Playful and physical active storytelling in day care settings

Abstract
This paper is about playful and physically active storytelling (PPAST) with children in day care. It is highlighting why this way of telling a story, combined with pedagogical tact for maintaining play mood during the story, can support 2–5-year-old children’s imaginary play. From 2016 to 2020 three prototypes of physical active stories for kindergartens and seven for nurseries and home-nurseries were designed to facilitate PPAST in day care. The stories were designed in a design-based research approach drawing on qualitative as well as quantitative data generation. The material was distributed to 3,000 day care facilities in Denmark. This paper aims at answering two questions: How does PPAST work for different groups of children? What makes PPAST playful? According to the participating pedagogues the children that benefit the most from PPAST are children in vulnerable positions. Seven principles of significance for play to emerge during or after PPAST can be deduced from the empirical data. PPAST must include children’s co-determination, children’s as well as the pedagogue’s embodiment of the story rituals, an imaginative open storyline that can be combined with aesthetic improvisations and the inclusion of affordances in the physical environment and finally, storytelling object(s) that inspire the story and remain when the storytelling ends are essential. And perhaps most importantly, the story must give room for children’s differentiated participation.

Keywords
design for play, physical active storytelling, imaginative play, pedagogy
Introduction
Humans have always gathered to tell stories because sharing stories connects us. Stories help us explore our ideas, dreams and fears and helps us understand ourselves, each other and the world (Bruner, 1991). This paper is about playful physical active storytelling (PPAST) with children in day care. It is about the inclusion of physical actions, affordances in the playground and rituals in storytelling. Furthermore, it is about children’s co-determination and the adult’s playful improvisations with the pedagogical aim of creating a space that can inspire and enhance children’s imaginative play.

Background
In 2004 the word learning entered the Danish day care legislation, and it became mandatory for all day care services in Denmark (age 0-6) to develop a local educational curriculum consisting of six themes: The child's versatile personal development, social competencies, language, body and movement, nature and natural phenomena and cultural forms of expression and values. The increased focus on learning generated a lot of debate and critique over the years (Sommer, 2015). In June 2018, the law was amended and renamed The strengthened pedagogical curriculum (SPC). The mandatory curriculum now states that «play» has value in its own right and not only as a tool for learning. It also states that pedagogy in all Danish day care facilities must be characterized by a playful and child centered approach. SPC further states that play sometimes must be guided, framed and supported to include all children (Børne- og Socialministeriet, 2018). As expected, the change from a learning perspective in pedagogy to a play centered perspective takes time, and three years after the amended law emphasized play above learning there is still work to be done before all Danish day care facilities are guided by a playful and child centered approach. An evaluation of the implementation of SPC 2020 indicated that adults working in kindergarten still only rarely participate in play (Dansk center for undervisningsmiljø, 2020).

Previous research has shown that especially for children struggling to get access to play communities, it is important that educators participate in play (Schousboe, 2015, p. 166). It is through participation in playful activities, primarily with each other, but also with adults, that children refine their play practices which includes playful, verbal and bodily communication skills (Mouritsen, 1996). Furthermore, research has shown that especially the outdoor play area lack professional facilitation of children’s physical active play (Bjørgen, 2012; Sønnichsen, 2017).

In western society the written language and the early development of children’s use of words and text is a strong discourse. Accordingly, working with picture books to create dialogue is a well-known methodology in Danish day care facilities when teaching young children to develop an understanding of the written and spoken language. But storytelling dominated by verbal and visual communication comes with the risk that bodily and playful qualities are to some degree ignored. In our focus on literacy, we sometimes forget that children tell stories through bodily action long before they start using words. Toddlers’ communication in social play is characterized by using whole body movements and sounds to attune emotions and cultivate relationships, play repertoire and play culture (Løkken, 2005). Also children remember stories better when they act them out (Pellegrini & Galda, 1982).
In general, young children display the greatest enthusiasm in playful activities that are supported by movement (Garvey 1979: 34). Different play moods are facilitated by different bodily actions. Consequently, the emergence of play is connected to doing (Skovbjerg, 2016). When approaching kindergarten at the age of three, the bodily acts are accompanied by words in an aesthetic narrative form – which we call children’s imaginative play (Mouritsen, 1996, s. 102).

The discrepancy between what we know about the importance of play and physical activity in children’s development and the professional practice leads us to the purpose and research questions of this paper.

Purpose and methodology
The purpose of this paper is to investigate if and how PPAST can contribute to building a pedagogical practice that supports all children’s access to play communities as well as a pedagogical practice that is playful and child centered. This paper aims to answer the two following research questions:

1. How does PPAST work for different groups of children?
2. What makes PPAST playful?

The overall methodology was design-based research where prototypes were designed in an iterative process between development and testing with inspiration from both data and theory, (Anderson & Shattuck, 2012; Barab & Squire, 2004). According to design-based methodology a pedagogical design must be tested and integrated in a realistic context, and on this background amended and retested before its value and contribution can be assessed (Anderson & Shattuck, 2012; Barab & Squire, 2004). The project was carried out during four years of development, testing, adjusting, retesting, and adjusting in an iterative process. The material and content developed in the project is just one example of how PPAST can be developed. The material being developed material in this project was called ‘Hoppeline’1. Day care facilities had the opportunity to sign up for the Hoppeline material and 3,000 day care facilities did.
Figure 1. The iterative process between development and analysis lasted four years.

Data generation methods
To generate data, both quantitative and qualitative methods were used. The quantitative
data were generated through a web-based questionnaire that collected the assessment and
experiences of the adult participants. The questionnaire was developed for this project and
consisted of 29 items in three scales and background questions. Before disseminating the
survey, it was piloted and adapted. To assess scale reliability Cronbach’s alpha was measured
for all three scales and the internal validity was high (> 0.75) for all three. Only two scales will
be used in this paper.

The questionnaire was sent to 2946 email addresses of participants using the Hoppeline
material. 332 respondents answered all questions and 486 some questions. The 39
respondents that indicated that they had never used the Hoppeline material were excluded
from the analysis. The low response rate was probably due to the fact, that the last materials
were sent out in the spring of 2020 coinciding with the COVID-19 lockdown. The restrictions
during the pandemic such as avoiding contact and keeping distance, dividing groups, and
cleaning several times daily were not compatible with the use of PPAST. Hence, many of the
participants would not have been able to use the Hoppeline material by the time they received
the questionnaire.

The respondents of the questionnaire worked in home nursery (40%), kindergarten (35%),
nursery (9%) and 15 % in other areas. 54 % of the respondents had used PPAST 10 times or
more, while 12% had used PPAST 3 times or less. The respondents used the following settings
for PPAST: the playground (65%), kindergarten classroom (61%), nature (48%), common
area (40%), a gym (22%) or other (9%). When using PPAST 61% of respondents indicated
that they worked alone and 39% indicated that the activities were completed together with
colleagues.

The study included qualitative research through video observations in two kindergartens
and one nursery. Observation is generally a good starting point for being able to describe the
interaction between actors, space and material (Brinkmann & Tanggaard, 2015, s. 86), while
the choice of video observation is suitable for observing a larger group in bodily interaction. The multidimensionality and possibility of repetition in video observation makes it possible to shift focus for observation (Rønholt et al., 2003, s. 124). The observations were analyzed with inspiration from phenomenological method (Brinkmann and Tanggaard, 2015, p. 217), to approach an understanding of how the designed material contributed to playfulness and where it might be optimized.

Using a mixed methods approach drawing on quantitative and qualitative data in the same project does offer the opportunity to look at the research question from more than one perspective. The data generation methods used presents a few challenges that must be taken intro account when using the data to create insights and arguments. While the qualitative data offers the opportunity to develop a deeper understanding of the way professionals and children have worked with PPAST, the data are in its nature subjective. In general, a design-based project must also be validated by its usefulness (Barab & Squire, 2004, s. 8), but at the same time, there is a risk of »cherry picking« or researchers unconsciously looking for datapoints to confirm their own beliefs (Cohen, Manion & Morrison, 2018, p. 287). By working in a team and using more than one researcher to analyze and argue, we have attempted to avoid biases. Using a questionnaire to answer the research questions offers the opportunity to draw on the experiences of many more participants than would be possible when using qualitative methods. However, the questionnaire comes with several challenges, too (Cohen, Manion & Morrison, 2018, p. 471). Questionnaires can also be biased if questions are asked with an underlying assumption about how participants will answer. Equally, if the analysis of the answers is not carried out taking context and recruitment into account, there is a risk of getting a biased analysis. In this project there is a risk that only the participants that are positive towards PPAST have answered. By piloting the questionnaire and having theory guide the development, we have attempted to develop questions that are not loaded and built on wrong assumptions.

The design of PPAST

The PPAST design investigated in this paper was called Hoppeline. The following is a description of the material and the thoughts behind it.

The main aim of the material was to inspire pedagogues to use PPAST to make storytelling playful while at the same time helping children build play repertoire in relation to imaginative play. The PPAST was designed between 2017 and 2020 in an iterative interdisciplinary collaboration between educators in four day care facilities, musicians, a graphic designer, and the project team. The material was distributed to 3,000 day care facilities in Denmark (ranging from a few to more than 100 children) with support from the Nordea Foundation. Participation was voluntary and participants signed up for participation on their own initiative. It is important to emphasize that PPAST does not require a large-scale project but can be developed locally at the day care facility.

The imaginative stories for kindergarten (age 3-6) had a detailed colorful illustration on one side of a plastic coded sheet and text on the other side. The stories for nurseries (age 1½-3) consisted of very simple illustrations and text. All stories were about the same two main characters: the rabbit Hoppeline and her friend Frækkefrø. The stories came with a ladybug hand puppet and rhythmic songs, that would support aesthetic communication.
The design encouraged adults and children to embody the action of the story together since it was clearly stated in the text with graphic icons, when the pedagogue was to tell the story in his/her own voice, when to speak through the hand puppet and when to give room for physical play activity. Through a multimodal guidance approach, the importance of perceiving the written story as a framework open for improvisations and the emergence of play and not a fixed storyline was conveyed.

A theory-based design
Different theoretical perspectives inspired the design of the Hoppeline stories. First and foremost, the design can be linked to the concept of play moods (Karoff, 2013; Skovbjerg, 2016). Skovbjerg outlines four basic practices facilitating play moods in children’s own play. Especially three of those practices SLIDING, DISPLAYING and SHIFTING inspired the design of the narrative framework to help pedagogues sustain one playful mood into the next moment during storytelling. The fourth practice EXCEEDING, is characterized by being out of beat for example by destroying, mocking, yelling and for example being naughty in a playful way by doing the opposite of what the pedagogues have planned for. Out of ethical concerns we did not focus directly at designing for this practice. Instead, pedagogues were encouraged...
to be responsive to the play initiatives that would emerge through the storytelling. This also meant tolerating what they considered as an acceptable practice of EXCEEDING from the children and the mood of euphoria.

The practice called SLIDING characterized by strong repetition without significant variations has inspired the inclusion of sequences of movement with a common rhythm. The practice DISPLAYING characterized by children showing what they can do with their body aiming at creating an atmosphere of extroversion, noise, and performance has inspired the inclusion of different creatures like monsters, animals or artists, athletes etc. that are to be embodied in the storytelling. The practice SHIFTING characterized by intensity would add a high-tension mood was included in the design through several games of tag and romping about (Skovbjerg 2016) designed to give powerful impressions through the vestibular sense and the proprioceptive sense and awake feelings of danger (that is, a danger that is overcome) important for children’s inner motivation (Sandseter 2009, 2015).

Children’s play culture often emerges with and around artefacts or spaces that invites to bodily playful action (Løkken, 2005; Mouritsen, 1996; Schousboe, 2015; Skovbjerg, 2016), consequently, the concept of affordances has been meaningful to consult. Affordances are opportunities for action in the physical world that arise when they are recognized or discovered by a subject (Gibson 2015). They can by natural structures, such as hills, trees, rocks, and areas with uneven surfaces, or the wind, rain and sun. They can also be immovable objects, such as a climbing frame, or movable items like sticks, bean bags, etc. The design encourages pedagogues to be aware of and include play invitations in the physical environment to add sensory quality to the storytelling.

To tickle the imagination, the stories were designed to contain the same captivating ingredients that characterize children’s own fantasy play: thematic freedom of action, free connection logic and the ability to act physically (Schousboe 2015). In other terms, everything is possible. A lot of action in the form of verbs such as running, jumping, fighting, spinning, crawling, flying, swimming, riding etc. was included in the design.

According to Mouritsen (1942-2015), there are three forms of children’s culture: culture with, for and by children. All three are known to be mutual sources of inspiration to each other. The Hoppeline material (hand puppet, illustrations, music) were designed as culture for children because they are concrete products aimed at motivating children. The stories were designed to inspire a playful bodily culture with children – a co-creating playful and physically active storytelling with both pedagogues and children’s participation. However, the materiel can only inspire. In the end, it is the playful pedagogical tact of the pedagogue (Van Manen, 2015) that shows itself as subtle influence, as holding back, as openness to the child’s experience, as attunement, as situational confidence, as improvisational gift (p. 79) that makes the storytelling playful, co-creative and physically active in a way so that it may scaffold children’s own imaginative play – culture of children. Children’s imaginative play is based on what Mouritsen called raw material from culture for- and with children, as well as their own and other children’s play culture (Mouritsen, 1996). The Hoppeline stories draw on various sources, such as consumer culture products for children, children’s play culture, and established pedagogical methods, in other words, a repertoire familiar to children as well as educators – no elements are new, but they are put together in a new way.
Results

In the following we will briefly present the results of the quantitative part of the study, after that we will elaborate on them through our analyses of the qualitative data.

How does physically active storytelling work for different groups of children?

88% of the respondents assess that PPAST in general have contributed positively to children’s desire to play.

<table>
<thead>
<tr>
<th></th>
<th>Greater benefit</th>
<th>Same benefit</th>
<th>Less benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children who are often restless or have trouble concentrating during other types of educational activities</td>
<td>80%</td>
<td>19%</td>
<td>1%</td>
</tr>
<tr>
<td>Boys</td>
<td>76%</td>
<td>24%</td>
<td>0%</td>
</tr>
<tr>
<td>Children who are often passive during other types of educational activities</td>
<td>76%</td>
<td>24%</td>
<td>1%</td>
</tr>
<tr>
<td>Children with low motor-skills</td>
<td>76%</td>
<td>21%</td>
<td>3%</td>
</tr>
<tr>
<td>Children who have difficulty getting into play communities</td>
<td>75%</td>
<td>24%</td>
<td>1%</td>
</tr>
<tr>
<td>Girls</td>
<td>70%</td>
<td>40%</td>
<td>0%</td>
</tr>
<tr>
<td>Children with language challenges</td>
<td>69%</td>
<td>29%</td>
<td>3%</td>
</tr>
<tr>
<td>Children with high motor-skills</td>
<td>58%</td>
<td>42%</td>
<td>0%</td>
</tr>
<tr>
<td>Children with high language skills</td>
<td>50%</td>
<td>49%</td>
<td>1%</td>
</tr>
<tr>
<td>Children with high play competences</td>
<td>49%</td>
<td>51%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Table 1. How do you think different groups of children benefit from physically active storytelling compared to more traditional ways of storytelling? (n=365-368).

The three lowest scoring groups (children with high motor-skills, children with good language skills & children with high play competences) all represent children with a high level of competencies. Table 1 shows that, according to the respondents, these groups have equal or higher benefits from the PPAST compared to traditional storytelling The groups of children that benefit the most from physical active storytelling (e.g., children who have difficulty getting into play communities, children with low motor-skills, children who are often restless or children who are often passive during other types of activities facilitated by grown-ups) are groups of children in vulnerable positions. Thus, respondents’ asses that PPAST offers a positive outcome for groups of vulnerable children, nevertheless, not at the expense of children with high levels of play, language- and motor competencies.
What makes physically active storytelling playful?

Respondents were asked to assess the importance of 12 different items in relation to children’s desire to play during or after the physically active storytelling.

<table>
<thead>
<tr>
<th></th>
<th>To a high degree</th>
<th>To some degree</th>
<th>To a low degree</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. That children and adults embody actions in the story together.</td>
<td>73%</td>
<td>25%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>2. That the children have the opportunity to participate in different ways and with different intensity, both physically and verbally.</td>
<td>73%</td>
<td>25%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>3. That the adults convey the story in a bodily dramatizing way through actions, voice acting, etc.</td>
<td>73%</td>
<td>25%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>4. That the adults include rituals / repetitions in the story.</td>
<td>73%</td>
<td>25%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>5. That the storytelling is not subject to time pressure</td>
<td>72%</td>
<td>26%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>6. That the storytelling is planned in advance, but open to improvisation.</td>
<td>62%</td>
<td>34%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>7. That adults have the opportunity to participate in different ways and with different intensity.</td>
<td>56%</td>
<td>41%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>8. That children's own play and suggestions for play have a place in the story.</td>
<td>52%</td>
<td>42%</td>
<td>5%</td>
<td>1%</td>
</tr>
<tr>
<td>9. That the children themselves have chosen that they wish to join.</td>
<td>48%</td>
<td>43%</td>
<td>6%</td>
<td>2%</td>
</tr>
<tr>
<td>10. That the children can influence the action of the story along the way.</td>
<td>48%</td>
<td>42%</td>
<td>9%</td>
<td>2%</td>
</tr>
<tr>
<td>11. That the physical environment is included in the narrative.</td>
<td>47%</td>
<td>47%</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td>12. That the narrative is spontaneous and unplanned.</td>
<td>35%</td>
<td>50%</td>
<td>12%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Table 2. To what extent do you consider that the following are important for physically active storytelling to contribute positively to children’s desire to play? (n=342)

The data shows that respondents prioritize that embodiment must be done not only by the children but also the adults, that there are several ways to participate, that rituals and repetition play a part in the story and that the physically active story can take place without time pressure, is planned but open to improvisation. At the other end of the scale respondents prioritize the least that the narrative is spontaneous and unplanned.
Skating With Hoppeline

Lily tells the nursery children about Hoppeline skating on the ice while she shows them the illustration. »Now we must also try skating«, she says, and takes out a box of cloths. She shows how she can skate across the floor by putting a cloth under each foot. Then she distributes the cloths. The children set about experimenting with »cloth-skating«. Most of them are very focused on getting their feet to move the cloths. Siv observes the others for a long time before she tries out »skating«. One of the older boys with good gait in the »skates«, throws himself to the floor while dramatically shouting »I am falling«. »Oh no« Lily replies and smile at him. Others of the older children follow his example, and the noise level rises with the repeating of the sentence »I am falling« and laughing. Peter sits behind the back of the sofa in the corner of the room and follows the others whit his eyes while Anne is immersed in pushing her teddy bear around on the floor on a cloth. (Observation in nursery 2020).

In the qualitative example, Lily uses the illustration, words, and her embodiment of the action of the story to display new play opportunities to the toddlers. Having cloths ready, shows that Lily has planned how to embody the story and her timing makes it possible for her to keep the toddlers’ attention. The cloths on the slippery floor give the children a sense of skating which together with the movement tickle their imagination. In other parts of her storytelling, we observed Lily using table and madras in a story about jumping into the water, sandbox and plastic shovels in a story about farm work and play objects in a story about puppies and a vet. Including affordances in the storytelling, makes the story come alive in a sensational way. Lily is open to improvisation and makes it possible for the children to participate in different ways which means that different play moods can emerge. Anne is devoted to the care of her teddy which reflect the play mood GLIDE. The older children approach a play practice of Display creating an atmosphere of noise and performance coming close to a high-tension mood and even euphoria due to their more and more intense bodily actions (Skovbjerg 2016). Siv has most likely not understood the verbal part of Lily’s storytelling but by looking at Lily´s and the other children´s embodiment of the story, she is eventually able to get a new bodily experience. The submission to repeat actions of others is a way of saying ‘yes’ to play invitation and the first premise for play moods to emerge (Løkken, 2005; Skovbjerg, 2016).

When the children and Lily collaborate to interpret phenomena through bodily language a meeting point of common attention is created. They mirror each other as they play the roles of skaters. This results in a qualitative difference between their own bodily interpretations and that of the others (Fredens, 2018) which enables the children to refine their play repertoire, get ideas and build a play practice while at the same time allowing themselves to be drawn into a playful mood through their physical actions (Skovbjerg 2016). Peter is participating in a more physically passive way, but that does not mean he isn’t feeling playful. In any case, he is very busy looking at the other children. According to Wenger (Wenger, 2010), there are different forms of participation. For instance, children may be in a legitimate peripheral participation position or in a full participation position. The older boy has a full participation position because he is affecting the play through his actions, and Lily gives him the space to negotiate his meaning in this way during the storytelling. Peter and Siv are in a legitimate peripheral participation position because the learning curve is steeper for them. They may
not have the required movement repertoire to participate in an imaginative game of skating. For children like Siv or Peter it becomes important that the storytelling is not subject to time pressure or the obligation to perform storytelling in a traditional way where both introduction, middle and end must be completed before we are able to say that we have told a story. Instead, the timing of the storytelling is bound to the pedagogical tact (Van Manen, 2015) of Lily. She decides, based on the playful commitment of the children, how long she will carry on »skating« and when she will carry on to the next page in the story. The physical storytelling object remains when the storytelling is over and makes it possible for the children to be reminded of their experience and new play repertoire later.

Rituals

Spontaneous and scattered children’s voices can be heard though the air shouting out the rhythmic strip from the ritual that begins the storytelling in the playground. More and more voices join in. They are on their way to the storytelling place (observation Kindergarten 2019)

From sociology we know that performing rituals together can create collective energy that can translate into the feeling of togetherness and emotional energy in the form of commitment, drive, and self-confidence. The collective energy arises when bodies are mutually attentive to something, follow each other in emotional stimuli and rhythmic entrapment and motion (Collins 2014). This corresponds with the description of how toddlers exchange common feelings and intentions in their play through so-called »joy concerts«. Through rhythmic sounds and movement actions, they affect each other emotionally, thus creating a common mood which confirms their togetherness or friendship (Løkken 2005). Creating collective energies can potentially lead to solidarity in a group and provide the group with common symbols of their social relationships (Collins 2014) which in turn can aid in giving all children in the group participatory roles in the play. In the observation, the children contribute to the playful mood by spontaneously using the strip for the storytelling ritual to create collective energy. Knowing the ritualistic rhymes, the same movement, the same stories as the other members of a play community, gives a child a better chance of participation in the play, practicing and negotiating his or her own opinion. It also makes it possible for children to create their own positive personal narrative based on the community narrative and to contribute to creating collective energy in the play community. A pedagogical effort giving children common play repertoire in day care, can be important especially to children who struggle to get access to play communities. Some of the pedagogues in kindergarten experienced that beginning the »playground time« with PPAST often meant, that the children would establish more open play groups where children in more vulnerable positions had a chance to access.
Seven principles for PPAST

Using the knowledge from the iterative process between development, testing and reflections with theory in the Hoppeline project as well as the questionnaire we will summarize what is important for physically active storytelling to become playful and benefit the participation of different groups of children. We will do this by presenting seven design principles which should be considered as dynamic and open ended with the intention to guide further exploration:

1. PPAST is physically active for both children and pedagogues

   The first principle emerging is that PPAST is physically active. Both the children and the pedagogues should interpret the action in the story together in a playful way, characterized by an aesthetic bodily dramatizing interaction. To repeat actions of others is a way of saying ‘yes’ to play invitation and the first premise for play moods to emerge. Play mood is connected to doing in a concrete bodily sense and the embodiment of the verbal part of storytelling makes it possible for children with verbal language challenges to participate.

2. PPAST begins and ends with a ritual

   The second principle is to begin and end PPAST with rituals. Rituals at the beginning and end of storytelling create temporal structuring and common symbols and feelings of belonging which can be of special importance to children who on a normal basis struggle to get access to play communities in the day care.

3. PPAST has an imaginative storyline

   Like any narrative PPAST must have a storyline with a main plot, heroes, helpers, enemies, a beginning, a middle and an end, but in PPAST play is more important than the storyline. Also, playful physical storytelling contains the same captivating ingredients that characterize children’s own imaginative play.

4. PPAST includes playful improvisation

   Playfulness has to do with emergence which means that playful storytelling must be open to improvisation to be able to contribute to a change of play mood through the chance of practice, ensuring that one playful mood slides into the next while the storytelling is preserved. In fact, one should only think of an imaginative storyline as a framework that can be adjusted according to how and where the playful mood emerges. Improvisation is hard to design for, but in PPAST preparation as well as openness to improvisation is important.

5. PPAST includes affordances in the physical environment

   The analysis of the empirical data showed that when affordances in the physical environment were included in the storytelling, it inspired physical activity and trickled the imagination through the senses. Most outdoor play spaces in Nordic day care facilities contain all kinds of affordances such as: climbing tools, puddles, hills, play materials, etc. that can be used in the story to create playful invitations and the kind of sensory experience that gives the imagination air under its wings. This testifies to the possibility of play moods to emerge anywhere a playful invitation catches our attention. Also, creating surprise in the physical environment can trickle the imagination – shiny pearls in the sand box etc.
6. PPAST includes a storytelling object(s)
   PPAST includes objects that inspires the story and remains when the storytelling ends. Culture with,- for- and by children are mutual sources of inspiration to each other which is an argument for using storytelling objects in the storytelling that remain when the storytelling is over, so that the children can revisit them and be inspired to play. The object could be an illustration, but one could also imagine others more tangible object, supporting storytelling and its after play.

7. PPAST gives room for differentiated participation
   The analysis of our empirical data through the lens of social learning theory has shown the importance of allowing for differentiated participation in the facilitation of play moods. Children absorbed in the role of skaters etc. who are given the space to negotiate for meaning by contributing to the action of the story either physically or verbally has what we can define as a full participation position while for example children who do not process the repertoire to participate in an imaginative game of tag – may initially observe the other children from a distance. This does not mean that play mood only occurs in the first example. Observing others play can also create playfulness while at the same time getting a sense of what is going on. It is of most importance for the participation of all children that there is not only one way to participate and not only one way to interpret the story in a bodily way, but several ways.

Concluding remark
In accordance with the two research questions in this paper we have demonstrated that, the groups of children that benefit the most from PPAST are groups of children in vulnerable positions according to the participants. Participants assess that these benefits occur not at the expense of children with high levels of play-, language- and motor competencies. What makes PPAST playful can be summarized in seven open ended dynamic design principles to guide further exploration. PPAST is physically active, begins and ends with a ritual, has an imaginative storyline, includes playful improvisation, includes affordances in the physical environment, includes a storytelling object(s) that inspires the story and remains when the storytelling ends and gives room for differentiated participation. The principles can be used as a point of departure for pedagogues when designing and performing their own PPAST but for PPAST to reach sustainability we will need to explore and elaborate on how day care educators can design and plan their own physically active storytelling in co-creation with children.

The PPAST material is a pedagogical design which is designed to facilitate the pedagogical support of children’s play mood and play repertoire. But a pedagogical design is not the same as pedagogy. It is by far a given fact that the use of the design itself will promote the support and inspiration of children’s play. The designed stories can only be turned into pedagogy in the hands of the pedagogue(s). As the empirical examples show, play mood in storytelling can be facilitated by pedagogues who are open to the play invitations coming from the children, from the physical environment for example the affordances of the playground and from their own play repertoire and pedagogues who are able and willing to perform storytelling through aesthetic communication using a playful dramatized voice, mimic, gestures, bodily action
and the use of supporting storytelling object(s). Play mood in storytelling can be facilitated by pedagogues who are open to include the children’s different ways of participating in the storytelling. To be able to conduct play in storytelling where one playful mood follows the next, the pedagogue – to quote Van Manen – has to be able and willing to seize the opportunity that is offered within Kairos moments of possibilities that are pure, perfect, unpredictable and uncontrollable (Van Manen, 2015, s. 52). In order for PPAST to become playful, it must be characterized by a circularity where the use of words, pictures (or other storytelling objects), physical affordances and the pedagogue’s playful presentation as well as the children’s bodily and verbal initiatives mutually inspire each other. Similarly, to how children learn to play through participation in play communities in daycare with other children and with professional playful pedagogues, the pedagogues themselves must also learn to perform tact in playful and physically active storytelling by practicing together with children and other pedagogues.

Notes
1. Hoppe is a Danish word for jumping and Line is a girls name
2. Frækkefrø means fresh eller nærmere ‘naughty’ frog

References

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