How children make meaning through drawing and play

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ABSTRACT
This article presents studies of 5–6-year-old children in year one in a Norwegian primary school as they develop and engage in drawing-related play within teacher-initiated drawing sessions. The author discusses the quality of the children's play from a semiotic point of view and reflects on play as a possible learning context for drawing. Elevating drawing and play to the same prominent position as images in contemporary texts, she demonstrates how they can be used to support children's competence in interpreting the visual mode as well as using it to convey meaning.

KEY WORDS
children's drawings • play and school • visual meaning making

INTRODUCTION
The semiotic mode of images has a central educational function in supporting children's control over resources in the visual sphere, as well as facilitating their access to them (Kist, 2000; Kress, 2003; Kress and Van Leeuwen, 1996; Luke and Elkins, 1998; The New London Group, 1996). The way in which children produce drawings is a valuable starting point for supporting their visual literacy. Drawing is a semiotic or meaning-making activity in which children use visual resources to share information, knowledge and ideas (Kress, 1997, 2003). When they start school, children have already acquired a certain amount of artistic competence and experience of drawing (Anning and Ring, 2004) and it is an educational challenge to acknowledge this competence as well as to contribute to children's further development as visual meaning makers.

To guide the development of visually supportive educational contexts, there is a need for research that deepens our understanding of how children
use drawing and how they learn to draw (Anning and Ring, 2004). In this article, I aim to contribute to our knowledge about play as a drawing practice that 5-6-year-old children develop when they draw in the company of their peers in school. I show how Norwegian children in their first year in school interact with each other in ways similar to play when drawing in teacher-organized sessions. Another aim is to reflect on the children's play as a learning context for visual meaning making.

Building on a semiotic perspective of drawing (Kress, 1997, 2003; Kress and Van Leeuwen, 1996; Thibault, 1997) and on transformation as a core feature of play (Garvey, 1977; Schwartzman, 1978; Sutton-Smith, 1997), I present two categories of drawing-related play: play with the graphic results of drawing and play with drawing as a dynamic world. These categories describe how drawing as a semiotic mode becomes a starting point and material basis for play in children's drawings and help to analyse the elements that encourage transformation of meaning. I discuss ways in which the drawing practices I have observed represent learning potentials for visual meaning making.

Thus the general purpose of the article is to contribute to the field of research on children's meaning making with drawings. It has a more specific purpose in that it can be used as a didactical basis for planning drawing activities and developing a learning milieu that supports children in visual meaning making.

Relationships between drawing and play in educational settings have been studied to a certain extent in previous research (Dyson, 1989; Ånggård, 2005). My approach is the semiotic perspective on how children transform drawing as a resource for meaning making when they draw and play. The article builds on a study of teacher-initiated drawing activity in year one in a Norwegian primary school (Hopperstad, 2002, 2005). I first present the theoretical framework for the article and then provide more information about the study. This is followed by a presentation and discussion of results.

**THEORY**

In agreement with Atkinson (1993), Kress (1997, 2003) and Thibault (1997), I take drawing to be a meaning-making or semiotic activity in which children draw signs. These signs consist, at the level of the signifier, of visual–graphic marks such as lines, points, figures and colours (Thibault, 1997). Children's ways of using visual signifiers are a motivated response towards objects and phenomena that are important to them (Kress, 1997: 10ff). At the same time, we need to take into consideration the way children develop control over visual resources and how they access them. Children may sometimes find it difficult to follow up an interest through lack of experience and use of a specific visual form (Thibault, 1997).

Visual signs are based on iconicity and create an impression of similarity (Sonesson, 1989). However, they can never convey the complexity...
of the objects and scenes they depict. Rather, they record invariant features of
the world as we know it (Gibson, 1986). As a semiotic mode, drawing has
both possibilities and limitations for meaning making. It engages children in
spatial, rather than temporal, semiosis. Kress (1997) reflects on this situation
and suggests that images are naturally suited to make meaning about what
the world looks like or consists of and less suited to representing the dynamic
features of the world. Gibson (1986) similarly maintains that still pictures
‘arrest’ the dynamic, changing the quality of everything we perceive. They
can convey meaning about actions and events through the use of diagonal
lines (Kress and Van Leeuwen, 1996; Thibault, 1997). However, the action
will always be artificially stopped (Gibson, 1986). Kress (1997) observes that
children move between semiotic modes as well as combining them; he argues
that this multimodal practice enables them to compensate for limitations
they experience in each mode.

To summarize, drawing involves the act of choosing available visual–
graphic forms to make intended meaning. Meaning rests on the capacity of
signs to create an impression of similarity. Making meaning through
drawings is a question of exploiting the possibilities drawing affords as a
spatial mode, and of combining drawing and other modes to enrich
meaning. I argue that children’s spontaneous play in teacher-initiated
drawing sessions touches on these fundamental aspects of visual semiosis.

The literature on play indicates that it can be defined in various ways
(Sutton-Smith, 1997). For the purpose of this article, I build on the under-
standing that transformation is a characteristic feature of play (Garvey, 1977;
Schwartzman, 1978; Sutton-Smith 1997). To transform reality means to enter
a state of make-believe or pretence (Garvey, 1977). Play is usually contrasted
to a pre- and post-transformed state of non-play (Bateson, 1972; Garvey,
1977; Huizinga, 1950). Children signal play in their talk as they shift between
planning and acting out the play drama – as they laugh, exaggerate or use a
different tone of voice (Daiute, 1989; Garvey, 1977). Norwegian studies of
children’s communication in socio-dramatic play have documented that
children use different regional accents to signal play (Vedeler, 1987).

In this article, I argue that children’s ways of making drawings in the
company of their peers have a transformative feature associated with play.
Two categories of play are developed to discuss this:

1. Play with the graphic results of drawing
2. Play with drawing as a dynamic world

Play with the graphic results of drawing describes a drawing practice in
which children seem to act in a transformative way towards the visual–
graphic signifiers that their drawing results in. They transform and play with
the relationship between the visual–graphic forms they produce and the
possible meaning these forms convey. As a result, the drawn signs appear to
have more than one meaning, at least for a while. ‘Play with drawing as a
dynamic world’ describes a drawing practice in which the children act in a
transformative way towards the ‘arrested’ quality of drawing (Gibson, 1986).
As they draw, they imitate imaginary actions, sounds and movements of
drawn elements with their voices and bodies. The children thus seem to turn
drawn elements into lived and movable objects and figures.

Children may engage in many forms of pretend play. The two
categories I present and discuss here are similar to what Corsaro (1997) calls
‘fantasy play’, in which children create imaginary worlds in a spontaneous
and improvisational manner. The categories are also similar to socio-
dramatic play (Wood and Attfield, 2005), which involves cooperation and
verbal interaction between children as they play with objects and create roles.

METHOD

My study was conducted within an ethnographic perspective, which is a
more focused approach on particular aspects of everyday life than a more
comprehensive ethnography (Green and Bloome, 1997). The aim was to
develop knowledge about the kind of drawings children produce in
organized activity and how interaction between the children contributes to
the drawing process.

For a period of approximately two months I was a participant
observer in two year-one classes of 5–6-year-old children in groups of 22
(class A) and 13 children (class B). Two teachers and one teacher’s assistant
worked in class A, one teacher and one teacher’s assistant in class B. The
children attended two different schools.¹

In the classrooms I interacted with the children but avoided doing any
typical ‘teacher’ things. I took the role of a guest and, as a consequence, was
an atypical adult in the classrooms. I felt that this role was valuable for my
relationship with the children. In particular, I felt that the role reduced some
of the censorship associated with the teacher role. At the same time, the role
as a guest made it possible to focus on the activity I was observing.

The children worked in groups of four, sometimes five or six in their
classrooms. This was the regular organization of drawing sessions as well as
other learning activities. Curriculum activities in year one in Norwegian
primary school are related to themes and topics. Generally the teachers in my
study included drawing in many of the themes they were working on. During
the fieldwork, I observed the children as, for example, they made drawings of
Norwegian folk tales, the rain forest and Bible stories. The teachers set broad
drawing tasks: ‘Now I want you to draw something from the folk tale you just
listened to’ is an example. In every observed session, the children were
provided with pieces of white A4 drawing paper and a selection of pencils
and crayons.

I moved between talking to the children and listening to their ongoing
talk with each other during the drawing activities. My practice as an observer
thus depended on the situation and the children’s initiatives (Schatzman and Strauss, 1973).

A total number of 17 drawing sessions were observed. One group of children was chosen as a focal group for each observation. All groups were observed in a minimum of two sessions. A stationary video camera was used to document the drawing process. To gain the children’s confidence in the equipment, I answered any questions they had and allowed them to hold the camera (Erickson, 1992). The camera caused some attention at first but soon became a familiar part of the classroom context. Corsaro (1985) reports similar experiences.

In addition to the video observations, I also took field notes. All drawings (63 in total) were copied in colour and scanned onto a computer, and the video-observations were transcribed.

**COMMENTS ON THE ANALYSIS**

The first step in the process of analysing the material was to identify talk during drawing sessions that was related to the developing drawings. The children talked about the content of their drawings, and they engaged in talk about ways of drawing. Participation in drawing-related talk varied between the children and from session to session. However, a flow of drawing-related talk took place in both classes.

The drawing-related talk was categorized according to language function. I found valuable support in the work of Dyson (1989) and Cocking and Copple (1987). A brief presentation of the results of the analysis of language functions follows.

The children planned their drawings and shared their plans with each other. As the drawings developed, they talked about the meaning of drawn elements. They named drawn elements and described them. They also explained the meaning of drawn signs and argued in favour of their own graphic solutions. Explanations and arguments often occurred because someone asked questions. From time to time, children found it a bit challenging to choose what or how to draw, and searched for help from a peer. Help was also spontaneously offered from one child to another, particularly if a child was expressing some kind of dissatisfaction with his or her own drawing. The children’s talk sometimes had a narrative function. They told stories about things that happened or had happened in their drawings. Sometimes they also told stories about things that would happen in the future. Some children accompanied their narratives with dramatizations in terms of gestures (for instance, the use of an arm to represent a movement) and sound effects. Narratives and dramatizations are particularly relevant for this article. Language used to evaluate and instruct was also found in the material. Children evaluated their own as well as their peers’ drawings: ‘Oh no, I can’t make the mouth right’ is one example. Occasionally the children also instructed what and how a peer should draw. Sometimes a specific visual...
form in a child’s drawing caused the drawer or the peers to associate the element with a new meaning, based on what it looked like. Again, this is a language function that is important for the discussion of children’s ways of drawing and playing which I address in this article.

The drawing-related talk I observed clearly parallels Coates’s (2002) observations of talk between two groups of 5-6-year-olds. Coates observed that the two groups differed in the sense that one engaged more in descriptions of the drawings, while the children in the other group developed stories as well. I found that the degree to which children described their drawings and narrated stories varied throughout each session and that some drawing tasks seemed to inspire the children to narrate more than others. I also noticed a difference between girls and boys. Boys in general engaged more in talk and they were more active in the development of narratives. This will be discussed later.

Furthermore, I worked with the material to identify how sequences of drawing-related talk were connected to each other and how the children’s talk developed. However, the character of the drawing process was not obvious from the sequences. I found it necessary to use a strategy in which I shifted between (1) looking at the video recordings; (2) reading the transcribed sequences of drawing-related, categorized talk; and (3) studying the drawings in order to get a comprehensive understanding of the drawing process. The two play categories presented in the article are the result of this process.

RESULTS
In both classes, I observed drawing sessions related to the topic ‘Norwegian folk tales’. Examples from these sessions are presented later. In addition, I include sequences of play episodes in which children made drawings from a Bible story, and when they were inspired by a self-made poem.

Play with the graphic results of drawing
In some of the drawing sessions, there is a strong sense that children engage in play with the graphic results of drawing. The children’s talk in these cases is characterized by associations with their vocabulary of expressions or the way in which the visual form of specific, drawn elements conjures up a new and often surprising and humorous content. The children appear to see new meaning in existing, graphic forms. They discover the possibilities of ‘reading’ certain signs in ways that differ from the meaning these signs were initially meant to signify. This new meaning is unpredictable. It is produced spontaneously when the children look at the graphic results of their own or their peers’ drawing activity. Thus, it has the improvisational character associated with fantasy play (Corsaro, 1997). At the same time, it is a fantasy the children share with each other and may develop cooperatively. Their play thus has a social character. The associations to a new meaning are
accompanied with laughs and giggles and spoken in a brighter tone of voice, in accord with Garvey’s (1977) descriptions of children’s play signal.

A group of five children in class A made drawings representing a Norwegian folk tale. One of the boys in the group, Stian, drew the protagonist of the folktale, the Ashlad (in Norwegian ‘Askeladden’). Ida sat next to him; she looked at his drawing from time to time and suggested after a while that Stian should draw hair on the Ashlad. Stian started to work on the hair. When he was finished he thought that it looked like a hat. Ida and a second boy in the group, Jonas, joined in and shared his amusing association.

Sequence 1

1. Stian: it looks like a hat  
it is a top hat (said with a high-pitched tone)  
(Stian looks up and smiles)  
2. Jonas: it looks like the hats they use in China (said as he looks at Stian’s drawing)  
(Jonas laughs)  
3. Stian: yeah this is a hat  
(Stian hums a little and continues to draw)  
no it is not really a hat  
I have to use some colour

Stian’s high-pitched voice and his and the other children’s laughter are indications of a play attitude towards the meaning of the drawn sign. The sequence also shows that Stian in this way moved the association back to the initially intended meaning, saying that ‘it is not really a hat’ and thus signalling a post-pretend state (turn 3).

Andreas (boy), Mari and Ane (girls) made drawings inspired by the Bible story ‘The blessing of children’. Andreas first drew a child and some of the disciples. He then started to draw an angel. After a while, he looked at it and said to the others with a laugh that it was funny and looked like a butterfly.

Sequence 2

1. Andreas: I made an angel  
but I made a funny angel (laughs)  
it almost looks like a butterfly  
look this is a butterfly (smiles and hums)  
(Ane and Mari look at his drawing)  
2. Mari: yes (smiles)  
I know(!!) how to make a butterfly  
3. Andreas: no I did not make a butterfly  
this is an angel #I have tried to make an angel
A more extended episode of play with the graphic results of drawing occurred when Andreas, Mari and Ane made drawings in relation to the Norwegian folk tale ‘The Ashlad who had an eating contest with a troll’ (known in Norwegian as ‘Askeladden som kappåt med trollet’). The Ashlad is the protagonist in most Norwegian folk tales. In this particular folk tale, he is cutting down trees in the troll’s forest when the troll comes across him. To save his life, the Ashlad suggests that he and the troll sit down at the troll’s table to see who can eat the most porridge. The Ashlad then makes the troll believe that it can eat more if it cuts a hole in its stomach. The troll dies and the Ashlad helps himself to treasures from the troll’s impressive treasure casket.

Andreas decided to draw the treasure casket with a lot of silver and gold and jewellery. He placed the casket on the right-hand side of the paper. At the top of the paper he drew the Ashlad at the troll’s table with a bowl of food in front of him. After asking Mari for advice, he decided to draw the Ashlad in the forest as well. He started to draw this scene on the left-hand side of the paper. After a while, he discovered that he had drawn the Ashlad with three legs. He laughed and shared his discovery with Mari and Ane:

**Sequence 3**

1. Mari: three legs? (said as she looks at Andreas’ drawing)  
   (Mari laughs and continues to draw)
2. Andreas: yes
3. Mari: perhaps #you can put one arm there and #and legs (said as she leans towards Andreas and points at his drawing)
4. Andreas: yes  
   (Andreas laughs and continues to draw)  
   do you think #what #do you think this is a funny drawing?  
   one two three four (counts the arms and feet he is drawing)  
   (Andreas laughs)
5. Mari: should have had eight(!) legs  
   (Mari laughs)
6. Andreas: eight?
7. Mari: yes because #then it is an octopus
8. Andreas: one two three four five six #seven eight (counts as he draws)  
   now he has eight legs

As in sequences 1 and 2, a new association is made from the original meaning of a given expression or visual form. In this case, however, a peer made the association. In addition, the association was based on what the sign could have meant had it been adjusted further. If the Ashlad had eight legs, he could be an octopus. Andreas immediately picked up on this possibility of
adjusting the sign and making a new meaning. He drew eight lines on the Ashlad’s body and called them legs. A transformation of the sign thus appears to have taken place.

Ane, the second girl at the table, became interested at this point. As shown in the continuation of sequence 3, she looked up and commented that the Ashlad could be a spider.

Sequence 3 (cont.)
9. Ane: no he could be a spider
   since a spider has <eight legs>
10. Mari: <yes and> so has the octopus
   ...
11. Ane: no no ‘Inky’...
12. Mari: the octopus #<octopus>...
13. Andreas: <ink>...
14. Ane: octopus yes # it does not have any legs
   it has hand – it has eight – it has eight arms
   no – it has not got any(!) feet at all
15. Andreas: so it has eight arms
   there is ink – there is ‘Inky’
   no it isn’t really
   now here comes the axe
   this is how it should be done
   now I need grey – I mean brown
16. Ane: but it has ...
17. Andreas: at least I have grey
   now(!) I need grey
   #I forgot to make the mouth
18. Mari: Inky # the octopus has a mouth for sure
19. Andreas: yes this is the mouth
   the octopus has a mouth doesn’t it?
20. Mari: <yes>
21. Andreas: <but> the octopus has a cap
22. Mari: no – yes (looks up and smiles)
23. Ane: yes Inky # on television
   Inky on television
24. Andreas: look # now he has a cap (laughs)

Andreas seems to have accepted Ane’s piece of information and advice regarding the octopus and the spider (turn 15). He changed the name of the
eight lines from ‘feet’ to ‘arms’. He kept to the association ‘octopus’, however, rather than spider, maybe because it appeared to be more intriguing and fun.

What is noteworthy in sequence 3 is that the children started to refer to Andreas's drawing of the Ashlad, which they pretended to be an octopus, as ‘Inky’ (turns 11, 13, 15, 18 and 23). Inky is the name of a figure in the shape of an octopus, which is used to represent and promote the work of an environmental organization for children called ‘Inky's Ecodetectives’ (‘Blekkulfs miljødetektiver’ in Norwegian). ‘Inky’ is known to children in Norway through television (turn 23), cartoons and books. Ane was the first one to use the name (turn 11). Whatever her reason for doing so, this contributed to the play with the graphic sign. ‘Inky the Ecodetective’ is pictured with a cap on his head in the cartoons and books. Turn 21 in sequence 3 shows that Andreas seemed to remember this. Having established that Inky on television wears a cap, he included a cap in his drawn sign (turn 24).

Andreas and Mari make new meaning as they enter in and out of play. The basis for the children's play is the graphic result of Andreas's drawing act. New meaning appears to develop as a chain of associations, from the Ashlad with four legs, to an octopus with eight legs and then to the particular figure known to the children as ‘Inky the Ecodetective’. New meaning also permeates the drawing in this case. The Ashlad is drawn with eight legs sticking out of his body and with a cap on his head. The drawing is shown in Figure 1, where the Ashlad can be seen in profile on the left, with an axe in one hand.

![Figure 1](image-url)

**Figure 1** Andreas's drawing.
Play with visual form continued as Andreas and Mari engaged in talk about the best way to draw caps. As Andreas drew a second cap, he and Mari developed a vivid flow of associations (a pig's ears and a girl with pigtails, for instance). This second cap is visible at the top of Figure 1.

The examples in this section show how children use visual–graphic forms as material for play and how they play with the different meanings these forms can convey. They put forward and share associations with new and fun meanings. Even if the new sign relations are spontaneous and change from one moment to the next, they are at the same time motivated combinations of sign and meaning – meaning based on impressions of similarity created by visual–graphic signifiers.

The examples are significant because they show how the children are aware that visual forms can be read in different ways, and that they can be adjusted and refined to convey different meaning for different people in various contexts. It clearly seems to make sense to the children that more than one meaning can be read in a visual form and that meaning can also be temporary. The children's play with the graphic results of drawing activity is not always possible to trace in the drawings. Traces that are available, such as those in Figure 1, are therefore particularly valuable as material documentation of the children's play.

**PLAY WITH DRAWING AS A DYNAMIC WORLD**

The material provides insight into a play practice in which the children appear to play with drawing as a dynamic world. On these occasions, the children make their drawings 'come alive'. They bring life to drawn objects and figures in spite of the fact that everything they draw is fixed on the surface of the paper. They seem to engage with the drawings as worlds in which things are happening and objects and drawn persons are acting and making sounds. The children name drawn elements as they draw and talk, yet their talk also has a narrative function. They develop narratives in the past, present and future tense about events and actions in the drawings. Sometimes the narratives are dramatized when the children use their voices to make drawn figures speak and signify actions with sounds and gestures.

The two boys Mats and Daniel engaged in talk while making drawings from the Bible story of "The blessing of children." Mats included a tiny ant in his drawing and told a story about it, which Daniel responded to:

**Sequence 4**

1. Mats  
   it is a tiny ant here
   it is going downhill on a sledge
   dijjjjjjj boom (lifts his arm and moves it down towards the table top)
Sindre and four other children were sitting together making drawings from a folk tale. Sindre drew the king’s castle and decided to put a flag mast on the top. When it was finished, he took on a slightly unfamiliar voice, unlike the local dialect he usually used, and said as he looked at the others:

Sequence 5
1. Sindre: hoist the flag
duruturututu
(uttered with a rising voice, at the same time he moves his hands up and down)

The way Sindre uttered ‘duruturututu’ made it sound like a fanfare. As he sang, he moved his hands up and down as if he were physically hoisting the flag.

These observations are similar to findings reported by Dyson (1989). The actions the children perform as they draw, talk and gesture seem to be within the drawing, or part of the drawing as a dynamic world. Yet the graphic marks are static. With talk, sounds and gestures the children appear to transform and play with the ‘arrested’ quality of the drawn signs (Gibson, 1986).

Three boys, Steffen, Thomas and Roar, and two girls, Anna and Eline, were in a group making drawings from a poem they had written with the help of their teacher Kari. An intriguing aspect of the poem was that each verse told a short story about each of the children. The story about Steffen contained both an object and action that the boys immediately related to. Loosely translated from Norwegian, it went like this: ‘Steffen drives a car so very, very far.’ When the teacher told the children to make a drawing of the poem, all three boys wanted to draw the car. Roar finished his version first and showed it to the other children. It was drawn with a characteristic pointed front and was later on called a ‘racecar’ (sequence 7).

Steffen clearly admired Roar’s car and struggled for a while to draw a similar car. But he was not satisfied. He kept rubbing out his drawings and commented that his car looked like a mouse. Eventually, Roar offered to help him and drew a car on Steffen’s paper. When the car was finished, Steffen said:

Sequence 6
1. Steffen cool
# I am driving to you

Play is based on players’ ability to produce and interpret the metacommunicative messages or signals that they have created in their imaginations (Bateson, 1972; Garvey, 1977). Steffen’s utterance in sequence 6 is an explicit signal of play and communicates the complexity of the transformation he has engaged in. It shows how Steffen has transformed the arrested quality of his drawn sign, as well as his own position. As soon as
the drawing of the car was finished, he treated it as a movable object and pretended that he was driving the car. Furthermore, he related the car in his drawn world to the drawn, dynamic world in Roar's drawing and pretended to be driving to Roar.

As the drawing activity progressed, the three boys developed their drawings further, beyond the content of the poem they had started to draw from. Roar planned to draw someone who was shooting. Thomas gave his car a parachute because it moved so fast. Steffen drew a castle including several cannons inside and outside its walls. He also drew an aeroplane and developed a story about a cannonball that made Mars explode. His drawing is shown in Figure 2. The car is seen in the middle at the bottom of the drawing. The planet of Mars is drawn in the upper right-hand corner. The figures inside the castle represent the three boys.

In an analysis of talk between four 6-year-old children (two boys and two girls), Coates (2002) found that the boys engaged in a vivid conversation with each other. Her findings can be related to my observation of the three boys. As their drawings developed, they continuously named and offered descriptions of drawn elements; they also produced narratives and dramatized action with gestures and sound effects. There was an open line of communication between them all the time. They commented on and supported each other's solutions. They looked at each other's drawings and smiled and responded with 'cool,' 'wow' and similar words. The narratives the boys developed and shared turned their drawings into dynamic worlds. The narrative language function mediated imaginary actions and events. The dramatizations similarly added a dynamic quality to the drawings. The boys appear to have used this strategy to 'give life' to the fixed, visual–graphic signs they were making and in order to play with their drawings as dynamic worlds.
According to Kress (1997), children choose the visual forms that best represent the interests they have in relation to what they draw. Thus, children's drawn signs convey the way they perceive the world and their orientation towards it. I would suggest that action and drama are central to Steffen, Roar and Thomas's play with the drawings as dynamic worlds. They gave their cars different characteristics that signified their power and potential speed, and used sound effects to illustrate their engine power. Similarly, boys who demonstrated this kind of interest when they drew are described by Kress (1997).

The boys' common interest in action and drama was put into perspective when one of the girls in the group, Eline, was struggling to draw a car. She asked the teacher for help. Teacher Kari suggested that Roar could help her. Eline was not interested in this, however. She wanted a different kind of car:

Sequence 7
1. Eline  no I want a nice car
   not a racecar
2. Teacher  he makes racecars?  
3. Eline  yes
4. Steffen  yes look
          this is the kind of cars he makes (points at his drawing)
          vroooom

The various visual shapes of a drawn car produce different meanings. The children seemed to be aware of this. The boys concerned themselves not only with drawing a car, but with drawing a car that conveyed the meaning they found relevant and that could be developed in their play: racing cars. Eline wanted another visual form for her car sign. She seemed to have a different interest and thus struggled to make a sign that reflected what she wanted it to. 'Racecar' and 'nice car' represent different orientations towards cars as such, and these orientations are reflected in the visual signs.

DISCUSSION
The data show that school children in organized small-group drawing sessions engage in play as they draw. This is a drawing practice they share and develop with their peers. There are similarities and differences between the two play categories I have presented in this article. A transformative feature is inherent in both of them, and the children's willingness to pretend is central across the two categories. However, I found that the children's play is related to drawing as a meaning-making or semiotic activity in different ways. The meaning of signs is changed when children play with the graphic result of drawing. This new meaning is seen in the visual form.
I find it relevant here to relate to Kress's (1997) analyses of younger children's meaning-making practices. Kress is of the opinion that signs children produce in order to reflect their own interests and perspectives on the world can be seen as metaphors. Such metaphors are made and remade in transformative processes (p. 19). The data from the Norwegian classrooms similarly indicate a transformation of meaning in children's drawn signs. The children make transformations and then play with the similarity or metaphoric power of their drawn signs. Visual form is regarded as 'looking like' something new and other than the intended meaning. Form is altered or interpreted differently as the children enter in and out of play.

Paley (1981) studied what 5-year-old children play with in kindergarten. She suggests that children play with possibilities. She also documents that children play with language. The children in my study play with the possibilities of making more than one meaning with a given, drawn sign. They transform the visual–graphic resources of the visual mode into pretend elements and play with possible meanings.

Play with drawing as a dynamic world concerns the 'arrested' (Gibson, 1986) quality of drawings. The characteristic feature of this kind of play is that the children pretend that the graphic marks belong to a world of action, in spite of the fact that they are still and fixed on the drawing paper. This result is also in line with Kress's (1997) analyses of young children. He points out that children can make things happen when a drawing is on the page by using their imaginations and moving into 'the (world of the) page' (p. 27, brackets in original). As long as a drawing is on a piece of paper, children have to pretend that actions take place and use talk and gestures to mediate it. I have observed that children play with figures and objects on the drawing paper. At the same time, they also use gestures to mediate actions and events. According to my observations, gestures are of special use in showing the direction, speed or force of actions and movements (sequences 4 and 5). I suggest that this practice extends the drawings beyond the piece of paper and enables children to engage with the dynamic dimension of the world in the process of visual–graphic meaning making.

It seems to be unproblematic for the children to accept the possibility of pretending that drawn objects move and make sounds and that their own talk and gestures can combine with drawn signs to make meaning. They appear to use drawing to represent the characteristic features of objects and figures and rely on other modes to represent action. It is relevant to refer to Kress here, who suggests that drawing is the best medium for 'showing' and that talk is more suited to 'telling'.

However, I also find it relevant to refer to Thibault (1997), who argues that children's competence and experience with drawing must also be taken into consideration. It may be the case that the children in my study used talk, sounds and gestures because, at that time, they did not have access to visual ways of representing their interest in action. If this is the case, it is relevant to ask whether children who learn more about how images can convey action...
will refrain from using this multimodal approach and engage less in play with drawing as a dynamic world.

Play with drawing as a dynamic world can be compared to a sociodramatic play, in which the children interact and cooperate to develop play (Wood and Attfield, 2005). My observations show that the children engage with each other’s drawings. They develop narratives about ongoing, future and past actions. They draw on individual pieces of paper, yet at the same time they share the dynamic world of their imagination with their peers. The ongoing talk and gestures may give the drawings the status they need to work as a material basis for this social play.

As they were drawing and playing in their drawn worlds, the children in this study seemed to build on and relate to common criteria as to how objects should be drawn. In sequence 6 in particular, we get a sense of how play was initiated once the proper form of a racing car was produced. The three boys all made cars with a similar, pointed front. At the same time, they incorporated different features that signified their qualities as racing cars. The boys appeared to relate to and reflect an interest in action and drama as they drew. The form of the cars was both motivated by this interest and acted as a motivator for further development in play. As a result, the boys drew and played with individual versions of the racing car category.

The practices of drawing and playing described here took place in two classrooms. Other ways of drawing and playing are likely to occur in other classrooms or educational settings. Free drawing activity is yet another context in which play may occur in various ways, both similar to and different from the play forms presented in this article. My study indicates that boys, more than girls, engage in play with their drawings as dynamic worlds. It is tempting to suggest that boys in general are more interested in action and that this kind of play is therefore a practice they develop more often than girls. It is also relevant to ask whether the character of the drawing tasks was less likely to inspire the girls in my study to engage in this kind of play. A different result may emerge from observations of drawing related to other issues. Further research can deepen our understanding of this.

In the remaining sections of this article, I examine three themes that indicate learning potential in children’s play at the drawing table. However, more research is needed to develop knowledge about how play may work as a learning context for visual meaning making.

Relating sign and meaning
First, my observations of children who play with the graphic results of drawing give a sense of the ways in which they engage in a continuous process of relating sign and meaning. Meaning is changed when a new meaning is seen in a given visual form. New meaning is framed within the context of play. Atkinson (1993) suggests that as children draw, they evaluate and adjust their drawings in order to improve their semiotic power. When children play with the graphic result of drawing, they appear to re-define, for
a while, the semiotic power of their drawn signs. This kind of play is a pleasurable context in which to develop vivid associations to new meaning. It allows children to experience, in familiar ways, original meanings and visual forms and explore their potential to create new meaning.

Signs convey different interests
Second, I suggest that drawing-related play provides children with opportunities to experience how forms of signs can be made, adjusted and used to reflect different interests. Drawing and playing with the drawing as a dynamic world in particular may allow children to experience how their own visual-graphic solutions differ from those of their peers and that individual choices convey different perspectives and orientations. The observation in this study of the three boys who played with their racing cars illustrates this learning potential. Clearly, the boys and Eline seemed to display a difference of interest in regard to their racing cars.

The possibilities of meaning-making modes
Third, the study makes it relevant to argue that children who draw and play can experience the possibilities and limits of drawing as a visual, semiotic mode. Kress (1997, 2003) argues that it is important to be familiar with and able to exploit the possibilities of different semiotic modes. I suggest that play can inspire children to combine different modes in a variety of ways and thus experience what each mode can do for them. In observing children's interactions, teachers have a rich opportunity to invite the children to share their thoughts about their multimodal strategies. This may make children more conscious about the drawing practices they engage in, the inherent possibilities of drawing and the other modes they rely on.

FINAL REMARKS
Drawing and play, as presented in this article, took place in teacher-organized drawing sessions in year one in Norway. Talk between children was part of the classroom culture; they were free to talk and interact, thus encouraging play. The drawings became a common focus for the children's interaction in the two classrooms and sometimes a starting point for play. Will children continue to play as they draw beyond their first year in school or beyond the ages of 5 and 6 years? If so, how will this child-initiated practice be treated in later grades? There is a need for further research to develop knowledge about children's drawing activity across grades.

Since this study was conducted, the Norwegian Ministry of Education and Research (2005) has introduced a new national curriculum for primary, lower and upper secondary education. The new curriculum includes multimodal or mixed texts as one of four main educational areas for teaching Norwegian. The curriculum thus reflects the growing impact of images and other graphic elements in written texts. The curriculum more specifically
highlights drawing as a resource for developing competence in reading and producing multimodal texts. One of the aims of education in the first two school years is that pupils should be able to communicate the contents of the texts they work with by talking, writing, drawing, music or movements (p. 41). I observed children who made drawings inspired by folk tales, Bible stories and other texts. As they drew, they also engaged in play. In this article, I have argued that play represents a learning context for visual meaning making. Therefore, I suggest that children’s play practice should be welcomed as part of the learning activities in a multimodal literacy classroom. Sensitive teachers may also participate in and support the children’s playful approach to drawing.

There is a risk, however, that this may encourage adults to control children’s approaches to play. Children play for the sake of playing, not for the sake of learning. Play occurs spontaneously. It should be welcomed in drawing sessions in school not only for its potential to provide children with opportunities to learn about visual meaning making, but also because it allows children to relate to their peers, inspire and be inspired. Therefore, there is also a powerful argument for welcoming play in literacy-related drawing sessions as it adds engagement and pleasure to drawing in school.

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NOTES

1. Children in Norway start school the year they turn 6 years old. The youngest child in the study was 5.10 years old at the point of observation, the oldest child was 6.9 years. The school and parents gave permission to reproduce Figures 1 and 2, and the children’s names have been changed to preserve anonymity.

2. The transcription system is based on MacWhinney (1995). The following codes are used: # = a short pause = simultaneous talk; (!) = stress; . . . = an unfinished utterance. When a child corrects his or her talk, this is signalled with a short hyphen between words. Ongoing talk not relevant to the main topic has been removed to some extent in the sequences, and this is marked with three dots between the numbered turns.

REFERENCES


BIOGRAPHICAL NOTE

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