

# A REALISTIC NOSTALGIA FOR THE FUTURE – EXPLORING MATERIALS AND MATERIAL UTTERINGS IN A PRESCHOOL FOR SUSTAINABILITY

In Nordic kindergarten, activities with materials have had a significant position historically. The Norwegian term “forming” includes both the material-based craftwork and the art area. Research shows that creative activity with materials constitutes a smaller part of the content in the kindergarten than before. The aim of this article is 1) to provide a historical overview of the subject forming, 2) to put this retrospectively into an epistemological context that points towards 3) an actualization in relation to the UN Sustainability Goals and children’s right to expression according to the UN Convention. The article is based on an ethnographic study in kindergarten and an article on the topic written in Norwegian (Carlsen, 2015, 2022). The discussion illuminates how the anchoring of forming in natural and cultural materials is lifted into a sustainability perspective and how a shift in theoretical perspectives opens new understandings and contributes to the kindergarten’s content.

Keywords: forming, arts and crafts, materials, children’s utterings, sustainability

## INTRODUCTION

Activities with materials and tools have had a great significance in Norwegian and Nordic preschool pedagogy. The term “forming”, Arts and Crafts in English, has for long been the subject term in Norwegian preschool, and still is in preschool teacher education. The term is unique to Norway and exclusively linked to education within the field. Forming is included in the definition of “sloyd”, which covers a variety of terms in the Nordic context, as described by the Nordic Forum for Research and Development in Educational Sloyd, NordFo (see NordFo, n.d.). In this article, I use the term forming for Arts and Crafts, because it expresses connotations close to children’s actions with materials, rather than to the art field and cultural artifacts in general. However, the content of the term forming is perceived differently in the preschools, ranging from pure employment and adult-

led making of predetermined objects to bodily negotiation processes with materials (Fredriksen, 2011) and creative pictorial processes and children’s visual utterings. This article is based on an ethnographic study in kindergarten (Carlsen, 2015), and is a further elaboration on the research work in my Ph.D-thesis *Forming i barnehagen i lys av Reggio Emiliias atelierkultur/Arts and crafts in kindergarten in the light of Reggio Emilia’s atelier culture* (Carlsen, 2015), and a rework of an article about the subject forming, written in Norwegian (Carlsen, 2022). The study was carried out with visual ethnography as methodological approach during a six months’ stay in one Norwegian preschool. The data material was constructed with fieldnotes, photos and video-recordings, as well as group interviews with staff members. A thorough review of methodological and methodical aspects of the study can be found in the article “Visual ethnography as tool in exploring children’s embodied making processes in preprimary education” (Carlsen, 2018).

Observation of activities in preschools raises questions which this article seeks to explore: What position does children’s drawing and aesthetic activity with materials have in preschools today, compared to previous preschool practices? What opportunities does the preschool provide for children’s exploring and experimenting with varied materials? What roles does creative activities with materials play in children’s formulations about their everyday life?

In the first part of the article, I describe historical key shifts in the content and understanding of the educational subject forming in preschool and preschool teacher education. This part is based on an analysis of state management documents, historical documents, and research on the subject. Part two touches epistemological perspectives on the preschool’s educational activities considering the changes described. The third part of the article points at a future perspective which goes back to the roots – literally – with a renewed look at materials in preschool, and how the “old” natural- and cultural materials can be lifted into a forward-looking sustainability perspective and challenge, thus actualizing the exploratory and creative nature of the subject forming.

## SOME HISTORICAL LINES

Is forming, one of the historic pillars of the preschool pedagogy, on its way out of preschool, or on its way in, with renewed recognition of the importance of the subject? The question contains an assertion about a close connection between preschool pedagogy and the subject of forming, and the answer requires an understanding of both the nature and history of the educational subject, and of the development of the preschool. I use mostly the term “preschool” in this text because the Icelandic word *leikskóli* is translated into English using this term. The Norwegian term *barnehage* is a direct translation from the origin German term *kindergarten*, and in the historical part of the text I use that term to connect to this. “Preschool” suggests the connotation that the institution for children up to six is a pre-existence, before the real school begins, without describing the content and character of the setting as in *leikskóli*. The term “kindergarten” relates to the gardener metaphor in former growth pedagogy, where children are seen as fragile plants, protected, and nurtured by the teacher. But the term could also imply new connections with nature

and growing life. Of these three terms *leikskóli* seems to be the most appropriate term for the institution in a pedagogical context today.

The aesthetic subjects have significantly less place in children's everyday life in preschool than previously (Carlsen, 2015; Gulpinar et al., 2016; Waterhouse, 2020; Østrem et al., 2009), and the subject of forming is drastically reduced in preschool teacher training. When I started teaching preschool students in Norway in 1985, the subject had approximately 300 annual hours spread over two academic years, whereas the part included in the compulsory course for all preschool teacher students was around 40 annual hours in 2020. The number will vary between different institutions (Carlsen, 2015). In the framework plan for the kindergarten (Utdanningsdirektoratet, 2017) and in preschool teacher training, forming has disappeared as a separate subject and is subsumed under the knowledge area of art, culture, creativity (no. Kunst, Kultur, Kreativitet, KKK). In the framework plan, the term "forming" no longer exists, while in teacher education it remains part of the KKK together with music and drama. The choice is based on the argument of a relationship between aesthetic subjects and their role in young children's holistic learning processes. In teacher education this can be problematic. The students need knowledge and skills in the subject and its contribution to preschool life and children's exploration, play and formation, as Ann-Hege Lorvik Waterhouse writes in the article "Forming – an unnamed subject" (Waterhouse, 2020). The conception that children construct knowledge in and through practical action with materials and tools has a solid foundation in preschool teacher training, and historically the subject forming has had a central place in the preschool.

## FORMING IN THE TRADITIONS OF ASYLUM AND KINDERGARTEN

Forming is developed in interaction with two institutional cultures that have shaped the kindergarten's uniqueness: asylum tradition and kindergarten tradition (Balke, 1995; Bleken, 2007; Greve, 2010). Forming in the kindergarten also has a clear connection to the school subject, with a common development as a process concept and as an educational subject.

Children's asylums were established all over Europe, including the Nordic countries, with the industrial revolution and women's factory work. Through the asylum institutions large groups of children were gathered and received food and hygienic care. In many of the asylums, craft training and production were part of everyday life. The knitting schools, established by Johann Friederich Oberlin (1740–1826), show the starting point of a line of development in kindergarten subject forming, which can be linked to employment of the children, making various products. Shoemaker- and carpentry work, spinning, knitting, and sewing were meant to teach the children skills to take care of themselves and their families, and provide knowledge and dexterity for future home industries. In the asylums, older children helped younger ones, and the organized activities functioned as disciplinary tool. This made it possible to take care of many children at the same time.

The usefulness of craft production, however, was not the main purpose of Friederich Wilhelm August Fröbel's (1782–1852) kindergartens. The handling of materials and tools

was seen as an important element in children’s play and development. The aim was “development and formation of the human being based on three fields of force, namely *action, feeling* and *cognition*.” (Balke, 1995, p. 97, italics in original, author’s translation). Play, learning and work were considered fundamental elements in a child’s life, and Fröbel developed the “Fröbel gifts” to realize the educational aims. Fröbel’s pedagogy is a basis for understanding the kindergarten subject forming and the subject in Norwegian schools as it was developed during the first half of the 20th century. Play and learning, action, feeling, and cognition are central concepts (Johansson, 2007).

Fröbel mentions many materials and tools suitable for the kindergarten’s educational work. Through observation of children’s creative play with materials in interaction with adults, the various functions of the materials were defined. Balke (1995) describes a contradiction in Fröbel’s work between the child’s free expression and detailed descriptions of what he called occupations in a late phase. This contradiction has developed in the forming activities in kindergarten, and exercises according to set models have lived side by side with creative material exploration.

The founder of the nursery school in England, Margareth McMillan (1860–1931) created a sociopolitical and educational life work together with her sister. The objective was to “create hope for the poorest, health for the sick children and love for the neglected. They wanted to give everyone an educational opportunity that accommodated all these qualities” (Balke, 1995, p. 152, author’s translation). McMillan wanted to achieve those goals through beautiful surroundings, varied sensory impressions and creative activity, clearly expressed through aesthetic values. Her practice relates to the art education movement, inspired among others by John Ruskin and William Morris. McMillan was well informed about scientific research relating to children’s drawings in Europe and the USA, and contributed to information about, and enthusiasm for the art education trends in Austria, Germany, and England (Andreassen, 1961; Borgen, 1995). In the nursery school, McMillan emphasized the environment, both inside buildings and outside in a varied and inviting garden with plants and animals. This was to awaken the child’s feelings through subconscious sensory impressions “as it was the feeling that carried the incipient thinking” (Balke, 1995, p. 148, author’s translation).

From the beginning of the 20th century, Nordic preschool teachers turned their interest to Fröbel pedagogy as well as forming based on the English nursery school tradition and the art education movement. This was particularly relevant for the preparation of the physical environment for creative activities, and the role natural materials were given in Norwegian kindergartens.

The research questions I have asked in the introduction can be closely linked to the cradle of kindergarten pedagogy and the subject forming in Norway. In what follows, I make a journey through various phases in the ideological and theoretical shifts of education in forming from the end of the 19th century, to link the current situation to earlier thinking about creative activities and the importance of materials in children’s everyday lives.

## FORMING - A SUBJECT OF SKILLS AND OF AESTHETIC EXPRESSION

The kindergarten subject forming is a result of the historical development of kindergarten pedagogy but also clearly influenced by the school subject's ideological and didactic changes from the skill subjects drawing, boy's craftwork with wood and metal, and girl's needlework, into forming (Kjosavik, 1998, 2001). The subject forming in school and teacher training was well established with weight on aesthetic expression before the development of preschools in Norway gained momentum from the 1970s. Through the training of teachers for school and preschool at the same educational sites, forming as a school subject also came to influence the teaching of preschool teacher students. In the preschool both teacher-educated and uneducated staff left a mark on how forming was understood and practised (Carlsen, 2015).

### Art pedagogy and reform pedagogy

Forming as a pedagogical idea and school subject was developed in Norway at the same time as educational concepts from reform pedagogy, activity pedagogy and art pedagogy characterized the debate (Andreassen, 1961; Borgen, 1995; Halvorsen, 1995; Kjosavik, 1998, 2001). In the beginning of the 20th century, there were two movements, psychological-scientific and artistic, which both focused on the importance of giving individual children opportunities to express themselves with uniqueness, developmentally and psychologically. These movements had implications for educational theory in general and influenced the preschool and the development of skills subjects in school. The reform pedagogy movement and work school pedagogy with John Dewey and Georg Kerschensteiner saw practical action as the basis for learning and reform pedagogy emphasized the necessity of building on children's own experiences in teaching. Helga Eng's research on children's pictures (Eng, 1918, 1926) gained significant importance together with art education's recognition of children's pictures as aesthetic expressions. This gave momentum to future target formulations on aesthetic sensitivity relating to the school subject and the education of school- and preschool teachers. In the rise of the subject forming in schools, it is possible to see parallels to the kindergarten tradition of process-oriented exploration with materials in well prepared environments.

### The critical image pedagogy

Influence from the critical image pedagogy, dating from 1970, when Gert Z. Nordström and Christer Romilson published the book *Bilden, skolan och s amh allet* (1970), created strong waves in arts and crafts pedagogy in the Nordic countries. The authors criticized the anchoring of teaching about children's drawings in developmental psychology, and promoted a sociological and politicized methodology, the polarizing method, with a clear focus on the mass media image. The Danish variant of critical image pedagogy gained influence on preschool activities in a more specific way through Hanne and Rolf K ohler, Kristian Pedersen (K ohler & Pedersen, 1978) and their colleagues. The themes these teachers and researchers worked on were based on children's lives both through their direct experiences and indirect encounters with cultural images in their own environments.

## Trageton's workshop pedagogy

Arne Trageton, teacher of pedagogy at the teacher training school of Stord in the West of Norway, investigated the three-dimensional aspect of children's play through his workshop pedagogy (Trageton & Gullberg, 1986). He built his didactic system on Piaget's description of children's cognitive development. The 4-dimensional movement and role play, and children's daily experiences led to the workshop with 3-dimensional representations in various materials. The results of the 3-dimensional work were, in the next sequence of the teaching process, elaborated in 2-dimensional images. Depending on the age and maturity of the children, the last level of abstraction introduced letters and numbers. In this context, a traditional gender-specific technical and material division became irrelevant, as did the division into a technical problem-solving and a figurative-linguistic communicating part of forming. All types of materials, tools and techniques serve children's development of concepts, from the concrete to the abstract. Trageton's categorization of media for creative play contributed to a systematic sorting of reusable and traditional materials used in forming. Workshop pedagogy was taught in preschool teacher training and opened new practices in many preschools. Trageton's research and writings are still referenced in research with themes related to environment, materials, and creative learning (Carlsen, 2015; Fredriksen, 2011; Nordin-Hultman, 2005).

## Aesthetic learning processes

Arne Marius Samuelsen and I published the book *Inntrykk og uttrykk: Estetiske fagområder i barnehagen* [Impressions and expressions, aesthetic subject areas in kindergarten] in 1988. The book remained important in preschool teacher training for nearly 30 years. We criticized the workshop pedagogy to the extent that it set aside other forms of understanding than the cognitive. Furthermore, a practice based on the workshop pedagogy could legitimize the use of recycled materials as sufficient for children's creative activities in preschool, if such an activity displaced the high-quality materials in forming. From the mid-1980s, several development projects focusing on content were initiated in preschools and supported by the Ministry of Administration and Family. Among the projects that received support was "Aesthetic subject-areas in kindergarten" (Samuelsen, 1986). Alexander Baumgarten's definition of aesthetics as the science of sensitive cognition, derived from the Greek word; *aistheticos*, sensing (Bale, 2009; Carlsen & Samuelsen, 1988), laid the foundation for a fruitful dialogue across Norwegian institutions for preschool teacher education. The theories of Malcolm Ross (1978, 1984) and Robert Witkin (1974) contributed as a base for work with aesthetic subjects.

## Influence from Reggio Emilia's atelier culture

Attention to children's aesthetic learning processes coincided in time with the remarkable pedagogical philosophy in municipal schools and centres in the Italian town Reggio Emilia. In 1981; the slide series and the book *Ett barn har hundre språk* (Wallin et al., 1981) were introduced in the Nordic preschool field. The connection between children's actions with

materials and the development of knowledge through investigative learning processes in Reggio Emilia has clear parallels to forming and correspond to the social-pedagogical anchoring of preschool pedagogy in the Nordic countries. The metaphor “The hundred languages of children”, formulated by Loris Malaguzzi, the first leader of the municipal schools for preschool children in Reggio Emilia, an educational philosopher and educational strategist, entered the educational vocabulary as a fixed term. The atelier, a rich workshop environment in all Reggio Emilia’s preschools and centres, was established to contribute to the exploration and development of children’s language skills to create meaning and provide opportunities for diverse expressions. Knowledge about Reggio Emilia’s educational practice, philosophy and epistemological foundation has had, and still has, a significant impact on the practice in preschools, on governance documents, and in relation to forming as well as similar areas in preschool teacher training throughout the Nordic countries. Several researchers have worked with the inspiration from Reggio Emilia, among many others: Carlsen (2013, 2015, 2019), Dahlberg & Moss (2005, 2006), Dahlberg, Moss & Pence (1999), Häikiö (2007), Lind (2010).

### **Art, culture, creativity**

The Norwegian school curriculum L97 (Det kongelige kirke-, utdannings- og forskningsdepartement, 1996) achieved a remarkable change in the primary- and lower secondary school in the direction of a more culture-centred education. The curriculum changed the name of the subject from forming to arts and crafts. This change signalled a movement from a subject where the children’s processes are in focus to a subject where the established art and culture occupy a central position. The two parts in the subject term form-ing indicate that “form” is combined with action, which in Norwegian is “handling”, with the same ending as in the English word making, make-ing. The name change led to a heated debate among professionals, both in teacher training and in the schools. This change in the school curriculum strongly influenced developments in the framework plan for preschools from 2006 onwards. Forming as term is gone, and parts of the content are incorporated into an integrated subject-area called “Art, culture, creativity”, without mentioning forming. I see this as a problematic shift: There is no evidence basis for reserving the concept of creativity to the field of art and culture, as the name of the subject-area now is named. The content of the school subject term arts and crafts seems problematic in preschool, because it does not cover the special nature of the 1-5-year-old children’s material explorations and experimental drawings and symbolic language. The former common term “aesthetic subjects” which included forming, drama and music, has mainly been replaced by “art subjects” in literature aimed at preschool teacher training (e.g., Bakke et al., 2011; Østern, 2013). This means that the materials and craft elements that historically have played an important role in preschool education, also receive less theoretical attention. Furthermore, this underlines the tendency, in the framework plan for preschools, of listing different artistic and cultural forms of expression in society, taken from school curriculum terminology. Facilitating small children’s experiences of art has, however, been part of the content of forming in preschool and school throughout the subject’s history. But if art, culture and creativity mainly contribute to art-orientation

activities in the preschool, the focus shifts from the children as creators of culture to adults' communication of artistic and cultural impressions from the existing art world to the children.

## Materiality and meaning-making

Materials and suitable tools have had a central place in children's play throughout preschool history. Fröbel's gifts and McMillan's use of natural materials outside and indoor in the preschool's physical environment laid a foundation for looking at the materials themselves as a basic educational tool. A constantly tight economy made it necessary for the preschools to use "free", or recycled materials to a significant extent. In the 1970's and 1980's, these materials became so strongly associated with the term "forming" to many people in the educational field, that the subject's aesthetic qualities were partly blurred. The free materials, in use since the beginning of the kindergarten history, were at the same time theoretically anchored in Trageton's workshop pedagogy.

Ecological philosophies are found behind the systematization of materials in recycling centres, for example in Reggio Emilia's Remida center (Remida, n.d.). In this ecological and educational resource centre, surplus materials from companies are collected for reuse and made available for preschools, supply centres, and other organizations. Several countries have established Remida centres modelled after the centre in Reggio Emilia, and many have built on their own recycling traditions. Traditional forming materials and tools of high quality are less often observed in the day-to-day work in preschools today than a few decades ago. One reason may be that the earlier child-centred approach to learning, which emphasized children's exploration and expression through materials, has to a greater extent been replaced by learning tools of a more formal nature. An important factor can also be the lack of knowledge and training skills among the preschool staff as changes in preschool teacher training suggest (Carlsen, 2015; Waterhouse, 2013).

According to educational research, the role of materials in preschool has changed during the past decade. Several Swedish researchers, such as Lenz Taguchi (2010), Hultman and Lenz Taguchi (2010) and Olsson (2008) among others, linked the materiality turn in philosophy to pedagogical research. This turn has been followed up in Norwegian preschool research, with reference to post humanist theory (e.g., Barad, 2007, 2008), where the relationship between the human being and matter is formulated as intra-active, and the dynamic space between the material and the human individual, meaning is created (Lenz Taguchi, 2010). From a professional forming point of view, Taguchi's text can to a great extent be perceived as a theorization of well-known, experienced phenomena in creative processes with materials. The person who creates with materials knows that both the properties of the material and the tools have a decisive impact on the process and on the creator (Carlsen, 2015, pp. 126–128; Fredriksen, 2011).

## THEORETICAL PERSPECTIVES ON FORMING IN PRESCHOOL

There is an ongoing debate as to which perspectives on knowledge and understanding of children, childhood and education should form the foundation of care in preschool and preschool teacher education. From a historically rooted pragmatic and reform-oriented pedagogical tradition (Dewey, 1916, 1934/2005), of developmental psychological understanding (e.g., Pramling Samuelsson & Pramling, 2013) and socio-cultural perspectives (Säljö, 2000, 2008) which many educators rely on, the discussion has moved into social constructionist (Dahlberg & Moss, 2006; Dahlberg et al., 1999) and post humanist understandings (Lenz Taguchi, 2010; Otterstad, 2018 among others). The latter has its origins in neo-materialist theory (Bennet, 2010), where nature and things are given as much importance as people and are seen as parts of the same whole. By highlighting the role of materials as a main content in preschool work, it is possible to draw a theoretical line from Fröbel's pedagogical ideas about materials and tools in children's education, through pragmatism built on action and reflection, to a post humanist and neo materialist position.

Placing oneself within a post humanist position does not mean becoming distanced from the aesthetic creative focus that forming has brought into the preschool from the reform pedagogy period, nor does it mean disregarding the individual child's construction of visual and material forms of communication together with others. It means bringing one's creative person into the community with the environment, which consists of both the human and the more-than-human. The creative person is not someone who unilaterally processes existing material, but someone who in intimate reciprocity influences and allows oneself to be influenced (Carlsen, 2015; Häikiö, 2020; Waterhouse, 2021). With such a theoretical position, *Dewey's Art as experience* from 1934 is not far off. Dewey describes the interaction between the creator and the matter itself, the substance, in the aesthetic experience. The material changes and the creator is changed in the same process. Transformation takes place on an external level, where new form arises, and simultaneously on an internal level, where feelings, new thoughts and knowledge are created.

Our relationship with the biological and mineral diversity that our globe consists of has changed over the almost 100 years since *Art as experience* was published. Today, this relationship is critical, not least for our own part as human beings, if we continue to rule rather than intra-act with nature (Johansson, 2019). A post humanist and neo materialist position implies an ecological orientation with consequences for the content of the preschool, depending on what we choose to do together with the children, which materials and tools we invite them to intra-act with, and how.

## FORMING IN PRESCHOOL IN THE PRESENT, AND FROM A FUTURE PERSPECTIVE

What function does such a retrospective stance that I have presented here have for the preschools' future forming activities? Which choices must be made, for children to

experience cohesion with the physical conditions they depend on, with the earth and the matter of which we are all a part? How do we create sustainability in the preschool without burdening children with dystopian future scenarios? Is there time for a realistic nostalgia for the future?

These questions involve two approaches connected to forming: The first focuses on children's experiences of- and with- the material itself, with the matter that surrounds them. They must learn to know the world directly and specifically to be able to love it and take care of it in line with the UN's sustainability goals (ref. Utdanningsdirektoratet, 2017; Unated nations, n.d.-b). We need a present and future pedagogy that gives children time and space to discover and develop familiarity with the identities of the materials (Vecchi, 2012), their properties, their possibilities and resistance; in brief, their affordances (Gibson, 1986). Materials change according to the environment or substances they appear in (Ingold, 2007). In preschool we need long paths of experience that recognize the possibilities of transformation with materials from the very raw, found in nature, through a series of stages explored with the tactility, physicality, and visual wonder of the 1–5-year-olds (Carlsen, 2019). The images in series 1 show how clay in different stages and conditions may contribute to children's experiences of transformations with, and in, the natural material.

### Image series 1



*Clay deposit in a local gravel pit with 3-6-year-olds exploring. Something was taken home to the sandbox, and the results were left in the rain. Burning clay in a fire, full fire and everything glows. The clay changes properties when a small bear comes out of the fire.*

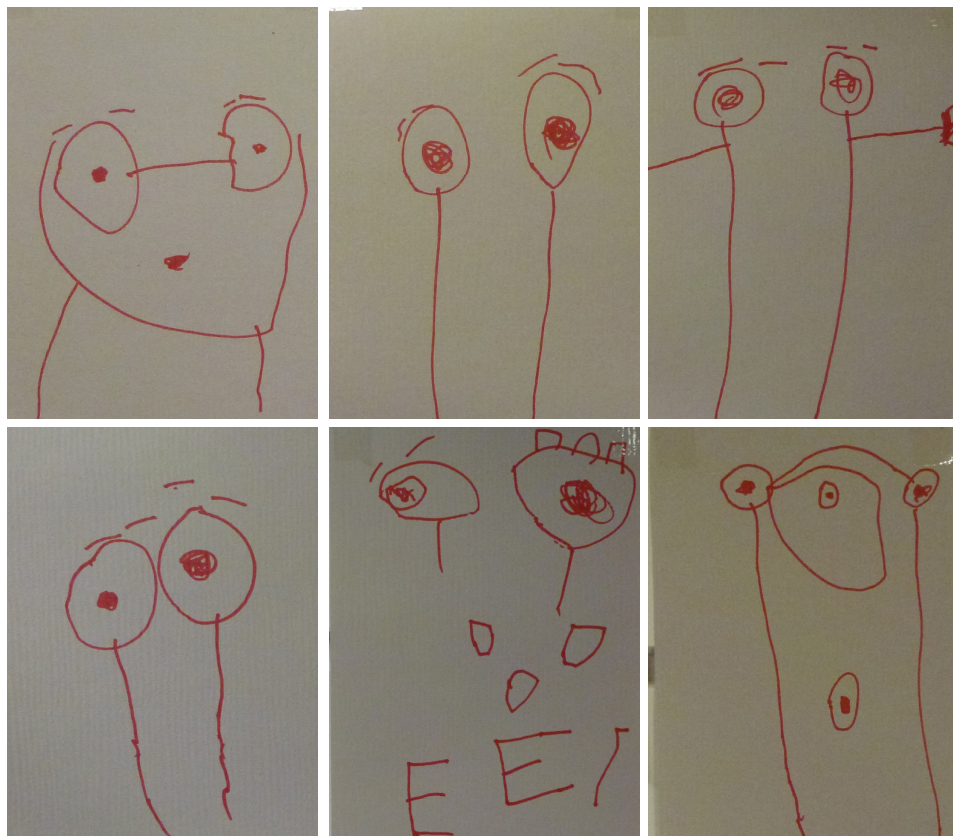
To choose materials with long paths of experience means putting away the hobby catalogues with fixed, semi-finished products; materials that are industrially processed in many stages, with specific products in mind. These are adult-conceived things that require little manual intervention, preferably with the help from adults, to get the result as close to the given template as possible. The opposite of this shortcut is incorporated in the actual cultural history of the crafts, where exploration of the possibilities of materials, seen in relation to the living conditions at any historical moment, has challenged human beings' imagination and constructive and creative abilities (Johansson, 2009). A few generations ago, most of the Nordic children were familiar with harvesting from nature, observing and learning artisanal processes where all materials were taken care of and used literally to the last thread. This way of harvesting is to some extent preserved by indigenous people who can still read nature's potential and is also an integral part of the knowledge base in the Nordic sloyd (Sandven, 2019).

What about experimental and creative use of modern and recycled materials? Can the aim of working sustainably in preschool end up with exclusively sorting plastics and making patterns of ready-made shapes, in the worst case with adults who have thought through and presented the ideas here as well?

The plastic exists. Children has a strong fascination for many of the new materials; the sparkly, the pink, everything they collect; variations in season after season that are controlled by commercial companies. What I think of, and may call a nostalgia for the future, does not ignore the living conditions and everyday life of today's children. The question is how their time in preschool is used and whether there is reflection upon which sensory experiences the various materials give children, and which values and ethical reflections lie behind the choices made by the preschool teachers. An important question is how the children's fascinations are received, so they can recognize, translate, transform, and discover the origins and possibilities of the enchantment in other materials e.g., in sparkling ice or in light through the droplets of water..

The other approach to forming focuses precisely on this; transformation of experiences, sensations, feelings, and ideas into the languages of expressive form (Pedersen, 1998). The two-year-old's finger traces in the sand and clay and the crayon lines on paper start with exploration of the materials. At the same time, a layer of recognition is created in the forms that arise, a layer of expanded meaning. The two layers exist side by side, intertwined with each other. They are not the result of a linear development where material exploration is abandoned for a higher level; the symbol-creating and figurative. One of the challenges in preschool is to take care of the exploration with materials when children begin to take an interest in communication by forming visual concepts and languages with various expressions. The images in series 2 shows the struggle of a four-year-old boy to search for a visual form representing the human body through a series of drawings. He develops his visual language through trying again and again.

## Image series 2



*Figurative explorations of the human figure, a four-year-old's transformative image concepts.*

The UN Convention on the Rights of the Child § 13.1 points out children's right to express themselves, among other things, "in artistic form or through any means of expression the child may choose" (Convention on the Rights of the Child, United Nations n.d.-a). A prerequisite for children's expression is that the child as an individual, in communication with others, develops the possibilities of expression, the hundred languages, as said in Reggio Emilia.

This means putting away the downloaded Lego-style copies of Harry Potter or Ninjago for colouring as a calming tabletop activity. The opposite of this is incorporated in pictorial courses of action, where the interest in events and phenomena in the preschool's shared life in the local environment is explored with materials and tools, varied in both qualities and formats. As in the encounter with materials, in what Alison Clark calls slow knowledge (Clark, 2023), the long roads provide the richest experiences in children's tentative formulations of both their own sensory experiences and of the diverse forms of expressions in their cultural environment.

## TO SUM UP ...

The preschool child has many things to do during a day. Daily rhythms and routines have their time, and time is precious. My research question about the preschools' opportunities to provide for children's exploring and experimenting with varied materials, compared to previous preschool practices has been discussed in this article. And so has the question of which roles children's drawings and creative activities with materials play in children's formulations about their everyday life. Those responsible for the play and learning contexts in which the children explore, must choose their materials and themes with consideration. The UN's Sustainable Development Goals (United Nations n.d.-b) and the Convention on the Rights of the Child give these choices a direction. The historical development of the educational subject forming, and the discussion of theoretical perspectives provide new understandings of the subject's contribution to the preschool content. The material turn in philosophy opens up the potential for a changed view on the importance of materials in children's aesthetic processes and construction of meaning. The contribution from forming offers necessary challenges, in what I have called a realistic nostalgia for the future, regarding the materials and themes chosen for children's activities in preschool. There are imperceptible transitions between playing with materials, investigating the outside world and available tools, or those which can be invented, and children's symbol-creating actions and expressions. Everything is connected. For preschool children, the processes take place in encounters with bodies and surroundings, in intra-action with the materials and with adults, all participating in continuous meaning-making processes.

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