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Semiotic Play : A Child Translates Text into Pictures

Ragnhild Söderbergh

INTRODUCTION

Much time and energy has been devoted to devising clever experiments in order to find out about children's linguistic abilities. There always remains a feeling of uncertainty, however, as to whether the test really captured what it was intended to - that, after all, the fish did not slip through the meshes of the net. Superior to the specimens elicited by researchers in laboratories or on casual visits in children's homes are the spontaneous examples found, for instance, in parents' diaries, where the parent is also a trained scholar with a sensitive ear and eye and the rich experience of the child that only a shared everyday life can give.

This paper has been based on a diary documenting a girl's learning to read and her reading, from two to seven years of age, and on some of her spontaneous drawings that have been dated at the time of their production and saved. The corpus of pictures presented and analyzed here were spontaneously made during a period of two months - November and December 1968 - as illustrations of episodes from texts that she had earlier read and which she reread before she produced the drawings. At the time of the production of these drawings the girl was 5 1/2 years old. In comparison with her other drawings from the same period, the book-illustrating ones are much more stereotyped and conventionalized. A close analysis indicates that they are transformations of the written text into a pictorial mode. As such they not only give interesting information about the child's comprehension of the texts and her linguistic abilities, but also invite more speculative comparisons with pictorial precursors of written language in the history of writing.

BACKGROUND

The young artist whose drawings we are going to analyze here is an early reader. Her reading development has been documented elsewhere (cf Söderbergh 1977 etc.). By the age of 5 1/2, when she made the book illustrating drawings, her favourite literature comprised the famous *Nils Holgerssons underbara resa* (*Nils Holgersson's Adventurous Journey through Sweden*) by Selma Lagerlöf. At about the age of three she had also spontaneously started to write; a specimen of her writing ability at age 5 1/2 has been given in fig. 1, which is a page from a fictitious newspaper announcing a baptism. In English translation the text runs as follows: "Birgitta Vibeke is baptized in the church of Gothenburg. Bengt Hellekant is the name of the priest. On Sunday November 10. With the name of Birgitta Vibeke". The "photo" of the event represents a bold piece of liturgical innovation: the priest is kneeling on a cushion, holding the baby in both hands, her back against the font.

So at the age of 5 1/2, when she started to "translate" alphabetically written texts into pictures, the artist really knew how to write and also made frequent use of this ability in her everyday life. This is important to keep in mind when we analyze her "transformations of written texts into the pictorial mode". To be able to better understand the very special character of these "transformations" (figs 4 etc.) in comparison with her other, contemporary, drawings, I have given an example of her "ordinary" drawings from the same period (figs 2 and 3 showing areoplanes, standing and in the air - observe the propellerplane in fig. 3 with the propeller running).

When going through the collection of drawings of the young artist some twenty years later, I found 28 from November-December 1968 that had been directly based on written texts that she had read at the time. For 11 of these, however, there were illustrations in the books that had more or less influenced the drawings, which made a comparative analysis of drawings viz. corresponding text more complicated. So I decided not to deal with them here. For the same reason I have refrained from analyzing a few "marine" drawings where you may trace a direct influence from similar pictures that her grandfather made for her. In all, I have chosen 14 drawings for a close analysis in this study.

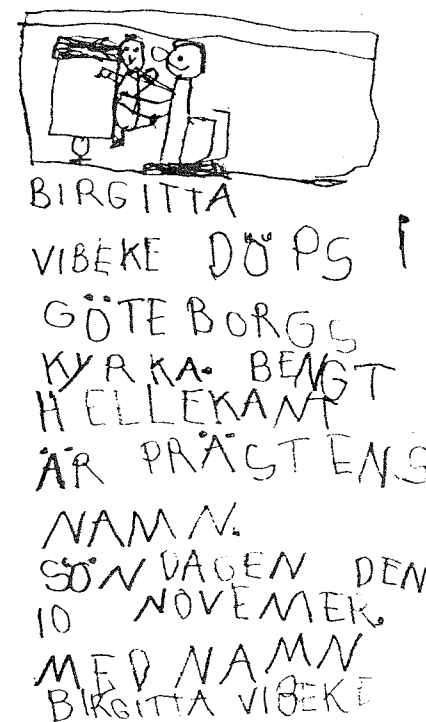


Fig. 1



Fig. 2

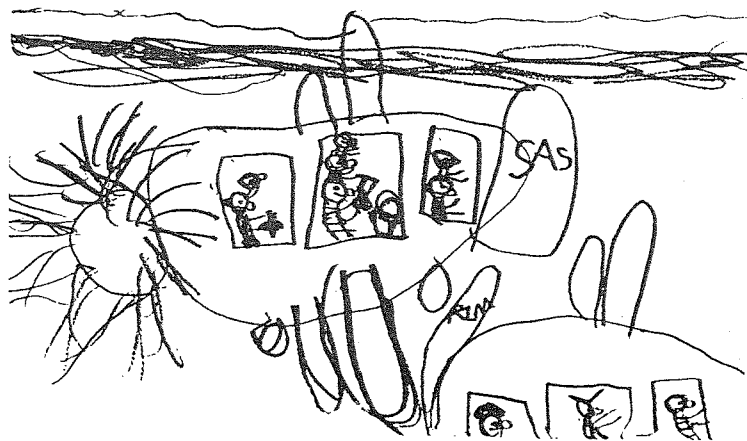


Fig. 3

A CLOSE ANALYSIS OF 14 BOOK-ILLUSTRATING DRAWINGS IN COMPARISON WITH THE WRITTEN TEXTS

The 14 drawings analyzed in this study have been based on episodes from three different books. "Kåre the buck", "Mårten the goose and the swans 1-2" (two drawings), "Jarro the wild duck 1-5" (a series of five drawings), "Hunting Gråfäll 1-2" (two drawings), and "The Student" are illustrations of episodes from *Nils Holgersson's Adventurous Journey* (here referred to as NH). "Mother Afke's fainting" and "Preparations for an outing" illustrate episodes from *Mor Afkes tio (Mother Afke's Ten Children*, here referred to as MA) written by Nienke van Hichtum and translated into Swedish from the Dutch original (*Afkes tiental*) by Sonja Pleijel. "The Israelites on their way to Kanaan" has been based on text from *Barnens Bibel (The Children's Bible*, here referred to as BB) by Anne De Vries, translated into Swedish by Britt G. Hallqvist.

Kåre the buck

The story tells that a peasant is puzzled by the fact that when his buck returns home from the wood every afternoon his horns are red. Finally the peasant decides to follow the animal at a distance into the wood. In doing so he discovers that the buck starts to rub his horns against a cliff which gives the red colour.

"As he stood there thinking, a block of stone came rolling down a hill close by him. The peasant jumped out of the way and saved himself, but Kåre the buck was hit by (lit. "came right under") the block and was killed. When the peasant looked up the hill, he saw a big, strong giant woman, who was just going to roll another block of stone at him".

(Sw. *Medan han stod där och funderade, kom ett stenblock rullande utför en brant tätt bredvid honom. Bonden sprang åt sidan och räddade sig, men bocken Kåre kom rätt under blocket och blev ihjälslagen. När bonden tittade uppåt branten, såg han en stor, stark jättekvinna, som var i färd med att rulla ner ännu ett stenblock mot honom. NH, p 391).*

Looking at the corresponding drawing (fig. 4) we see on the bottom line, from left to right :

- a) an oval shape (cf block of stone in the text), as big as the trunk of the creature situated to the right of the oval (cf b)
- b) a four-legged creature with a tail and horns (defining him as a buck) lying on his back, all four legs in the air and a big bruise where the eye should be (cf was hit by the block and killed in the text)

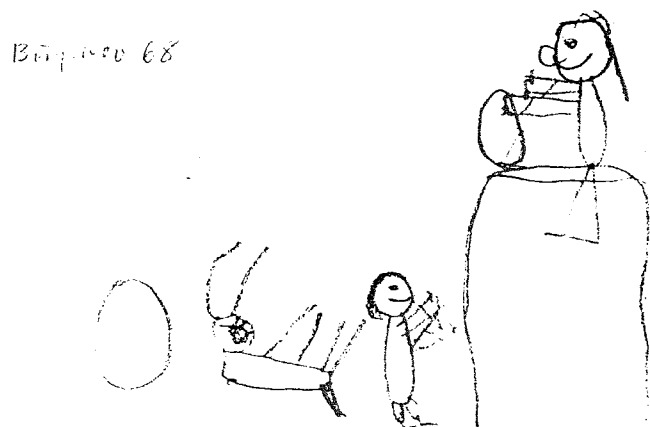


Fig. 4

- c) a person with trouser-legs (which define him as a man) standing with his back to the buck and facing
- d) a cylinder-like shape, twice his own height (cf hill) with a person on top, facing him. This person's size is twice the man's (cf giant), and the string of hair reaching down as far as the middle of the back suggests that this giant is a woman. Her left hand holds on to an oval, bigger than her own head - cf the last line of the text above!

A comparison between text and drawing shows a very close correspondence between the two : there is not a single stroke in the drawing which does not owe its existence to what is told in the text. Moreover, the highly stereotyped figures may be identified on the basis of configurations of a small set of formal elements, where minimal contrasts may serve to distinguish between variants of the same species. This will be still more evident as we go on to analyze the rest of the drawings.

It is also to be noted that the artist has placed her figures in the picture in such a way as to show the order in which things are happening, time being indicated by direction left to right. In the leftmost part of the picture we find the block of stone rolled down by the giant woman, and the dead buck directly to the right of the block. In the right half of the picture we find the man (left) and the giant woman on the hill (right) turned dialoguewise towards each other - in the text that follows what has been cited above there is a dialogue between the two, where the peasant succeeds in persuading the giant not to roll the stone down at him!

Mårten the goose and the swans

The story tells how the flock of (grey) wild geese, including the tame white goose Mårten on which Nils is riding (the boy having been enchanted by a brownie and reduced to the size of three inches), has just arrived at a bay called Hjälstaviken. This bay is inhabited by hundreds of swans who at the sight of Mårten fly into a rage, accusing him of trying to pretend being a swan. They attack him :

"He (the old swan king) hissed with anger and rushed straight at Mårten the goose and snatched a couple of his feathers And from all directions the swans stretched their strong beaks to pick off his feathers".

(Sw. *Han (den gamle svankungen) fräste av ilska, störtade rätt på Mårten gåskarl och ryckte av honom ett par fjädrar Och från alla håll sträckte svanorna fram sina starka näbbar för att rycka fjädrarna av honom. NH, p. 424).*

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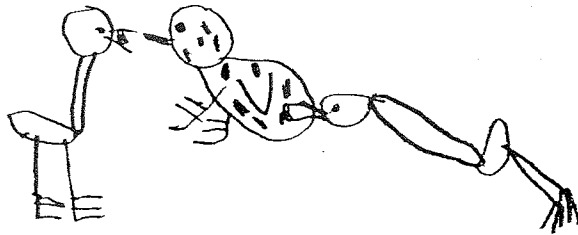


Fig. 5

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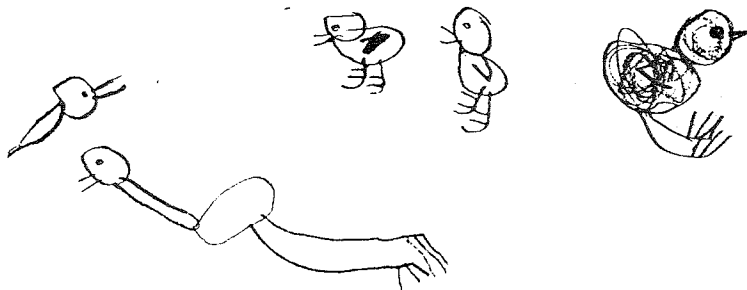


Fig. 6

To this text corresponds the drawing fig 5, where Mårten the goose is at the center, one swan at each side. Mårten has been drawn as a "prototypical" bird, with his head immediately attached to his trunk, but the swans have long necks joining the head and the trunk. Moreover, the swans are more slender and more longlegged than the rather clumsy Mårten. The swan to the left in the picture has a feather in his open beak (cf the text) and the swan to the right occupies an almost horizontal position (cf *stretching*), pecking with an open beak at Mårten who has big dots all over, marking the spots where he has been robbed of his feathers. We also find a type of "economy" in that two swans (=plural!) in the picture represent a lot of swans in the text.

The next drawing (fig 6) shows the end of the swan episode. The text tells that "all the sparrows in the neighbourhood ... hurried down to Hjälstaviken. And these small and weak creatures attacked the swans. The attack ... only lasted for a short moment, but when they were gone and the swans had regained consciousness, they saw that the wild geese had flown away and crossed the bay".

(*Sw. alla traktens småfåglar ... ilade ner mot Hjälstaviken. Och dessa små krafilösa stackare kastade sig över svanorna. Överfallet ... varade bara ett par ögonblick, men när de voro borta och svanorna kommo till sans igen, sågo de att vildgässen hade lyft och svävat över till vikens andra sida. NH, p 425*).

In fig 6 the sparrows are flying at the center of the picture. The swans have been moved to the left: in fact the leftmost swan only peeps in, showing his head and neck - the trunk and legs "existing" only in an imagined space to the left, outside the frame of the picture. The sparrows (identified by their relative size) are facing the swans (they *attack*), and it is to be noted, that the right swan, which is still within the frame of the picture, has got exactly the same horizontal position as in figure 5, as if petrified under the influence of the attacking sparrows (cf the text *When the swans came to themselves again*, indicating that they had been "out of themselves"). Also here "all the sparrows" of the text have been represented by only two in the picture - the principle of economy. - At the far right end of the picture Mårten the goose (all dark from the harsh treatment) is escaping, his back to the swans and the sparrows, heading for the "exit" into the imagined space beyond the right frame of the picture (cf *the wild geese had flown away*). So here, too, there is a clear marking of the order of events, from left to right: left the swans who have now

stopped attacking, middle the sparrows, who are now attacking the swans, and right Mårten, who as a result of the attack of the sparrows is able to escape.

The fact that Mårten is escaping has not been explicitly stated in the text but may be inferred from the wording "they saw that the wild geese had flown away"; thus Mårten, belonging to the flock, must have followed them. As we shall see when examining the rest of the pictures, the artist is quite skilled at constructing her drawings on the basis of inferences from the text.

Jarro the wild duck

This story has been embedded into a chapter dealing with lake Tåkern, a famous breeding place for all kinds of seafoal. Jarro, who lives in the lake, has been shot but not killed. A young man working at a nearby farm takes him home and hands him over to the mistress of the house who "quickly prepared a basket and put the bird to bed" (figs 7 and 8). (Sw. *Hon gjorde raskt i ordning en korg, där hon bäddade ner fågeln*. NH, p 238).

In fig. 7 we see the mistress of the house sitting on a chair, preparing the basket, with Jarro on the floor behind her. She has been drawn as the "prototypical" woman : trunk divided into two parts, corresponding to blouse and skirt (cf the "prototypical" man who has by contrast trunk + trouserlegs). The text does not tell where the duck is when the woman prepares the basket, nor does it explicitly state that she is sitting. By inference from the text, that tells that the bird is handed over to the woman by the young man ("She instantly took Jarro from the young man", Sw. *Hon tog genast Jarro från drängen*, NH, p 235), and knowing that one cannot hold on to a bird when preparing a basket, the artist has placed the animal behind the woman, i.e. to the left in the picture, thus marking that he has been put aside before she started to work on the basket. The chair reveals the cultural context of the artist : when we are involved in different kinds of handicraft we generally sit down working.

In fig. 8 the bird is "put to bed" : a neat bed with a pillow, a blanket and a folded sheet, all in accordance with the artist's experience of what a real bed must look like.

The next drawing (fig. 9) is the first example of a picture that does not straightforwardly represent a concrete episode. We see a four-legged, fierce-looking animal, tail down and showing his teeth, confronting Jarro who seems to be falling backwards, his eyes closed, seemingly frightened to death. The corresponding text tells that Jarro, who immediately had gone to

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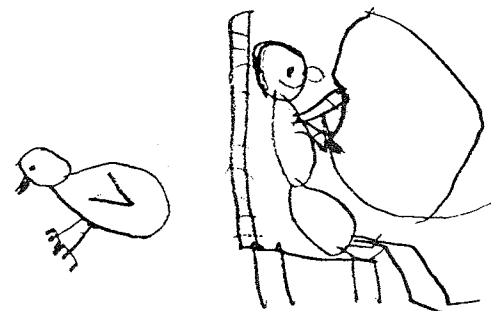


Fig. 7

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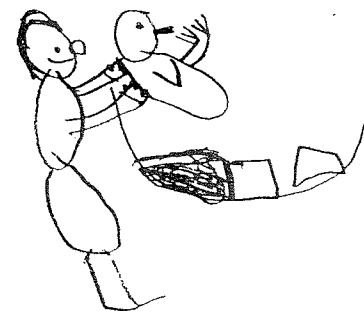


Fig. 8

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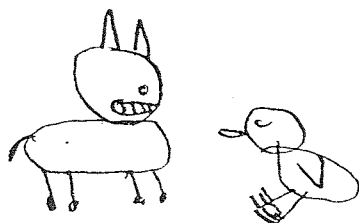


Fig. 9

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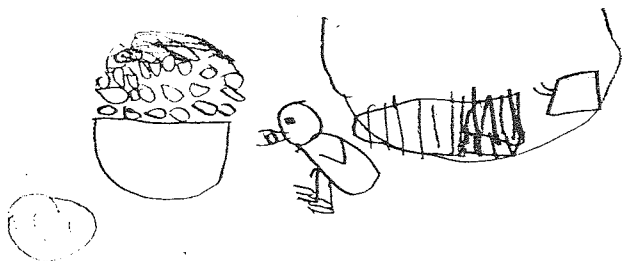


Fig. 10

sleep after being put to bed, wakes up and finds that Cesar, the dog in the house, is sniffing at him. Then "he was so scared that he nearly fainted" (Sw. *erfor han en så stor skräck, att han höll på att mista sansen*. NH, p 238). He also remembers the summer before, when he was just a small chicken, and how scared he had been every time he saw Cesar: "When he had seen ... the dog wading through the reeds, showing his frightful teeth (literally: with his mouth filled with teeth), he had imagined seeing Death himself". (Sw. *När han hade sett ... hunden med det tandfyllda gapet komma vadande genom vassen, hade han trott sig skåda döden själv*. NH, p. 239).

None of these two episodes, however, has been represented by the drawing - it is rather their common denominator, Jarro's fright, that has been depicted: the fierceness of the dog and the panic of the bird expressed in the text (cf his mouth filled with teeth and that he nearly fainted) have found congenial expressions in the picture.

In the next drawing (fig. 10) Jarro has left his bed and is eating from a bowl (note the grain in the beak). The text runs: "Next time Jarro woke up he saw a plate with grain and water in front of him. He was still rather ill, but nevertheless he felt hungry and began to eat" (Sw. *Nästa gång Jarro vaknade, såg han, att ett fat med gryn och vatten stod framför honom. Han var ännu ganska sjuk, men han kände sig hungrig i alla fall och började äta*. NH, p 239).

The text does not actually tell that Jarro was standing up eating. However, the (human) bed already designed for him by the artist does not allow Jarro to eat from a plate being placed immediately in front of him (i.e. in or on the bed) when he is still in bed. So the artist has placed both the bird and the food on the floor beside the bed - replacing the plate by a bowl (or possibly a deep plate). According to Swedish cultural habits animals are generally served from bowls, not from plates (and on the floor!).

The last picture of the series (fig. 11) shows Jarro in bed, flanked by two four-legged animals. Both have "straight" mouths, marking fierceness. The normal mouth of men and four-legged animals is a bow - note that even the giant woman has a bow-formed mouth. By comparison with fig. 10 the animal to the right is easily identified as the dog Cesar. The animal to the left has been represented as less stiff: she has slightly curved legs. Her ears are missing. In my opinion her appearance is slightly cat-like, which well agrees with the text, where only one more animal has been mentioned, the housecat Klorina. It is said that Jarro did not like her eyes, and "he

could not put any confidence in her. Moreover she always kept teasing him". (Sw. *han kunde inte fatta något förtroende för henne. Dessutom retades hon ständigt med honom.* NH, p 240).

Towards the end of the story there is a long discussion between Jarro and Klorina in which Cesar also joins. The drawing may be seen as a kind of "family photo" of the three animals in the house ; both the cat and the dog resided at the fireplace near which Jarro's basket had been placed.

Mother Afke's fainting

The following drawing (fig. 12) represents an episode from *Mother Afke's Ten Children*. We see two dyads, one (two women) in the left, the other (two girls) in the right part of the picture, and separated by an empty space at the center. All figures are in profile, standing on the bottom-line of the picture, their backs turning left. One woman is supporting or lifting the other, who seems to be falling backwards. The two little girls, one behind the other, their backs to the women, are weeping profusely.

According to the text the two girls Boukje (6 years old) and Sietske (4 years) have been entrusted with their younger sibling, but they forget all about it and the little one gets lost. The whole village goes searching, and finally the toddler is found. When Boukje and Sietske return home they are thrashed by their mother, who then faints. Ate Jetske, a woman who is their neighbour, comes to the rescue and "lifts up Afke on her strong arms" (Sw. *lyfter upp Afke i sina starka armar.* MA, p 110).

Then there is an interlude filling more than one and a half pages in the book, where Ate Jetske takes care of Mother Afke, the baby is fed etc. At the bottom of page 111 the two little girls are reintroduced, and turning to page 112 we learn that they sit weeping on a bench outside the house, feeling extremely unhappy.

In the drawing, the artist in the left part of the picture has caught Ate Jetske at the moment when she is lifting up Mother Afke. In the right part, by inference, she has drawn the moment when the girls leave the house, heading for the "exit" into the imagined space with the bench outside the house. Already inside the house they have probably been weeping after having been thrashed by their mother. The space between the dyads evidently corresponds to the "interlude" in the text between the fainting episode in page 110 and the reintroduction of the two girls at the end of page 111.

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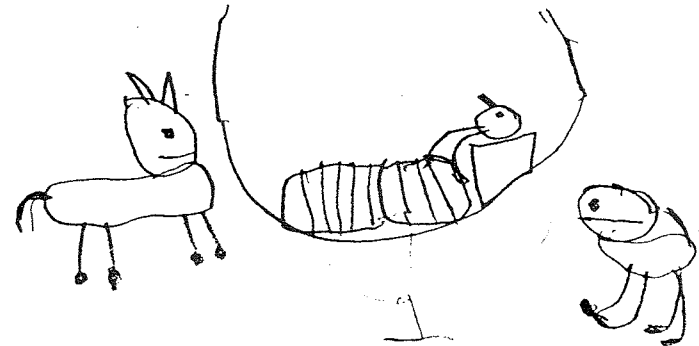
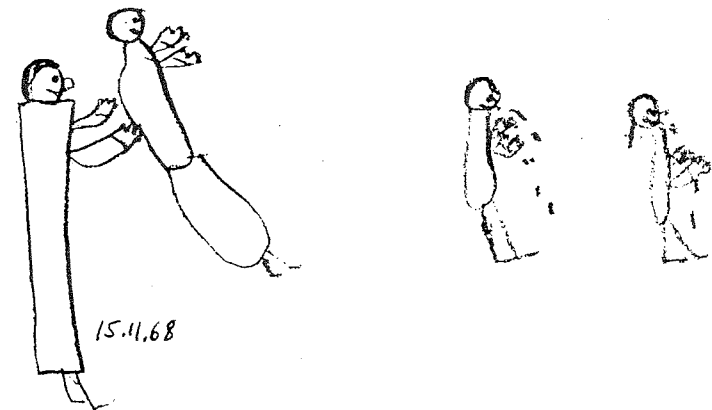


Fig. 11



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Fig. 12

A couple of details are worth mentioning. The two women have been contrasted by the artist giving Ate Jetske a frock instead of the normal blouse+skirt. There is also a small contrast between the two girls (both prototypical, endowed with trunks only), one of them having been given long hair with a ribbon.

Preparations for an outing

This drawing (fig. 13) shows another episode from *Mother Afke's Ten Children*. In chapter seven the family is planning a whole-day excursion by boat on the following day. In the rather lengthy discussion the oldest boy, 18-year-old Watse, remarks that they must not forget - among other things - to take the frying-pan, as they are going to cook their food in the open air. The episode illustrated, however, is taken from the beginning of the following chapter, where the text runs as follows:

"As early as four o'clock in the morning, they were all busy ... Even Sipke (i.e. the baby) ... was wide awake, sitting straight up in his cradle with some pillows behind his back. With his hand in his mouth he was looking with eyes wide open at all those big and small people who were rushing to and fro. There was nobody who for a single moment was sitting down on a chair". (Sw. *Redan klockan fyra på morgonen var de allesammans i farten ... Till och med Sipke ... var vaken och satt rakt upp i sin vagg med några kuddar bakom ryggen. Med handen i munnen tittade han storögd på alla de där stora och små människorna som sprang hit och dit. Det var ingen som ett ögonblick satt stilla på en stol.* MA, p 122).

The drawing corresponds closely to the text : the baby is sitting at the center of the picture, straight up with pillows behind his back, the rushing people have been represented by a big boy (one leg bent denoting running) and the meaning of the last sentence is given by the empty chair at the right end of the picture. The frying-pan has been introduced by inference from the chapter before - the big boy holding it must be 18-year-old Watse, whose position at the left end of the picture is completely in accordance with the fact that the inference is made from chapter seven, dealing with the planning of the outing in the evening before, i.e. time past.

The Israelites on their way to Kanaan

This is a drawing (fig. 14) corresponding to text from the *Children's Bible*, telling how the Israelites started out on their long journey to Kanaan "with their children, with cows and sheep and all the precious things they had

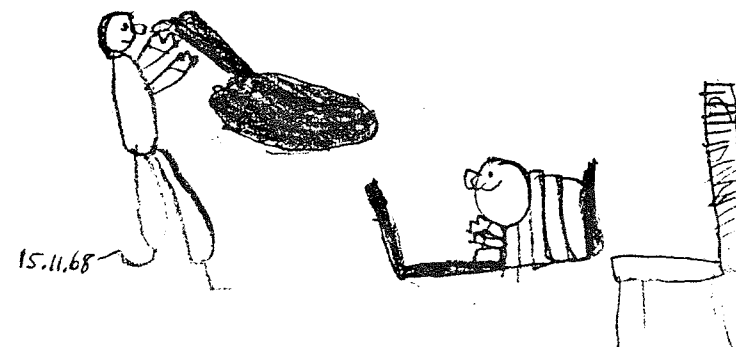


Fig. 13



Fig. 14

received (i.e. from the Egyptians)" (Sw. *med kor och får och alla de fina sakerna som de hade fått*. BB, p 71). It is told that they were walking very slowly because of the children, the sheep and the lamb. "And how should they find their way to the far-off country? ... They just followed Moses. He went first, his long stick in his hand". (Sw. *Och hur skulle de hitta vägen till det fjärran landet? ... De följde helt enkelt efter Mose. Han gick först med sin långa stav i handen*. BB, p 71).

There are several things to note in this picture. At first sight the peculiar dresses seem to be an exception from the stereotyped style noted in the earlier pictures. But also in other drawings illustrating Bible texts - and only in these - we find the same clothes. A close examination reveals that they are religious habits : veils (for women only) and long dresses and scapulars (the "scarves" hanging from the necks) for both men and women. During a visit to Rome in the Summer of 1968 the girl had very carefully studied these habits, worn by monks and nuns. Now she introduces them when illustrating episodes from the Children's Bible. Thus the religious habit in her drawings is a marker denoting Bible text in contrast to other, "secular" texts.

In accordance with the principle of economy, the cattle (cows and sheep) of the text have been represented by one four-legged animal. The parcels carried by the people is the artist's congenial way of rendering the concept "gifts" (cf the precious things they had received). According to her experience gifts are always wrapped up in paper, with ribbons.

Moses is walking at the head of the procession, stick in hand. Note that he is at the right end, already halfway out of the right (future time) side of the frame of the picture - on his way to the far-off goal of Kanaan which is to be reached some time in the future. The length of the procession is suggested by the fact that the last person we see is just peeping in through the left (past time and Egypt) side of the frame.

Hunting Gråfäll

Figs 15 and 16 are two different attempts at illustrating the same passage - the sad story about the death of the elk Gråfäll in *Nils Holgersson's Adventurous Journey*. The story is told by the wild goose Akka, to Gråfäll's friend, the old dog Karr. Akka and her flock, flying over the woods, had witnessed the tragedy. They saw "three huntsmen ... on skis, they had dogs on the lead and a knife in the belt, but no guns ... They have gone out without a gun, only with spear and knife, because they don't dare to shoot in

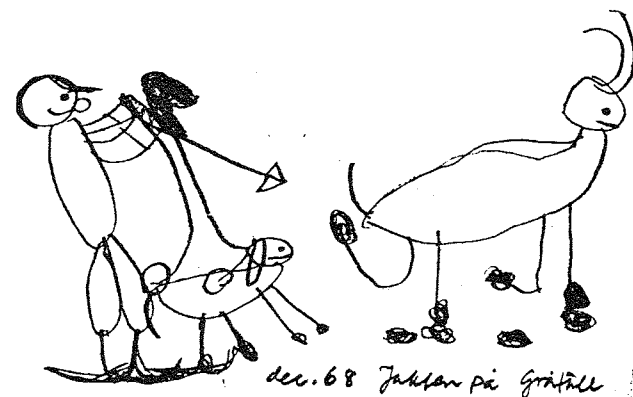


Fig. 15

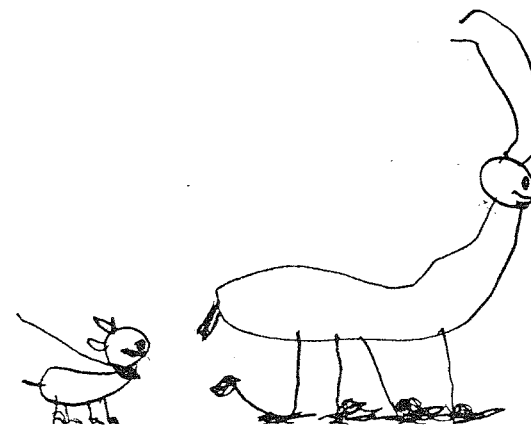


Fig. 16

the woods at this time of the year" (Sw. *tre jägare...på skidor, de hade hundar i band och kniv i bältet men inga bössor... De har gått ut utan bössa, bara med spjut och kniv, därför att de inte vågar lossa skott i skogen den här tiden.* NH, p 299). They find Gråfäll and chase him; he runs very quickly at first but little by little he slows down : " He put his legs more carefully into the snow, and when he lifted them up again there was blood in the footprints ... The elk was heavy, and with every step he sank down to the bottom of the snowdrift. ... The huntsmen and the dogs ... were still chasing him ". (Sw. *Han satte ner fötterna varsammare i snön. Och när han drog upp dem igen, syntes det blod i spåren. ... Älgen var tung, och för vart steg han tog sjönk han ner till botten av drivan. ... Jägarna och hundarna ... förföljde honom alltjämt.* NH, p 300-301).

Fig. 15 shows the elk running (two legs bent) in the right part of the picture. Dark footprints have been marked. He is followed by a dog (with a straight mouth) and a man on skis (one man in the picture representing the three in the text). The huntsman has an additional "masculine" marker, a peaked cap, possibly to make him unambiguously show up as a man, because both men and women wear trousers when skiing. The artist has with great difficulty tried to place two skipoles (inference from own experience) and a spear, possibly also a lead, in the hands of the huntsman. This problem has been solved in the second version of the drawing (fig. 16) simply by throwing the huntsman out of the picture, the lead pointing out to the left of the picture suggesting his existence - and his expected appearance. In this picture the elk is just bending one leg, and the other three seem to have sunken deep down into the snow - an attempt at illustrating the last lines cited above?

The Student

The story corresponding to the last drawing we are going to analyze (fig. 17) covers 17 pages. The girl read it over a period of four days, Nov 16-20, 1968. The drawing was made on Nov 22.

The first four pages tell that a student at Uppsala university is asked by one of his friends, who for many years has been working on a book, to read the manuscript and give his opinion. The student, who is in a hurry because he is going to have an examination, puts the manuscript on his desk at the open window. When he leaves the room, the manuscript is caught by the wind and spread all over the town of Uppsala. We get an account of the student's unlucky day until the evening when he returns home, full of

remorse because of the manuscript, goes to bed and immediately falls asleep, leaving the lamp burning on his bedside table. At that very moment "a little creature dressed in yellow buckskins, a green waistcoat and a white conical cap" (i.e. Nils Holgersson) is standing on the roof outside the student's attic window (NH, p 442).

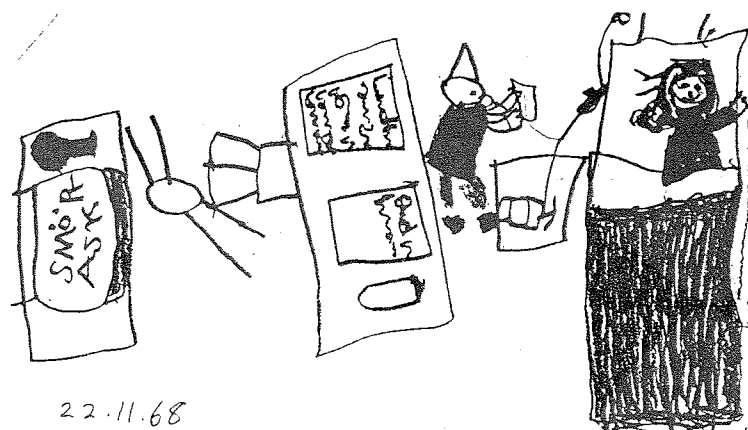
Following this is a seven page "flashback", telling how and why Nils has been brought there, by Bataki the raven.

Then the story is back again at the point where Nils is standing outside the attic, and the last six pages tell how he enters the room, makes himself a sandwich on the student's desk, and then has a long conversation with the student, who has been awakened by the noise. Finally, by the help of Bataki, the manuscript is found page by page, brought back, and given to the student.

The drawing shows the student lying in bed, the lamp on the bedside table; note the flex, the switch and the point in the wall, necessary for the lamp to function - according to the text it had been left burning (the fact that the lamp in the story must have been a petroleum lamp is not mentioned in the text; besides the artist knows only electrical lamps). Nils, holding a page of the manuscript, stands looking at the student. Behind him is the writing table with its chair, and, still further back, another table with a four-legged stool. On that table there is an enormous box with the text SMÖRASK (butterdish).

With one exception the drawing follows the text very closely. The author tells (p 441-42) that the student went to bed, covering himself with the quilt. As soon as he had put his head on his pillow he fell asleep.

"He had not even had time to put off his lamp that stood burning on the bedside table close by him" (cf above). In the original picture the artist has also added colours to the dress of Nils, yellow trousers and green waistcoat (cf text cited above). - In the passage preceding the conversation between Nils and the student, there is a detailed description of the writing desk that is said to be standing not far from the bed : it is crammed with books, sheets of paper, writing utensils and photos. Nils is standing on the table "leaning over the butterdish and making himself a sandwich". Here the artist has made a "correction" to make the picture fit her own cultural rules : the butterdish has been placed on a separate table - note also the corresponding stool - where the student can take his meals. Moreover, the writing table is meticulously tidy.



22.11.68

Fig. 17

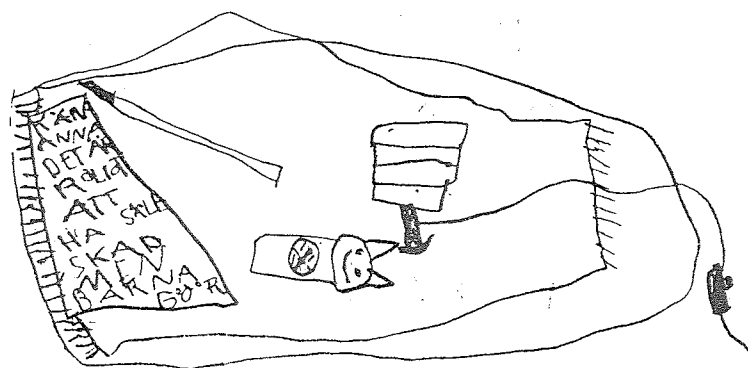


Fig. 18

It is to be noted that the actual handing over of the manuscript that we see in the picture is never mentioned in the book. We are just told that Bataki fetches the pages one by one to Nils, and when the raven is finished, he is standing on the windowsill watching the student putting all the pages in order. So Nils handing over the manuscript is a scene constructed by inference.

The most interesting detail in this drawing, however, is the lamp. It is mentioned no less than three times in the text : first when the student goes to sleep (cf above), then at the end of the "flashback" page 448 : "A lamp was burning in the room", and finally when the student wakes up and finds Nils standing on his writing-desk : "The student ... saw that the lamp stood burning on his bedside table ...".

The lamp in the picture is exactly the same design as the artist's own lamp on the desk in her playroom, which suggests that she may have used her own lamp as a model when she made the drawing on Nov 22nd. But there is also another drawing, made on Nov 21st, i. e. on the day before she drew "The Student". This is a study of her writing desk with the lamp (fig 18). On the reverse side she has written : PENNA PAPPER SUDDGUMMI-UGGLAN I LEKRUMMET 21 NOV 1968 (Eng. Pencil, paper, rubber eraser owl in the playroom 21 nov 1968).

PENNA
PAPPER SUDDGUMMI-
UGGLAN
ILEKRUMMET
21 NOV 1968

Because the author herself has dated her drawing, I can be perfectly sure that this is a preparatory study of the lamp on the table : it has been made on the day after she had finished reading the story about the student, which is also the day before she drew "The Student". From this preparatory study she has then probably copied the bedside lamp in "The Student", on a smaller scale and adding the point in the wall. Here we see the start of something new in the artist's drawing development : a budding interest in making a realistic representation of an object. This desire for realism marks the beginning of the end of the "pictographic" experiment.

DISCUSSION

The drawings examined in this study are attempts at illustrating episodes in stories from books read by the artist. Our analysis has revealed a very close correspondence between drawings and texts : there is not a single stroke in these highly stereotyped drawings that does not owe its existence to what is told in the corresponding text.

The actors : human prototypes

A story contains actors performing actions, in space and time. The actors here are human and animal. The figures representing these actors may be identified on the basis of configurations of a small set of formal elements, constituting prototypes.

The prototypical human being consists of head (eye(s) and mouth; nose optional), trunk, legs (with feet) and arms (with hands) as in fig. 12, the second figure from the right, which is also the prototypical girl. By adding trouser-legs (and bigger relative size) you get a man, as in fig. 4. Man and boy are mutually distinguished by different relative size only. The prototypical woman, however, differs from a girl also in that a skirt is joining her trunk to her legs - or rather her trunk has been divided into two parts, representing blouse and skirt - as in figs 7 and 8. If more than one woman is represented in the same picture, they may be contrasted by one of them being given a rectangular or conical trunk (denoting a frock), as the leftmost woman in fig. 12. Note that the two girls in the same picture have been distinguished by giving the rightmost one long hair with a ribbon.

Thus more features are added when it is necessary to distinguish between two or more individuals of the same species (and sex). But if the people represented in a picture are not individuals, but treated collectively, as a group, as in fig. 14, no extra features are added : all females in the picture

look the same. (That one of the *men* is marked by being given a stick, is because he is Moses, i. e. an individual - moreover the stick has been mentioned in the text). The very special kind of dress in this drawing (religious habit, already discussed) marks it as an illustration of a biblical text.

The actors : animal prototypes

The prototypical four-legged animal has a head (eye(s), mouth and ears), trunk, four legs (feet marked) and a tail. Ears may be replaced by horns, to mark a buck or an elk, or they may be missing altogether to distinguish a cat from a dog in the same picture (fig. 11).

The prototypical bird has a head (eye(s) and beak), a trunk with wing(s) marked, legs and three-toed feet. A goose has been distinguished from a sparrow in the same picture by relative size only (fig. 6). Swans, however, have been "overmarked" : a long neck separating head and trunk, no wing(s), slenderness and long legs plus relative size characterize these birds (figs 5 and 6). This excessive marking may be due to the fact that the whole issue of the flight illustrated here was the swans' pride in their beauty and the fact that they were different from the white goose in all respects but size and colour.

The actions

In all the pictures an action is represented - past, ongoing and/or future. The buck has been killed, the peasant and the giant woman confront each other and are starting a dialogue; the giant woman is on the verge of rolling down a stone (fig. 4). The swans are attacking the goose (fig. 5), the sparrows are attacking the swans and the goose is escaping (fig. 6), the woman is preparing a basket (fig. 7) and is putting the duck to bed (fig. 8), the dog is confronting the duck who is fainting from horror (fig. 9), the duck is eating (fig. 10), the dog and cat are quarrelling (fig. 11). Ate Jetse lifts up Afke who has just fainted, and the girls leave the room weeping (fig. 12), the baby is looking at the boy who is running with the frying-pan in order to pack it (fig. 13), the israelites are marching towards Kanaan (fig. 14), the (hunter and) dog (are/is) chasing the elk who is running (figs 15 and 16) and Nils is handing over the manuscript to the student (fig. 17).

In 13 of the 14 drawings there is more than one individual involved in the action, and in nine of them there is interaction going on. The active-

interactive character is stressed by the fact that all the characters have been portrayed in profile. There are also special action-marking traits, like bent legs for running (figs 13 and 15), bodies leaning backwards to denote fainting (figs 9 and 12) or forwards to show attack (fig. 5); grain (fig. 12) or feather (fig. 5) in beak to denote eating and pecking respectively.

Space, time and order of events

The space of the picture is reserved mainly to allow for an adequate rendering of the event : actions being performed etc. Thus there is a striking scantiness when it comes to representing number of acting characters, and environment. One character stands for many in fig 15 (the huntsman, the dog) and 13 (the boy), two stand for a lot in figs 5 and 6 (the swans, the sparrows). The sparse furnishing of the writing-desk in fig. 17 (cf above) is in the same vein : the artist has only represented two handwritten pages and a pen, i.e. what marks the desk as a writing-desk.

Nor are all characters fully within the space of the picture. As has earlier been demonstrated, the frame of the picture has been used in a congenial way to let the actors enter or make their exit (figs 6, 12 and 14) to put them out of action (the swans in fig. 6) or to suggest their soon appearance (the "hidden" huntsman in fig. 16).

We have also demonstrated in detail how time and the order of events in time has been marked by left(past)-to-right(future) position in the drawing. This is a convention imposed on the (early reading) artist from our writing-system, where the left-to-right order implies that what is told first comes to the left of what is told later (on the same line as well as page-wise). Here the girl has used this convention to be able to mark the order of events in her stories.

Inference and context

The pictures follow the text closely, but not all the pictures represent only what has straightforwardly been stated, verbatim. We have already shown in great detail how many of the drawings, whole or in part, show what may be inferred from the text. This ability to make a correct inference and to represent it pictorially is a characteristic of the skilled, mature reader, who may not be able to draw a picture, but who nevertheless conjures up "inner pictures" when he interprets the text by recreating it mentally.

The actual pictures drawn here, conventionalized and stereotyped as they are, owe their existence to the artist's own experiences and what we may

call her personal and cultural context : her experiences of daily activities in her own home ; gifts given and received (fig. 14) ; the fact that she has seen animals and birds in real life, that she has walked the mountains (cf. the hill in fig. 4), gone skiing (fig. 15), met monks and nuns in Rome (fig. 14) etc. Extremely important is the fact that she has received "a linguistic input" during all these events in interaction with her family and friends. This input "maps" language to the concrete experiences, which is a necessary prerequisite for a child to be able to learn to read with meaning. Thus later, in the process of reading, the child will be able to associate the written words with conceptions and to conjure up the "inner pictures" that underly, first, the interpretation of the text and then - as here - the pictorial representation of the text in drawings.

It is this close interconnection between own experience, reading and drawing that may be traced in "childish" traits like the bed of the duck or the gifts carried by the israelites.

The book-illustrating drawings and the history of writing

This close analysis of the drawings in comparison with the underlying texts suggests that they are the outcome of a kind of "linguistic" or "semiotic" play, where the artist has been involved in a very close interpretation of written texts by trying to transform them into the pictorial mode. This has been done in a consistent, uniform and economical way, by creating distinct formal means to give a stereotyped and conventional representation to events, i.e. actions performed by actors in space and time.

In our cultural tradition there exist similar pictorial representations, such as stone-sculpture and frescoes in medieval churches ("biblia pauperum"), also strongly stereotyped, and based on texts which permit an unambiguous interpretation.

But there is a still more thought-provoking parallel, which puts this childhood experiment into a wider developmental perspective.

In "Geschriebene Sprache" Elisabeth Feldbusch (1985) among "Zeichnerische Vorformen Geschriebener Sprache" (pictorial precursors of written language) mentions a pictorial representation of proverbs used by the chieftains of the Ewe people in Togo, West Africa. These utterly simple, highly conventionalized and childlike drawings were made on calabash and sent from one chieftain to the other as messages. One proverb runs "Two enemies cannot make a stand for ever; finally one of them must yield". The corresponding drawing shows two men (head with eyes; body,

arms, legs) from in front, and standing side by side, each one with a bow and arrow at his left side (Feldbusch, p. 101).

So the drawings analyzed in this study may perhaps be seen as an ontogenetic correspondence to a phylogenetic phase represented by e.g. the Ewes. This attempt of a 51/2-year-old girl at creating a written language of her own was, however, in the long run doomed, and this for two reasons. First, she had already acquired the conventional alphabetic writing system of her culture and knew how to use it in order to create texts. Second, her budding interest in creating life-like pictures was soon to take over, making her abandon the art of stereotyped drawing.

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Lund University, Dept. of Linguistics
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Vertical, monovocalic and other "impossible" vowel systems: a review of the articulation of the Kabardian vowels

Sidney A. J. Wood

ABSTRACT

The Caucasian language Kabardian has become famous for its minimum vowel system, for the controversy concerning the analysis of its vowel phonemes, and for the central role of that analysis in phoneme theory generally and the laryngeal theory in particular. Phonetically, Kabardian is interesting for the extensive assimilation of its few vowel phonemes to the surrounding consonants. Two published descriptions of these assimilations are compared in this article, and the articulatory processes involved are reinterpreted in terms of gestures that shape and tune the vocal tract, as an alternative to the Bell model of vowel articulation. The assimilations are more complex than was expected, some vowel allophones not acquiring articulatory components present in the environments, others appearing to acquire components not present in the environments. It is suggested that this can be explained by the spectral ambiguity of some palatovelar and pharyngovelar (uvular) configurations.

INTRODUCTION

This article is devoted to a review of the phonetic processes that may be involved in the assimilation of vowels to the surrounding consonants in the NW Caucasian language Kabardian. The review is mainly based on the descriptions by Catford 1942 and Kuipers 1960, and to a lesser extent on Bagov et al. 1970, Kumaxov 1984 and Smeets 1984.

The Kabardian vowels are of unique interest for the typology of vowel systems since, paradoxically, they are invoked by both sides in the debate concerning the status of systems smaller than three phonemes (Trubetzkoy 1939; Jakobson 1942; Allen 1965; Szemerényi 1967; Kuipers 1968; Kumaxov 1984), particularly the controversial one-vowel proposal for Proto-Indo-European (e.g. Allen 1965 and Gamkrelidze 1968 in favour, Szemerényi 1967 against). No-one looking for data in this literature can ignore that debate. The solutions proposed for the Kabardian vowel system involve either no, one, two or three vowel phonemes manifested in almost twenty allophones (Jakovlev 1923; Trubetzkoy 1925; Kuipers