

Beyond the word, within the sign: Inquiry into pre-school children's handmade pictures about schooling

*Elisabet Malmström**

Abstract

This article reports reflections on a study addressing the role of a handmade picture in understanding pre-school children's ideas about their future school context. How is it possible to handle communication by pictures dealt with in the framework of a general theory of signs to signify inquiry? The underlying aim of the study and related report are to deepen educational insights into drawing as communication, co-operation and discovery with meaning. This purpose will contribute to a deeper understanding of the role of picture breakdown and a semiotic modal-specific qualifying conversation within integrative pedagogy. Interviews, picture explication as well as the children's and teachers' comments are my empirical resources. The result features the children's style and orientation to sign-mindedness, the pictures' composition, and children's discovery of the object with meaning and at the end a considered "figure of thought" from reconstruction the sign with a semio-cognitive potential.

Keywords: *socio-semiotics, mediation, learning, pre-school context*

Introduction and Purpose

Attending to the development of a child's pictorial competence is not often done in the same way a pre-school cares for linguistic competence. Therefore, exploring the picture as a "language of action" and a socio-cultural force is an area of interest. Today, we are not out to learn by heart like in old times, but society has instead led us to use "texts" to support co-operation and communication for learning, while children need to learn methods to discover meaning in texts of various kinds, such as handmade pictures. To understand focused intention, the meanings and messages place greater demands on both the learner and the teacher.

Children create pictures in everyday life. This article therefore deals with children's contextual pictorial representation and the importance of understanding that the logic of image-making depends on the image's use. This will yield insights into how pre-school children through drawing discover the object of schooling with meaning.

My point of departure is a wide conception of the text that deals with thinking about thinking related to the real world; picture work about schooling and the child's material use. A picture is a sign with potential within its expression of its content to

*Department of Teacher Education, Kristianstad University College. E-mail: elisabet.malmstrom@hkr.se

©Author. ISSN 2000-4508, pp.111–126

be a resource in meaning-making if it is produced, used and analysed in co-operation. The reconstruction of meaning can be seen in terms of both inter-subjective and intra-subjective significance. Today, the science of children's art inquiry in childhood education (see, for example, Kress, 2000; Taguchi, 2010) is very interesting as regards future improvement of the field. My contribution is that I highlight that Peirce's semiotic for art in education may allow a realistic recognition where freedom of thought in relation to the object is "real", and that it is also a matter of the child's constraints. I have used concepts that are themselves, despite the fact that society is changing and creating new ways to grasp (Liedman, 2006), to be integrated with mental phenomena.

The picture is seen as a resource and a conveyor of knowledge about any matter in focus; based on logic, from an understanding of social dynamics on the conventional and personal level and from an understanding of emotional aesthetics.

In the phenomenological approach to the definition of "picture", three instances are involved in pictorial consciousness (Sonesson 1989, 1992); the physical *picture thing*, the *picture subject* (in this study this is schooling) and the *picture object* (the depicted as conceived of schooling) is an intentional object. I thus attempt to contribute to the perspective of educational semiotics and pedagogy and deal with how a picture made from a question may signify the signified. In my view, when considering pictorial representation as a sign system it is important to not neglect the differences from other sign systems such as the written (verbal) one. This will accordingly inspire my position in pragmatism. Communication is understood in the way Dewey used it – as co-operation (Biesta, 1995). Thus this article deals with how mediation by sign action functions with complexity and rhetoric when mediation by a handmade picture leads to discovery of the schooling (object) with meaning. The main questions are: How is it possible to understand the positive possibility handmade pictures have in a pragmatic perspective, in terms of the child's discovery with meaning, built on semiotic resources equal epistemological status to the verbal? How do children visualise future schooling with meaning?

Background, Theoretical and Methodological Perspective

As suggested by several researchers (Lukens, 1896, p. 97; Vygotsky, 1935/1978, pp.112-113; Kress, 2000, p. 217), the handmade picture is understood as representation and communication on a level preceding written language. I define the verbal aspect as a narrow view of language use, as in Kjörup (2004, p. 15). This narrow and vertical view of the concept of the text, with the verbal on top, makes the handmade drawing, on the bottom, invisible by relations that may be asymmetrical, verbal or medial. A wide view means that the drawing is considered to be a kind of semiotic resource, but it may still not be used to the fullest extent possible. Gorrée (1994) embraces the scientific semiotic task of paying attention to the mutual interactions between the verbal and the non-verbal: "This aspectual

differentiation has important consequences for the varieties of the translation between them” (p. 227).

Piaget introduces his concept of *semiotic function* that involves representation in the broad sense identical with thought not only by language but also by means of, among others, drawing and symbolic play, characterising that which they have in common as the differentiation which separates the signifier and signified (Piaget, 1951, 1969). With the conceptual pair *semiotic function* and *sign* he wanted to highlight a difference to linguistics conceptual pair *symbol* and *sign*. Semiotic function as a concept is a more practical description of a symbolic and personal activity.

In the 1970s interactive competence in the child's drawing was focused on by Wertsch (1979, 1985, 1991) who took his starting point in Vygotsky's theories of language, fantasy and creativity in play as a social resource. The child successively develops a competence for expressing significance on one hand, and knowledge about by which graphic principles significance can be expressed on the other (Wertsch 1979, 1985, 1991). In this respect, language development is analogous to the process of complex formation in the mental development of the child, taking account of the self and the emotional aspects. In his thesis *The Psychology of Art*, Vygotskij emphasises that “Art is the social within us, and even if its action is performed by a single individual, it does not mean that its essence is individual” (Vygotsky, 1924/1971, p. 249). Here he means that signified features of *social* norms may be found in the signifier piece of art, as an aesthetic image of an object. This is in my view as much an *aesthetic* position. Vygotsky writes that play represents a synthesis of intellectual, emotional and volitional aspects and is future-oriented (Vygotskij, 1930/1995). The zone of proximal development (ZPD) is a concept Vygotsky created (1935/1978) and it actualises what a teacher must know about the pupil and what a pupil might get to know through good tuition, to provide the child with courage for an education that might change what children want (Ventimiglia, 2005).

I agree with Marnier and Örtengren (2003) that semiotics may contribute to the socio-cultural educational perspective. These scholars proclaim a horizontal concept of the text for the purpose of giving the same epistemological status to verbal and other semiotic sign-action to focus on the fact that a human being acts in a lifeworld by means of language but also through other semiotic resources.

As opposed to Saussure's language – orientedness, which subordinates the non-verbal to the verbal, Peirce gave equal epistemological status to verbal and nonverbal signs and sign systems (Gorlée, 1994, pp. 11- 12).

There might be situations in which it is easier for children to think about objects through colour and lines than to express themselves verbally. Sonesson (2000) says that Peirce is more generally often taken to say that, given the class of all existing signs, we can make a subdivision into three sub-classes, containing *icons*, *indices* and *symbols*. Although it is controversial, Sonesson argues that it of course is easy to

show that many signs may have iconic, indexical and symbolic features at the same time. He interprets that this seems to mean that “at least as applied to signs, iconicity, indexicality and symbolicity *do not separate things*, such as signs, but *relationships between things*, such as parts of signs. Peirce has said that the perfect sign should include iconic and indexical as well as symbolic traits” (Sonesson, 2000 p. 6). In my view, he writes about this in Volume 2:

A Symbol is a law, or regularity of the indefinite future./.../ Consequently, a constituent of a Symbol may be an Index, and a constituent may be an Icon (CP 2.293 p. 160).

The *symbol* is for Peirce conventional (CP 2.297 p. 167), but in this study it is *also* used in the European tradition, which means that it is personal (Piaget 1969; Sonesson, 1994).

The Dynamic and the Immediate Object

In Peircean semiotics the picture sign mediates between its object and its interpretants (Bergman, 2004). A picture might have iconic, indexical and symbolic features and its parts relate to each other, similarly to the parts of a written text.

From Peirce’s point of view, written texts are organic (that is growing) wholes characterized by dynamic interdependence of, and interaction between, their parts (Gorlée, 1994, p. 232).

According to Peirce, in the *sign-object-interpretant* triad, the object determines the sign and is qualified relative to an interpretant (Bergman, 2004, p. 274) as logic, energetic and emotional (Bergman, 2004; Colapietro, 1989). This means that the pictures made as an answer to a question deal with the object of the question. The qualities in pictures characterise the concrete field of human interpretation. It is possible to interpret Peirce’s basic sign relation in communicative terms (Bergman, 2004). Bergman uses the modal concept as an *immediate* object which is how the object is mediated in sign-action and in this study in the mediation of schooling. The concept of the *dynamic* object signifies all possible relations to the object and the process of learning in communicative relations in the schooling context and might as well be seen as corresponding to learning about the object and related to the child’s proximal zone of development. There may be no final interpretant as there is always something to learn about in relation to any object and which, in this case, more pictures from these children about schooling would show.

Learning the Self, a Semiotic Process

In socio-cultural mediation children and teachers need guidelines on how to link texts to a physical reality. This is in fact quite complex and learning the rules for translation is an essential part of modern education (Säljö, 2000). In *Collected Papers*¹, Peirce writes about a child’s *private self* when the child in interaction with others is aware

of its ignorance and that this feeling is different from *ego* and calls for action and learning (CP 5.235).

The drawing in this study is a semiotic resource of expressing the child's state of fixation concerning the child's idea about schooling. Peirce's texts (CP 5.233, CP 5.374) account for the link between the self and the world. The Self is itself a sign and a framework for understanding human subjectivity through the child's semiotic action and discovery with meaning.

The Study

An empirical study of 6-year-old Swedish children creating a picture imagining their future schooling was conducted (Ahlner Malmström, 1998) and all 990 children starting school in a town in the south of Sweden were included. The drawing task gave them a chance to express themselves in another medium as a resource to add to verbal language.

The question was to ascertain how a child expressed a feeling for, a relation to and an insight into his/her future schooling by sign-acting. The task given was framed as a seemingly dramatic question: *Next autumn you are going to start school. What do you think of when you are given this news? Tell me by drawing a picture!*

Method

A letter was sent to all pre-schools after a previous phone call asking for participation. The tasks were given to the children by their pre-school teachers. The 121 teachers involved were asked to write down comments the children made while making the pictures and they were asked to write down their own comments about how the drawing activity had proceeded. Twenty-five interviews with children were made by the author in four pre-schools and included the children's explication of a specific picture (see Figure 2) made by one child in the study. The interviewed children also prepared pictures but their pictures are not among the 45 (see below). The method of questioning and conversations about school made the children start thinking. Intentionality involves conscious or unconscious direction. The explicated meaning was carried out for the 45 pictures. Chosen by the author after reading the teachers' comments, they were made by those children who before starting the drawing activity had said they knew little or nothing about school and that they could not draw anything. The result was reconstructed built on the Peircean three modes of being, Firstness, Secondness and Thirdness (CP 3, CP 1). Firstness features the mere impression of schooling, Secondness signifies the relation between elements that feature the positive possibility of schooling and Thirdness features sign function, and intentionality; its content and qualified discovery with meaning to the context of schooling.

A holistic method (Arnheim, 1974; Sjölin, 1993) was used to focus on differences in the pictures' content, the signified. Social scaling (Andersson, 1994) as size scaling marked an expression of social value. Element polarisation (Nordström, 1985)

comparing different pictures or comparing elements within a picture was used to understand how the polarisation method might strengthen or weaken the content and qualified meaning and how intentionality may well be understood. With a Jungian analysis (Riedel, 1993) attention was paid to the picture's symbolic bearing on the future. All 768 pictures that were sent in were analysed inter-textually (Sjölin, 1993) whereby a group of pictures was compared from a specific aspect and they were also used as a frame of reference for the mentioned 45 pictures.

Results

The explication process of the immediate object shows children's target for the dynamical object. Four themes of content include children's intention related to the object, style and composition, orientation to sign-mindedness, the teachers' reactions to the act of drawing and, finally, my reconstruction of the semio-cognitive sign.

The Style and Composition

The children were found to use different approaches that vary from concrete graphics to a suggestion of a central perspective. This is illustrated by the two axes of the *style* (projective-indicating realism) and composition (symmetrical – asymmetrical). Not many children employ the approach that suggests a central perspective (15 out of 45). The children construct compositions that vary between symmetry and asymmetry. Twenty-eight pictures out of the 45 were symmetrical. An asymmetrical or a symmetrical composition could be combined with both styles. Children differentiate their signs to varying degrees according to their experience of school as a frame of reference. Style and composition is related to the conveyed message of school experiences and in some pictures is expressed in a very concrete manner. Not surprisingly, the projective style and the symmetric composition were the most common cases.

The children consciously or unconsciously represent their lifeworld founded on logic, social and emotional. The more school-like the pictures are, the more differentiated the choice of elements and their relations. An example of differentiation with reference to school is illustrated by comparing two pictures; in one picture the dominant element in the picture plane signifies a desk alone and the second signifies several desks arranged in a row. Both pictures refer to the school, but the second picture can be seen as more differentiated because it says something more about settled educational and learning conditions; that you have a peer sitting in front of you and another behind. If a picture is indistinct according to the social world of schooling, that is the room outside the picture room, it might still be important emotionally to the inner room of the self.

Children's Orientation to Sign-mindedness

The children in the study use the method of polarisation as a means of reflection in order to make the picture message distinct. They use this method on one hand when

they draw and on the other when they interpret the picture and discover with meaning (see Figure 2); the yellow and red stand for different kinds of feelings. Yellow is a happy colour. Red is more of an angry colour. The boy who drew the picture points at the red human beings and says: "The teacher is teaching and she is angry with me because I know nothing."

The interviewed children interpret the picture. Figure 2 and the children who interpret the mere impression of the picture object say:

One has yellow clothes and one has red.

The children who interpret the relation between the elements that feature the positive possibility of schooling and also interpret the sign function and qualified discovery with meaning say:

The boy thinks that it will be fun if he is the yellow one and that it will not be fun if he is the red one.

He is totally cross, the teacher. The other two are learning. They don't like it very much. He (points at the red-coloured one with the sad mouth) does not think that school is fun and he (points at the yellow-coloured one with the happy mouth) thinks that school is good. It is the happy one who made the picture.

Yellow is a happy colour and therefore he is happy. Red is a little bit an angry colour, I think. I think that she is scolding him. It is perhaps him, that he has done something silly. So he is angry because she is angry with him.

He is yellow because he is happy.

They sit in school and do maths or maybe read their homework.

The children discover lightness and experience it as a happy colour. In the context the children show how with self-regulation they use the colour to express content with meaning. The sun is a personal symbol and is used in 160 pictures. The children experience red colour intensely, and it signifies both positive and negative feelings. The pictures show that blood is red and might change the skin, and a person's face might become red if he/she is angry or ill.

The children mediate and make use of colours and lines in terms of social meaning in a pre-theoretical way. This is sometimes more obvious: When one child likes yellow and lilac together, he says "It becomes neat". The child does not know that the colours are complementary to each other and strengthen the colour effect of both. In the same way, red/green and blue/orange are complementary colours. The pictures show that blue-grey signifies that it is "getting dark" or that the school might be having a dull time. Thus, the children discover meaning as pre-theoretical knowledge about colour nuance and about the function of mixing colours. They differentiate a special expression corresponding to a special feeling of experience and express transitions from day to night or from happiness to dullness/sadness.

A dot can be an eye or on behalf of a deaf child it can signify an ear. The horizontal outline in this context might signify the pages in a closed book, and vertical lines that someone is turning over the pages of a book. It also signifies hair that stands up because the person is happy or angry. Another example of a vertical line is the teacher's finger pointing straight up to the blackboard arranged with numbers. In this school context this strengthened the message of mediation. The human being in the picture is the teacher! The cross on the human being to the right in Figure 2 combines the horizontal line and the vertical; all the examples to strengthen the intentional message, content and qualified meaning. It is bad not to know! Diagonals are used to signify a desk with a lid you can open. The children understand that diagonals express movement and not a static state. This function of the diagonal is part of pre-theoretical knowledge but becomes conscious in sign-action and in reflection upon the sign for the discovery with meaning.

A depicted hand used for either writing or to turn pages in a book or waving is made with roundness; fingers like a flower. A round filled-in circle is a hand that causes trouble. When children are younger the use of roundness is not differentiated, but in these examples it is used to differentiate moves, feeling and form. A mouth line is happy or sad and spirals are made to differentiate curly hair from straight.

The children in the study often create play-signs for written language. They use and draw eight different functional methods; signs in books, on the blackboard or in speech bubbles. One method is used when the child for example combines figures and letters and another method is a zigzag line. One child could use several conventional ways for conveying the idea of writing, for example, a proposition with subject and predicate, its name or nonsense signs. By using the same method twice or more the child might indicate a learning method.

The children in the study often create play-signs for mathematical language. They use three methods; systems of numbers on the blackboard, single numbers on the blackboard or numbers that have in some way a guiding function, such as the figure on the door.

Twenty-three of all children use the element of a clock. The clock in the drawings does not look like a modern one, which could be interpreted more as a symbol of starting school, in which more attention must be given to time limits. The significations differ depending on the placement of the clock; as depicted on the school building for all people to look at, or depicted on the wall in the classroom, guiding the children who are studying. People pay attention to time in our culture.

Children know at this age in general that an element which is far away in reality should be pictured as small in size. A profile indicates that a person has turned around to talk with another person. A distance between elements of grass and a human being suggests that a person is jumping up in the air and what is hiding the scene is in front of it. Children have an intuitive feeling for central perspective. What you cannot see in the picture still exists.

The Teachers' Reactions to the Act of Drawing

The teachers made observations about the children's comments and thoughts during the process of picture-making. The focus of the comments represented a wide variation. Confronted with the children's pictures, the teachers can gain new knowledge on which to reflect, as expressed in the following words:

Incredible that they could be thinking about so many different things! They even reflect on gender!

Remarkable what a child can gather from instruction!

To me it has been very interesting because this has made me understand a lot about development.

A general impression is that the children have a very blurred impression of schooling.

It is surprising that the children do not seem to think much about school.

The teachers comment on the study as follows: 52 teachers (43%) think that the drawing activity has advantages, 52 teachers (43%) think that the drawing activity has advantages and drawbacks and 17 (14 %) think that the drawing activity has drawbacks.

Has advantages. The teachers find the inquiry interesting. They like it and will repeat it with new children. The children find it very exciting and eagerly want to start drawing at once. The teachers seem surprised and happy about really seeing the children's thoughts in the pictures. The children show approval of the opportunity to choose among different colours and materials. They show a strong interest in discussing the subject which is sometimes more important than the picture they draw. The act releases their thoughts! The children are very interested and exert themselves to the utmost. They really focus on the subject. They seem to like the idea of starting school! The exercise inquiry is very positive; "The children are excited and I myself think it was interesting and fun!"

Has advantages and drawbacks. The teachers think that most of the children are quite motivated, and that the children talk much a lot their drawings if they have the opportunity to do so. But some children do not understand the instructions and have some difficulty in thinking further on and "they have to sit there thinking for a long time".

Has drawbacks. The teachers believe that most of the children think it is difficult. The instruction may be too abstract or the children may not have started to think about school yet. Their spontaneity and engagement in drawing faded away; "The children looked very thoughtful".

Semio-cognitive reconstruction of the sign

The tuition of children’s orientation to sign-mindedness calls for an explication process with answers to many questions about the outer context, the pictorial and the inner rooms of the mind and self. Using the pragmatic method the reconstruction matrix seen in Figure 1 is a “figure of thought” that frames the semio-cognitive meaning potential in mediation. The matrix is a combination of the parts in the Peircean sign triad (sign-object-interpretant); the sign (the symbol is used in both the conventional Peircean meaning and in the European tradition of personal meaning) and the interpretant (logic, energetic, emotional). The matrix models and supports the general purpose of pointing at possible connections to the object, between coding and decoding in qualified modal conversation. The mediation of schooling in the picture (see Figure 2) made by one of the children in the study connects *sign - action and mind*. The meaning potential is the tension between the image’s character levels, the child’s lifeworld and the teachers’ subject-specific discourse with the child.

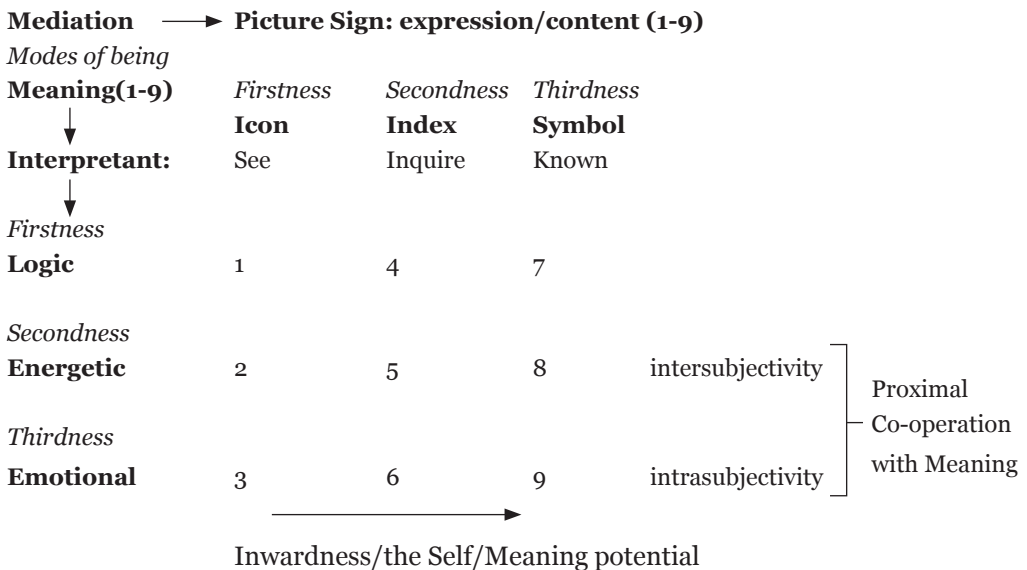


Figure 1. Matrix of mediation: The sign idea and base (represented by the cells) connect to the outer and inner worlds of representation. The orientation to sign-mindedness follows the “process of explication” 1-9, the dialogue about what is seen, what is possible to inquire and what is known:

Based on logic 1, 4, 7 - Explication from what is possible from seeing.

From an understanding of social dynamics on the conventional and personal level 2, 5, 8 - Explication from what is possible to inquire.

From an understanding of emotional aesthetics 3, 6, 9 - Explication from what is possible knowledge about the culture and intra-personal.

The example of the drawing (see Figure 2) signifies human beings, the teacher’s and the pupils’ desks, the sun, the lamp, a cross and the walls and the ceiling/roof of a room/ house and an aerial. The human beings are painted in red and yellow (1). The graphic

style is a suggestion of a central perspective and a symmetrical composition. The child seems to have the ability to draw and has a confidence in drawing, using fantasy in lines and colours (2). An explication of a preliminary content might be that the child has contradictory feelings; which one can see, for example, from the respectively lined out sad/angry and happy mouths (3). The relation between the elements is connected by means of the school work inside the school building and a preliminary explicated unpleasant meaning pertaining to it (4). The dominating elements are the letters in the balloon and the teacher's and the pupils' desks. The child drew himself in red, to the right; "The teacher is angry with me because I know nothing" (5). The composition of elements, notably the polarisation of colours and lines, signifies that the child has contradictory feelings regarding schooling (6). The letters could be discovered with meaning, a symbol that signifies learning to write or read. The cross on the red human being to the right might signify the badness of not knowing (7). But the child might even think that schooling will be fun, as might be suggested by the yellow triad elements corresponding to the yellow sun, the yellow shine from the lamp and the yellow happy human being where the human being mediates between the sun's world of natural energy and the technique world of electrical energy (8). The child is occupied with how he could value schooling with meaning. He polarises with meaning in both positive and negative thinking. The picture is a good but not an unusual example of distinct polarisation within lines, colours and symbol use. The child will hopefully acquire the opportunity to experience what good schooling is, as symbolised through the yellow triad of the three icons, the human figure, the lamp and the sun. The triad involves conscious or non-conscious directedness intended for the future (9).

Discussion

The question makes the children start thinking (Ahlner Malmström, 1998). The inquiry starts the process of discovery with meaning. The questioning task involving the school subject is a problem-solving inquiry, and the teachers help the children interpret the question of inquiry. Teachers often hear children say they cannot draw or they do not know what to do or how to do it. But 79% of the children in the study realise their ideas or find out thinking during the process of drawing. Often the interpretation during drawing time and process changes the intentionality and content with meaning (Freeman 1972, 1996). The world of schooling is dynamic and children sometimes start their sign-action in a very confused way. The child discovers the object with meaning during the process of drawing. In other words, the dynamic object is made immediate to the child during the activity of inquiry, including co-operation with peers and the teacher (Bergman, 2004). The children are realising a sign-acting activity and the problem caused them to think, struggle and reflect (Peirce, CP 5; Säljö 2000). The 45 pictures in this study were selected because they were made by children who felt they were ignorant about schooling and about drawing. Their pictures show what the future school might mean to them.

Combining the verbal and the pictorial, the children represent their ideas of schooling with more or less differentiation. The picture, considered as part of an integrative pedagogical conversation, transforms the child to new thinking and learning. The children start to reflect on their thinking about future school by means of the picture as a conveyor of knowledge about schooling. To paint the sun gives life wings and protects play and happiness. It is through what the sun symbol signifies that the self takes form (Brodin, 1982), related to the European tradition of personal meaning. Pertaining to Peirce, the yellow triad including the sun is thirdness and representational thought. With more or less approximate certainty it denotes the object (Hoopes, 1991) of schooling. The result shows that children make use of colours and lines in terms of social meaning in a pre-theoretical way (Habermas, 1990). Horizontal and vertical lines are not easy to draw (Arnheim, 1974), but children give them high priority so as to make a differentiation between different meanings. I have come to the conclusion that children at this age use pictures as organic wholes when special dominant elements, colours and lines are used to strengthen messages and to discover the object of schooling with meaning. Children tap into an intuitive feeling to combine composition, complementary colours and different hardnesses and blacknesses of line. They differentiate lines and colours in an expressive way. Much of the child's expression is made in an *intuitive* intention and much is made in a *focused* intention. One dominant element is more often chosen intentionally to express the preliminary idea. Often the interpretation during drawing time and process changes the intentionality and content with meaning. Children often interpret with meaning what they have expressed after they have finished their pictures and start to reflect upon them; the picture suggests the thought: "Here I am jumping high. You can see that the grass is far underneath."

The interpretation stemming from the children's drawing activities deepens insights into how drawing may constitute a way to convey spontaneous categorisations (Sonesson, 1992; Kress, 2000) about future schooling. The study gives an insight into the way in which drawing activity communicates dominant elements, personal and social values as well as learning strategies on a meta-cognitive level. To discover meaning in different texts means to form an identity (Säljö, 2000). But in contrast with the theory of semiotics, Säljö subordinates the picture sign to the verbal sign. His opinion is that "a picture theory of the meaning of linguistic expression is totally inadequate" (p. 84). My opinion is that he does not treat the picture from its socio-semiotic complexity or its rhetoric resources. Children's pictures help children understand what they and other children immediately think about schooling in different aspects, as made aware of the dynamic object.

From the framework of a general theory of signs I have highlighted the wide picture-text through children's pictures of schooling and a considered reconstruction of the sign, a figure of thought signifying the picture sign from a semi-cognitive potential. The matrix figure of thought frames the pictorial with meaning in relation

to theme, mind and the self in a socio-cognitive and sign-specific aesthetic way when it comes to pedagogy and rhetoric. It is an aid to better guide learning with attention to aesthetics and the three human worlds, the logic objective world of facts, the energetic dynamic social world and the emotional expressive world. It could be helpful in subject-specific qualifying conversation about any sign-act-thought in pre-school (picture, sculpture, piece of music) and in analysing developmental pictorial style and self processes (Malmström, 2006, 2007), tutorial processes and modal competence.

The principal aim of this article has been to deepen insights into drawing as communication by focusing on the picture sign (signifier/signified) in a school context and to better understand how drawings made by children relate to their denotations and aesthetically connote personal, social and aesthetic values. Thus it will hopefully serve to illuminate the role of picture analysis and modal conversation about hand-drawn pictures in Art education. Admittedly, these questions have not been pursued to their limits, which would hardly be feasible within the confines of a single study.

Nonetheless, I think that the approach to semiotic mediation by means of the picture sign as well as the dynamic and the immediate object constitute valuable “steps” on the way to appreciating the possibilities of the socio-semiotic project within education including a future aim beyond formalism. Artistic formalism is often the aim today and that is why the cognitive and the socio-cultural perspectives have to co-operate. Other important insights stemming from this article concern the child’s aesthetic learning process as a conveyor of knowledge and the stress on the relevance of the teacher’s reactions and tutorial competence such as those built on pragmatism, beyond formalism. Further studies are needed on subjects such as: How do teachers act in response to the different levels of explication? How may *proximal communication* between children, children’s pictures and teachers develop to stay more stable? It is important to inquire into discourses of *how* qualifying conversations are built on; freedom of participation and acknowledgement by sign-acting, communication and openness to all possible perspectives, as well as awareness of the critical power of the verbal communication and the “positive possibility” inherent in the horizontal subject-specific view on the concept of text.

In the modern world pictures in all different forms have become significant factors in everyday life. My impression is that if children’s pictures are given a serious part to play in contemporary education when it comes to rhetoric, aesthetics would hopefully not then be taken for granted.

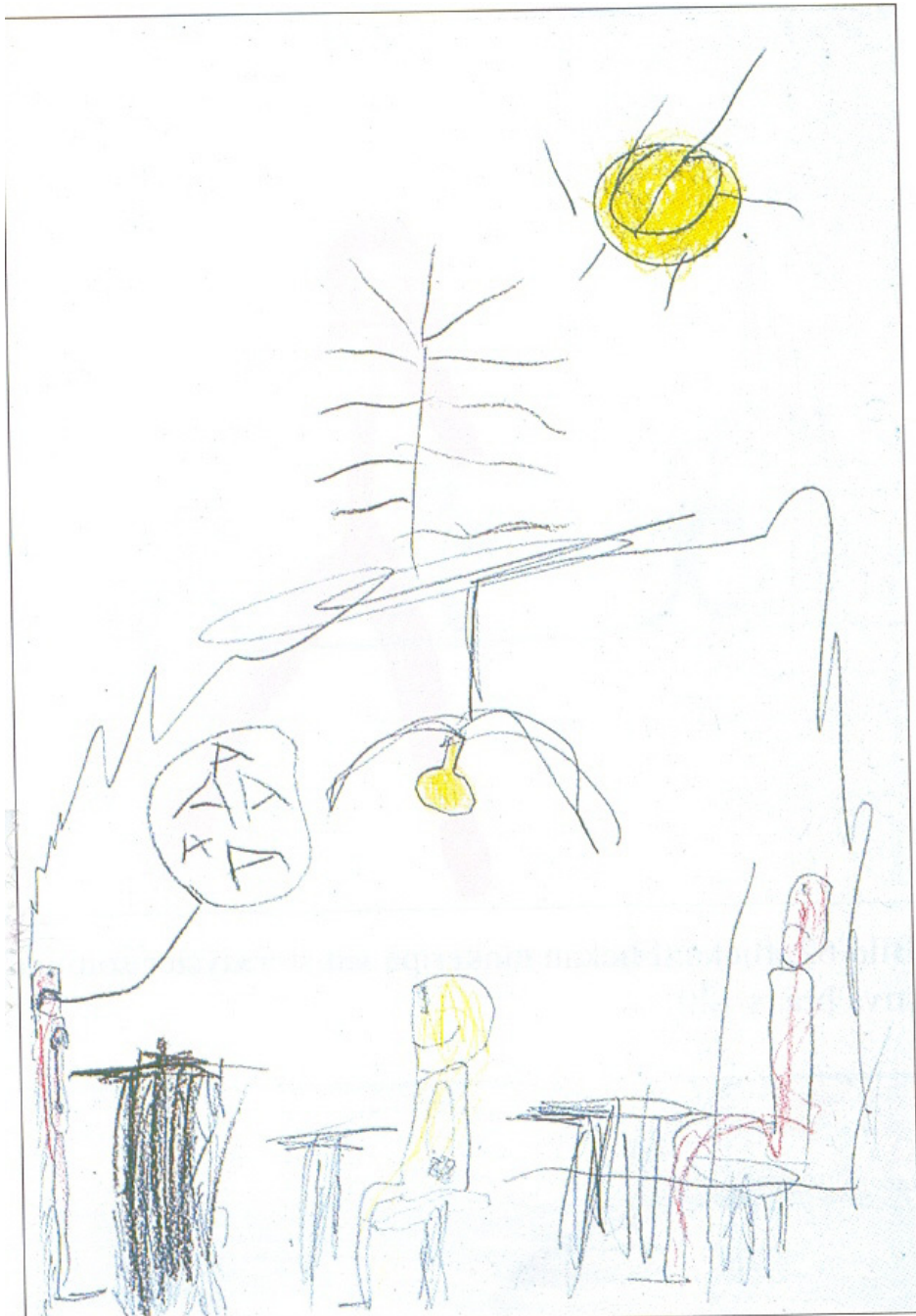


Figure 2. The boy who drew the picture points at the red humans and says “The teacher is teaching and she is angry with me because I know nothing.”

Elisabet Malmström holds a PhD in Education and works as a Senior Lecturer of Education at the Department of Teacher Education, Kristianstad University in Sweden. Her research area is education with a focus on aesthetics and image.

E-mail: elisabet.malmstrom@hkr.se

References

- Ahlner Malmström, E. (1998) *En analys av sexåringars bildspråk – bilder av skolan* [An explanation of a six-year-old child's pictorial language – pictures about school; in Swedish]. Lund, Sweden: Lund University Press.
- Andersson, S. (1994) *Social scaling and children's graphic strategies: A comparative study of children's drawings in three cultures*. Linköping, Sweden: Linköping University.
- Arnheim, R. (1974) *Art and visual perception*. Berkeley: University of California Press.
- Bergman, M. (2004) *Fields of signification- Explorations in Charles S. Peirce's theory of signs*. Helsinki: University of Helsinki.
- Biesta, G. (1995) Pragmatism as a Pedagogy of Communicative Action. I: Jim Garrison (Ed.) *The New Scholarship on Dewey*. Netherlands, Kluwer Academic Press, 105-122
- Brodin, K. (1982) *Barnbild och bildspråk* [Children's pictures and pictorial language; in Swedish]. Stockholm: Almqvist & Wiksell förlag AB.
- Colapietro, V. M. (1989) *Peirce's approach to the self – A semiotic perspective on human subjectivity*. Albany: State University of New York Press.
- Freeman, N. H. (1972) Process and product in children's drawing. *Perception* 1, 123 - 140.
- Freeman, N. H. (1996) Art learning in developmental perspective. *Journal of Art Design Education*, 15, 125-131.
- Gorlée, D. L. (1994) *Semiotics and the problem of translation*. Amsterdam: Atlanta GA.
- Habermas, J. (1990) *Kommunikativt handlande- texter om språk, rationalitet och samhälle* [Communication in action: Texts about language, rationality and society; in Swedish]. Göteborg, Sweden: Daidalos.
- Hoopes, J. (1991) *Peirce on Signs*. North Carolina: The University of North Carolina Press.
- Kjørup, S. (2004) *Semiotik* [Semiotics; in Swedish]. Lund, Sweden: Studentlitteratur.
- Kress, G. (2000) Representation, lärande och subjektivitet: Ett socialsemiotiskt perspektiv [Representation, learning and subjectivity: A socio-semiotic perspective; in Swedish]. In J. Bjerg (2000). *Pedagogik*. Stockholm: Liber.
- Lenz Taguchi, H. (2010) *Going Beyond the Theory/Practice Divide in Early Childhood Education*. USA and Canada: Routledge
- Liedman, S-E. (2006) *Stenarna i själen – form och materia från antiken till idag* [The rocks in the soul - the form and matter from ancient times to today; in Swedish]. Finland: Albert Bonniers' Publisher.
- Lukens, H. T. (1896) A study of children's drawings in the early years. *The Pedagogical Seminary*, 4, 79-110
- Malmström, E. (2006) *Estetisk pedagogik och lärande- processer i bildskapandet, delaktighet och erkännande* [Educational aesthetics and learning-processes in aesthetic learning, participation and acknowledgement; in Swedish]. Stockholm: Carlssons
- Malmström, E. (2007) *Reflections on a didactical socio-semiotic orientation to sign-mindedness and learning- Peirce's Semiotic and Pedagogy*. 8th Conference of the AISV-IAVS (Association internationale de sémiotique visuelle, International Association for Visual Semiotics, Asociación internacional de semiótica visual) Istanbul, 29 May – 2 June 2007, *Papers Volume I*. Istanbul: Kültür Üniversitesi, ISBN: 978-975-6957-63-9
- Marner, A. & Örtengren, H. (2003) En kulturskola för alla – estetiska ämnen och läroprocesser i ett mediespecifikt och medieneutralt perspektiv [One cultural school for all: Aesthetic subjects and learning processes in a media-specific and a media-neutral perspective; in Swedish]. *Forskning i fokus, nr 16*. Myndigheten för skolutveckling.

- Nordström, G. Z. (1985) *Bildspråkets funktioner* [The function of the pictorial; in Swedish]. In P. Cornell, S. Dunér, T. Millroth, G. Z. Nordström, Ö. Roth-Lindberg, *Bildanalys – teorier, metoder och begrepp*. Stockholm: Gidlunds.
- Peirce, C. S. (1931-1958) *Collected Papers of Charles Sanders Peirce* (CP) Charles Hartshorne, Paul Weiss, and Arthur W. Burks (eds.)(8 volumes), (In the article references are made to CP, followed by the number of volume and paragraph)
- Piaget, J. (1951) *Play, Dreams and Imitation in Childhood*. London: Routledge & Kegan Paul.
- Piaget, J. & Inhelder, B.(1969) *The Psychology of the Child*. London: Routledge & Kegan Paul.
- Riedel, I. (1993) *Bildspråket* [Bilder in therapie, kunst und religion; in Swedish]. Stuttgart: Kreutz Verlag.
- Sjölin, J. (1993) *Att tolka bilder* [To explicate pictures; in Swedish]. Lund, Sweden: Studentlitteratur.
- Sonesson, G. (1989) *Pictorial concepts – Inquiries into the semiotic heritage and its relevance for the analysis of the visual world*. Lund, Sweden: Lund University Press
- Sonesson, G. (1992) *Bildbetydelser* [Pictorial explication; in Swedish]. Lund, Sweden: Studentlitteratur.
- Sonesson, G. (1994) Prologomena to a semiotic analysis of prehistoric visual displays. *Semiotica*, 100: 3/4, July 1994, 267-339.
- Sonesson, G. (2000) *From Iconicity to Pictoriality – A view from ecological semiotics*. (publishing in *VISIO*, 10 Š) http://www.arthist.lu.se/kultsem/sonesson/CV_gs.html#Other__scientific
- Ventimiglia, M. (2005) Three educational orientations: A Peircean perspective on education and the growth of the self. *Studies in Philosophy and Education*, 2005; 24(3): 291-308.
- Vygotsky, L. (1924/1971) *The Psychology of Art*. Cambridge: The M.I.T. Press.
- Vygotskij, L. (1930/ 1995) *Fantasi och kreativitet i barndomen* [Fantasy and creativity in childhood; in Swedish]. Göteborg, Sweden: Daidalos.
- Vygotsky, L. (1935/1978) *Mind and Society*. Cambridge: Harvard University.
- Wertsch, J. V. (1979) From social interaction to higher psychological processes. *Human Development* 22:1-2
- Wertsch, J. V. (1985) The semiotic mediation of mental life: L.S. Vygotsky and M.M. Bakhtin. In J. V. Wertsch *Language thought and language: Advances in the study of Cognition*. New York: Academic Press.
- Wertsch, J. V. (1991) *Voices of the mind – A socio-cultural approach to mediated action*. Cambridge: Harvard University Press.

Endnotes

- ¹ The *Collected Papers of Charles Sanders Peirce* is quoted as CP, followed by the volume and paragraph number.