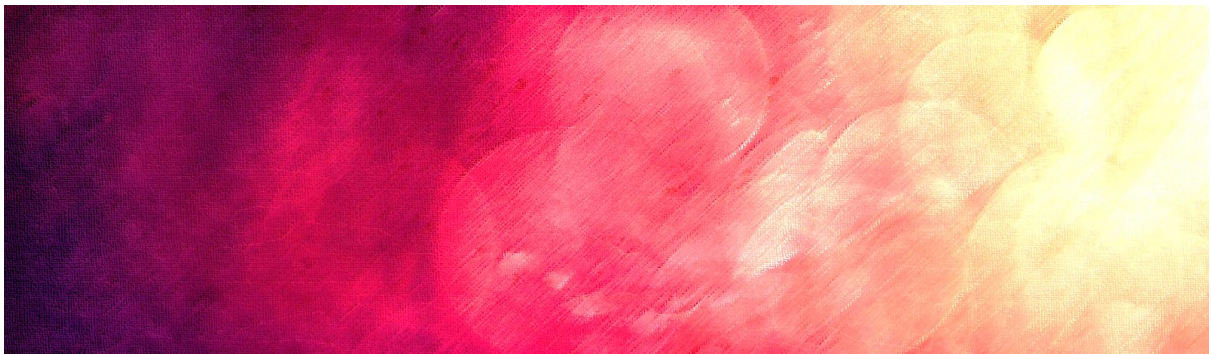


Teachers' actions and children's interests. Quality becomings in preschool documentation

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Abstract: High quality is considered to be important for children's development and learning in early childhood education. Swedish preschool teachers are required to systematically develop their practice and support children's learning, using documentation and taking children's interests into account. From a posthumanist perspective, preschool documentation, models and templates could be seen as actively producing certain elements of quality. Reading documentation from eight Swedish preschool groups diffractively through different texts, such as the national curriculum, supportive texts and research, this article discusses how teachers' actions and children's interests are produced as important quality aspects in one of these groups.

Keywords: Documentation, Early childhood education, Posthumanism, Preschool quality,

Modelling preschool quality documentation

Children's learning is considered to benefit from their attending preschools of high quality (Taggart et al., 2015; Åsén & Vallberg-Roth, 2012). This is recognised and discussed worldwide (Vermeer et al., 2016). In Sweden most preschools are run by municipalities. Whereas, in the past, schools and preschools were under more detailed state control, now they are controlled through management by objectives. Fulfilling objectives is seen as one way of demonstrating quality and has become a way of directing Swedish preschool practice. Children's learning also connects to children's play and interests (Hedges et al., 2011; Wood, 2014). Thus, preschool practices are expected to consider children's

experiences and interests. In Sweden, one way that preschool quality is maintained and developed is through *systematic quality development work*, which means that quality is required to be monitored, assessed and improved in a systematic process which must be documented (Swedish National Agency of Education, 2011). The National Agency of Education provides one model for how systematic quality development should proceed. Based on the above, it is crucial to study what preschool quality can become in and through documentation.

The aim of this article is to contribute to knowledge about how a local template and a national model play a part in and produce teachers' actions and children's interests as elements of quality in systematic quality development documentation in preschools.

The following section will introduce previous research on the use of models and templates in Swedish preschool documentation practices.

Models and templates

In Swedish preschools, the time it takes to document is often seen as problematic (Bjervås, 2011). Alasuutari, Markström and Vallberg Roth (2014) argue that, as teachers spend more time completing paperwork, there is a risk that they could have less time available to work directly with children. In a report by the National School Inspectorate (Skolinspektionen, 2012), some preschool teachers requested models or templates to help them with the difficult task of documentation. This report also points to a need for increased knowledge of preschool preconditions in order to refrain from unreflectingly copying school templates that are inapplicable for preschool practices.

In a study by Lager (2010), a so-called 'year-wheel' became central for connecting different actors. In the same study, focusing on the product of documentation sometimes obscured the focus on other parts of the practice, so that the product became more important than the actual quality development work. In other research, templates for individual development plans in preschools were found to direct what areas of development (for example, knowledge or care) these plans would focus on (Vallberg Roth & Månsson, 2008). Moreover, teachers sometimes adjust their documentation in accordance with the templates, since their practice does not always fit into them (Löfdahl & Pérez Prieto, 2009b). Templates could therefore be seen as playing a crucial role for the construction of quality, as stabilising, but also directing what quality could become. The following section will briefly discuss preschool quality.

What can preschool quality become?

The Swedish preschool curriculum states that preschool quality should be directed towards the curriculum goals, it should also be documented and developed to provide learning opportunities for children. The curriculum underlines the importance of interaction, between children as well as between teachers and children, in order for children to learn and develop; it further underlines that the teaching should derive from children's previous experiences and interests (Swedish National Agency of Education, 2011). Interaction is considered one of the most important aspects for pedagogical quality (Sheridan, 2009). In order to develop preschool quality, it has to be evaluated. The Swedish preschool curriculum contains objectives to strive for, not to achieve, and teachers are required to evaluate the extent to which their practice has strived towards these objectives. Teachers are also required to systematically document how they work towards the goals. This documentation is supposed to focus on the practice rather than on individual children, but should also indicate 'how the child's knowledge changes and when they experience the preschool as interesting, fun and meaningful' (Swedish National Agency of Education, 2011, p.14). However, some research on preschool documentation has found that documentation focuses more on children as subjects of

observation and surveillance than on teachers' practices and children's interest and learning (Sparman & Lindgren, 2010; Vallberg Roth & Månsson, 2011).

Whilst quality is sometimes seen as potentially measurable through different kinds of scales, some researchers want to go beyond that, arguing that quality has multiple meanings and is therefore not useful for evaluation (Dahlberg, Moss, & Pence, 1999; Moss, 2016). Others want to redefine or critically examine quality in different ways. For example, Salazar Pérez and Cahill (2016) argue that by using universal evaluation measures there is a risk that definitions of what is 'good' and 'quality' in preschools will narrow rather than embrace more dynamic childhood experiences. Also, universal measures and definitions of quality do not take into account differences in and between cultures, marginalising certain qualities while privileging, and at the same time obscuring, a white western stance (Ritchie, 2016). There are also efforts that try to go beyond the dichotomies of, on the one hand, an objective, measurable view on quality, and, on the other, a subjective, relational view, and recognise preschool quality as *multidimensional* (Sheridan, 2009).

This article focuses on a national model for preschool quality development work (Skolverket, 2015), and its adaptation, which will be presented below. This model does not have pre-set criteria, nor does it focus on individual children. Instead, it focuses on how quality should be made visible but also develop through a series of steps. The article argues that what preschool quality becomes has to do with the kinds of models, templates or measures that are involved in quality development work. Thus, quality is seen as something that will be produced through the involvement of models or templates. The following section will introduce the study.

The study

Preschool systematic quality development documentation is done in order to follow up, evaluate and develop preschool practice. Using a template might facilitate the documentation process, giving teachers more time to interact with children. However, as mentioned above, templates also influence what the documentation will focus on.

Neither the Education Act (SFS 2010:800) nor the Swedish preschool curriculum (Swedish National Agency of Education, 2011) specifies exactly how systematic quality development work should be done. This is also true for the National Agency of Education's model for systematic quality development work; instead, how and when it should be done is to be solved locally by heads of preschools together with the teachers (Skolverket, 2015). Thus, individual schools and preschools are free to develop their own local ways of working with the model. Although this allows for different possibilities, the template restricts what is possible to document and evaluate.

Description of the collected documentation

The documentation collected within the study came from eight preschool groups in two preschools¹ in a small/medium-sized municipality in the southern part of Sweden. These groups used one local template, an adaptation of the national model, provided by their head of preschool. The documentation was digital, made in PowerPoint (PPT) format. In all, the documentation from the eight groups (referred to as the PPT files) contained 340 slides.

The national model is presented by the National Agency of Education as the way systematic quality development work should be performed in schools and preschools (Skolverket, 2015). It consists of a

¹ The head and teachers of the participant preschools were informed about the aim of the study. They were also informed that they could leave the study at any time should they change their mind. Furthermore, teachers were informed that if any parts of the documentation contained details about specific children, those parts would not be used. Names of the municipality, preschools and teachers were anonymised.

cyclic process in four phases, similar to the PDCA² cycle. The phases focus on different parts of the quality work process as shown in figure 1: from a description of the present situation (Where are we?), an analysis should follow, leading to formulation of specific objectives, which in turn should lead to a plan and its implementation. The last phase should then define a new present, starting over from phase one. The last phase emphasises participation of heads, teachers, other personnel, and children, all of whom should be involved in developing the preschool practice.

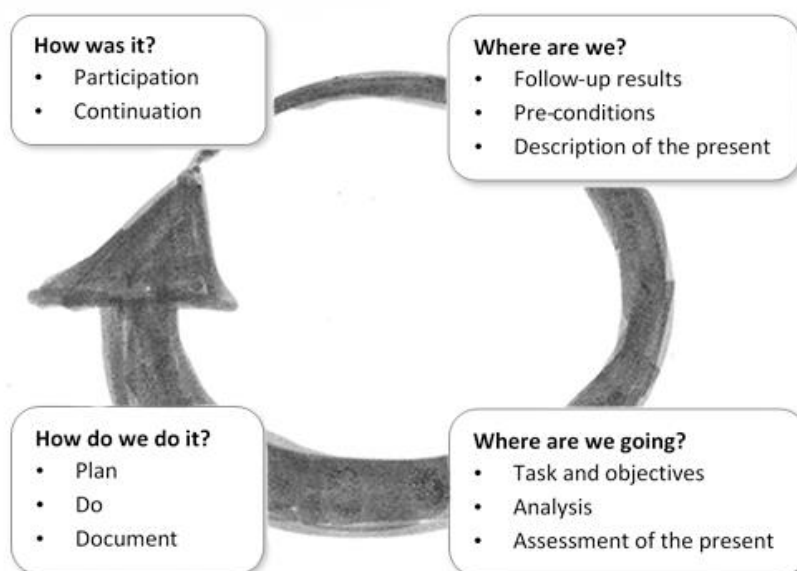


Figure 1 National model for systematic quality development work (translated from an original in Skolverket, 2015)

The local template followed the national model, with locally adapted subtitles and questions. The template slides³ are shown in figure 2. On the first slide there is a ‘year-wheel’ setting out when certain things are supposed to be performed during the school year. The five small circles in the wheel are ‘stops’, where the local template is supposed to be used. On the second slide a modified version of the national model is shown. Here the first phase – *Present - Where are we?* – is supposed to be used only at the beginning of the school year and concerns children’s interests and learning processes. The three following phases, with subtitles/questions, are repeated at each stop in the year-wheel.

² Plan, Do, Check, Act. For further descriptions see, for example, Sokovic, Pavletic and Pipan (2010).

³ The local template was anonymised.

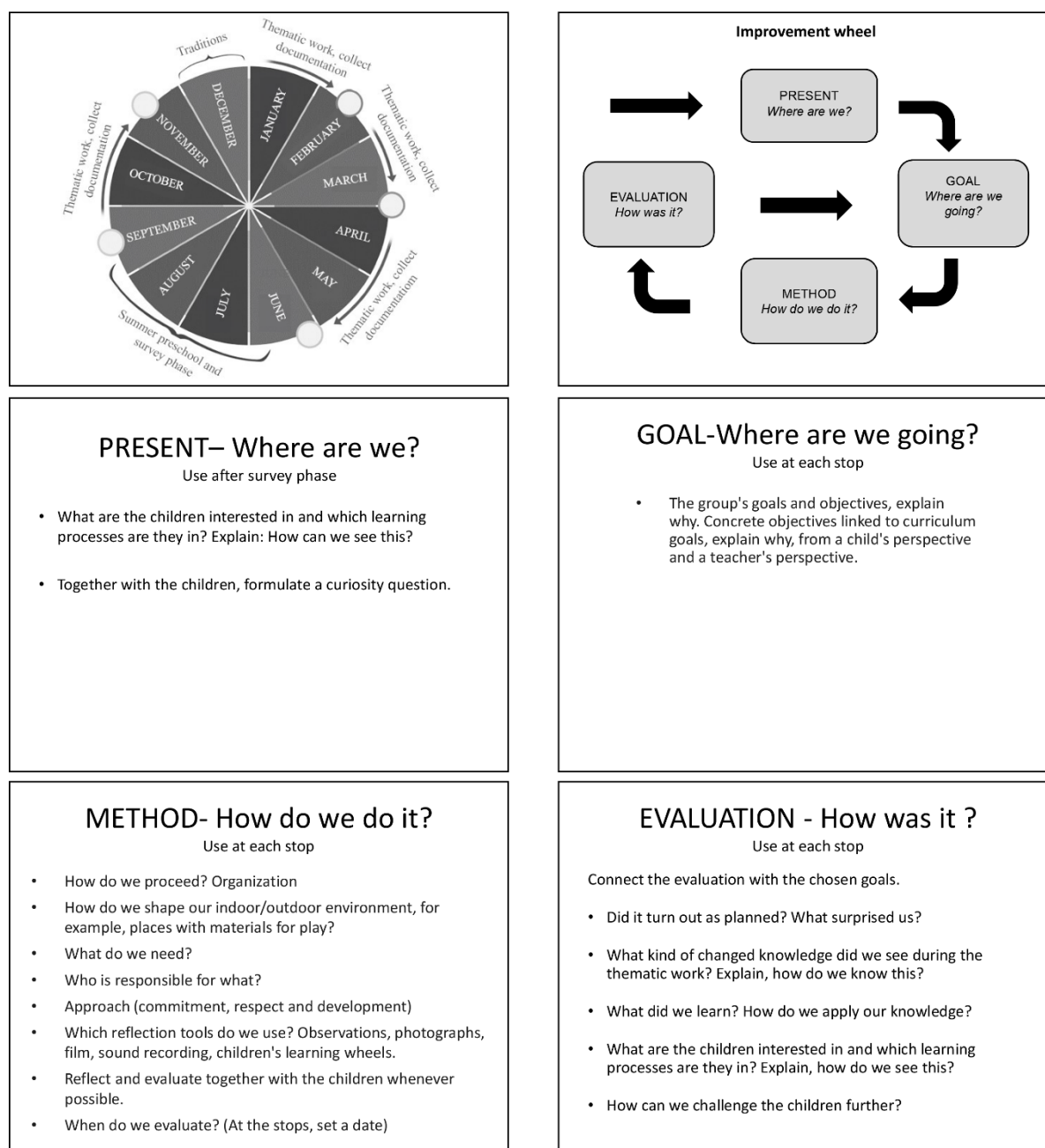


Figure 2 The local PPT template (reworked from the original)

The local documentation was made within the template, inserting text and photos. The PPT files had a different appearance between the groups; in some, the template was obvious and separate, in one it was even marked with a contrasting colour, whilst in others it was integrated with the inserted text and photos.

In the next section I will present the theoretical and methodological approach.

A posthumanist approach

There are two reasons behind the choice of perspective for this article: the multidimensionality of quality mentioned above, and a curiosity question about the relation between models, templates,

documents and how quality is produced. Firstly, taking a multidimensional view on quality means that several aspects have to be dealt with simultaneously. This is where Barad's (2003, 2007) agential realism could be helpful. She argues that everything is entangled, without anything preceding anything else. Through intra-action,⁴ things are locally determined and thus known. This also means that it is impossible to look at something *from without*. Instead, the documentation studied here, the reading of different texts (curriculum, research, theory), the physical handling of the PPT files, the researcher and her writing, are all entangled in producing this article.

Secondly, documents are often considered to be passive in relation to how, for example, quality is produced. In turning to posthumanism and agential realism (Barad, 2007), it is possible to understand how materiality plays a role in systematic quality development work. It enables seeing how not only words, but also things such as models, templates, and national guidelines are all performative. Thus, taking as a departure point Barad's (2003) notion of performativity, where matter is included as one active entity, this article asks how quality can be produced when documents (national model, local template and PPT files) are seen as performative in preschool systematic quality development work. In this article, what preschool quality becomes has to do with what is possible to document, what is made important enough to document, and what the national model and local templates ask for. It also has to do with preschool documenting traditions and what is seen as good preschool documentation and quality. Furthermore, it has to do with how this study is conducted, the research process. All these things are here seen as intra-acting (Barad, 2007). In Barad's terms, systematic quality development work, its documentation and the research process can be seen as an apparatus enacting 'what matters and what is excluded from mattering' (Barad, 2007, p. 148) as preschool quality in this article. In this apparatus the researcher becomes one entity, while theories, previous research and research material (PPT files) become other entities. The concept of 'intra-action' also entails that neither researcher nor texts (such as the national model, local template and PPT files) are seen as active agents beforehand, but as produced, or emerging through the specific intra-actions of the research process.

Reading diffractively

When everything is entangled with everything else, for one part of the entanglement (the researcher) to be able to know something about another part (the PPT files), a certain kind of research process is needed. For this study, a diffractive methodology (Barad, 2007) was considered useful. Unlike reflection, which tries to mirror something that is already there, diffraction opens up for what will come out of intra-active encounters (Barad, 2007). Diffraction is defined by patterns of difference rather than by mirroring images. It avoids trying to read what something means and instead focuses on what it produces (Lenz Taguchi, 2012). In this study, diffractive reading describes the process of handling and reading the PPT files in different ways; reading them through different texts (Mazzei, 2014); through the local template, the national model and previous research, focusing on what is produced. This research will produce certain specific knowledge that emerges through the in-between of researcher and research object in a process that encompasses the researcher as one part (Hultman & Lenz Taguchi, 2010). However, by not trying to find 'hidden truths' but instead seeing the knowledge as produced by intra-actions, I wish to trouble preschool systematic quality development documentation instead of establishing what 'it really is'.

What comes out of reading the PPT files (text and photos) diffractively, together with other texts, such as the local template, the national model, the curriculum, and previous research, will lead in different directions, spreading thoughts and knowledge (Mazzei, 2014). By making word clouds,⁵ counting words, printing, cutting out pieces, and putting them together again, I have physically 'played' and

⁴ The word 'intra-action' indicates that entities are not considered to be separate, initially. Instead of seeing them as separate and interacting, entities are seen as being produced through intra-actions.

⁵ This was done by inserting text into word-cloud generating software such as wordle.net and worditout.com.

experimented with the PPT files as well as with the curriculum and the national guidelines. By ‘playing’ with the texts, opportunities to see things in multiple ways emerged. One example of this is that whilst the texts focused mostly on teachers’ actions, initially making me think that children seemed to disappear, the word ‘children’ stood out in the word clouds. This prompted me to engage further in *how* children were present in the documentation.

The digital format made it easy for me, as researcher, to engage with the PPT files. Thus, it mattered that the documentation was made as PPT files since it enabled handling it in ways that otherwise would have been difficult or impossible. For example, selecting and counting words would have been more difficult if the documentation had been made and saved as printed or handwritten pages. When choosing words to count, I started by focusing on those which could be connected to education or care since they are important areas in the Swedish preschool curriculum (Swedish National Agency of Education, 2011). I then focused on the most frequent words in the different PPT files. In addition to exploring their substance or details in different ways, I also examined the PPT files in a physical sense, for example, looking at the kind of physical content (such as text and photos) that was included.

In this article, reading diffractively also means involving *photos* as well as *text*, and *reading* as well as *playing* with the PPT files and various other texts. What was known was seen as emerging from the intra-actions of the research process. While entangled in everything else, to be able to say something, *agential cuts* (Barad, 2007) have to be enacted, making temporary stops in the ongoing intra-active entanglement. Agential cuts are not made by someone or something; instead, they are enacted by specific intra-actions producing separation between ‘subjects’ and ‘objects’ (Barad, 2007). Thus, these cuts were made through the specific intra-actions that simultaneously produce the researcher and the focus of the research, that is, the research process.

In the analysis, the following question was asked: Since the PPT files, through the chosen perspective, can be seen as both a part of and as one of the entities producing systematic quality work, what consequences can diffractive reading have for how quality is produced in the studied documentation?

Reading diffractively means reading *with* the data, installing oneself in it in order to uncover one of many realities that already exists, and in which the researcher is entangled. In my initial engagement with the PPT files and the local template, two aspects emerged as central: first, the word ‘children’, and second, a focus on what the teachers did and how they arranged the preschool environment. With these aspects in mind I also read the curriculum, the national guidelines and previous research, all of which became entangled in the research process. Reading diffractively means engaging oneself in the reading, refraining from trying to find essences, and acknowledging the agency of the text itself. This is challenging, especially since ‘the position of objects “behind” or at least “separated” from discourse is embedded in the very logic of European languages’ (Jones & Hoskins, 2016, p. 81). However, diffraction helps highlight how the documentation is entangled with different texts and with the template.

Through diffractive reading a story will unfold, producing aspects of preschool quality in different ways. The story begins with my engagement with the PPT files, the national model, and the local template. By providing passages from the PPT files and other texts, I will show how they were read diffractively together. I will begin with the focus on what the teachers did.

Teachers’ actions as quality

In the phase in the template called *Evaluation – How was it?* some of the questions were:

- Did it turn out as planned? What surprised us?

- What kind of changed knowledge did we see during the thematic work? Explain, how do we know this?
- What did we learn? How do we apply our knowledge? (local template, slide 11)

These questions focus on actions, on whether things had turned out as “we”, the teachers, had planned, and on what “we” had seen and learned. In most of the PPT files the template questions and the answers were placed in close proximity. This means that the answers would probably follow the questions more directly than they would in a document where the questions were separated from the answers, which I could see in the following passages (following the questions above):

We have fulfilled what we had thought and planned. We have continued to read the books. We have painted mountains, trees. Explored colour. The children have mixed colours.

[...]

Our method has resulted in children continuing to discover and try activities on their own. They have developed the doing and exploring. [They are] [u]sing the concepts that we have provided. (group 1 slide 56)

Our intention was not to show so much beforehand, in order not to direct the children, but we realised that they need to be shown to get more experience with the material. Once we showed them what could be done, the children were quick to imitate us and also imitate each other. Then we saw that it was good to have a lot of the same material; this is something that we will continue having. (group 4 slide 11)

Reading these passages, plans, doings (implementation of plans) and intentions become central, that is, different kinds of activities or actions, such as fulfilling plans, reading books, providing concepts and using a method that encouraged children to continue to discover activities. The reading of the template and PPT files includes an understanding of them as parts of *quality work*, which produced activities and actions, such as planning and reading, belonging to the teachers (we), as important aspects of quality. Engaging with these passages I perceive the teachers as doers rather than as feeling subjects: there is, for example, no record of what surprised them. The diffractive reading produces (in me) a picture of astonishment at the mundane - or maybe there is no astonishment at all? It also gives the impression that the teachers and the children seem to be separate *as well as* entangled: the “we” reading books and painting mountains could refer to teachers and children as well as only to children. However, reading the questions and answers of the documentation I ask myself: how and where do teachers and children truly meet? For example, teachers plan, children use concepts, teachers learn (that children need to be shown), children imitate.

Focus on activities

In the photos of the PPT files, mostly activities and materials could be seen; some photos included teachers, most of them included children (often in groups). This made me interested in looking into whether children’s activities could be important. In the drawing below (figure 3) my eyes were drawn to the book held by the teacher. The children are seen from behind or looking towards the book, indicating that the book might be important. The photo caption said ‘Reading aloud from the book’, which could be read as indicating that the activity of reading the book is the principal focus of the photo, not who is reading or who is listening.



Figure 3 'Reading aloud from the book'. Drawing by the author from photo in a PPT file (group 1 slide 16)

The photo captions seldom included any names; they sometimes included the words 'one child' or 'the children', which suggested that children were not described as individual persons. Instead, my reading produced this as descriptions of groups and as examples of children. This intrigued me and prompted me to look into some classroom studies and into research about quality work to see how children might be described there.

Applying the principle of symmetry⁶ in classroom studies, Sørensen (2013) found children to sometimes be configured as a homogeneous group, a team opposite to the teacher, while in some situations teacher and children were configured as one. Reading this diffractively *with* the drawing above (figure 3) produced different ways of perceiving this picture: the children could be seen as one team, looking at the book, with the teacher and the book as opposite. But since all of them, including the teacher, are turned towards the book, they could *also* be seen as one group, as taking part in the same activity: book-reading. The caption 'Reading aloud from the book' does not say who is doing the reading. It would be easy to assume that the teacher is reading to the children; however, a diffractive reading of the photo through Sørensen's findings could open up for the possibility that one or all of the children could also be reading (text and/or pictures) aloud from the book.

In a study by Löfdahl and Pérez Prieto (2009a) of quality accounts in Swedish preschool, children and their perspectives were absent, and children's own activities, such as free play, were seldom mentioned. Here, activity as such seemed more important than the children for whom the activities were planned, and children seemed to be taken for granted and 'fitted into teachers' needs for the benefit of the planned activity rather than for the benefit of the children' (Löfdahl and Pérez Prieto, 2009a, p. 404). In a similar way, my diffractive reading of the passages and the study produced *activities* as important for preschool quality work. Löfdahl and Pérez Prieto's study described a divide between children's own activities (free play) and teacher-planned activity. In the passages there were no descriptions of whether the children's activities were regarded as teacher-planned or free play. The difference between teacher-planned activity and free play in the study prompted me to wonder about their relation. Would these two kinds of activities be considered equally important for quality? And, if

⁶ 'Symmetry' comes from Latour and Actor-Network Theory, meaning that humans and non-humans should be treated symmetrically as opposed to prioritising humans.

children try activities on their own, when would those activities be considered teacher-planned or as free play? The curriculum says that play should be used to stimulate children's learning and development (Swedish National Agency of Education, 2011). Does this mean that instead of being 'free', play should be integrated into teacher-planned activities? Through diffractive reading, ideas about children's free play and about teacher-planned activity interfered with the above picture: would this activity be teacher planned or initiated by one child or maybe the whole group of children? Would it originate from an interest of the teacher's or from the children or both? As Davies puts it:

Ideas and concepts are not innocent or neutral, but actively engage in the diffractive entanglement of any research. Like particles of light, ripples on a pond, or crisscrossing waves on the ocean, they affect each other—they interfere with each other. (Davies, 2014 p. 735)

The curriculum also states that:

Learning should be based, not only on the interaction between adults and children, but also on what children learn from each other.
[...]
Children should get stimulation and guidance from adults in order to increase their competence and acquire new knowledge and insights through their own activity (Swedish National Agency of Education, 2011, p. 6)

Reading the PPT files and the curriculum a picture is painted of preschool practice as focusing mostly on teachers' actions. These passages describe children's own activity as vital, but since teachers, adults and "we" are mentioned first, teachers' activity seems to be more important.

Summarising teachers' actions

In all, the intra-actions including the PPT files, the local template, the national model, previous research and the researcher enacted an apparatus which produced quality as focusing primarily on activity, mainly teachers' activity or actions. Thus, this apparatus enacted teachers' actions as mattering, thereby separating them from children's actions. Meanwhile, teachers and children were *also* sometimes configured as a team, in the drawing in figure 3, in Sørensen's research and also in this example, from one of the passages above:

We have fulfilled what we had thought and planned. We have continued to read the books. We have painted mountains, trees. Explored colour. The children have mixed colours. (group 1 slide 56)

The "we" in this passage might include both teachers and children, like the drawing in figure 3 when produced as an example of a joint reading. Thus, this reading produced quality as no longer solely encompassing teachers' actions but *also*, to some extent, including children's own activity. The activity of teachers and children would then interfere, and entangle in preschool practice. The activity that emerged as quality would mainly belong to teachers, but might also belong to children. Thus, a diffractive reading spread the picture and produced questions also about children's activities, free play and interest.

Since the word 'children' stood out in the word clouds created from the PPT files, I was intrigued to look into the ways in which this word was present in the PPT files, that is, intra-actions of myself and the files produced a process of further study. Which aspects of 'children' were there, or in

which contexts did ‘children’ emerge, what did ‘children’ connect to? Re-turning⁷ this word into the PPT files, the local template, the national model and the curriculum, over and over, a second picture was painted.

Children’s interests as quality

While most questions in the local template included “we” (referring to the teachers), a few also contained the word ‘children’, especially in the first and last phases of the national model: *Where are we?* and *How was it?*, in which one question was formulated: *What are the children interested in and which learning processes are they in?* This encouraged me to look further for interest in the different texts. I turned to the curriculum (Swedish National Agency of Education, 2011):

The starting point for the preschool is the experience children have already gained, their interests, motivation and their drive to acquire knowledge. (p. 6)

The work team should document, follow up and analyse [...] the occasions when children experience preschool as interesting, meaningful and fun. (p. 15)

...and then to the national guidelines:

Through work with pedagogical documentation, it becomes possible to start from what is happening among the children; what children are interested in and preoccupied by examining in daily preschool practice. (Palmer, 2012, p. 5)

Since children’s interest was mentioned in the curriculum, national guidelines, and template, I thought it must be important. This made me curious about the relation between children’s interests and quality development documentation in previous research.

In a study on Norwegian teachers’ documentation, Alvestad and Sheridan (2015) found that it focused on children’s interests and teachers’ pedagogical work. This was also clear in a study of children’s participation in preschool projects by Hamerslag (2013): preschool teachers integrated children’s interests in the projects, and started by considering children’s interests when choosing a new project, using pedagogical documentation to make visible children’s interests, theories and knowledge. The emphasis on children’s interests can also be tracked to the Reggio Emilia philosophy and pedagogical documentation, which have influenced Swedish preschools for a long time (Dahlberg, Moss, & Pence, 1999; Lenz Taguchi, 2000).

In my reading of the question *with* the curriculum, the national guidelines and some previous research, and focusing on systematic quality work, children’s interest was produced as an important aspect for preschool quality. However, a diffractive reading did not produce children’s interests as one stable and singular aspect. Reading the PPT files through different texts, different aspects of children’s interest emerged. Since diffraction produces patterns of difference rather than mirror images, children’s interests were produced disparately, as emerging and as a trait.

⁷ The word ‘re-turning’ is used here in the sense of turning something over and then over again, rather than in the sense of going back to something (returning).

Interest as emerging

The term ‘interest’ can refer to a number of different things: one can have a special personal interest in something, or can show interest by engaging in something. Interest can also refer to acting in someone’s interest, or it can encompass someone’s rights. In my initial reading of the PPT files, children’s interests were recognised in the form of engagement in different topics, for example, water, soft toys or insects, as in the following PPT passages:

In the space where there was water, stones and brushes, we have seen that water was a great interest of the children. We therefore tried to station the water-play in our nursing room by using a large tub and various buckets and bowls. Many children were still drawn to the sink with running water (group 4 slide 13)

We are considering whether we can plant an animal (a soft toy that talks) in the tree stump and make children interested in forest animals. They have actually shown interest in insects in the forest and in animals in conversations about the zoo. We also have worksheets with animals, which we can try out. (group 7 slide 17)

Through a diffractive reading of the PPT passages and different definitions of the term ‘interest’, children’s interest was produced as emerging in several diverse ways: first, as emerging from *policy documents*, as a starting point for the practice, for example, when children’s interest in water was described as a starting point for organising water-play. Second, as a way of acting in children’s interests or of encompassing their *rights to respect*, emerging from the description of children expressing their interest in insects, which made me think that the children had been listened to, and their ideas respected. And third, as something that could emerge from *teachers’ actions*, in accordance with the description of how the soft toy might make children interested in forest animals.

Interest as a trait

In the following passage, interest is described as something that could be discerned when children focused on something:

After the summer we started to carry on with the plans we had made for the autumn. We went to the forest to show our new colleague where we usually go, and the children were able to present the trees we usually visit. Their interest in the trees had shrunk and there was a greater interest in bugs. We followed the interests of the children and were co-learners. We did also look at the trees in the school-yard and searched for tree stumps and explored them, but the children showed no real interest in that. We then chose not to continue with our various plans about stumps and trees. We followed the children’s interests about bugs and introduced the magnifying glass, which they found exciting for a short time. Although we have tried to work in accordance with the children’s interest in animals, they did not want to dig deeper into that. We believe that there is no point in continuing with these themes since the children do not seem interested. (group 7 slide 19)

In this passage the text says that when the interest in trees waned, the teachers (we) followed the children’s interest in bugs, providing a magnifying glass. When this did not seem to work, it says that they did not continue with the topic. My reading of this passage, through the curriculum and guideline passages above, produced children’s interests as something inherent in the children, as a trait that could be thought of as a starting point for teachers, who then could follow. A curiosity in how children’s interests could be discussed in previous research guided me to a study by Hedges et al. (2011), where children’s interests were described as highly stimulated by everyday life experiences

with families and friends, adults and other children. These children's interests often followed teachers' interests in kindergarten.

Reading the above passage diffractively through this, children's interests emerged in *disparate* ways: the PPT files seemed to claim that interest could be discerned when children focused on something and also that children's interest was something that teachers would follow, which makes me think of interest as something inherent in children, a trait. In Hedges' study and in the previous passages, children's interests were produced as emerging, or stimulated by others. In the PPT files, *following* was written as teachers following children's interests, while the study talked about children following teachers' interests.

Summarising children's interests

Reading the passages through the template question about children's interests, the passages from the curriculum, the national guidelines and some research produced children's interests as a point of departure for their learning, for teachers' work and for preschool practice as a whole. Since the same template question was asked at the beginning (*Where are we?*) and at the end (*How was it?*) of the quality work, children's interests were also produced as both a point of arrival and a point of departure. Thus, through diffractive reading, identifying, following and keeping children's interests were produced as important aspects of preschool quality. Children's interests were also produced as multiple: as emerging from diverse directions *and* as inherent in children. Being produced as multiple, through intra-action, the word 'interest' could be played with and thought of as *in(tra)est*. Children's *in(tra)est* would then point to something that is produced between children and their environment rather than something that takes place within children, as a relation rather than as inherent or emerging in children.

Summarising...

Installing myself into the PPT files, I could imagine that teachers were planning, acting and arranging, and that children were everywhere and nowhere, as learning objects or examples, with interests that would be situated within them as well as emerging out of intra-actions of policy documents, rights to respect and teachers' actions: as *in(tra)ests*.

The story about what was produced as preschool quality through intra-actions in systematic quality development documentation has thus far produced quality as two more or less stable aspects. Reading these aspects through each other produced a systematic quality development documentation that did not focus on children's development and learning, nor on 'how the quality of the preschool, i.e. its organisation, content and actions can be developed so that each child receives the best possible conditions for learning and development' (Swedish National Agency of Education, 2011, p. 14). Instead, this diffractive reading produced quality as concerned with how teachers act and work *and* with children's interests, as emerging *and* as a trait *and* maybe also as *in(tra)ests*.

This means that what quality became through my diffractive reading of these PPT files was part of what preschool quality could become in these particular preschools. Other kinds of documentation, such as surveys answered by parents or lists of children's schedules, could determine quality quite differently. With this article, I argue that preschool quality should not be seen as settled once and for all, but that it is important to take into account what is continually and locally produced, and which entities are involved in this production. It mattered that the systematic quality development work was performed by using a local template in PPT format. It mattered for what quality became and it also mattered for how it could be researched.

Discussion

Barad argues that entities are not determined beforehand, but instead become determinate as results of specific intra-actions; they become an inseparable part of what Barad calls phenomena: ‘the ontological inseparability of agentially intra-acting components’ (Barad, 2007, p. 33). For this study this means that within the apparatus of systematic quality development work, the local template, curriculum, national guidelines and the act of documentation became inseparable parts of the production of different ways of understanding preschool quality.

If preschool teachers use a certain kind of tool, model or template for systematic quality work, it could mean that less time is needed for paperwork and more time can be used for interacting with children. Since the curriculum and research establish teacher-child interaction as one of the most important aspects for quality, using these models or templates might be seen as a good idea. Through reading systematic quality development documentation diffractively, I have shown how entities such as models and templates play a part in and produce systematic quality development work, in turn producing certain elements as important for quality. Still, one element that was not produced through my diffractive reading was interaction, between children or between teachers and children. Although seen as highly important in the Swedish preschool curriculum as well as in research, interaction did not emerge as important here. It could very well be that teachers’ actions and children’s interests were the main concerns in these particular preschool groups, *and* it might be a consequence of the local template becoming actively agentic in this systematic quality development work. However, if templates should be used in order to enable more teacher-child interaction, this result seems a little paradoxical.

Through the diffractive reading of the material and text in the study, children, as well as teachers, were produced as a group; there were no records about who they were, which means that any differences between teachers, children, or groups were made invisible. One problem with this could be that quality runs a risk of becoming decontextualised, universal, and standardised, since it would not take into account these differences (Tobin, 2005). If there are no records in the documentation of which children are present in each group, they could be described as similar, with a risk of being compared to one single standard; ‘this is how a preschool group is and functions’. However, the local template may be sufficiently open for local standards (or processes) to develop, and universal standards to be countered, within each of the groups. Since children’s interests were one aspect of quality that became important through the diffractive reading, taking as a departure point children’s interests in each group rather than some kind of standardised quality measures could be one way of *not* adapting universal standards.

Likewise, despite a strong emphasis on children’s interests there were no records of *different* interests, and interests were often accounted for in relation to what teachers provided (for example, trees). In relation to children’s seemingly ‘free choices’ in play, Wood (2014) points out that power relations within groups of children might disadvantage some while advantaging others. Thus, focusing on children’s interests (as a group) could be problematic if there is no focus on the source of children’s interests. Focusing on interests as a quality element could also mean that only children showing interest will be seen. In addition, which interests would be seen as important? In which topics can children/are children allowed to show interest? For example, would playing digital games count as much as exploring trees? Also, thinking of interest as *in(tr)est*, as produced between children and other entities, might open up for multiple ways of accounting for interests, for example, as something not just belonging to the children or emerging from teachers’ actions but also as materialising through intra-action, in which non-humans, such as toys, water or digital devices, also participate actively.

Concluding thoughts

Preschool quality, although multiple, or perhaps indeterminate, did become specific when produced by specific intra-actions in preschool systematic quality development work, that is, by a certain apparatus. By taking a posthumanist stance, troubling the idea of documentation as representing a truth, and forwarding how materiality plays a part in it, knowledge was produced about how a national model, a local template and different texts co-produced different preschool quality becomings. The importance of which measure is involved was stressed. With the use of one local template for systematic quality development work, certain aspects of preschool quality were brought forward. While previous research has shown that documentation focuses on individual children when using individual development plans, portfolios, and sometimes pedagogical documentation (Vallberg Roth, 2012), in this study a different model produced other aspects of quality that did not focus on individual children but instead on teachers' work and children's interests or in(tra)ests. With this article I argue that it is important for anyone working with systematic quality development documentation in preschool to consider what quality can become, and how local templates, curriculum, photos, national guidelines, research, and doubtless other things as well play an active part in constructing preschool quality.

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References

- Alasuutari, M., Markström, A.-M., & Vallberg-Roth, A.-C. (2014). *Assessment and documentation in early childhood education*. New York: Routledge.
- Alvestad, T., & Sheridan, S. (2015). Preschool teachers' perspectives on planning and documentation in preschool. *Early Child Development and Care*, 185(3), 377-392.
<https://doi.org/10.1080/03004430.2014.929861>
- Barad, K. (2003). Posthumanist performativity: Toward an understanding of how matter comes to matter. *Signs: Journal of Women in Culture and Society*, 28(3), 801-831.
<https://doi.org/10.1086/345321>
- Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. London: Duke University Press. <https://doi.org/10.1215/9780822388128>
- Bjervås, L.-L. (2011). *Samtal om barn och pedagogisk dokumentation som bedömningspraktik i förskolan*. (Dissertation) Göteborg: Göteborgs universitet.
- Dahlberg, G., Moss, P., & Pence, A. (1999). *Beyond quality in early childhood education and care: Postmodern perspectives*. London: Falmer Press.
- Davies, B., (2014). Reading Anger in Early Childhood Intra-Actions: A Diffractive Analysis. *Qualitative Inquiry*, 20(6), 734-741. <https://doi.org/10.1177/1077800414530256>
- Hamerslag, A. (2013). *Barns deltagande och delaktighet. Projektarbete i en förskola med inspiration från Reggio Emilia*. (Licentiate thesis) Uppsala: Uppsala universitet.

- Hedges, H., Cullen, J., & Jordan, B. (2011). Early years curriculum: Funds of knowledge as a conceptual framework for children's interests. *Journal of Curriculum Studies*, 43(2), 185-205. <https://doi.org/10.1080/00220272.2010.511275>
- Hultman, K., & Lenz Taguchi, H. (2010). Challenging anthropocentric analysis of visual data: A relational materialist methodological approach to educational research. *International Journal of Qualitative Studies in Education*, 23(5), 525-542. <https://doi.org/10.1080/09518398.2010.500628>
- Jones, A., & Hoskins, T. K. (2016). A Mark on Paper: The Matter of Indigenous-Settler History. In C. A. Taylor, & C. Hughes, *Posthuman Research Practices in Education* (ss. 75-92). Basingstoke: Palgrave Macmillan. <https://doi.org/10.2514/1.J055169>
- Lager, K. (2010). *Att organisera för kvalitet. En studie om kvalitetsarbete i kommunen och förskolan.* (Licentiate thesis) Göteborg: Göteborgs universitet.
- Lenz Taguchi, H. (2000). *Emancipation och motstånd.* (Dissertation) Stockholm: HLS.
- Lenz Taguchi, H. (2012). A diffractive and Deleuzian approach to analysing interview data. *Feminist Theory*, 13(3), 265-281. <https://doi.org/10.1177/1464700112456001>
- Löfdahl, A., & Pérez Prieto, H. (2009a). Between control and resistance: Planning and evaluation texts in the Swedish preschool. *Journal of Education Policy*, 24(4), 393-408. <https://doi.org/10.1080/02680930902759548>
- Löfdahl, A., & Pérez Prieto, H. (2009b). Institutional narratives within the performative preschool in Sweden: 'If we write that we're no good, that's not good publicity'. *Early Years: An International Research Journal*, 29(3), 261-270. <https://doi.org/10.1080/09575140903161438>
- Mazzei, L. A. (2014). Beyond an easy sense: A diffractive analysis. *Qualitative Inquiry*, 20(6), 742-746. <https://doi.org/10.1177/1077800414530257>
- Moss, P. (2016). Why can't we get beyond quality? *Contemporary Issues in Early Childhood*, 17(1), 8-15. <https://doi.org/10.1177/1463949115627895>
- Palmer, A. (2012). *Uppföljning, utvärdering och utveckling.* Stockholm: Skolverket.
- Ritchie, J. (2016). Qualities for early childhood care and education in an age of increasing superdiversity and decreasing biodiversity. *Contemporary Issues in Early Childhood*, 17(1), 78-91. <https://doi.org/10.1177/1463949115627905>
- Salazar Pérez, M., & Cahill, B. (2016). "Readiness" as central to the (re)production of quality discourses in the United States. In G. S. Canella, M. Salazar Pérez, & I.-F. Lee, *Critical examinations of quality in early education and care: Regulation, disqualification, and erasure* (ss. 11-25). New York: Peter Lang.
- SFS 2010:800. (2010). *Svensk författningssamling 2010:800, Skollag.* Retrieved from Sveriges Riksdag: <http://rkrattsdg.gov.se/SFSdoc/10/100800.PDF>
- Sheridan, S. (2009). Discerning pedagogical quality in preschool. *Scandinavian Journal of Educational Research*, 53(3), 245-261. <https://doi.org/10.1080/00313830902917295>
- Skolinspektionen. (2012). *Förskola, före skola - lärande och bärande.* Stockholm: Skolinspektionen.
- Skolverket. (2015). *Kvalitetsarbete i praktiken.* Stockholm: Skolverket.
- Sokovic, M., Pavletic, D., & Pipan, K. K. (2010). Quality improvement methodologies - PDCA cycle, RADAR matrix, DMAIC and DFSS. *Journal of Achievements in Materials and Manufacturing Engineering*, 43(1), 476-483.
- Sparman, A., & Lindgren, A.-L. (2010). Visual documentation as a normalizing practice: A new discourse of visibility in preschool. *Surveillance & Society*, 7(3/4), 248-261.
- Swedish National Agency of Education. (2011). *Curriculum for the Preschool Lpfö 98. Revised 2010.* Stockholm: Skolverket.
- Sørensen, E. (2013). Human presence: Towards a posthumanist approach to experience. *Subjectivity*, 6(1), 112-129. <https://doi.org/10.1057/sub.2012.31>

- Taggart, B., Sylva, K., Melhuish, E., Sammons, P., & Siraj, I. (2015). *Effective pre-school, primary and secondary education project (EPPSE 3-16+)*. Research Brief. London: Department for Education.
- Tobin, J. (2005). Quality in early childhood education: An anthropologist's perspective. *Early Education & Development*, 16(4), 421-434. https://doi.org/10.1207/s15566935eed1604_3
- Vallberg Roth, A. (2012). Different forms of assessment and documentation in Swedish preschools. *Nordisk Barnehageforskning*, 5(23), 1–18. <https://doi.org/10.7577/nbf.479>
- Vallberg Roth, A. C., & Månsson, A. (2008). Individuella utvecklingsplaner som uttryck för reglerad barndom. Likriktning med variation. *Pedagogisk Forskning i Sverige*, 13(2), 81-102.
- Vallberg Roth, A. C., & Månsson, A. (2011). Individual development plans from a critical didactic perspective: Focusing on Montessori- and Reggio Emilia-profiled preschools in Sweden. *Journal of Early Childhood Research*, 9(3) 247–261. <https://doi.org/10.1177/1476718X10389148>
- Vermeer, H. J., van Ijzendoorn, M. H., Cárcamo, R. A., & Harrison, L. J. (2016). Quality of child care using the environment rating scales: A meta-analysis of international studies. *International Journal of Early Childhood*, 48(1), 33-60. <https://doi.org/10.1007/s13158-015-0154-9>
- Wood, E. A. (2014). Free choice and free play in early childhood education: Troubling the discourse. *International Journal of Early Years Education*, 22(1), 4-18. <https://doi.org/10.1080/09669760.2013.830562>
- Åsén, G., & Vallberg-Roth, A.-C. (2012). *Utvärdering i förskolan - en forskningsöversikt*. Stockholm: Vetenskapsrådet.

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