Thematic Drawing and Focused, Episodic Interview upon the Drawing —A Method in Order to Approach to the Children's Point of View on Movement, Play and Sports at School

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Abstract: This article follows the steps of a qualitative research project from an initial interest to the results. The research project "What children moves" intends to find out children's wishes and ideas concerning moving-, playing- and sports-activities at school. The method of data collection is a combination of thematic drawing and focused, episodic interview. The subject for the drawing —"These are my wishes for classroom lessons, for the schoolyard and for physical education lessons within a Moving School"—is connected with an adapted kind of "Three Wishes Free" instruction. The children are asked to draw one picture for each of the school related areas mentioned above. Some days after having handed in their drawings, the children are interviewed. The drawings and the transcripts of the interviews pass a special kind of qualitative analysis. The drawing sample comprises 395 children from the 2nd to the 6th grade. The interview comprises contents from 64 children out of the drawing sample, 32 girls and 32 boys.

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1. Introduction: About the Correlation of Question, Intention, Subject and Methodological Approach

This paper shall be a contribution to the discussion on qualitative research in sport pedagogy. It describes the steps from an initial interest up to the presentation of results. My interest of inquiry emerged in 1997 from a new idea in school pedagogy and sport pedagogy: the "moving school." In this discussion—from the middle of the 80s on—physical education experts first argued out of the "compensation model": School has to compensate the risk factors for the children's health that result from a "changing childhood" and from the school itself. In the last few years a different way of thinking has developed, which deals with the development-psychological aspect as well as the idea of "salutogenesis": School only does justice to its educational task if it makes for a holistic
development of their children. This means that school emphasizes learning by doing and especially on learning by moving, and thereby provides resources for the children's health. In this context the REGENSBURGER PROJEKTGRUPPE suggests the following definition: "The moving school is that kind of institution that puts movement as a principle into the center of classes and of everyday school life" (2001, p.27; translated by the author). The moving school postulates positive relations between physical activities and contentedness with school, learning success, psycho-physical development and health (LAGING 1999, pp.4-17; REGENSBURGER PROJEKTGRUPPE 2001, p.19). In this respect the moving school is a normative well-founded, pedagogical construct. The question, how to carry out a moving school and how to fill it with movement opportunities, is mostly answered top-down. An example for such a top-down-program is the initiative "The Moving Elementary School" of the Bavarian Ministry for Education. Its implementation into schools in 1997 was the reason for me to develop this research project. [1]

Despite lots of practicable suggestions, an overview of the many publications about the moving school shows one general empirical deficiency: The children's point of view is missing almost entirely. Therefore my interest focused on the children's idea of "their moving school." This led to the main question: "How do children wish that their moving school or rather movement, play and sports at their school should be and what kind of ideas do they connect to these?" The intention of a corresponding investigation should be to supplement the basis of discussion for moving school programs by a bottom-up approach. As far as the content is concerned, the research project was to provide knowledge of how children wish "their moving school" to be. Regarding the methods, it was to show a way how to investigate children's wishes and ideas in order to change from a "normal" to a "moving" school. The background of such an interest is built by a certain image of human being (SCHORCH 1998, p.28; PROHL 1999, pp.214f). This image of the human being is characterized by the respect for wishes and ideas of children, for their right of self-determination and their right of having "fulfilled moments" within the educational process (HENTIG 1999, p.37; SCHLEIERMACHER 1957, p.45). Three areas of research make up the theoretical framework: childhood research or rather research with children, research on school and instruction, especially from the point of view of sport pedagogy, and finally research that accompanies the development of schools (BARKHOLZ & HOMFELD 1994; SCHRATZ 1995; BRÄUTIGAM 1998; BREHM & VOITLÄNDER 2000; HUNGER 2001; FÖLLING-ALBERS 2001). The decision for a qualitative approach is based upon this background. [2]

Being a physical education teacher, a children's sports coach and—last but not least—being father I realized in everyday life that children's thoughts and feelings are not that easily "re-thought" and "re-felt." Somehow a child always remains a kind of a stranger. My understanding of being a child therefore always remains a "construction" (SCHOLZ 1994). But "fulfilled moments" of succeeding communication with children convinced me that the children's point of view can be captured using suitable methods. Even if we cannot reproduce them authentically, we may be able to re-construct them by trying "to look through
children's eyes" (HONIG 1999, pp.35-43). By having this opinion I declare myself for a special pedagogical tradition in German speaking countries called "Reformpädagogik" (literally translated: reform pedagogy). One of the fathers of this tradition, Jean-Jacques ROUSSEAU stated: "Childhood has its special kind of seeing, of thinking and of feeling, and nothing is more unreasonable than to try to insinuate our ways of thinking" (1995, p.69; translated by the author). In order to discover this "special kind" OSWALD (1997, p.80), HEINZEL (1997, p.398) and FÖLLING-ALBERS (2001, p.17) correspondingly recommend to use qualitative methods.

Those, who do qualitative research do not want to examine what is already known but to discover new territory. For this you need a framework for orientation. KLEINING (1982), LAMNEK (1995a, pp.21-30) and HELSPER, HERWARTZ-EMDEN and TERHART (2001, pp.254-260) point out characteristics of quality within qualitative research. I will pick out three of them which I consider most important: Openness, adequacy and structural variation. Openness refers to the children, the investigation situations and the methods. According to this, I refuse to formulate any hypothesis. In the research process openness is put in concrete form within the communication with the children, in which the research subject and the act of research is gradually developed. This act is also reflexive and flexible, thus it is possible to react to unexpected situations—be it within an interview or within the evaluation of interim results—by modifying the chosen methods.

Adequacy refers to the interrelation between question, subject and methods. Even qualitative research needs its theoretical background. The bibliographical research around the question always carries out previous theoretical knowledge. This can be used in order to formulate certain "open expectations." In my case the previous theoretical knowledge contains—among others—the following assumptions:

- Children wish to have movement, play and sports at school.
- Children have concrete ideas of movement, play and sports at school.
- These ideas go beyond what is already put down in school curricula and programs for moving schools.
- Children are able and willing to express corresponding wishes and ideas.
- Children express their wishes, ideas and feelings in two ways: They do something or they say something. Doing can be by body language, movement or esthetic expression, saying can be in oral or written form.

The formulation of such expectations sharpens the subject's profile and opens one's view for potential methods. This is also applicable to what OSWALD reported: "Methods constitute their subject" (OSWALD 2000, p.9). The subject depends on whether I observe or interview children or give them other opportunities to express themselves with regard to my assumptions. For this reason at a certain point of the methodological development process I made up my decision for an "entrance design" pragmatically. In this connection the
intention to gather a sample as big as possible also played a role. This is because even in the qualitative paradigm "quantitative statements are not excluded a priori ... especially when it is a matter of simple calculations, such as percentages" (LAMNEK 1995a, 4; translated by the author). In this connection KLEINING's "rule of maximum structural variation of perspectives" (1982, pp.234-237) appeared to be most helpful:

"This rule simply says that one should look at, touch and experience a subject from all sides in order to see it 'rightly', that means: not one-sided ... The achievable variation of information about the subject, which shall comprise structurally varying aspects, should be as high as possible" (KLEINING 1982, p.234; translated by the author). [6]

In this context KLEINING recommends to vary the methods, to include the historic and geographic dimensions and to vary the researching persons. This advise caused concrete consequences on my methodological decision, on the sampling and on my research strategy. [7]

2. Discussion of Potential Methods

At first questioning methods seemed to fit best to my subject. According to HEINZEL the qualitative interview method provides "the opportunity to capture scientifically the children's point of view on their lives, their wishes, their interests, learning processes, problems and fears within family and peer-group relations, school, living environment and leisure" (1997, p.396; translated by the author). HEINZEL's meta-analysis shows that partly or semi-standardized interviews (manual supported), narrative interviews and psychoanalytic depth-interviews are the most important forms of interviews for research with children (1997, pp.402-404). In HEINZEL's description of variations of semi-standardized interviews the "focused" interview stood out. "The focused interview is a technique which is used for illuminating certain aspects of a common experience as entirely, thematically concentrated and detailed as possible including emotional components" (FRIEBERTSHÄUSER 1997, p.378; translated by the author). According to LAMNEK (1995b, pp.79f) this form of interview comes relatively close to the quantitative methodology despite its fundamental qualitative and interpretative orientation. A partly standardized interview also offers the opportunity for comparison and quantification of results. Therefore, I also intended to let children simply tell about their ideas of a moving school. In this respect, the term "narration generating interview" according to FRIEBERTSHÄUSER (1997, pp.386f) summarizes forms of interviews "that basically try to make the interview partners tell stories (about their everyday life, their biography or special experiences) (...) The central characteristic of the narrative interview is the interview partner's detailed and undisturbed "story off-the-cuff" (translated by the author; italics in the original). A variation is the episodic interview (FRIEBERTSHÄUSER 1997, p.388). This approach combines the interest in stories with the interest in knowledge about a certain subject.
"In this way also generalized assumptions and correlations, concepts and their interrelations beneath the story shall be approached. The interview partners can talk about their knowledge of concrete situations in a descriptive or a narrative way, so that they can show their narrative competence without being forced to tell stories on and on ... The central point of this interview technique is the request for telling about situations in regular intervals ... In the interview any question-answer-sequence is combined with a request for telling again" (loc cit; translated by the author). [8]

A combination of episodic and focused interview with a set of questions (manual) seemed to fit best to the inquiry interest of my research project. This combination supports free telling as well as talking according to questions about the topics movement, play and sports at school. [9]

For carrying out the interviews I wanted to follow HEINZEL's advice: The place should be the familiar surrounding of the child's family's home. The conversation should be as undisturbed and uninfluenced by others as possible. The length of the interview should depend on how able and willing the child would be to react on the narration evoking stimuli. If necessary there are breaks to be taken in order not to expect too much of the child. The interviewer should be friendly, supportive, encouraging, patient, considerate, cautious, and should be at the child's level facing him/her during the interview to allow optimal communication. The child and the interviewer should know each other before the next meeting in order to create a trusting atmosphere. The child should be encouraged to playfully explore the technical aid (microphone, recorder) (1997, pp.405-409). My former experience from interviews with children (KUHN & BREHM 1996) showed that some children react shyly and reluctantly to the interview situation although the interviewer considers all these conversation supporting measures—especially when the interviewer is male. These conversations were rather like "question and answer games," in which the children acted in a passive and monosyllabic manner. This experience had consequences for the investigation strategy (see below) and to the thinking about a suitable conversation basis which provides the children with a "thematic forerun" so to speak. Connected to this I found HEINZEL's (1997, p.401) comment, that children are earlier able to speak about what they see, hear and perceive in their environment than to reflect and verbalize their inner world. Therefore in the didactic of oral narration you find suggestions to supporting the children's telling. In this respect HEINZEL (1997, p.402) among others mentions *telling after self made drawings*. So, the idea arose to combine interview and drawing. FUHS (2000, pp.99f) calls this combination a "symbolic interview form." He estimates it to be an opportunity to bridge the gap between the ways children and adults see the world. FUHS in his paper reported varying difficulties when he conducted qualitative interviews with children and we encountered the same problems time and again during our own studies. [10]

The decision to choose the children's drawing method was made against the background that children have a natural impulse to reproduce: Children do not need a special stimulus for drawing—they just like to draw. Spontaneous cause for children's drawings can be
"the attempt to free themselves from psychological tension, to possess the desired subject by reproducing or tracing it, to re-create a model or an idol, to find relief through intense gestural movement or in a broadest sense to act as an artist or craftsman" (REISS 2000, pp.233f; translated by the author). [11]

Beside these spontaneous causes children's drawing acts can be initiated by instructions, with which one gets information about the children's thinking and feeling (loc cit, p.235). In this respect the original drawing act gains the quality of a communication act (SCHOPPE 1991, pp.177-181; REISS 1996, pp.27-29). [12]

This instrument that TSCHANZ and KRAUSE call "thematic children's drawing" (1992) serves to investigate children's ideas about present or future states and conditions of their living world. For SCHOPPE the reality of children's life manifests in the drawing: "The child reveals his or her world quite immediately" (1991, p.176; translated by the author). Through the help of children's drawings we can investigate children's ideas about their families (BREM-GRÄSER 1970; DUSSA 1980; KAUFMANN 1988), about their remembered or present playing world (SPANHEL & ZANGL 1991), about the present and future working world (KAISER 1986; KOCH & HAARMANN 1985), about present or future existential problems (BLUMÖHR 1980; BRÖCHER 1995, 1996) or about the world of future (SCHREIER 1980; HORBELT 1987). Finally, subjects of thematic children's drawings are wishes, e.g. the ideal job (WINTER-UEDELHOFEN 1993), materialistic wishes (KÄHNE 1995) or the ideal teacher (RAU 1977). [13]

My methodological decision ties in at this point. Below the topic: "This is how I wish my classroom lessons (my schoolyard, my physical education lessons) to be in a moving school" I am looking for an approach to the corresponding activities children wish to have. The thematic children's drawing method appears to fit best to my inquiry interest, "because it meets the child's originality and individuality, and provides space for a creative transposition of the topic" (TSCHANZ & KRAUSE 1992, p.265; translated by the author). This also applies to the time frame that the children are given for their drawings. In this respect there are different alternatives to combine the two methods:

- **The interview takes place during the drawing.** SPANHEL and ZANGL (1991) give an example for this alternative. Coming off from the question how 7 to 10 years old children "perceive and judge the places and opportunities for playing in their everyday lives, and ... how they use and arrange their physical, material and social conditions" (p.18; translated by the author), they asked children to draw their playing places. Meanwhile, they had "semi-structured interviews shaped as everyday life conversations" (p.18). The conversations' contents, illustrated by the drawings' contents made the basis for the presenting of results.

- **The interview takes place during and after the drawing.** LUTZ, BEHNKEN and ZINNECKER (1997) used this method in order to reconstruct the present and biographic "lebensraum" by "narrative maps" (p.414). The elaboration of the narrative map consists of two steps. In the first step the children at the age of
10 should draw "a plan that includes all ways and places where you often got to" (pp.417f). While doing this they should tell stories about it. In this period of time the interviewer noted keywords for the following step of conversation. This second step was brought to its end by a semi-standardized interview in order to ensure "a certain standardization for the narrative maps that differed due to the spontaneous situation of production" (pp.418f).

- The interview takes place some days after the drawing. I chose this method for my research project. It carries three decisive advantages: First: The children can have a close look at the topic and can express their point of view without influence by the interviewer, without time pressure and without being forced to talk about it. Second: The time between drawing and interview provides the researcher with the opportunity to choose children (by their drawings) that are estimated to have rich conversations with (see below). Third: One can gather a much bigger sample with children that only draw, but will not be interviewed.

Such a triangulation of methods carries chances and problems (LAMNEK 1995a, pp.245-257; HELSPER et al. 2001, pp.260f). Methods are like "spectacles" that enable you to look at a subject from various angles and only provide a precise image if various points of view are taken into consideration. Thus various viewpoints lead to various perceptions, that is: to various subjects. The problem of triangulation therefore is that it creates various results. With this reservation we have to look at a cross-validation of results by comparison.

But in this "weak point" also lies the "strong point" of the chosen multi-methodic approach: It leads to desirable various results—the only possible way to make a comparison. It probably leads even to results out of the interviews which were not at all conceivable without the combination with the drawings. So, I get knowledge from different approaches—and with this a more differentiated picture of my subject than I would get with only one approach. I reach children, who rather choose the oral way of expression as well as children, who rather choose the pictorial way. The information included in both ways of communication can complete each other (JOHN-WINDE 1981; LOHAUS & SCHORSCH 1990). Children, who are overtaxed with a telling off-the-cuff get a thematic forerun with the drawing task (HORLEBEIN et al. 1996). Finally the investigations of SCHOTTENLOHER (1994) and GROSS (1998) point to the fact that drawing makes the description of emotional experiences easier.

3. Development of the Methodical Decision

This is my way to capture data: The children get the task to draw their wishes. In order to initiate this I use a modern adaptation of the classical "three wishes free" pattern (OSWALD & KRAPPMANN 1985, p.720), the "dream of Leo and his wish machine" (MEDICK 1998, pp.54-56):

"Imagine: Some night you’re dreaming of Leo, an extraterrestrial child, who lives in the Draco galaxy. Leo is about as old as you, as tall as you and pretty clever. In the
morning Leo goes to school, just like you. Leo has a wish machine. This machine doesn't understand any word, only pictures. When Leo desires something he draws a picture and pushes it into the PICTURE IDENTIFICATION CENTRE of his machine. The machine fulfills his wishes if they deal with really important things. By the way: recently Leo has been drawing a wish concerning movement at school—and it came true. You must know that teachers on Draco set great store by moving their students as much as possible. Therefore on Draco they call schools "moving schools." That means that the children are allowed to move around a lot in many different ways, not only in physical education but also in classroom lessons and on the schoolyard. Suddenly you hit on the idea to send out a radio signal to Leo in order to ask him whether he couldn't come along some time with his machine an visit you. Thereupon Leo decides to enter his space craft and make his way to earth. He lands directly in front of your window, opens the hatch of his space craft and says: 'Hi there, I'm Leo. I brought my wish machine with me and now you have three wishes free: One for the classroom lessons, one for the schoolyard and one for the physical education lessons. Try hard to find out how you wish movement, play and sports to be at school and draw three pictures: one for the classroom lessons, one for the schoolyard and one for the physical education lessons. In one week I'll be back and collect your pictures. Have fun with drawing!'” [17]

The research team (see below) made this adaptation because in the testing period for the "three wishes story" we found out that children reacted with some disconcertment at the classical "wish fairy." This we interpreted to the fact that this character does no longer fit into the children's present living world. [18]

The "dream of Leo and his wish machine" is presented to the children in the classroom provided with background music. Afterwards the interviewer calls for questions and asks the children to retell the story and repeat the drawing task. Then sheets of paper are distributed. We used German paper size A3 (24x29.7 cm), folded in the middle. On the first page the children find the "dream story" and a picture of "Leo" (s. Figure 1). Sides two to four are provided for the children's drawings. In each corner they could read: "This is how I wish my classroom lessons (my schoolyard, my physical education lessons) to be in a moving school!" The layout of the corner text is diagonal in order not to fix the children to a certain format (horizontal or vertical). With an exemplary cardboard everything is explained into details. If there are no questions left the interviewer agrees with the children and the teacher to come back in one week to collect the drawings.
The design of the interview situation—about one week after the children handed in their drawings—is principally narrative. An initializing narration evoking stimulus for each picture is set by a "narration generating starting question" (GLINKA 1998, p.132; translated by the author), such as: "You really are full of ideas! But, how do you imagine that exactly?" With this develop three "main stories" (GLINKA 1998, p.140) in each interview, one about each of the three pictures. The interviewer restricts herself to her role as an interested listener and tries to support the narration flow by verbal expressions and non-verbal gestures (LAMNEK 1995b, pp.71f). Subsequent to each main story the interviewer asks further questions which are to exhaust the "additional narration potential" (GLINKA 1998, p.141; translated by the author) or to refer to further contents of the drawing. Again the interviewer uses narration stimuli, such as: "Thomas and you like playing together, don't you? What is it like when you are playing together?" [20]

The interview is supported by a set of questions. It comprises open topics meant for stimulating the conversation about further aspects. This means that the interviewer does not have to follow strictly the order of the manual. The questions merely serve as a framework. The single topics also comprise narration stimuli in order to make the children talk about their subjective opinions by telling concrete examples and experiences. Corresponding strategies of questioning also can support this part of the interview (FRIEBERTSHÄUSER 1997, pp.375f). On the whole the principle is followed that children rather answer "how-questions" than "why-questions" (HEINZEL 1997, p.407). Though, SCHREIER's articles about "philosophizing together with children" (1995a, 1995b) point out that it is no problem for children to give reasons for their opinions. Therefore there is no need for completely doing without why-questions. As carry-on topics I chose: Further, not drawn wishes; the most important wish; estimation of realizing the wishes; what do you understand by "fun"?; social situation within wished activities;
teacher’s role within activities and a moving school; ideas of a moving school in general; leisure activities; passive consumption of sports; sportive self-estimation and, finally, the last report mark in physical education. These topics are covered either within the narration course or by ad-hoc-questions (LAMNEK 1995b, p.76). Doing this the interviewer tries to keep the conversation flow running by narration stimuli. Subsequent to each picture discussion the interviewer asks a summarizing question, such as: "Well, can you think of anything else concerning the schoolyard?" [21]

The whole course of the interview situation is carried out in accordance to the structures introduced by LAMNEK (1995b, pp.71f and 75f) and GLINKA (1998, pp.10-18). The conversations are recorded on tapes. A detailed postscript concerning the interview situation is made after each interview. [22]

4. Selection and Description of the Sample

The entire population of my investigation consists of children from Bavaria between the ages of 7-12. According to the qualitative-explorative approach of my study I did not want to achieve a statistical representative survey, but a representation as regards to the content (MERKENS 1997, p.104). In this respect I intended to work for statements with a generalizing character, such as: "Children at the age of 7 to 12 wish ..." As a decision basis for developing the sample I put KLEINING's principle of "structural variation" into concrete terms by differentiating by age, sex, living region, municipality size and season. The sampling is two-stage (FRIEDRICHS 1990, p.130) and follows the idea of "theoretical sampling" worked out by GLASER and STRAUSS (1967/1980, pp.45-60). The sample was gradually increased in view of the criteria season and number of inhabitants. Though, at present I cannot say whether a "theoretical saturation" (pp.61f), which would cause the end of sampling (LAMNEK, 1995a, pp.193-195), is already achieved. [23]

There are two different samples: the sample of children, who were drawing and the sample of children, who were drawing and interviewed. The drawing sample consists of 395 children from the 2nd to the 6th grade (age: x = 9.77; s = 1.09 years), 204 girls and 191 boys. They come from 16 classes out of 9 "normal" schools which do not yet follow the "moving school program." The schools lie in 3 different regions—north, middle, south—of Bavaria. The sample corresponds with the Bavarian people's distribution as far as the municipality sizes are concerned. The studies took place during different seasons. The whole period of investigation time extended over two years (June 1998—April 2000). [24]

For the second step the interview sample was formed by purposeful choice of children from the drawing sample. Altogether 64 children were chosen: two girls and two boys from each class. The choice was made upon the pictures along the criteria variety and quality of expression. The criteria are operationalized as follows: The criterion variety reflects the number of different activities shown by the picture. I expected that children, who draw more and various activities, have a more reflected imagination of the possibilities of laying out the corresponding
school area, than children, who draw less or only one activity. I also expected the interview situation to be easier for the child, if the interviewer can lead the conversation to different activities. The criterion quality of expression includes the child's abilities of depiction by arranging the drawing elements, by using colors and by drawing details (RICHTER 1997, pp.78-91). I expected that children, whose pictures are fully detailed, had a longer, more detailed and more intense look at the drawing task and in this time developed a higher level of reflection and verbal communication potential of the drawn situation than children, who, for example only drew some matchstick figures." In each case a consensus was reached by the head of the project and the person who was in charge of the single study (see below). In case of doubt we asked the teacher who he or she would estimate to be more communicative. Subsequently we made the final decision about the four children of the class we wanted to interview. [25]

5. Development of the Research Strategy

A total of 12 researchers were assigned for the project. Eight female researchers were in charge of the eight single studies having two classes each. They collected the data and did an initial evaluation of the pictures and the interviews. Another two female researchers, one male researcher and I further analyzed the pictures. Together with another female researcher, we analyzed the interviews. The male researcher had an additional task as a "quality manager." His task was to point out mistakes and weak points of the methodological program concerning data collection and evaluating. [26]

In order to capture data we gradually carried out eight single studies with about 50 children each. Each single study had one special person in charge. The first single study functioned as a pilot study. In order to reduce gender-specific influence from the interviewer onto the interview partner (HORLEBEIN et al. 1996, p.50), we only chose women to be interviewers. The choice of the persons was made by the following criteria (LAMNEK 1995b, pp.65-68): Intellectual and communicative competence, empathic and confidence inspiring personality, pedagogic interest in the investigated population, intrinsic motivation for empirical research, interest in the specific way of scientific work, basic competence regarding contents and methods. The relation between the female persons in charge to the potential interview partners was initiated by the contact during the implementation of the drawing method. So the children get to know "their" interviewer in a pleasing and an interesting situation, in which a trusting atmosphere develops especially through the music, the dream story and the interviewers' way of speaking. The training of the persons in charge regarding contents and methods (FRIEDRICH 1990, p.214; FRIEBERTSHÄUSER 1997, p.377; HEINZEL 1997, p.407) was carried out on two levels. Before starting field-work they had to have a good hermeneutic look at the theoretical framework and the research methodology in the literature. Meanwhile I talked to each of them personally in order to familiarize them with the research topic, the intentions, questions and the methods of the study as well as to explain to them how they should act in the implementation of the methods. In doing this we also discussed potential "risks and traps while dealing with semi-standardized interviews"
The pilot study should have provided us with answers to the following questions: How do the children react to the drawing task and the drawing cardboard? Does the way of choosing children for the interviews pay off, that means: do we really find children who tell a lot? How do the children act in the interview situations related to their drawings? Do our methods pay off in order to capture data which correspond to the interest of inquiry? The evaluation of the pilot study led to the following results: The drawing task went down very well with the children. Some of them wanted to express their wishes immediately after the call back from the "dream." The drawing cardboard proved to be a motivating medium for the children's drawings. All children worked out their cardboards within one week. The way of choosing children for the interviews was successful: we really found children who told extensive and detailed stories. The method "interview upon the drawing" proved to be a suitable way for interviewing children. The drawings served for the children as an orientation and helped the interviews not to develop into question and answer games but to really become episodic interviews. The evaluation of the pictures and the interviews supplied answers to all of our questions. To put it in a nutshell: The pilot study confirmed the methodological planning as well as led to some revisions regarding the content of the study. Nevertheless the team decided to include the results from the pilot study into the final analysis.

Subsequent to each single study the research team had audit discussions according to the principle of reflectivity within qualitative social research (LAMNEK 1995a, pp.25f). The intention of these discussions was to discover and to remove discrepancies between inquiry interest and methods. In the course of these discussions the phrase in the corners of the drawing cardboard was modified, the instruction with the "dream of Leo and his wish machine" was completed and stated more precisely, and the manual was completed by the topic "teacher's role" and "understanding of fun." The modifications caused by the audit discussions proved as essential in details, but the team rates them as marginal in view of the congruence of the single studies. Therefore I assume that there is no reason regarding contents or methods to reject a summary of all single studies' results to one overall result.

6. Development of the Evaluation Methods

The qualitative analysis of children's drawings can be performed using different methods. Though, we have to discuss some fundamental problems that accompany evaluation of children's drawings (TSCHANZ & KRAUSE 1992, pp.265f):

- In regards to drawing, children are differently talented. At this point I'd like to mention that my interest of inquiry does not aim at children's capability of iconographic expression. We can rather assume that the understanding of the
thematic drawing task and its transposing into contents does not essentially depend on the talent for drawing.

- **The contents of the drawing depend on the child's temporal, social and ecological living situation.** This dependence I do not only accept but rather estimate as desirable in terms of a "structural variation" (KLEINING 1982, p.234). Therefore I expect that regional conditions, such as being close to the mountains or a lake, local conditions, such as the schoolyard equipment or temporal media events, such as current cartoon movies or the soccer world championships in 1998 influence the contents of the drawings.

- **Adult evaluators have fundamental difficulties to interpret children's drawings.** On the one hand the team met this problem by focusing on the description of the drawing elements. Latent structures (MAYRING 1990, p.86), e.g. the desired activity, were exclusively interpreted from objective drawing elements. We did without any psychological interpretation, though the pictures are of course interpretable by corresponding criteria. (SCHUSTER 1994, pp.95-117; RICHTER 1997, pp.177-194). On the other hand the team regularly undertook a communicative validation of the drawing elements' capturing and categorizing by a sequence of independent evaluations of each member of the team with subsequent discussions.

- **The drawings' actual content of "reality" and "meaning" remains uncertain.** The "reality problem" is made up by the drawing task, because we asked for wishes—and they are not put into question. Concerning the "meaning problem," some questions will remain unanswered because of our interpretative self-restriction. If we interviewed the children we had the chance to cross-validate between drawing and statements. [30]

Even if you are aware of such problems, you still run the risk of designing a too tight system of categories for the data explication—"for security reasons," so to speak. Therefore it is necessary to find a procedure which delivers clues for the structuring of the material as it proves to be open for something that appears to be new. For this the studies of SCHOPPE (1991) and TSCHANZ and KRAUSE (1992) are helpful. SCHOPPE develops a schema which distinguishes between motive, text, way of portraying human beings, movement/activity and interaction (SCHOPPE 1991, p.187). TSCHANZ and KRAUSE define elementary (object, persons) and structural (activities of persons) categories. First they characterize these categories qualitatively and finally they quantify them. My evaluation procedure for the pictures focuses on the description and relevant interpretation of elements. We can call this procedure an identification of "manifest contents of communication" (LAMNEK 1995b, p.185/187; translated by the author). It is carried out in three steps: [31]

In the first—descriptive—step of evaluation the drawing's elements are identified. In doing this the evaluator distinguishes between personal (child, teacher), natural (e.g. grass, sun, horse), objective (e.g. table, football goal, basketball field), text (e.g. title, label, balloon) and symbolic (e.g. arrow, musical notation) elements. From this identification one can deduce the way of communication on
the descriptive level: communication with drawn and text elements, only with drawing elements or only with text elements. [32]

In the second—interpretative—step of evaluation the location, the social relations and the activities are deduced. Locations are e.g. the classroom, the schoolyard, the gym or the swimming pool. Social relations can be "simultaneously" (e.g. two children practice different activities), "together" (e.g. three children do rope-skipping as a group) and "together-against-each-other" (e.g. four children play soccer). The activities are distinguished as "related to movement," "not related to movement" and "other." Additional "other wishes" that are not related to any activity are defined. The definition of activities shall be illustrated by the following example. The activity is "basketball," if you see e.g.

- a single basketball;
- a basket;
- a child with a basketball;
- an empty basketball court;
- a basketball court with several children divided into two teams;
- merely the text "wonna play basketball." [33]

This definition is based on a comparison of drawing elements with children's interview statements, which led to the understanding that the wish to play basketball can be represented by various drawing elements. [34]

In the third—also interpretative—step of evaluation subjects are assigned to the pictures. Following SCHOPPE's classification (1991, pp.187-192) we distinguished single subjects as well as subject levels. According to his question "in how far the child's activity ... is demonstrable ... by semantic subjects" (p.186; translated by the author) SCHOPPE defines five subject levels: (1) Objective-static subjects, (2) general acting subjects, (3) special events subjects, (4) fictitious-desired subjects and (5) fictitious-abstract subjects (p.189). SCHOPPE deduces his levels from JUNKER's definition of "visual-artistic ways of operation." The levels (1) and (2) correspond to the operation "making pictures as a reproduction of phenomena and real/potential experiences, registering access to objects, persons, situations, processes of the empiric reality." The levels (3), (4) and (5) correspond to the operation "making pictures as a metaphor of ideas and thoughts, as an illustration of memories, wishes, fears, rational knowledge, adopted ideas" (1988, p.46; translated by the author). I modified SCHOPPE's classification as follows:

- subjects representing real objects, e.g. equipment for playing;
- subjects representing real actions, e.g. children playing basketball;
- subjects representing special events, e.g. a child hurts his or her knee by falling down onto the schoolyard;
- subjects representing fictitious objects, e.g. a roller coaster on the schoolyard;
• subjects representing fictitious actions, e.g. "underwater-lessons" in the classroom;
• (fictitious) abstract (acting) subjects, e.g. a metaphoric depiction of the fear of climbing up the vertical rope. [35]

With this classification we can determine the way of communication on the interpretative level. [36]

In contrast to SCHOPPE in my case the single subjects cannot always be definitely assigned to a subject level. This is because e.g. the subject "break for moving" can be depicted either as a general, a special-event or a fictitious-wish acting subject. So, the evaluation in this field leads to a matrix which records the children's drawing communication acts on the level of visual-artistic ways of operation as well as on the level of intention regarding contents. [37]

In order to name the single subjects I deduced categories for each school area from theoretical pre-considerations. Doing this I made sure that it won't become a closed but rather an open schema in order not to neglect the new aspects within the children's pictures. The subjects of the classroom pictures mainly relate to the terminology of the "moving school," e.g. break for moving, moving while sitting, learning while moving. The subjects for the schoolyard pictures can be deduced from the principle of "zoning" the schoolyard, as introduced e.g. in the publication "Moving Elementary School in Bavaria" (BStMUK 1998, p.18). Accordingly we understand the depicted elements as representatives of the sports- & ball-games zone, the playground zone, the running & skipping zone, the riding zone (for roller blading, skateboarding, biking and so on) or the resting zone. Subject combinations are possible because the depicted activities can be assigned to different zones. As a special subject which can be combined with various zone subjects we additionally defined a "green schoolyard." The physical education pictures can obviously be classified by typical—and again combinable—groups of activities, such as team sports, gymnastics, water activities, artistry, rolling and gliding sports, skipping activities, climbing etc. [38]

So we actually tried to make a "description" of each picture in order to gather any drawing elements as detailed as possible. Based on this descrip the interpretation of the location, the social relations, the activities and the subject was also put down in writing. This way a text was developed for each picture which reflected the picture's contents and intention as accurate as possible. [39]

For the interview-analysis we found different strategies of qualitative analysis of contents. LAMNEK (1995b, p.107) principally distinguishes two ways: the interpretative-reductive and the interpretative-explicative way. The decision about which technique to choose depends on the investigation aim and the interview form. Thematic aspects are to be worked out in view of the inquiry interest which is formulated in the research questions without leaving behind the openness towards unexpected aspects. In addition it should be possible to quantify certain contents, above all the wished activities, in order to achieve a basis for
comparison with the results of the picture-analysis. Therefore the way of evaluation can orient to the MAYRING's basic forms of "summarizing" and "structuring" (1990, p.86) or the interpretative-reductive way which LAMNEK (1995b, pp.114-124) explains. According to the aim the interview-analysis is carried out in five steps: At first the tape is transcribed. The transcription takes the whole conversation content, the breaks and nonverbal expressions, such as laughing or gesture, into account. In the second step the thematic course is written down by heading text parts with topics of the manual or new topics. In the third step the conversation content is structured by the topics. In the fourth step a matrix of topics gives an overview of the contents of all interviews. A generalized analysis by comparing the single evaluations is made in the fifth step. [40]

By the following measures I tried to ensure adequacy of subject and methods as well as validity and inter-subjective provability of results (KLEINING 1982, pp.245-248; MAYRING 1990, pp.104-106; LAMNEK 1995a, pp.152-193; HELSPER et al. 2001, pp.258-260). I tried to

• analyze the state of research about the subject regarding methodology and contents in order to find conclusive reasons for the compiling of subject and methods;
• modify the methodological and methodical principles of gathering data in order to find an optimum way to answer my questions;
• base the evaluation of data on a system of categories which is founded theoretically as well as regarding contents and which at the same time is open to new aspects;
• develop validity and inter-subjectivity concerning description and interpretation of the children's drawings' elements by four measures. First: Each drawing was independently evaluated—by me, another male researcher and two female researchers—with a system of categories we developed together (see above). The single evaluations were compared, and if there were divergences, a discussion followed. The result of the discussion was written down. For each picture we established a consent. Not agreeable elements/activities/subjects were rated as "not definable." Second: In these discussions the interview transcript was taken into account, if available. Third: In these discussions the statements of other children about the same or similar topics were taken into account. Fourth: In addition I re-evaluated every picture after each single study in order to check if this repeated re-evaluation would lead to the same or various results concerning the picture elements and subjects;
• develop validity and inter-subjectivity within the interview-analysis by two measures. First: Every interview was independently evaluated by me and a woman. The single evaluations were compared and discussed. Second: For establishing a consent the results of the persons who were in charge of the single studies were taken into account. [41]
7. Development of an Appropriate Way of Presenting the Results

The presentation of results is the attempt to "re-construct the original." This can only turn out well if one uses as much "authentic picture" and "authentic sound" as possible and, doing this, stick to the "principle of maximum structural variation" (KLEINING 1982). [42]

The first—and essential—approach is simply to show the variety of wishes and ideas, if you want to avoid shortening them to frequencies (which though have their legitimacy!). So, to an adequate qualitative presentation of results always belong the originals which are best attached on a memory medium (CD-ROM). That's what I'm going do with the final report on the whole project. The presentation is structured by three fields and two levels. The fields are deduced from the three investigated school areas (classroom lessons, schoolyard, physical education lessons). On the level called "How children see their moving school" the results of the picture-analysis are presented in three steps. Firstly, the results of the identification of drawing elements are presented. Secondly, the results of the interpretation of drawing elements are presented in view of location, social relations and activities. Finally, the results of the decision about picture subjects are presented. On the level "How children talk about their moving school" selected statements are compiled from the matrix of topics and afterwards are discussed in view of the children's wishes and ideas. The following three examples can illustrate this. [43]

1st example: Children not only formulate single wish for the classroom equipment and for certain learning situations. They design—as Michael's (10, Int47) statement shows—"moving learning-projects," in which they develop complex didactical considerations about the connection of learning locations, learning contents and opportunities for movement:

"Well, about this I thought that we could have a lesson outside the classroom in the open countryside and that the lesson is more fun outside and when we have general knowledge, that we can run around and show how this and that works. And then just investigate such things, you know, and the teacher explains how this developed and that we just calculate a little bit how much water is running down the river, that we can measure this somehow with some device. Or, from a branch, that we cut off the tree and than count the leaves and then roughly calculate how many leaves such a little bush has, such a little tree. And then we could also put this together, the classes and the sports, so that we go jogging through the town and then the teacher explains this and that. And then we could put this together, for example we play basketball and when the teacher asks, well, if you stand five meters apart and then, when the other player comes up to you and you want to shoot at that moment, how long will it take 'til the other player comes and how long will it take 'til the ball hits the basket. Or kind of exercises in Maths, for example, if the ball bounces this often in one second, how often does it bounce in one hour, if one does it continuously. And if we are running one lap, that we say: how many kilometers have we been running now and how many decimeters are this. Or we make a multiplication, and if we will be jogging our way back, how far have we been running all in all. I'd like it better that way, and then we
could put sports and classes together like this and then the classes also will be
good." [44]

2nd example: Subjects of the schoolyard pictures. From the 395 pictures about
the schoolyard we assigned 102 to the subjects representing real objects, 272 to
the subjects representing real actions, 1 to the subjects representing special
events, 3 to the subjects representing fictitious objects, 12 to the subjects
representing fictitious actions and 4 to the (fictitious-) abstract (acting-) subjects.
The overview shows that children mainly draw real or potentially experienced
subjects. They express this predominantly with an action structure, that means
with a scene in which persons are acting. The picture examples in Figure 2
illustrate the different subject levels.

![Figure 2: Examples of schoolyard pictures with different subject levels [45]](image)

As regards content the subjects of the schoolyard pictures can be seen as
representatives of different schoolyard zones (the number of pictures in which the
respective activity is depicted is put into brackets): sports- & ball-games zone
(212), playground zone (146), running & skipping zone (87), rolling & driving zone
(28) and resting zone (35). In addition the subject "green schoolyard" (45)
obviously plays an important role. The children often draw zone-combinations.
Figure 3 shows some corresponding examples and also one "pure" resting zone.
3rd example: *Wished activities for physical education*. The description of the picture elements and the subsequent interpretation of their relations lead to the definition of the wished activities. In the course of these working steps we found 112 different activities in the PE pictures. The front-runners are soccer, basketball, swinging rings exercises, volleyball, trampoline jumping, swimming, wall bars climbing, play with balls, high diving and inline-skating, in which girls and boys, as expected, show different preferences (Figure 4).

We classified the single activities as follows (the number of pictures in which the respective activity is depicted is put into brackets): Team sports (144), rebound sports (39), ball-play activities beyond certain types of sports (24), gymnastics (119), water activities (38), track and field activities (26), dance activities (13), little games (16), rolling and gliding activities (22), skipping activities (17), artistry (15), playground activities (9), workout activities (6), wall climbing (5), martial arts
activities (4), target activities (3), other movement activities (10) and other activities (12). This overview shows that the children have highly differentiated wishes for PE, in which team and other ball sports as well as gymnastics rank far ahead of the other activity categories. The single activities' order gave the research team reasons to discuss in view of "meaningfulness" (KURZ 1986; translated by the author) why exactly those activities were the preferred ones. [48]

8. Conclusions

So, if you think that, in the course of a qualitative research process, you have reached your aim by presenting the results, you find yourself unexpectedly led back to the starting point: With my question, how children wish and imagine movement, play and sports at school, I presupposed that a structure of wishes and ideas does exist. Now, that I revealed elements of this structure, I look back again at the whole issue, which but now seems to be more differentiated (KLEINING 1982, pp.243f). The wheel turns full circle—and opens up new perspectives of questioning, e.g.: In which relation do the children's wishes and ideas stand to the local conditions? What kind of correlations exists between wishes and intra-personal characteristics? What kind of knowledge may be hidden in the gathered material that we haven't yet discovered? [49]

So, while going a qualitative way of research, you come to know that you are walking in a circle which you cannot leave until you "cannot get any more data by varying perspectives and all information fits into the structural connection" (KLEINING 1982, p.244)—provided that you make a claim for this. In my opinion there is no such end in sight because you can never determine whether you have taken any possible variation of perspective into account. However, it seems to me essential to realize the fact that one's knowledge is preliminary and that one should be open to further discoveries. Finally, one has to be prepared to stand the uncertainty that is always connected to qualitative research designs. Finally, one has to be prepared to stand the uncertainty that is always connected to qualitative research designs. [50].

References


FQS 4(1). Peter Kuhn: Thematic Drawing and Focused, Episodic Interview upon the Drawing—A Method in Order to Approach to the Children's Point of View on Movement, Play and Sports at School


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Peter Kuhn, PhD, born in 1959. Studies: Catholic Theology and Physical Education at the Julius-Maximilians-University of Würzburg, Germany, in order to become a high school teacher. After three years in the school system, change to the Institute for Sport Science at the University of Bayreuth, Germany; employed as an instructor for students studying to be physical education teachers. Doctorate: 1996, magna cum laude. Main focuses in teaching: Sport pedagogy and volleyball, snowboarding, artistry, martial arts and elementary physical education. Main focuses in research: Children's point of view on movement, play and sports; sports and adolescent self-concept; sports and nature. On the side: Physical education teacher at several schools within co-operative programs.

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