



Model for Interpreting Drawings and its Application in the Hospital School

Christa Seidel

Diplom-Psychologin, Clinical Psychologist BDP

(Phd, Diplom-psychologist BDP (Professional Association of the German Psychologists)

© Christa Seidel 2010

Introduction

Healthy children and adolescents of school age live and develop within a complex system of coordinates, centered primarily on three pillars: family, school, leisure activities (social relationships in the circle of friends, peer groups, clubs, etc.). Children and adolescents experience these pillars each in different ways according to their personal conditions of development.

With the onset of severe acute illnesses, chronic illnesses, malignant diseases or child and adolescent psychiatric disorders requiring admission to hospital, the pillars of the once supportive system of coordinates collapse. Such a circumstance inevitably leads to the loss of the main points of reference, which has an aggravating effect on the recovery process and future prospects of the patients. When schooling is disrupted due to sickness, the hospital school takes over the important task of containing as far as possible and compensating for such an irruption in the lives of children and adolescents.

Loss of the social support system and the severity of the illness itself often trigger anxiety, with behavioural problems appearing for the first time or intensifying. It can frequently be expected that due to the strain of the illness and hospital stay, developmental and emotional disorders in children and adolescents that had previously been compensated may recur, leading to regression of the development process.

The use of drawings provides an invaluable advantage, especially when it comes to the difficult task of ascertaining the stage of development (developmental characteristics) and of developmental deficits while recognising particularities and/or social-emotional disorders (emotional signs) and carrying out consultation and appropriate educational development approaches.

This is true also for the evaluation and support of children and adolescents with specific learning disabilities (circumscribed motor disorders, speech disorders, dyscalculia, legasthenia), or children/adolescents with attention deficit hyperactivity disorder (ADHD) and attention deficit disorder (ADD) and their associated disorders (secondary behavioural disorders, performance anxiety, performance blocks), who, due to truancy, school phobia or separation anxiety, must be admitted to hospital.

Analysis of developmental characteristics and emotional signs in drawings also contributes to the clarification and understanding of a number of behavioural disorders (e.g. anxiety, problems of self-esteem, of aggression, compulsions) that can be observed in connection with psychosomatic, chronic or life-threatening illnesses.



According to the different symptoms and the associated questioning, a drawing acts as a diagnostic screening procedure and essential supplement to intelligence, perception and achievement tests as well as projective techniques and/or as a technique within the framework of planning and executing requisite counseling interviews, educational support and/or psychotherapeutic and art-therapeutic treatment. Drawings reflect the overall state of the patient. They give an indication not only of a patient's physical condition. The affective, cognitive and creative processing strategies of their perceptions and actual experiences all leave their mark in drawings.

A pre-condition for the interpretation of drawings made by sick pupils is knowledge of drawing development in physically and mentally healthy children and adolescents through the observation of developmental characteristics in 8 areas of observation that can then be classified in 4 stages of development as well as of emotional signs that can be expressed in the drawings of children and adolescents as an indication of behavioural problems. These correlations are to be explained on the basis of a new interpretation model (Christa Seidel 2007).

Interpretation of children's drawings

The application of children's drawings in diagnostics, consultation, support and therapy

Children's drawings are a mirror of a child's general development as well as the development of special functions. They form the phylogenetical and sociocultural-anchored foundation of his mental and social-emotional development. At the core of multidimensional and holistically oriented diagnostics, consultation, support and therapy is the social-emotional realm and its integration with mental functions of movement (particularly fine motor and graphomotor skills), language, perception, higher cognitive functions and creativity (cf. fig. 1; from Seidel 2007, pg. 20).

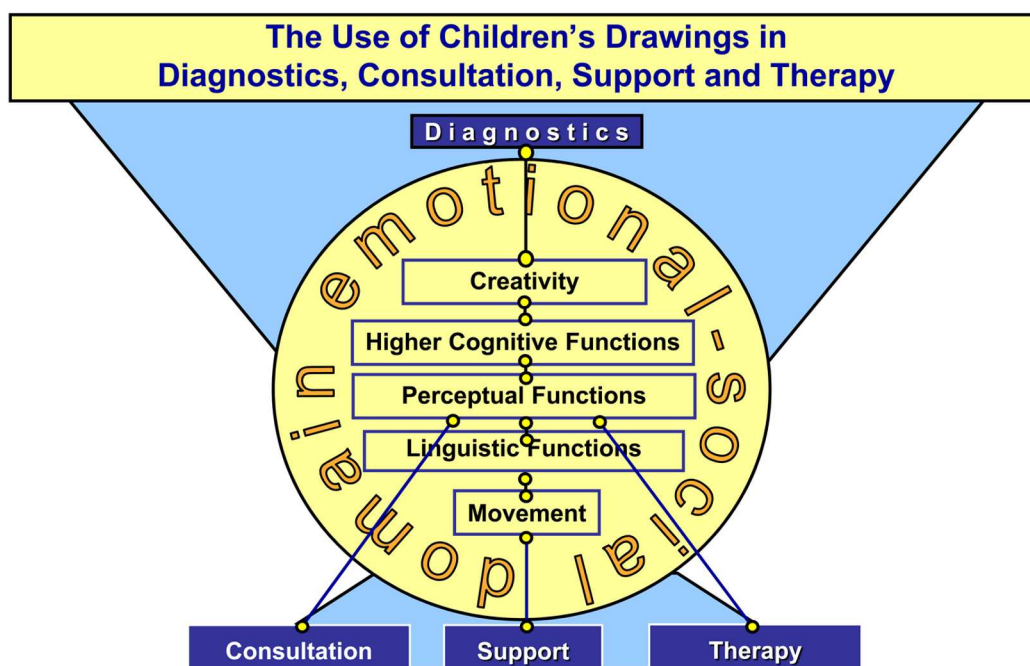


fig. 1



Guidelines for interpreting children's drawings

Through structured observations on 3 levels, free drawings and drawing tests are evaluated in accordance with newly developed guidelines and hypotheses about their interpretation are formulated.

Level I, 1. – 6.: Basic information and personal history are always taken into account first.

Level II, 1. – 5.: Analysis of the drawing itself includes information concerning the observation, behaviour while drawing, comments by the child/adolescent about the drawing, analysis of developmental characteristics (in 8 areas of observation and 4 stages of development) and analysis of emotional signs (symbolisation in 8 areas of observation), which could indicate social-emotional problems.

Interpretation of conspicuous emotional signs in a drawing should not be done in isolation; their classification presupposes Level I and Level II observations.

Level III: Hypotheses about the interpretation are only to be made on the basis of Level I and Level II assessments. A comparative analysis of a number of drawings and observations made over the long term is recommended (cf. fig. 2, from Seidel 2007, pg. 353).

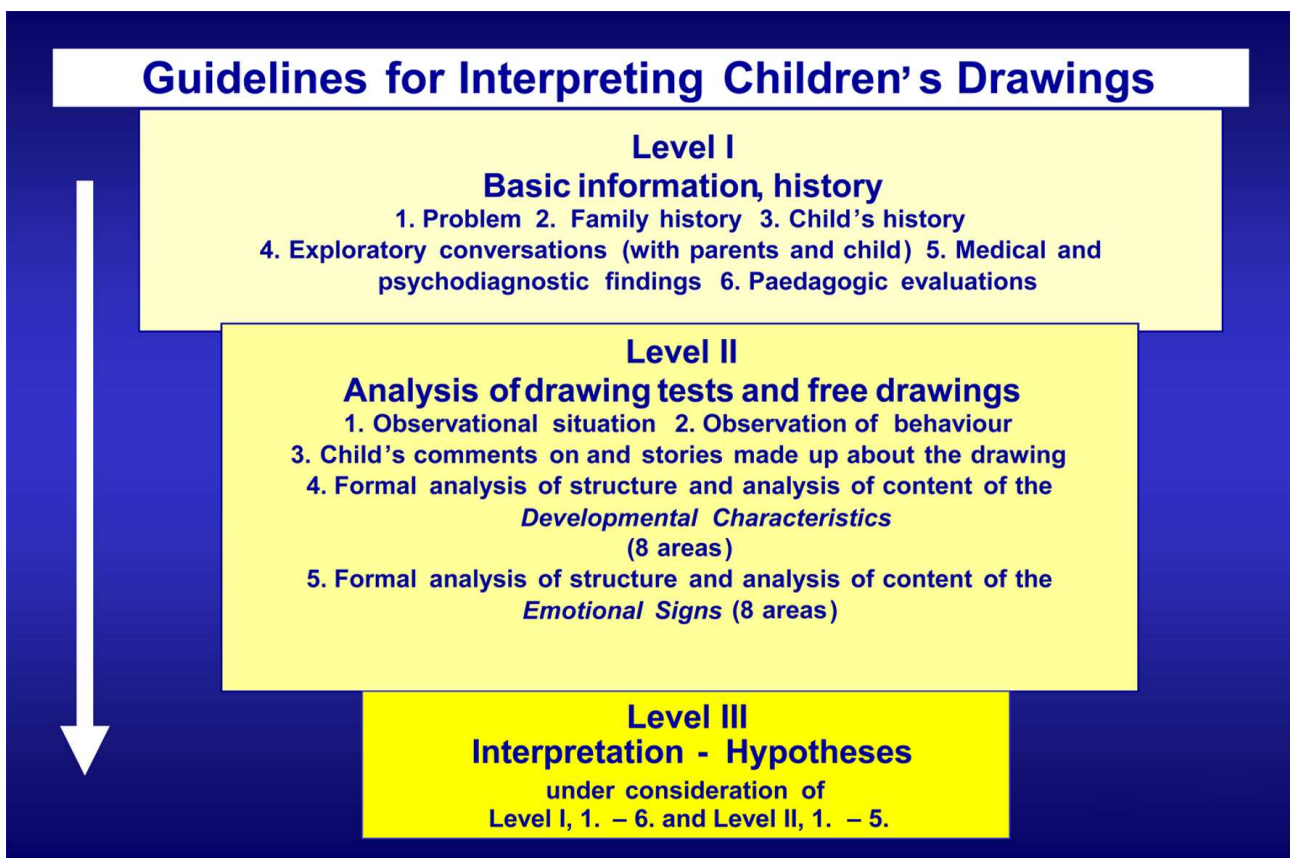


fig. 2



The development of a child as a reflection of his drawings

Striking patterns in drawings lend themselves to the recognition of different stages of cognitive maturity and indicate elements of a child's thinking and feeling. Through the interpretation of drawings, hints can be gathered as to sociocultural influences as well as to the achieved level of development, to developmental disorders, to intellectual giftedness, special talents or delayed development, to current experiences and/or to social-emotional disorders (trauma with emotional signs, e.g. regression in drawings, cf. fig. 8).

The timeline of the developmental stages corresponds to approximate values. Characteristic traits are found at the beginning, in the middle and at the end of each stage as well as at the transition to the next higher stage. The stages build upon each other and overlap. Drawing development is described analogously to Jean Piaget's model up to Stage 3 only. Stage 4 does not follow Piaget's model but rather shows planned designs, correlating to different ways of thinking and depending on social-emotional functions.

Empirical studies show that girls, unlike boys, undergo a somewhat accelerated drawing development up to the age of around 8 or 9 years. Drawing tests (e.g. the Koppitz Human Figure Drawing Test (1968/1972) or the Ziler Man Drawing Test (Brosat/ Töttemeyer 2006) take into account this fact with separate norms for boys and girls.

W. Wolpert describes gender-specific socialisation and personality traits of 9-year-old boys and girls in an analysis of children's drawings. The children had taken part in a drawing contest of their "dream home" in 1989. The drawings showed notable differences with regard to developmental characteristics.

(<http://www.kunstlinks.de/material/wwolpert/unterschied.pdf>)

In this study, however, the personality traits of the children were determined without sufficient consideration of their personal history and were based on a selection of predominantly standardised interpretations of symbols. Comments by the children about their drawings were not included. This approach does not comply with the principles of the guidelines for the interpretation of drawings presented here.

In the guidelines described here for the analysis and interpretation of drawings, Levels I – III are always included (cf. fig. 2).

At Level II comes first the ascertainment of the developmental characteristics with a structured description of the 8 areas of observation and their classification in the corresponding developmental stage (1 - 4). Only after personal data has been gathered can the conspicuous emotional signs be described in the 8 areas of observation and hypotheses about the interpretation of all available structured observations be formulated and discussed (cf. fig. 3, from Seidel 2007, pg. 97).

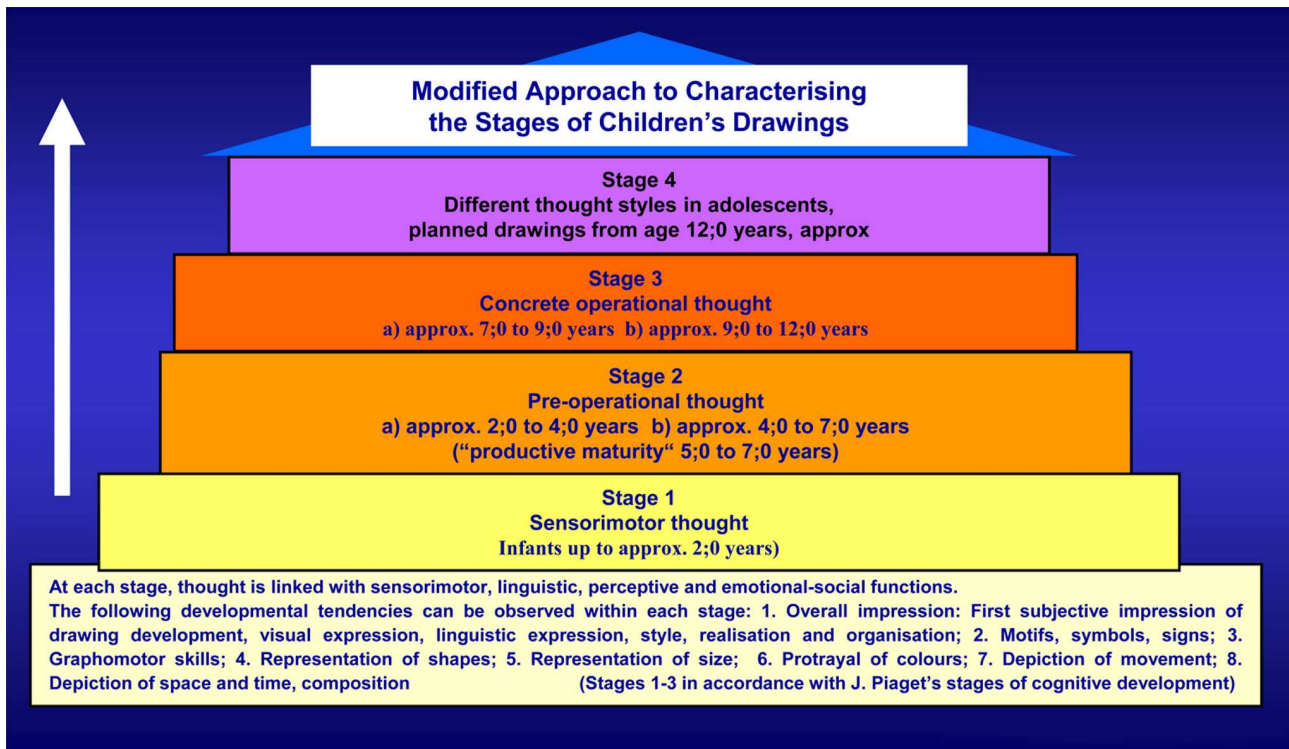


fig. 3 The development of the child as a reflection of his drawings
4 stages of age-appropriate development

The merit of children's drawings is still doubted in many psychological, child and adolescent psychiatric and (special) education institutions due to poor test quality criteria. Even teachers in hospital schools often underestimate the fundamental importance of the qualitative methods of developmental psychology and their child-appropriate methods of expression (Mey 2005) and do not specifically apply them enough in the context of developmental diagnostics, support and consultation.

Without considering developmental aspects, depth psychology-oriented projective interpretations of motifs, symbols and other emotional signs in drawings are often rashly made without the inclusion of basic information and preliminary findings (cf. Interpretation Level I, fig. 2) and without psychotherapeutic expertise. All too often, the interpretation fails to include and comparatively assess a number of drawings from cross-sectional and long-term observation as well as drawings before and after the time of illness and during the course of the illness itself.

Through a phenomenological description based on existing empirical values (Seidel 2007) it is possible also in intercultural comparison to recognise striking 'patterns' of drawing and age-appropriate or standard deviations of shape features that with a holistically oriented interpretation give clues to predispositions and environmental factors, sociocultural influences, illnesses and sensory impairments, current experiences or emotional trauma. Even in drawings made by blind children on tactile material, shape features and developmental stages can be recognised that with the appropriate support, are as comparable and interpretable as those of children who can see (Berg 2003).



Valid results of studies in trade literature (Koppitz 1972; John-Winde 1981 among others) indicate that drawing development is dependent on the child's cognitive development up to around the age of 11. This link is discussed in-depth in literature, albeit in different manners. This is not surprising given the interaction of thinking and drawing is determined by variables that require an individual analysis of the child's general development. Criteria for the individual analysis are included in the current interpretation model.

As long as the child is not impaired in his development by his health and is motivated in the execution of his drawings without any help or reference model and has sufficient practice in handling pencils, it is possible to record up until around the age of 11 by means of a screening procedure, structured observations on intellectual development, fine motor and graphomotor development, visual perception, cognitive supporting functions (attention, perseverance, concentration, memory), linguistic development (analysis of the comments about the drawings) and social-emotional development. A preliminary classification of the attained stage of drawing skills to the attained stage of intellectual development is possible under these conditions (Stages 1 - 3 of Piaget's stages of cognitive development). In order to reliably measure development in these areas, supplementary tests using standardised psychodiagnostic testing procedures are recommended. From around the age of 11, conclusions can be drawn as to the attained stage of drawing skills to cognitive development only through an individual analysis of verbal and non-verbal cognitive skills with the help of structured observation (e.g. by drawings) as well as standardised psychodiagnostic intelligence, perception and achievement tests.

In children with unbalanced intelligence profiles, partial mental retardation, circumscribed developmental disorders (specific learning disabilities), ADHD and ADD, psychoneurological disorders, behavioural and emotional disorders (such as trauma resulting from the suicide of a family member, the onset of illness, trauma, abuse, deprivation), drawing and cognitive development often diverge. In children with these conspicuities, the assessment of cognitive development should always be based on standardised intelligence, perception and achievement tests as well as projective tests but supplemented, however, by the analysis of drawings through structured observation.

Original drawings of highly gifted children and adolescents with good graphomotor and fine motor skills give insight into their above-average reasoning, perceptual and language development and their ability to store and process their sophisticated perceptions as well as their rich mental images (inner images). Significantly accelerated drawing development as well as extraordinarily expressive creations with creative ties to artistic and linguistic metaphors are conspicuous in these children and adolescents (Seidel 2007, pg. 247 – 263).

Gifted children with poor fine motor skills and/or poor graphomotor skills or circumscribed developmental disorders of scholastic skills and/or ADHD or ADD usually have sophisticated mental images and memory images, but often are not capable and thus not motivated, to convey these in their drawings.



Their giftedness under these conditions is in linguistic expression (comments about their drawings), but not recognisable through the analysis of the drawing itself, rather through observation of their other outstanding skills in other areas.

Some children and adolescents with Asperger syndrome often show in connection with an observed special talent for drawing, a significantly accelerated drawing development. They are capable of conveying and recording in a drawing the sophisticated mental images of their superior visual memory skills (photographic memory (Hartlaub 1930; Seidel 2007, pg. 563-574).

Their unusual and often bizarre linguistic and/or drawn connotations, however, are indicative of disorders of cognitive and emotional processing and classification of visual perceptions and reality-oriented actions as defined and described in psychiatric literature (to be assessed from the third stage of drawing development onwards).

The basis for the interpretation of drawings by children and adolescents is a comparative structured evaluation of the process of creation of a number of free drawings, made without any help or reference models (cross-sectional and long-term observations) as well as of a number of drawing tests including comments about the drawings.

The four stages of age-appropriate drawing development (cf. fig. 3)

Selection of characteristic observation traits; detailed description with comprehensive illustrations of the 8 areas of observation and 4 stages of development

(cf. Seidel 2007; Structured Observation Form, pg. 764-806).

Stage 1 (from birth to approx. 2;0 years)

As the preliminary stage of drawing development, this stage is characterised by sensorimotor reasoning. Sensorimotor intelligence develops from the integration of sensory perception and motor activities. "From the concrete grasping of the first months of life comes the internalised understanding (symbolic thinking) of later stages" (Bugge 2001). Babies and young children from as young as ca. 8 months like "drawing" with liquid paint, heedless of the result (referred to as smearing or "Spurschmierer", cf. Stritzker/ Peez/ Kirchner 2008).

As soon as young children are able to hold a pencil (between 13 and 18 months), they begin to scribble. Dots, lines, spirals and various circular scribbles are drawn. The circles are not yet closed and not yet named (not yet symbolised).



Stage 2 (approx. 2;0 – 4;0 and 4;0 -7;0 years)

This is the preoperational stage of cognitive development. The child no longer interacts just with things themselves, but begins thinking symbolically. This is marked by individual experiences and sociocultural as well as genetic influences. Stage 2 thinking is emotive, egocentric, descriptive, eidetic, everything is felt as inspired, lively and animated, linked to actions, centrated, irreversible, not yet reality-oriented. The child draws what he knows and feels, what is important to him and not just that which he sees. Children in Stage 2 use colour according to their feelings of the moment and this is not yet oriented to reality (blue sun, green cow). From around two to three years of age, scribble drawings are now named and have a meaning (concept scribble). From around the age of three, children grow out of the scribble phase. They are able to finish a circle and from lines and circles, compose the first shapes and motifs (crosses, spirals, rectangles, sun, people and animals) which are initially named later. People, portrayals of family members and self-representation, are first drawn as “headfooters” or “Kopffüßler” (a circle and lines for arms and legs and hair symbolising the whole body). (cf. fig. 4, from Seidel 2007, pg. 168).



fig. 4 S., C., girl, age: 3;6 years, naming: "Mama (cephalopod middle), tree (left), house (top right), lawn, flowers (below), the sun "(bottom right), wax crayons, 21 x 29.7 cm;

Drawing development: hurries ahead to the expected values in the overall design (composition) and representation of individual motives (center stage 2).

Overall development: age-appropriate, no evidence of development and / or behavioural disorders. Good creative potential recognizable.

From around the age of four, the motifs become more extensive (meadows, sky, flowers, houses, trees, animals, cars, etc.) and based on inner images, are correspondingly more detailed. Details of shapes are added at right angles. The period between the ages of four and seven is when children draw the most, and the most expressive, pictures. These are not geared to reality, but to their feelings. During this phase of development, they should not be encouraged to draw more realistically.



Expressionistic artists (such as W. Kandinsky, G. Münter, J. Miro, P. Klee, J. Dubuffet) let themselves be inspired by the imagery of children at this stage of development and found in it the archaic roots of evolution and the history of mankind. They adopted the characteristic traits of child drawings (e. g. the "headfooter") into their drawings in a new artistic style thus finding new break-throughs and a return to the primeval spirit of art.

From around the age of five, a child is capable of drawing his inner perceptions in an understandable way to the observer (maturity of drawing or "Werkreife"). People are given individual attributes. The magical thinking at this stage of development is reflected in depictions from the world of fairy tales and myths. At the end of the preschool period, the child begins to take the first steps of aligning his drawings to reality. Line is still unsure until the time the child is enrolled at school. At the beginning of this stage, motifs floated freely in space, now the edge of the paper serves as the first spatial orientation as a base line. The motifs are lined up side-by-side, overlapping is avoided. Each motif has its own place. Depiction of movement and space in the motifs occur only sporadically at the end of this stage, signaling the transition to Stage 3.

Stage 3 (approx. 7-9 and 9-12 years)

This is the stage of concrete operational thinking. Depiction of movement and space now show concrete operational intelligence. From the time they start going to school, children start to make their drawings conform to reality. Lines and strokes are confident. From around the age of seven, colours are predominantly true to reality (yellow sun, brown cow). They incorporate increasingly sophisticated shapes and proportions. The child no longer wants to portray the body as just flat, but in two dimensions. Arms and legs are now drawn two-dimensionally. Overlapping of shapes and shape details are to be observed. Children begin to draw people in profile, and with that the depiction of movement advances in recognisable steps. (cf. fig. 5, from Seidel 2007, pg. 216)



fig. 5 W., S., boy, age: 7;10 years, naming: "The lunar rover", felt pen and coloured pencil, 8 x 13.5 cm, excerpt from a series of 6 drawings, that all deal with the theme of "secret agents"

Drawing development: slightly anticipating with good cognitive potentials (middle stage 3), and living original pictorial expression shows the idea of inner richness of pictures of the boy and his ways to implement these drawings in the representation of movement;

Overall development: age-appropriate, no evidence of development and / or behavioral disorders.



Spatial perception now also shows marked progress. The sky and ground are consciously placed at the “top” and “bottom” of the picture as a representation of spatial orientation. From around the age of nine, people, buildings and other motifs show their first spatial traits. These are no longer placed predominantly side-by-side; the drawings show the first intimation of foreground and background. (cf. fig. 6, from Seidel 2007, pg. 225)



fig. 6 G., M., girl, age: 9;9 years, naming: "My holiday experience, I look from the window", felt pen, 21 x 32 cm;

Drawing development, anticipating with indications of wealth and good cognitive potential of internal images (End of stage 3), good shape, color and spatial representations, good composition of the picture, significant orientation of the motifs on the reality, graphomotor safe and loving design of details, tree (top) shows typical “Lötstamm” (branches are not yet growing organically out of the trunk) with crown skin that surrounds the branches and twigs, lower tree (right) shows incipient organic growth, the roof of the house and the car show trials of a preperspective representation, and the surrounding fence in the picture is opened in the sense of a folding picture with a right angle to the base line;

Overall development: age-appropriate, no evidence of development and / or behavioral disorders

In depicting situations, the pictures tell a story. There will often be speech balloons to illustrate the linguistic content and communication between the people portrayed. One can recognise gifted children by the effort they make in their sophisticated depictions of space and movement. At the end of Stage 3, there are increasing doubts about the quality of their drawing and often they may lose their motivation to draw and paint.



Stage 4 (from approx. age 12;0 on)

This stage is no longer governed by the maturing specific approaches of Piaget's theory of cognitive development (e.g. the formal operational stage of cognitive development). They are characterised by different sophisticated styles of thought up to the planned designs or "Geplante Gestaltungen" of adolescence. Only a small group of adolescents does formal operational thinking, in the sense of Piaget's structured model of intellectual development, guide the planning and execution of drawings (e.g. in perspective drawings). The shapes and details of drawings at the beginning of adolescence are as true to reality as possible ("Quasi-Realismus", Richter 1987); in later adolescence there is often an abandonment of realism, orientation to role models of modern art with their own modifications and abstractions. Adolescents like drawing or painting political and social motifs and looking into modern role models of visual media ("There are numerous FanArt portals worldwide that focus either on manga and anime or provide a wide range of creative FanArt sections."; from Zaremba 2010, pg. 176). In their own attempts to creatively modify works used as a model, there is often a tendency to alienation and irony .

Adolescents plan their pictures. Works of art are used as models for their own pictures ("I'm going to paint my own Picasso."). [cf. fig. 7, from Seidel 2007, pg. 246]



fig. 7 G., M., girl, age: 14;0 years, naming: "Carnival", acrylic and tempera paints, 41.9 x 29.6 cm;

Drawing development: age-appropriate, with references to very good potential for the Visual Arts (middle of Step 4), "quasi-artistic design" of adolescence based on models of the Expressionist Arts (e.g. imagery of Picasso);

Overall development: age-appropriate, talent and artistic focus in visual field indicate on, no evidence of development and / or behavioral disorders.



Adolescents with scientific interests and good spatial perception enjoy perspective drawing. This requires, however, expert educational guidance. Adolescents in Stage 4 show their interests and emotional dealings with current experiences in their pictures. The artistic talents of adolescents highly motivated to draw and paint can now be recognised. There are many adolescents though, who because of insufficient or lacking pedagogical stimulus, lose interest in this medium, preferring to turn to other pursuits.

Notable conspicuities in drawings that indicate developmental disorders and/or behavioural problems

Only with the aid of a holistical and developmental psychology oriented analysis of children's drawings with the inclusion of basic information and preliminary findings (Level I), the analysis of free drawings or drawing tests (Level II) and subsequent interpretation and formulation of hypotheses (Level III) can an attempt be made to differentiate between drawings made by children with developmental disorders and those of psychogenically disturbed children and adolescents (cf. Seidel 2007, fig. 2). Since behavioural disorders as associated disorders (secondary problems) often appear in developmental disorders, a differentiation of developmental characteristics and emotional signs in drawings is particularly difficult in this patient group and requires with the aid of standardised testing procedures, psychodiagnostic expertise. Structured observations of drawings serve here as an important supplementary screening procedure. In this analysis initially, focus should be geared to the cognitive and social-emotional resources of the child. These are especially helpful for planning, consultation, therapy and prognostic evaluations. What is particularly notable is when intelligence performance determined by psychological testing differs from drawing skills and emotional signs are readily observable (e.g. when giftedness has been ascertained and drawings show regression to the scribble stage, as can be seen in fig. 8). Children with circumscribed developmental disorders of scholastic skills (language, graphomotor and fine motor skills, reading, spelling and mathematical abilities) as well as children with ADHD or ADD frequently attract attention because of the unbalanced developmental characteristics of their drawings. Good or very good oral verbal skills with good or above-average vocabulary and the ability to make verbal associations and abstractions and creative linguistic expression in the telling of stories about the pictures differ often from marked developmentally delayed performance in other areas of observation. In this context in the analysis of developmental characteristics in drawings particular attention should be paid to disorders in the the execution and organisation (e.g. work attitude), graphomotor skills, regression of drawing performance to that of an earlier stage of development, and the representation of shapes with disintegration of form or „Gestaltzerfall“.

Emotional signs in drawings can be the initial indicators of primary or secondary behavioural and emotional disorders, but first need to be examined by specialists in psychotherapy and/or art therapy for any symbolism of depth psychological meaning (e.g. in the case of emotional trauma). Teachers in hospital schools, however, are called upon to record evidence of social-emotional problems related to current experiences by means of target-oriented questioning and hypotheses and to clarify their target-oriented observations and questions with specialists in an interdisciplinary discussion.



Conspicuousities in drawings in 8 areas of observation

Selection of characteristic traits; detailed descriptions of developmental characteristics and emotional signs with relation to patient case examples and with a large selection of illustrations and their interpretations cf. Seidel 2007.

With the help of structured observation in 8 areas, special attention should be paid to the following developmental characteristics and emotional signs (cf. fig. 2, level II). Hypotheses corresponding to their interpretation can only be formulated within the context of all the necessary information and findings (cf. fig. 2, Level III).

- **Overall Impression**

First subjective impression

The attained stage of drawing development does not correspond to the expectations of the overall assessment (cf. Seidel 2007, Structured Observation Form, pg. 764-806). The first subjective impression indicates either an above-average advanced drawing development (indication of high cognitive talent or giftedness or of special talent [Asperger syndrome]), or else general developmental disorders or circumscribed developmental disorders catch the eye with distinct deficits in some of the 8 areas. What is remarkable is when drawing development and intellectual development diverge. Emotional signs are the first to be noticeable in the first subjective impression.

Artistic expression

This is either of above-average expressiveness or noticeably lacking in expression, sparse; images of inner perception can not be age-appropriately stored and conveyed to the drawing. There are perseverations, stereotyping or "Schablonisierungen", bizarre depictions, grimaces, incongruities. Emotional signs are the first noticeable subjective impression in artistic expression.

Linguistic expression

It is either of above-average expressiveness (rich vocabulary in comments about the drawings, language rich in imagery, creative verbal associations in telling stories about the drawings, verbal abstractions) or it is lacking in expression, sparse; displaying linguistic development disorders and/or speech disorders. In the comments about the drawings there are marked indications of social-emotional problems (cf. child's comments about fig. 8). In the anniversary publication by the Public Hospital School, Munich, 2004, there are various examples of emotional signs in the pupils' comments about their pictures.

Style

This is either far more advanced than can be expected for the child's age or shows a marked development lag. There are stylistic inconsistencies, splitting mechanisms or "Splitterfähigkeiten", that could be indicative of both perceptual disorders and of social-emotional problems (emotional signs).



Execution and organisation

The work attitude is either well advanced for the child's age – persevering, organized and focused - or problems with concentrating impair the work attitude in a conspicuous way. Instructions are often forgotten or not executed correctly. Work is flighty, abortive. The work pace is hectic or remarkably slow. Scribbling over, crossing out, repeatedly starting over, not being able to get to grips with the drawing place or drawing paper, tearing up or crumpling up the drawing paper, frequent erasing, wanting to work only with a ruler. These conspicuities indicate underlying developmental disorders and at the same time of affective disorders. Hypothese about their interpretation can only come about through a holistically oriented analysis of the drawing taking into account the observations from Levels I, II and III.

- **Motifs, symbols, signs**

The motifs are either significantly advanced for the age (cf. comments about fig. 8, the “present”, the “future”) or they are under-developed in the event of developmental disorders (cf. Seidel 2007, Structured Observation Form). Social-emotional problems are indicated by conspicuous symbolisation (e.g. portrayal of body fluids [blood, urine, pus, tears], of excrement [faeces], of natural phenomena [night, lightning, thunder, fire, smoke], war scenes, aggressive fighting scenes, portrayal of teeth, emphasised portrayal of genitals, portrayal of the hospital situation [infusion apparatus with tubes, syringes, operating tables with equipment and patients in sick beds, among other things]; signs forbidding the eating of certain foods in connection with diabetes mellitus; portrayal of red hearts with question marks and black dividing lines as an expression of doubts and despondency related to cardiac failure; self-portrayal with indications of problems of self-esteem e.g. anorexia or bulimia (“shackled in chains”); window with view for an observer (a view of a future of illness-caused anxiety?); collages with use of the term: “Why?”, among other things (cf. Anniversary publication by the Public Hospital School, Munich, 2004).

- **Graphomotor skills**

These are either accelerated for the age or they show anomalies in the line execution and character and surface design (cf. Seidel 2007, Structured Observation Form).

Particular attention should be paid to the following anomalies of line execution and character (cf. Avé-Lallemant 2006, 2010):

- Gross fluctuations and shakiness in the lines
- Line is fine / fragile (frail, unsure, shaky)
- clayish/spongy (greasy, smeared)
- sharp / hard (heavy, grooves in the paper, make a comparative assessment of the back of the paper)
- firm / solid (wide, heavy pressure)
- fragmented lines
- fixated blackening



These anomalies could be an indication of developmental disorders and/or behavioural disorders, which can only be clarified through holistically and developmental psychology oriented diagnostics.

- **Shape**

Shapes, when rich in detail and sophisticatedly drawn, are advanced for the child's age or they do not conform to age-appropriate expectations (cf. Seidel 2007, Structured Observation Form). They are unfinished, lacking harmony. The shapes are asymmetrical with horizontal distortion; human figures are square-shaped, disintegration of form or „Gestaltzerfall“ in the drawing.

Emotional signs can be found for example, in the emphasis of certain parts of the body (cf. Koppitz's Emotional Indicators 1972); emphasis of specific people, omission of shapes or shape details (e.g. missing body parts in drawings of people; missing or cut-off branches in the tree test; missing windows, doors or floor in portraying a house).

- **Proportion**

The proportion of shapes and shape details is either markedly advanced for the child's age in how they are reality oriented or they do not conform to the proportions that one would expect for the drawer's age (assessment only possible from around the age of 7;0).

Emotional signs are indicated by particularly tiny self-representations and portrayals of other people (5 cm or smaller [cf. Koppitz's Emotional Indicators] as well as animals or other motifs), for example. Comparably, overly large self-representations or portrayals of people (23 cm and larger) [cf. Koppitz's Emotional Indicators] or other motifs could signal emotional or social problems.

- **Colour**

Depending on the developmental age of the child/adolescent, colour is used as a decorative element, as model colour, object-appropriate colour or appearance colour („Dekorativfarbe“, „Typenfarbe“, „Gegenstandsfarbe“ oder „Erscheinungsfarbe“) (cf. Seidel 2007, Structured Observation Form). In children of nursery school age and preschoolers, the choice of colour is frequently arbitrary, corresponding to their changing personal preferences and can only be taken with reservation and within the context of the child's personal history and comments about his drawing as symbolic of an emotional sign.

Young children often use the colour black because of the striking expressiveness of the colour and not in connection with social-emotional problems. If social-emotional problems exist, however, even children as young as nursery school age and preschoolers may use colour to symbolise affective states (fear, aggression, grief, death). In these circumstances, they – particularly older children and adolescents – use colours associated with their emotions and feelings (e.g. the use of red and black), in body fluids (blood, urine, pus, tears), excrement (faeces), frightening natural phenomena (night, lightning, thunder, fire, smoke), and sad and melancholic moods (can only be assessed from adolescence on). Children and adolescents are asked to talk about their preferences in the use of colour



in their drawings. Only through these statements and comments is it possible to know what the chosen colour personally means to the child/adolescent and thus the polarity in colour symbolism as an emotional sign in the individual valuation and in the context of the discussion about the picture. "Red is love, red is blood, red is the devil in his anger!"

- **Movement**

Depiction of movement comes remarkably earlier or later than would be expected for the child's age (cf. Seidel 2007, Structured Observation Form; from around the age of 7, movement depiction indicates flexibility of thinking and concrete operational thinking as well as good cognitive potential). With regard to emotional signs, movement symbolism of the line can be an expression of intense affective drives and reactions (e.g. portrayal of sea waves [Star-Waves Test, Avé-Lallemant 2006], portrayal of flowing tears, swirling lines for clouds of smoke. Little or interrupted expression of movement in the lines can also indicate affective disorders (wave movement, body posture, facial expressions in human figure drawings – to be assessed from around the age of 7;0 onwards).

- **Space and time, composition**

Space, time and composition traits found in the drawings are either advanced for the age or significantly lagging behind in the case of developmental disorders (cf. Seidel 2007, Structured Observation Form).

Emotional signs in the vertical structure

The positioning of the motif in the overall area (bottom, top, in the middle) can correspond to specific individual problem states. Motifs drawn at the bottom, top or in the middle frequently symbolise an individual problem according to where they are placed. The bottom area (e.g. missing base line – to be assessed from the age of 7 onwards) can be indicative of a problem of physical well-being (standing on shaky ground). Empty spaces in the overall area can likewise be an expression of social-emotional conflicts.

Emotional signs in the horizontal structure

These can indicate social-emotional problems (be on the lookout for motifs in the centre, on the left or right-hand side of the drawing surface!). Spatial distance of the motifs can symbolise emotional affection/alienation, closeness/distance, emotional relationship conflicts. In family portrayals, an omitted family member requires special attention in the interpretation. The same applies to when the drawer forgets himself in the portrayal or when the place of the mother or father remains empty.

Mirrored projection of the body image to the drawing surface

Special emphasis on body parts in self-representation can be interpreted as a projection of the conflict-laden corresponding body part of the child/adolescent to the drawing surface at hand (e.g. in human



figure drawings, the child/adolescent projects his left spastic leg with conspicuous emotionally laden shape features (e. g. marked shape and/or proportion] on the left-hand side of the drawing surface).

Emotional signs in situation portrayals

In story-telling pictures, the courses of action as well as representations of conflict-laden illness-related experiences in the family, the hospital or in the self-experience and coping with the illness can allude to emotional conflicts (e.g. portrayal of emotional events at the outbreak of an illness and hospitalisation; representation of battle scenes with symbolism of the fighters' body movements; portrayal of a brutal punishment by hanging, beheading; burial, robbery, mobbing, suicide, accident, etc.).

Emotional signs in the time order of the depiction of motifs

Pay attention to the order in which the motifs are depicted. The first or last motif can be an indicator of emotional problems: the first motif is often of great importance to the child or he may draw whatever is easiest to draw first or whatever holds the fewest negative emotions. The last motif drawn can also be of special importance emotionally to the child or adolescent and point to conflicts. If it is emotionally negative, it is often held back. In drawings, involvement with the time aspect of problematic incidents can be interpreted as an emotional sign, e.g. conflict-laden time as in the emotionally stressful interruption of playtime activities because of the necessity of having to regularly take medication in the case of diabetes mellitus; fear of living with a disease or illness over time; and in the critically ill, fear of dying or death (usually only to be observed in drawings from the age of approx. 10;0 years, end of Stage 3).

The application of the interpretation model described here is explained in case examples of patients and with drawings (cf. Seidel 2007).

The strength of symbols

The sheet of drawing paper represents the living environment. The drawing space and the motifs that fill it can have symbolic meanings. Whether these are linked to conventional culturally determined symbols (e.g. red cross for hospital), to supra-individual, collective symbolism (circles, mandalas), to culturally determined meanings of symbols (the colour black or white as a symbol of mourning, the heart as symbolic of love; the cross as a religious symbol) or to personal symbolism of a depth psychological significant derived from a person's history, must be determined by specialists. In this sense, the colour black is not chosen randomly or for the striking expressiveness of the colour, but can be a symbolic expression of dealing with an existing emotionally stressful experience of grief, pain or fear. It can also indicate, however, a reactive-neurotic depression or a bipolar depressive illness that should be clarified by a child and adolescent psychiatrist.

Even if patients cannot find (yet) the words to explain their problems, they often feel relieved by their choice of symbols in drawings and their greatest concern is that their fears and desires be understood by their teachers.



Pictures are like a protective shield against unconscious afflictions. Pictures can heal! Children also want to be understood without words!

V. Kast describes therapeutic efficacy of the dynamics of symbols:

“Only in situations where the ego can no longer find an outlet, when things are going very badly for us, are we open to that which comes from the unconscious.”...

“Images that are distressing in the imagination, become more concrete when drawn and are more open to analysis.” (Kast, pg. 33)

“In child analysis and therapy (...) artistic expression is an important means of revealing psychological problems as well as of healing and overcoming conflicts.” (Baumgardt, pg. 11)

Sara, an 18-year-old leukaemia patient, wrote in the “Festschrift” anniversary publication by the Hospital School, Munich, 2004, pg. 46:

“Despite all the difficulties, over the past few months I have gained a lot of self-confidence, mostly thanks to the daily support of my teacher. She always encouraged me. As I began to draw and paint, I was finally able to express my feelings; my father, the doctors and nurses were able to see how I really felt. I would have needed a lot of time to be able to express all that in words.”

Individual symbolic processing of aspects of experiences comes about not only in the therapeutic process, it can also spontaneously arise from a life situation.

Even without psychotherapeutic reprocessing, a symbol gives the feeling that something of importance has spontaneously happened in our life. The energy contained in a symbol is only fully effective if the drawer is completely engaged in his emotional condition. A wealth of connotations is tied to a symbol. Symbols are always to be interpreted as bipolar, never as unambiguous; their meanings are rationally never fully grasped or resolvable.

When a child draws himself as conspicuously large, it could simply be a matter of a big drawer who is proud of the size of his body and is happy to be the center of attention. An overly large self-representation, however, can also be the symbolic expression of a drawer whose body is small and who wishes to have a larger body, and whose desire is linked to the wish to strengthen his body consciousness and self-image. As a defense mechanism against his anxiety of being small, that desire is projected as the inverse in the drawing.

Verbalisation of the symbolic representation and information about the patient and his medical history and preliminary findings likewise are to be included in the interpretation for an approximation of the meaning of the symbols.



In deeper involvement with symbols, defence mechanisms can be expected, e.g. symbolisation can revive anxieties. If these are not in line with our self-image, they are to be repelled, obliterated in the drawings, such as by making them unrecognisable through heavy scribbling.

A girl who had been sexually abused draws, for example, a male figure with an over-sized penis. As soon as the drawing is finished, she heavily scribbles it out, wanting to make it unrecognisable (a symbolic act as a defence against anxiety expressing the desire to undo the emotional trauma).

Teachers in hospital schools who have no psychotherapeutic training should be aware of the context and, nevertheless, focus on current problematic coping with the experience and not get involved with depth psychology oriented meanings of symbols or the meaning of defence mechanisms. This must be left to the experts.

Despite these constraints, the use of drawings enriches pupils' lessons in all types of schools, but most especially in the hospital school. Their use should accompany this schoolwork and in cases of symptoms as described above, methodical priorities should be set. Occupational advanced training for teachers in hospital schools in this child-appropriate field of qualitative developmental psychology and the psychology of expression is essential. It equips teachers with an important tool for understanding and communicating with their sick pupils.

Case Example 'Georg' – and the interpretation of a drawing (Levels I-III)

Example of a gifted child suspected of having ADHD following an emotional trauma

Detailed presentation of this case example cf. Seidel 2007, pg. 336-340; Seidel 2010, pg. 273-277.

Level I

Georg, aged 7 years and 7 months, exhibits behavioural and learning problems at school (end of the 1st class in primary school). His development milestones conform to his age. Following the sudden death of his mother by suicide in dramatic circumstances, Georg and his older sister were cared for by the grandparents – with immediate separation from the father as well as from the home and with a resulting change of school. In the following months, Georg developed increasing motor agitation, concentration, reading and spelling problems. A psychodiagnostic assessment recommended by the classroom teacher was conducted by a child and adolescent psychotherapist. Results of intelligence, perception and achievement tests (children's drawings, unfortunately, were not specifically used) found that Georg was suspected of having attention deficit hyperactivity disorder ADHD, as well as giftedness and specific learning disabilities. Georg was classified as a child at risk of dyslexia – stressing problems of eye movement/oculomotor dysfunction, graphomotor skills, auditive perception as well as emotional disorders. Proposed therapy included: medicine to improve attention/concentration, eye training laboratory, reading/spelling training, psychotherapy (more detailed psychodiagnostic findings in Seidel 2007, pg. 336-337).

Advised medical treatment of the suspected ADHD was rejected by the boy's father, however art therapy and subsequent play therapy were immediately begun.



Fig. 8 George, age: 7;7 years, naming and image analysis, see text below.

Drawing Development: unbalanced (center mid and late stage 2 to stage 3), strong evidence for emotional trauma after suicide of the mother (emotional signs in the drawing);

Overall development: Giftedness diagnosed with specific developmental disorders of reading and legal writing, deficits of attention and increased restlessness (hyperactivity);

Suspicion of ADHD was not confirmed after successful psychotherapy.

Level II

Analysis of a drawing (fig. 8; crayon, 30 x 40 cm), made by Georg while undergoing art therapy, gives further insight. Here is what Georg says:

“Our house and in the garden, a tent. We slept there once – Papa, my sister and me. You go down further and the black is Mummy's headstone. That's terrible. Across the sun is a dark stripe, that is for when I hurt myself. That is bad, but not as bad as Mummy dying. The big circle in the middle stands for the present. At first everything was sad because of Mummy, but it's getting more cheerful and nicer. At the top right is the future, bright as the sun and lovely. The sun is still dark, but only just a little, it almost shines through.”

With reference to the developmental characteristics of a boy aged 7 years and 7 months, drawing skills would be expected to coincide with the beginning of the concrete operational stage of cognitive development (Stage 3). Assessment of the stage of development taken from the drawing at hand (first subjective impression) indicates very unbalanced drawing skills, that are either significantly advanced for his age (e.g. linguistic expression) or notably underdeveloped, to be classified as still at the beginning to



middle of the preoperational stage of cognitive development (Stage 2), corresponding more to that of a 4-year-old than to a child of 7 years and 7 months. Artistic expression, with the exception of the depiction of the tent with its top of a different colour (folding picture, Stage 3), is still predominantly marked by the plastic thinking of Stage 2. However, an above-average high level of verbal abstraction is apparent in linguistic expression (“in the middle is the present; top right is the future.”). The language is indicative of concrete operational thinking. The style is unbalanced, and graphomotor skills and the shaping of the circular scribble symbolising the “present” are indicative of the beginning of Stage 2. The choice of motif and symbols, however, is already at the end of Stage 3, revealing stylistic inconsistency (an indication of regression). Execution and organisation of the picture are partly well planned with age-relevant graphomotor skills (the tent) and partly showing regression to the scribble stage (the “present”). Some of the motifs, symbols, signs show content that for verbal abstraction and thought processing, for example, are significantly advanced for his age (the “present”, the “future”, “Mummy's death”, “headstone”) and already corresponds to a developmental age of ca. 10 years. Graphomotor skills are unbalanced, at times lines are confident and contoured, at other times noticeably unsure and developmentally delayed (the “present”, scribble age); the line execution and character in all the motifs show significant pressure fluctuations. The design of the sun and headstone shows noticeable darkening or blackening. The representation of shapes, with the exception of the tent, still correspond to that of a preschooler. As for the depiction of size, the child draws those things particularly large that are emotionally important for him (perspective of importance). No heed is paid yet to proportion. With the exception of the tent, colours show no sophisticated patterns. The colours used base on plastic thinking. The depiction of space and composition likewise show unbalanced development tendencies (The overall area is still a scattered picture with no reference to firm ground, the depiction of the tent is already in the pre-perspective stage).

With regard to emotional signs, significant conspicuities are noted: as for the first subjective impression, artistic and linguistic expressions point to emotional conflicts and the boy's mourning for the loss of his mother, who had recently died. However, Georg's inner resources are already apparent (resilience): “The sun is still dark, but only just a little, it almost shines through.” The style is also unbalanced and reveals stylistic inconsistencies that can be emotionally caused (regression to the scribble stage, something not in keeping with Georg's age and detected intellectual giftedness). Execution and organisation of the drawing both show imbalances, possibly indicating problems of concentration and of agitated behaviour. The choice of motifs and symbols of the “house”, “headstone”, of the “present” and the “future” and the thought processing are unusually advanced for his age (end of Stage 3), but clearly indicate emotional conflicts linked to the death of the mother. The graphomotor skills with the unsure line execution, pressure fluctuations and blackening or darkening of emotionally laden motifs also denote emotional signs. With the exception of the tent, the representation of shapes is rather that of a preschooler and because of the regression to the scribble stage in the emotionally laden motifs (the “present”, the “future”, the “headstone”) emotional insecurity is signaled. In the use of colour, attention is drawn to the blackening of the “headstone”, the darkening of the “present” (a scribble drawn in increasingly dark colours on top of



each other) as well as the darkening of the sun and the red colouring of the house as possible emotional signs of mourning and insecurity in Georg (fear of loss?). Also in the unbalanced spatial representation (Overall representation is a scattered picture and missing ground for the house; on the other hand the depiction of the tent is in the pre-perspective stage) emotional signs are assumed.

Level III

Discussion of the developmental characteristics and emotional signs leads to recommendations for further educational measures. The unbalanced development profiles and the accumulation of emotional signs assumed that the specific learning disability diagnosed and secondary problems in the demonstrably gifted boy were triggered by the death of the mother. The ongoing process of mourning together with the associated profound fear of loss, could have provoked the behavioural problems (suspected ADHD) and disposition to poor reading, spelling and graphomotor skills and increased his problems of self-esteem. The motifs which are emotionally laden for George, such as "headstone", the "present", the "future", draw attention to significantly reduced graphomotor skills and shape representation that do not conform to Georg's significantly above-average cognitive skills. The emotionally caused regression of drawing ability (stylistic inconsistency) in the emotionally laden motifs bring about the assumption of secondary problems. Verbal remarks about the drawing reflect not only Georg's intellectual giftedness, but also pointedly his increased sensitivity and emotional need, his insecurity and fears of loss. The advice to immediately undergo psychotherapy (art or play therapy) and the accompanying consultation with the father following deferment of other suggested treatment methods is confirmed through the analysis of these, as well as of other drawings and exploratory conversations with Georg and his father.

The art therapy and subsequent play therapy were of vital help to Georg in strengthening his self-esteem and dealing with his fear of loss. Behaviour (motor agitation), graphomotor skills and reading skills were all stabilised with psychotherapeutic treatment, scholastic and domestic support gradually. His spelling continued to show problems. The suspected ADHD could not be confirmed following long-term observation after the successful completion of psychotherapy. In the meantime, this gifted and highly sensitive boy is attending gymnasium (6th class). He no longer needs any psychotherapeutic help, is integrated in the class, has very good social contact with his friends and creatively indulges in his many interests at school and in his leisure time. His skills in mathematics, science and his ability to express himself verbally are significantly above average. Reading is in keeping with his age, though he is still weak in spelling. Georg is once again living with his sister and father and his father's new partner with whom Georg has a good relationship.* (cf. fig. 8, from Seidel 2007, pg. 338)

* The case example 'Georg' is taken from the revised version Seidel 2010.



Notice to teachers in hospital schools who use drawings in their educational measures

The model described is to encourage a more close observation of children in class in hospital schools, for the drawings contain personal messages of the child/adolescent. Children identify with their “works of art”. Through these works they are able to boost their self-confidence ('sense of coherence') and enhance their joy of learning (Schiffer/Schiffer 2004) or resolve difficulties in their personal lives, such as stressful experience of dealing with their emotional traumas (cf. Case example 'Georg', fig. 8) or their illnesses through imagination and symbolisation. Sick pupils can transfer the images that come from inside them to three-dimensional works or drawings and thus find a way to their inner balance, to their core.

It is not the role of teachers in hospital schools to be involved in psychodiagnostics or psychotherapy - and yet in their pedagogic work, especially when undertaking drawing, painting or other creative activities (e.g. modeling with clay) with their pupils, they are actively involved in highly sensitive psychological processes and must use their expertise to carefully deal with these. Individual successful aspects of drawing or creating artworks (e.g. the child's verbal explanation of his “work of art”) can be highlighted, even if these do not otherwise conform to the educational stage or if developmental disorders and/or emotional signs are recognised.

On the back of each “work of art”, the pupil's date of birth as well as the date and his age when the work was created should be noted. Equally important are notes about the working situation (e.g. free drawing/creation or given theme; other notes about the structured observation of behaviour during the drawing, cf. Seidel 2007, Structured Observation Form, pg. 765-770). The pictures and/or photos of their creations should be collected in a portfolio at the start of hospitalisation. When the pupils so desire and allow it, it is recommended to hang or exhibit a selection of current pictures or creations in the patient's room. By looking at their own pictures or creations, the pupils always will be stimulated anew to deal with their “works of art” as a procedure. The unconscious and the preconscious become more accessible in the conscious experience, which can have a positive effect on the healing process.

It is very helpful when teachers continuously motivate sick pupils to be creative and/or draw and paint, listen to their comments about their works of art and write these comments down. They should give the children and adolescents positive feedback for their creative drawing and painting efforts (“I can see that you have put a lot of effort into creating your 'work of art'.”). Teachers should make note of any observed developmental characteristics as well as of emotional signs (symbolisation that, from their point of view and in accordance with their further training, could indicate developmental disorders or social-emotional problems). They should try to discuss and clarify these observations in an interdisciplinary discussion with psychologists, psychotherapists, art teachers and/or art therapists.

In group lessons, a joint, creative inspiring topic can be used to make the discussion with the pupils among themselves about their pictures educationally relevant for the recognition or support of the development potential of linguistic expression, action planning, and fantasy development as well as to utilise retention,



differentiation and drawing of mental images. Through the medium of drawing and creative works, interests can be awakened with the help of art educational stimuli and the use of diverse, fantasy-stimulating drawing materials, so contributing to a deeper reflection of the pupils' own experiences as well as a more sensitive and insightful non-verbal and verbal communication amongst one another.

Drawings and creative works often can identify talented and gifted children or children with specific learning disabilities (Picasso was dyslexic!) thereby ensuring that these children receive the corresponding care and attention, recognition and individual support they require. Severely and chronically ill children and adolescents also need understanding teachers who recognise their talents, acknowledge them and be of help in getting schooling appropriate to their intellectual and creative talents when they return to their regular school.

How frustrating it must be for a cancer-stricken, artistic and cognitively talented child, who because of his illness-related absences is rejected from the Gymnasium and sent to the Hauptschule! Here is an important role teachers in hospital schools as intermediaries.

Teachers who teach in hospital schools and who are supposed to cater to the needs of the sick, have herewith diverse tasks to fulfill. They are specially challenged, on both a humane and a professional level.

Here we are talking about a caring, multi-modal development approach for the child or adolescent with special regard to his current health problems and with an adequate assessment of his general development, familial and social references or losses.

Empathy and caring attention for the sick pupils as well as a wide spectrum of professional knowledge are prerequisites for the fulfillment of these difficult occupational tasks.

To achieve this aim at the interface of pedagogic, special education, art education, psychology and medicine, teachers in hospital schools require a differentiated education and occupational advanced training. In the context of this further training for those in hospital schools, the use of drawings should also be professionally taught and made available as a systematic approach.

When teachers in hospital schools use drawings, it is their main task to give the patient attention through drawing or artistic creation, to listen to their comments about their "works of art", to give them the feeling that their greatest concerns are taken seriously and thus giving them courage for coping with their future. With that, teachers are a crucial support to the work of doctors, psychotherapists and art therapists in an integrated therapeutic approach.

Through the evaluation of drawings, teachers receive important information that they can pass on to the parents of the sick. However, as long as they have had no psychotherapeutic training or further training, they should undertake neither meanings nor interpretations of the drawings vis-à-vis the patient. That also applies to the use of drawings in parental conferences. Here the interpretation may be made only with



psychotherapeutic expertise! Teachers should recognise and activate interests, artistic and cognitive abilities and resources in the patients that could be used to help stabilise the healing process. From their structured observations of the drawings or creations, they obtain sophisticated background knowledge of all the patient's problems (analysis of developmental characteristics that from the development process and emotional signs point to current problems in the social-emotional realm). With that, they are more competent in dealing with the patients on a human and pedagogical level.

On the basis of this knowledge and in interdisciplinary cooperation with psychotherapists and/or art therapists, they should help the emotionally endangered patient, who may not have had any or not enough psychotherapy treatment, to receive targeted aid and to reveal and promote their creative strengths.

If teachers in hospital schools have a good basic knowledge about the development and interpretation of children's drawings, they can recognise the developmental age as well as the characteristic traits of the drawings and can classify them in the stages of development described herein. They can then choose drawing themes suitable to the developmental age and wishes of their pupils, giving them the time necessary to further develop their drawing in small, consecutive steps. A child, who in accordance with his intuitive thinking that is not yet reality-oriented, who creates his drawing in accordance with age-appropriate developmental criteria, will hardly learn from copying reference models for furthering his artistic development. Interested adolescents with the drawing competence for planned designs or „Geplante Gestaltungen“, however, are open to such stimuli. For their further training in drawing they require, in addition to free creative expression, art history and formal aesthetic information as well as the systematic teaching of drawing skills (Skladny 2009). Competent teachers do not intervene to correct pupils' drawings. It should go without saying that at each age-group level, free choice of subject should be allowed and children encouraged to comment on their pictures (“Would you like to tell me something about your picture?”). The important thing is to listen to what the pupils say. A child's or adolescent's explanations are the key to deciphering his pictures and the unreflected projection of his own thoughts and feelings works towards the interpretation of the drawings. Leading questions are to be avoided at all costs, as these would interfere with the patient's free expression.

An example of an impermissible leading question: “Does that black blob on your picture stand for your fear of the operation?” The teacher's questions should always be neutrally formulated, free of any personal interpretation or association of the drawing, such as this, for example:
“Tell me a bit about this black blob. What does it stand for?”

Conducting discussions about pictures should be taught and practised during further training. Verbally inhibited children especially need pedagogical assistance and help in getting started with their picture commentaries, such as the following prompt: “Show me where on your drawing you feel especially good.” If the child complies with the request, perhaps he will also be willing to explain why he feels good in that



place and will begin to talk. Through this he experiences assistance to talk about the positive emotions which motivated him in the composition of his picture (indication of resources). The subsequent request for the child is to now show the place in the picture where he does not feel so good. If he complies with this request, the teacher receives the first indication of the problem-laden content of the drawing, which subsequently needs to be professionally clarified and dealt with.

The use of drawing in truancy, school phobia and separation anxiety

The interpretation of drawings is helpful in clarifying the factors that trigger the complex problems of truancy, school phobia and separation anxiety (overtaxing of abilities in the case of general cognitive impairment [mental retardation] or in learning disabilities with age-appropriate general intelligence and specific learning disabilities - underachievement in the case of above-average intelligence or giftedness).

The interpretation of drawings can also identify children and adolescents with problems of truancy, school phobia and separation anxiety as well as give clues to developmental disorders (marked developmental characteristics) in the areas of motor skills, language, perception and higher cognitive functions (including the supporting functions of concentration, attention and perseverance in their work attitudes) while at the same time indicating social-emotional problems (emotional signs) .

Initially, the drawing should always be according to free choice of subject. Afterwards drawings based on a theme may prove useful (e.g. drawing tests). No time limitations are set and the pupils are given free range to use their creativity. Under these conditions, performance anxiety and performance blocks rarely, if ever, appear as they do when carrying out time-limited psychodiagnostic procedures. In children and adolescents with specific learning disabilities (circumscribed fine motor and graphomotor disorders, speech disorders, legasthenia, dyscalculia, ADHD and ADD), who often suffer performance anxiety and diverse behavioural disorders, not only can cognitive skills, cognitive or creative achievement potential be recognised in conjunction with standardised psychodiagnostic drawing tests but also conspicuities in the social-emotional realm. With that it is possible at the same time to more reliably assess the status of general development. For the clarification of the complex problems of behaviourally disturbed pupils with or without truancy, school phobia and separation anxiety, the use of drawings is shown to be particularly advantageous for the planning and execution of appropriate special education measures. Through the structured assessment of drawings, special educational and psychological assessment are of significantly deeper and more expansive knowledge than the application of psychodiagnostics which, unfortunately, is frequently based exclusively on intelligence, perception and achievement tests.

The use of drawings in severe chronic or life-threatening illnesses

A particularly difficult area of responsibility, in both humane and professional terms, is the pedagogical care and support of the severe chronic and the critically ill. With these patients especially, drawings and/or artistic creations should be used regularly during the course of illness and be compulsory.



An illness, especially a chronic or threatening disease, is often experienced by children and adolescents, as well as adults, as a particularly constricting and fearful life situation. Through symbolic processing in drawings, patients are frequently able to establish access to their fears and to repressed content of the preconscious and the unconscious.

“The unconscious and the conscious in their respectively revived contents are linked together in a symbol. This symbol formation allows for the creative development of the personality. Life history can be reconstructed by means of symbols.” (Kast 2002, pg. 22)

Faced with a perceived existential threat from illness, critically ill children and adolescents, as well as adult patients, often show an unexpected awakening of their creative potential, manifested in artistic creation, creative linguistic expression (e.g. in the form of poetry) or in other creative abilities (e.g. in the areas of music, theatre, dance). They find it a relief for their affective state, often marked by anxiety and aggression, to initially express themselves in a non-verbal symbolic form, creating a “work of art” – their “work of art”, through which their feelings are expressed while their self-confidence is boosted, and through which they can experience a 'sense of coherence' (Antonovsky). Neuroscience findings indicate that through the increased development of anxiety (associated with an increased function of the amygdala, among other things) the symbolic dealing with experiences stimulates the right hemisphere of the brain and involvement with art, music and religious topics is found to be relieving (Obiols 1996). This knowledge complies with the methodological and content targets of art therapy provided at many, but unfortunately not yet all, clinics for those who are most emotionally vulnerable, the severe chronic or critically ill (e.g. cancer patients). Collaboration of hospital school teachers with art therapists is constructive and to be strived for.

Through their drawings and/or 3D creations, their dreams or their linguistic creations, severely and chronically ill children and adolescents often gain access to symbolic processing that does not correspond to logic and rational reasoning (accentuation of the left hemisphere of the brain), but issues from the depth of their unconscious (accentuation of the right hemisphere) experience. This can reflect the patients' affective state and also symptoms of their illness and disease processes (Bach 1995), but should, however, only be construed in the context of an individualised interpretation (Seidel 2007).

When severely ill pupils draw their pain, for example, they create from the symptom of pain a symbol for pain and with the protective shield of the always ambiguous and never completely rationally resolvable symbol, can often better understand and accept parts of themselves. They stave this off, unfilled with fear, and thus are in a position to more closely examine their pain from different perspectives, to deal with it actively and creatively.



Even if it is not possible to speak (yet) and the symbol pictures cannot be psychotherapeutically worked out, the process of creating their artistic and creative “works” (e.g. from clay or other materials) can develop a relieving and healing effect.

Closing discussion of the workshop

In the closing discussion of the workshop, many of the participants regretted that they were not instructed, or not sufficiently instructed, in the use and interpretation of drawings during their training or further training. It was agreed that using their drawings or creations is desirable to the understanding of the problems of sick pupils and to the positive influencing of their healing process.

The interpretation of drawings is like learning and speaking a new language, initially the practice is truly laborious. But this educationally significant effort is worth it.

Pictures are like a protective shield against unconscious afflictions.

Pictures can heal!

Children also want to be understood without words

There was great approval for the project presented by Dr. Adelheid Manz:

“Development, testing and accreditation of the curriculum “Education during Illness” (“Pädagogik bei Krankheit”) in various areas of teacher training”. The curriculum provides for the establishment of the interpretation and use of drawings at the European level. Dr. Manz was pleased to have become acquainted with the new model for the interpretation of children's drawings that was presented in the workshop. She assured that this approach in accordance with the guidelines introduced here would be incorporated in the project she is directing and would be included in the curriculum upon accreditation (Project duration: 36 months).

The following institutions will cooperate on this project:

Head of the consortium: Dr. Adelheid Manz, head of the institute, with the coordinating team: Dr. Alistair Swiffen, Monika Szalai. In cooperation with representatives of the universities and clinic schools: Eötvös József College Baja/Hungary, University of Pécs/Hungary, Upper Austria Teacher Training College, Teacher Training College Ludwigsburg/Germany, University of Perugia/ Italy. Hospital schools Hungary: Verein der Krankenhauspädagoginnen; Austria: Heilstättenklassen im Klinikum Wels; Italy: Scuola Ospedale Monza; Sponsored Partners: Samara/Russia: State Pedagogical University, State Medical University; Serbia: University of Novi Sad, Vrsac Teacher Training College.



Bibliography

- Avé-Lallemant, Ursula: Der Sterne-Wellen-Test. (3. unveränd. Aufl.). München/ Basel 2006.
- Avé-Lallemant, Ursula: Baum-Tests. Mit einer Einführung in die symbolische und graphologische Interpretation. 6., neugestalt. Auflage. München 2010.
- Bach, Susan: Das Leben malt seine eigene Wahrheit. Über die Bedeutung spontaner Malereien schwerkranker Kinder. Textteil und Bildteil. Einsiedeln: Daimon.
- Baumgardt, Ursula: Kinderzeichnungen – Spiegel der Seele. Kinder zeichnen Konflikte ihrer Familie. 8. Aufl. Zürich 1996.
- Berg, Imke: Zeichnungen blinder und sehender Kinder im Vergleich. Stuttgart 2003.
- Buggle, Franz: Die Entwicklungspsychologie J. Piagets. 4. Aufl., Stuttgart, Berlin, Köln 2001.
- Brem-Gräser, Luitgard: Familie in Tieren. Die Familiensituation im Spiegel der Kinderzeichnung. 9. veränd. Aufl. 2006. München 2006.
- Brosat, Hannelore/ Töttemeyer, Nadja: Der »Mann-Zeichen-Test« in der detailstatistischen Auswertung nach Ziler (neubearb. Aufl.). Münster 2007.
- Hartlaub, Gustav Friedrich: Der Genius im Kinde. Ein Versuch über die zeichnerische Anlage des Kindes. 2. stark umgearb. und erw. Aufl. mit 35 farbigen und 92 Schwarz-Weiß-Druck Bildern. Breslau: Ferdinand Hirt 1930.
- John-Winde, Helga: Kriterien zur Bewertung der Kinderzeichnung. Bonn 1981.
- Kast, Verena: Die Dynamik der Symbole. Die Grundlagen der Jungschen Psychotherapie. 6. Aufl. 2002.
- Kirchner, Constanze/ Kirschenmann, Johannes/ Miller, Monika (Hrsg.): Kinderzeichnung und jugendkultureller Ausdruck. Kopaed 2010.
- Koppitz, Elizabeth M. (1968). Die Menschendarstellung in Kinderzeichnungen und ihre psychologische Auswertung. Stuttgart 1972.
- Mey, Günter (Hrsg.): Handbuch Qualitative Entwicklungspsychologie. Köln 2005.
- Obiols, J. E.: Art and Creativity: Neuropsychological Perspectives. In: Depression and the Spiritual in Modern Art: Homage to Miró (J. J. Schildkraut and A. Otero, Eds.). Chichester, New York, Brisbane, Toronto, Singapore: John Wiley & Sons 1996.
- Piaget, Jean/ Inhelder, Bärbel: Die Psychologie des Kindes. (8. Aufl. 2000). München 1972.
- Richter, Hans-Günther: Die Kinderzeichnung. Entwicklung Interpretation Ästhetik. (6. Nachdr. 1997). Düsseldorf 1987.
- Schiffer, Eckhard/ Schiffer, Heidrun: LernGesundheit. Lebensfreude und Lernfreude in der Schule und anderswo. Weinheim/ Basel 2004.
- Seidel, Christa: Leitlinien zur Interpretation der Kinderzeichnung. Praxisbezogene Anwendung in Diagnostik, Beratung, Förderung und Therapie. Journal Verlag, A-Lienz 2007.
[Guidelines for the Interpretation of Children`s drawings. Practice-related Application in Diagnostics, Consultating, Support and Therapy. Journal Verlag A-Lienz, Austria, 2007]



7TH HOPE CONGRESS MUNICH 2010

NOVEMBER 3 - 7, 2010

Seidel, Christa: Modell zur Interpretation von Kinderzeichnungen - seine Anwendung in Kunstunterricht und Kunsttherapie. In: Kirchner, Constanze/ Kirschenmann, Johannes/ Miller, Monika (Hrsg.): Kinderzeichnung und jugendkultureller Ausdruck. Kopaed 2010.

Skladny, Helene: Ästhetische Bildung und Erziehung in der Schule. Eine ideengeschichtliche Untersuchung von Pestalozzi bis zur Kunsterziehungsbewegung. München 2009.

Stritzker, Uschi/ Peez, Georg/ Kirchner, Constanze: Schmierer und erste Kritzel – Anfänge der Kinderzeichnung. Norderstedt (Books on Demand) 2008.

Wolpert, Winfried: Der „kleine Unterschied“ in der Kinderzeichnung. Eine Analyse von Kinderzeichnungen auf Grundlage der geschlechtsspezifischen Sozialisationsforschung und Symbolik der Bildsprache. <http://www.kunstlinks.de/material/wwolpert/unterschied.pdf>

Zaremba, Jutta: FanArt - Zu Praktiken und Ausdrucksformen aktueller JugendKunstOnline. In: Kirchner, Constanze/ Kirschenmann, Johannes/ Miller, Monika [Hrsg.]: Kinderzeichnung und jugendkultureller Ausdruck. Kopaed 2010.

20 Jahre Staatliche Schule für Kranke, München 1984-2004. Eine Festschrift.

Staatliche Schule für Kranke (Hrg.). München, Kölner Platz 1, Haus 22, 80804 München

[20 years Hospital School, Munich, 1984-2004. An anniversary publication by the Public Hospital School, Munich, (Ed.), Munich, Kölner Platz 1 -Haus 22, 80804 München]

Further information how to interpret children's drawings
on

<http://www.christa-seidel.de>
(German)

<http://www.childrensdrawings.org>
(English)