constructive behavior by mother category cluster. Munich and Hamburg were lowest in frequency of constructive behavior by Susan themas, and Hamburg was highest in frequency of constructive behavior by mother themas.

X. SUMMARY

This study was an analysis of Story No. 4, The Ink Spots, Series A, of the Anderson Incomplete Stories. Story No. 2, The Lost Meat, had been analyzed in a previous study, and it was possible to make comparisons between the two analyses and further evaluate the Anderson Incomplete Stories as a measuring instrument of intercultural differences.

Samples used were from data collected in Birmingham, England; in Helsinki, Finland; in Hamburg and Munich, Germany; and in Knoxville, Tennessee, U.S.A. Subjects were 1,227 children in the seventh school year in these cities.

Children's stories were coded in two ways: by four defined levels of outcome (integrative, domination-resistance, ambiguous, or domination-submission); and by categories representing the psychological themes in the stories. In Story No. 2 there were 33 categories for thought, feeling and action by the child-character and 46 for the mother-character. In Story No. 4 there were 37 categories for thought, feeling, and action by the child-character and 53 categories for the mother-character.

Aims were to analyze Story No. 4 and make sex and socio-economic comparisons in category clusters and outcome levels, and these same comparisons in cross-cultural samples, and to make comparisons of Story No. 4 with Story No. 2.

Reliability of coding showed percentages of agreement ranging

from 93.5% to 100%.

The Birmingham sample was highest in the two outcomes of spontaneity of the child, _integrative_ outcome and _domination-resistance_.
It was lowest in _ambiguous_ outcomes. That is, human relations in Birmingham were more clearly defined by these children in their stories.
Helsinki was significantly different from all other samples in _ambiguous_, unstructured outcomes of the stories, indicating a low order of communication, and significantly lower in _domination-submission_. Hamburg, Munich and Knoxville were alike in all four outcomes and showed no significant differences among themselves.

More boys showed _ambiguous_, unstructured outcomes than girls in all five samplings, the differences being significant in four.
More children in the high socio-economic groups showed _integrative_ outcomes in both Story No. 2 and Story No. 4, the differences for Story No. 4 being significant in Hamburg and Munich. More children in the low socio-economic groups had _ambiguous_ outcomes than in the high groups in all samples, the differences being significant in Helsinki, Hamburg and Munich.

Analyses of the data showed that in completion of the stories children were sensitive to the structure of the stimulus material.
There were two structural differences in the two stories that showed effects in the analysis of the data. Story No. 4 had a question after it: "How do they both feel about it?" Calling attention to both the mother and the child seemed to account for higher numbers of _integrative_ outcomes, higher percentages of _constructive behavior_ by both the

mother and the child and higher frequencies of anxiety than were found
in Story No. 2, while themas of _domination_ and _submission_ were lower
in frequency. Second, in Story No. 4 the mother enters just as Susan
finds herself in a predicament. There was less opportunity or necessity
to tell truth or lie, and there were much lower frequencies of both
tells truth and _tells lie_ in Story No. 4.

The girls wrote longer stories with wider variety of themas than
boys. As Heber found in Story No. 2, girls gave higher frequencies
in category clusters of _constructive behavior by mother_, _submission_, and
anxiety. Consistently in all five samples girls were high in _constructive
mother_ category clusters; with the exception of Helsinki, _constructive
behavior by the child_; and, with the exception of Knoxville, _child tells
lie_. For all five samples girls had higher frequencies of _anxiety_ and
submission, the differences being generally in the same direction as
for Story No. 2, and six of the ten differences for these two categories
being significant.

Analysis of data for socio-economic levels showed that children
from the high groups generally wrote longer stories. They had consistent-
ly higher frequencies of _integrative_ outcomes (as in Story No. 2), the
differences in Hamburg and Munich being significant. The high groups
had consistently higher frequencies in the category cluster of _construct-
ive behavior by the mother_ and, with the exception of Helsinki, _construct-
ive behavior by the child_. Children in the high group had higher fre-
quencies of _tells lie_ in Birmingham and Helsinki. Children in the
low group had higher frequencies of _tells lie_ in Hamburg and Munich,

the difference in Munich being significant. Socio-economic levels in the four cities were exactly reversed for child tells truth. Children in the high socio-economic group had high percentages of tells truth in Hamburg and Munich, while tells truth was found more frequently in Birmingham and Helsinki among children at the low socio-economic level. Children in the low groups tend to write shorter stories.

Knoxville stories reveal more initiative and personal integrity in the child and more respect for the child for both Story No. 2 and Story No. 4. Knoxville children showed the highest percentage of tells truth and the lowest percentage of tells lie. They showed high attention to the child in having highest percentages of constructive behavior by Susan, and lower attention to the mother in having next to lowest percentages of children with themes in the constructive behavior by mother category cluster. Munich and Hamburg were lowest in frequency for constructive behavior by Susan, and Hamburg children, who gave little attention to constructive behavior by the child, were highest in frequency of constructive behavior by the mother. Evidence shows that according to the children's stories highest frequencies of truth and lower frequencies of tells lie were accompanied by milder punishment and milder forms of parental domination.in Knoxville. Admonishment about future behavior ranked first in frequency and admonishment about past behavior ranked third. In all the other samples scolding ranked first among the types of domination. Admonishment did not rank high in any of the other samples and scolding did not rank high in Knoxville. It was pointed out that admonishment represents chiefly disapproval of some kind of behavior. Scolding and physical punishment represent an attack on the child himself.

Hamburg and Munich were significantly different from each other in category clusters of constructive behavior by the mother, truth, lie, and anxiety, supporting the findings for Story No. 2, which leaves open the question of a German national character.

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TABLE 19

HELSINKI, FINLAND: NUMBERS AND PERCENTAGES OF
BOYS AND GIRLS WITH THEMAS CODED IN THE EIGHT
CATEGORY CLUSTERS, AND ACCORDING TO OUTCOME

| | Story No. 4 | | | | Story No. 2 | | | |
| | Boys | | Girls | | Boys | | Girls | |
Category Cluster	N	%	N	%	N	%	N	%
Constructive (mother)	48	46.6	54.	51.4	17	16.5	18	17.0
Constructive (child)	39	37.9	32	30.5	4	3.9	5	4.7
Child tells truth	42	40.8	47	44.8	49	47.6	55	51.9
Child tells lie	15	14.6	20	19.0	32	31.1	36	34.0
Resistance	17	16.5	17	16.2	11	10.7	7	6.6
Anxiety	71	68.9	89	84.8*	51	49.5	59	55.7
Submission	25	24.3	43	40.9*	48	46.6	67	63.2*
Domination	37	35.9	41	39.0	58	56.3	63	59.4
Outcome								
Integrative	18	17.5	14	13.3	7	6.8	7	6.6
Domination-Resistance	10	9.7	2	1.9	(Not reported by Heber)			
Ambiguous	55	53.4*	38	36.2	"	"	"	"
Domination-Submission	20	19.4	51	48.6*	"	"	"	"
Total	103		105		103		106	

*Significantly higher than the other sex at the .05 level or better, by
chi-square test.

TABLE 20

HAMBURG, GERMANY: NUMBERS AND PERCENTAGES OF BOYS AND GIRLS
WITH THEMAS CODED IN THE EIGHT CATEGORY CLUSTERS,
AND ACCORDING TO OUTCOME

| Category Cluster | Story No. 4 | | | | Story No. 2 | | | |
| | Boys | | Girls | | Boys | | Girls | |
	N	%	N	%	N	%	N	%
Constructive (mother)	66	53.7	73	59.3	20	14.1	34	24.5*
Constructive (child)	34	27.6	44	35.8	14	9.9	13	9.4
Child tells truth	62	50.4	65	52.8	65	45.8	83	59.7*
Child tells lie	32	26.0	36	29.3	72	50.7*	51	36.7
Resistance	11	8.9	17	13.8	16	11.3	13	9.4
Anxiety	76	61.8	88	71.5	72	50.7	80	57.6
Submission	21	17.1	32	26.0	70	49.3	78	56.1
Domination	76	61.8	83	67.5	88	62.0	83	59.7

Outcome

Integrative	13	10.6	17	13.8	14	9.9	14	10.1
Domination-resistance	6	4.9	7	5.7	(Not	reported	by	Heber)
Ambiguous	44	35.8	40	32.5	"	"	"	"
Domination-Submission	60	48.8	58	47.2	"	"	"	"
Total	123		123		142		139	

*Significantly higher than the other sex at the .05 level or better, by
chi-square test.

73.

TABLE 21

MUNICH, GERMANY: NUMBERS AND PERCENTAGES OF BOYS AND GIRLS
WITH THEMAS CODED IN THE EIGHT CATEGORY CLUSTERS,
AND ACCORDING TO OUTCOME

| Category Cluster | Story No. 4 | | | | Story No. 2 | | | |
| | Boys | | Girls | | Boys | | Girls | |
	N	%	N	%	N	%	N	%
Constructive (mother)	24	32.9	48	52.7*	5	6.8	5	5.4
Constructive (child)	20	27.4	29	31.9	5	6.8	8	8.7
Child tells truth	25	34.2	39	42.9	26	35.6	32	34.8
Child tells lie	27	37.0	34	37.4	45	61.6	61	66.3
Resistance	6	8.2	12	13.2	8	11.0	4	4.3
Anxiety	29	39.7	52	57.1*	28	38.4	35	38.0
Submission	7	9.6	25	27.5*	26	35.6	48	52.2*
Domination	49	67.1	59	64.8	42	57.5	51	55.4
Outcome								
Integrative	8	11.0	13	14.3	3	4.1	2	2.2
Domination-Resistance	1	1.4	11	12.1	(Not	reported	by	Heber)
Ambiguous	34	46.6*	21	23.1	"	"	"	"
Domination-Submission	30	41.1	46	50.6	"	"	"	"
Total	73		91		73		92	

*Significantly higher than the other sex at the .05 level or better, by
chi-square test.

74.

TABLE 22

KNOXVILLE, TENNESSEE: NUMBERS AND PERCENTAGES OF BOYS AND GIRLS
WITH THEMES CODED IN THE EIGHT CATEGORY CLUSTERS,
AND ACCORDING TO OUTCOME

Category Cluster	Story No. 4				Story No. 2			
	Boys		Girls		Boys		Girls	
	N	%	N	%	N	%	N	%
Constructive (mother)	42	45.2	57	47.1	12	12.2	9	7.6
Constructive (child)	27	29.0	52	43.0*	4	4.1	10	8.4
Child tells truth	58	62.4	72	59.5	60	61.2	80	67.2
Child tells lie	16	17.2	14	11.6	23	23.5	19	16.0
Resistance	6	6.5	9	7.4	14	14.3	6	5.0
Anxiety	58	62.4	82	67.8	12	12.2	16	13.4
Submission	24	25.8	48	39.7*	41	41.8	83	69.7*
Domination	46	49.5	70	57.9	56	57.1	85	71.4*
Outcome								
Integrative	15	16.1	14	11.6	4	4.1	5	4.2
Domination-Resistance	5	5.4*	2	1.7	(Not	reported	by	Heber)
Ambiguous	32	34.4*	27	22.3	"	"	"	"
Domination-Submission	41	44.1	78	64.5*	"	"	"	"
Total	93		121		98		119	

*Significantly higher than the other sex at the .05 level or better, by
chi-square test.

TABLE 23

HELSINKI, FINLAND: NUMBERS AND PERCENTAGES OF CHILDREN IN THE
HIGH, MIDDLE AND LOW SOCIO-ECONOMIC GROUPS WITH THEMES CODED
IN THE EIGHT CATEGORY CLUSTERS, AND ACCORDING TO OUTCOMES
FOR STORIES NO. 4 AND NO. 2

Category Cluster	Story No. 4						Story No. 2					
	High N	%	Middle N	%	Low N	%	High N	%	Middle N	%	Low N	%
Constructive (mother)	39	52.7	37	46.3	26	48.1	22	29.7*	8	10.0	5	9.1
Constructive (child)	21	28.4	30	37.5	20	37.0	3	4.1	5	6.3	1	1.8
Child tells truth	29	39.2	34	42.5	26	48.1	40	54.1	37	46.3	27	49.1
Child tells lie	17	23.0	10	12.5	8	14.8	32	43.2*	27	33.8*	9	16.4
Resistance	13	17.8	14	17.5	7	13.0	10	13.5	5	6.3	3	5.5
Anxiety	58	78.4	59	73.8	43	79.6	49	66.2*	35	43.8	26	47.3
Submission	26	35.1	31	38.8	11	20.4	36	48.6	47	58.8	32	58.2
Domination	33	44.6*	35	43.8*	10	18.5	38	51.4	49	61.3	34	61.8

Outcome	High N	%	Middle N	%	Low N	%	High N	%	Middle N	%	Low N	%
Integrative	15	20.3	12	15.0	5	9.3	8	10.8	3	3.8	3	5.5
Domination-resistance	4	5.4	5	6.3	3	5.6	(Not reported by Heber)					
Ambiguous	27	36.5	34	42.5	32	59.3*	"	"	"	"		
Domination-submission	28	37.8	29	36.3*	14	25.9	"	"	"	"		

| Total | 74 | | 80 | | 54 | | 74 | | 80 | | 55 | |

*Significantly higher than the other socio-economic group or groups at the
.01 level.

TABLE 24

HAMBURG, GERMANY: NUMBERS AND PERCENTAGES OF CHILDREN IN THE HIGH,
MIDDLE AND LOW SOCIO-ECONOMIC GROUPS WITH THEMAS CODED IN THE
EIGHT CATEGORY CLUSTERS, AND ACCORDING TO OUTCOMES
FOR STORIES NO. 4 AND NO. 2

Category Cluster	Story No. 4						Story No. 2					
	High		Middle		Low		High		Middle		Low	
	N	%	N	%	N	%	N	%	N	%	N	%
Constructive (mother)	51	73.9*	55	50.0	33	49.3	16	23.5*	33	22.6*	5	7.5
Constructive (child)	30	43.5	27	24.5	21	31.3	8	11.8	16	11.0	3	4.5
Child tells truth	44	63.8*	45	40.9	38	56.7*	40	58.8	73	50.0	35	52.2
Child tells lie	18	26.1	30	27.3	20	29.9	29	42.6	63	43.2	31	46.3
Resistance	10	14.5*	15	13.6*	3	4.5	8	11.8	15	10.3	6	9.0
Anxiety	45	65.2	83	75.5	36	53.7	40	55.8*	90	61.6	22	32.8*
Submission	12	17.4	34	30.9*	7	10.4	33	55.9	79	54.1	31	46.3
Domination	37	53.6	80	72.7	42	62.7	45	66.2	83	56.8	43	64.2

Outcome												
Integrative	9	13.04	12	10.9	9	13.4	8	11.8	18	12.3	2	3.0
Domination-resistance	3	4.4	4	3.6	6	9.0	(Not reported by Heber)					
Ambiguous	38	55.1*	24	21.8	22	32.8*	"	"	"	"		
Domination-submission	19	27.5	70	63.6*	30	44.8*	"	"	"	"		
Total	69		110		67		68		146		67	

*Significantly higher than the other socio-economic group or groups at the
.05 level or better, by chi-square test or t-test.

TABLE 25

MUNICH, GERMANY: NUMBERS AND PERCENTAGES OF CHILDREN IN THE
HIGH AND LOW SOCIO-ECONOMIC GROUPS WITH THEMES CODED IN THE
EIGHT CATEGORY CLUSTERS, AND ACCORDING TO OUTCOMES
FOR STORIES NO. 4 AND NO. 2

| | Story No. 4 | | | | Story No. 2 | | | |
| | High | | Low | | High | | Low | |
Category Cluster	N	%	N	%	N	%	N	%
Constructive (mother)	37	44.0	35	43.8	5	5.8	5	6.3
Constructive (child)	29	34.5	20	25.0	7	8.1	6	7.6
Child tells truth	37	44.0	27	33.8	26	30.2	32	40.5
Child tells lie	24	28.6	37	46.3*	59	68.6	47	59.5
Resistance	10	11.9	8	10.0	4	4.7	8	10.1
Anxiety	42	50.0	39	48.8	31	36.0	39	40.5
Submission	17	20.2	15	18.8	39	45.3	35	44.3
Domination	57	67.9	51	63.8	49	57.0	44	55.7
Outcome								
Integrative	14	16.7	7	8.8	3	3.5	2	2.5
Domination-resistance	7	8.3	5	6.3	(Not	reported	by	Heber)
Ambiguous	21	25.0	34	42.5*	"	"	"	"
Domination-submission	42	50.0	34	42.5	"	"	"	"
Total	84		80		86		79	

*Significantly higher than the other socio-economic group at the .02
level, by chi-square test.

Anderson Incomplete Stories: Form 2.

Age at last

Birthdate:_____birthday:_____Boy:_____ Girl_____

Birthplace:_____Church attended:_____

School:_____Grade:____ How long have you lived in
this community, city, town?_____

Occupation of father:_____Occupation of mother:_____

- -

1. Frank and Peter were walking to school. Suddenly Frank grabs Peter's cap and throws it high up into the nearest tree so that Peter could not reach it with his hand. Frank had never done anything like this before. Neither had Frank and Peter quarreled with each other the day before.

Why did Frank do this?   What does Peter do?
What does Frank think?   How does Peter feel about it?

Think about these questions, then **finish** the story quickly with a few sentences.

2. Michael's mother sends him to the store to get one pound of wieners. On the way home he puts the package of meat on the edge of the sidewalk and plays for a short time with his friends. A shepherd dog darts forward quickly, claws half the wieners out of the package and rushes away with them. Michael wraps up the remaining wiener and takes them home.

What does Michael say to his mother?
What does his mother do?
How does Michael then feel about it?

Think about these questions, then **finish** this story quickly with a few sentences.

3. The teacher suddenly discovers that fifty cents has disappeared from her desk. She looks up and sees that all the class are working on their arithmetic assignment. She wonders what happened to the money and what she should do.

What does the teacher do?

<u>Finish</u> this story also with a few sentences. Tell what happened to the money and also exactly how the teacher feels and what she does.

4. Elizabeth is sitting in the living room working on her homework. Suddenly she remembers her mother's new coat. She wonders how she would look in it. When taking the coat off she notices that she had got some ink spots on her mother's new coat. Just as Elizabeth is trying to wipe out the ink spots her mother enters the room.

What does her mother say?   How do they both feel about it?
What does Elizabeth say?   What does each one do?

Think about these questions and <u>finish</u> this story quickly with a few sentences.

5. George and Karl are playing with a football. They know that they should not play football on the narrow space in front of the house. George gives a strong kick and the ball hits a window and makes a big crack in it. Karl thought that someone had appeared behind the window. No one could have seen who had kicked the ball against the window.

Finish this story with a few sentences. Tell how the two boys feel about it and what they do.

6. Elsa often handed in her home composition late to the teacher. This time it was an especially important composition and she had, moreover, written it on time. On the way to school she lost her composition notebook and could not find it anywhere.

What does Elsa say to her teacher?
What does the teacher say?

Think about these questions and finish this story with a few sentences.