Socially Innovative Reconstruction of Preschool Premises

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Abstract
In order to shed light on Western public schools as neglected sites of social innovation, the article presents a single case study of a process for reconstruction of preschool premises in a Swedish municipality. Social innovation is discerned in terms of a value-based reconstruction of the schools, aiming to ensure gender equal play, learning and development among the children. The case highlights social innovation as an ideologically and locally contextualized process, reflecting the cultural dynamics and political processes in the public preschool context. It thereto pinpoints the materialization of norms and values in relation to the rooms, furniture and materials of public preschools. The study exposes how these were often ascribed stereotype notions both by the staff in their interaction with the children, and by the children themselves while playing and participating in other activities, thus hampering gender equal play, learning and development.

Keywords gender; norms; preschools; social innovation; values

Introduction
Rising inequalities, diminishing social cohesion, and insufficient measures for integration and inclusion have amplified the need for novel solutions to societal challenges. The rapidly expanding field of social innovation studies has engaged in analyses of the aspirations, processes and challenges of developing such solutions in varying contexts (Brandsen et al., 2016; Brundenius et al., 2016; Moulaert et al., 2013; Nicholls et al., 2015). These studies have acknowledged the social embeddedness of innovation processes. This in terms of the ideological, cultural and relational factors in the specific context that seem to affect the initiation, implementation and success of such processes (Brandsen et al., 2016; Jessop et al., 2013; Styhre, 2013). Social innovation is thereby perceived as a contested issue among stakeholders with varying ideological and political perspectives and interests (Segnestam Larsson and Brandsen, 2015).

This motivates further investigation of how the norms and values in specific contexts are converted into practical transformation in organizations and societies. Despite the prominent role of norms and values in Western public education and school settings, not least regarding democracy and gender equality (Heikkilä, 2016), such contexts have rarely been focused in social innovation studies (cf. Alden-Rivers et al., 2015; Brundenius et al., 2016; Ümarik et al., 2014). Education has only being briefly mentioned as part of the general area of social service innovation (cf. Martinelli, 2013). In order to shed light on these neglected sites of social innovation, the article presents a single case study of a process for reconstruction of preschool premises in a Swedish municipality. The study provides further insight into the role of contextualized norms and values in social transformation processes. It also highlights the materialization of such norms and values in relation to the construction of public preschools. The guiding research question for the study thus concerns how social innovation norms and values are contextualized and materialized in a Western public preschool setting, based on a Swedish case.

The article starts with a theoretical contextualization of the study, based on the field of social innovation studies as well as of social norms in Western public school settings. This is followed by an account of the single case study design, carried out as part of a participatory research approach. The results are then presented regarding the studied reconstruction process, with specific focus on how the guiding norms and values are contextualized and materialized. A discussion is thereafter pursued regarding how the results can be interpreted in the light of previous studies on social innovation and social norms in public school settings. This is followed by conclusions on how these insights serve to advance the knowledge on contextualization and materialization on social innovation values.
Theorizing Social Innovation and Normative Preschools

Social innovation studies have during the last decade expanded significantly in the wake of scholarly and political interest for novel solutions to societal challenges. Such challenges consist of rising inequalities, diminishing social cohesion, and insufficient measures for integration and inclusion, etc. (Brundenius et al., 2016; Brundenius et al., 2016; Moulaert et al., 2013). This includes rising income and wealth concentration, evoking social exclusion and marginalization of some groups of people in both developed and developing countries around the world (Brundenius et al., 2016). The rapidly rising number of scientific studies on social innovation have delineated it as novel approaches to meeting social needs or delivering social benefits to various communities (Moulaert et al., 2013). It thereto encompasses novel ways to address social problems in a more effective, efficient, sustainable or just way than established solutions (Brundenius et al., 2016). Much interest have been paid to social innovation as transformation of institutions. There, oppressive power structures are challenged and changed, by collective agency of concerned stakeholders initiating empowering social relations bottom-up (Moulaert et al., 2013).

Social innovation thus implies complex organizational and societal processes of satisfying unfulfilled social needs, reconfiguring social relations and empowering disadvantaged and marginalized groups of people (Brandsen et al., 2016; Moulaert et al., 2013). It thus extends the traditional view on innovation as a denominator primarily for new (mainly technological and industrial) products and services. The extended view includes organizational and societal change as well, in a multi-level approach to renewal of the economy, society and everyday life (Brandsen et al., 2016; Lindberg, 2014; Styhre, 2013). This implies that social innovation can take the form of a new product, service, method or technology, as well as a new approach, principle, norm, regulation, system or organization (Brundenius et al., 2016). It thus encompasses both material and immaterial results, and thereto denominates the very process of developing these results (Moulaert et al., 2013). Previous studies have delineated the processual innovativeness as new ways of involving concerned stakeholders in identifying and addressing social needs. It also encompasses new forms of cooperation across organizational and sectorial boundaries. This in order to realize encompassing solutions to complex societal and organizational challenges (Lindberg, forthcoming; Lindberg and Nahnfeldt, forthcoming).

The dual dimensions of social innovation as process and results reflect the call for theoretical engagement with complexity in social innovation studies. This includes a focus on dynamic processes, discontinuous and unpredictable systems, as well as structural transformation (Moulaert et al., 2013). Innovation is then acknowledged in multiple forms and contexts, including a variety of stakeholders and areas of activity, as well as a wide spectrum of incentives, procedures and visions (Lindberg, 2014). It also encompasses an understanding of how social innovations emerge, take shape and are integrated into the repertoire of established solutions in organizations and societies (Brandsen et al., 2016). The social embeddedness of innovation strategies and processes is considered as highly relevant to fully understand their dynamics and effects (Brandsen et al., 2016; Jessop et al., 2013; Styhre, 2013). Social innovation is thereby acknowledged as an ideologically and locally determined process.

The outcome of social innovation is highly dependent on “a decisive set of environmental factors” (Cattacin and Zimmer, 2016: 21). This includes the cultural dynamics and political processes in the concerned context (Brandsen et al., 2016; Jessop et al., 2013). The level of freedom and diversity, the character of political cultures, traditions and set-ups, as well as social relations and constellations of actors, are crucial parts of this (Brandsen et al., 2016; Cattacin and Zimmer, 2016; Jessop et al., 2013; Styhre, 2013). Those factors are considered to impose “both opportunity structures and constraints for new ideas and concepts that are put forward by agents in alliance with like-minded persons and brokers and which develop into locally embedded social innovations” (Cattacin and Zimmer, 2016: 22). This implies that social innovation is both contextual and path dependent (Moulaert et al., 2013).

Contextualization of social innovation has hitherto been studied in regard to various localities, such as cities (Brandsen et al., 2016), communities (Lindberg et al., 2017), rural areas (Copus et al., 2017) and informal settlements (Cipolla et al., 2015). It has also been studied in various areas of activity, such as
public welfare services (Rønning and Knutagård, 2015), neighborhood development (Ehn et al., 2014), social enterprises (Nicholls, 2006) and women’s networking (Lindberg et al., 2016). Social innovations in the area of public education and school settings, as focused in this article, are less common. This topic has mainly been explored in terms of education in social innovation (Alden-Rivers et al., 2015) and social innovation by (university) education (Brandsen et al., 2016; Brundenius et al., 2016). Social innovation in public education has rarely been focused, however. Even less so in Western regular school settings, except from more general school reforms (Umari et al., 2014).

Studies on social service innovation often mention education as a focus area besides health, care and other welfare areas. These generally lacks empirical and analytical accounts from the educational area, however (cf. Copus et al., 2017; Martinelli, 2013; Sirovátka and Greve, 2014). These studies might nevertheless provide insights into how social innovativeness in such services can serve to better address social needs (e.g. increased user-friendliness, need-adaptation or efficiency). They may also help understand empowerment of service users from specific social groups by greater information, knowledge, recognition, voice or power. The studies thereto highlight potential transformation of social and power relations among service providers and users. Thereto, they scrutinize how universal access to social services can be ensured by up-scaled, institutionalized change in social service provision (Martinelli, 2013).

As one dimension of the contextualization of social innovation, the relation between inertia and innovation is pinpointed in previous studies. There, non-occupied spaces – or clearings – between existing organizations and projects in a social landscape are identified as crucial for social innovations. This in order to develop independent of established structures (Segnestam Larsson et al., 2015). The identification and exploitation of such spaces is dependent upon a combination of bottom-up strategic initiatives and top-down institutional reorganization (Moulaert et al., 2013). Sustainable social service innovation on the local level are for example considered to require universal access to basic services guaranteed by the public system top-down. This at the same time as providing spaces for context- and user-sensitive, diversified initiatives bottom-up (Martinelli, 2013).

Such concordant dynamics are often hampered, however, due to conflicting interests of various stakeholders. This creates resistance and opposition to the initiated change. The values, actions and outcomes of social innovation processes are increasingly viewed as contested issues among researchers. This is partly due to clashing ideological perspectives (Segnestam Larsson and Brandsen, 2015). This reconnects with a historical view on innovation and renewal of traditional structures as as threatening rather than promising (Godin, 2014). The knowledge on such tensions remain however to be more fully explored. This since the gradual ‘appropriation’ of social innovation to the business and policy spheres has served to underscore the moral virtues and ethical norms of social innovation (Jessop et al., 2013).

The normative dimension of social innovation has been highlighted in several studies. This in terms of its aspired value creation for communities and societies rather than for private individuals (Brundenius et al., 2016). Innovation is thereby recognized as “a context-dependent process which is implicitly and fundamentally informed through the social agendas and consensus of those involved” (Daniel and Klein, 2014: 23). The social and collective aspects of innovation are thus pinpointed. This contrasts to the economic and individualistic focus in traditional innovation studies (Styhe, 2013). The impact of norm systems on organizational and societal change has been specifically highlighted in social innovation (Jessop et al., 2013). This includes the main aspirations of many social innovation processes to counterbalance societal challenges, such as social exclusion (Brundenius et al., 2016), diminishing welfare services (Segnestam Larsson and Brandsen, 2015), urban segregation (Brandsen et al., 2016; Ehn et al., 2014) and rural decline (Copus et al., 2017).

Some studies have highlighted gender equality aspirations in social innovation processes. These pinpoint the innovative identification of unfulfilled needs of improved gender equality in various contexts. They also pinpoint the development of new solutions that serve to diminish segregating, hierarchical and stereotype notions of gender in organizations and communities (Lindberg et al., 2015; Lindberg and Berglund, 2016). An intersectional dimension in social innovation aspirations is further
perceivable. This includes the recognition of social innovation to improve the well-being, life-quality, relations and empowerment among societal groups that are disadvantaged, due to other social factors such as ethnicity, age, unemployment or disability (Brandsen et al., 2015; Nicholls et al., 2015).

Similar aspirations are distinguishable in studies on Western public education. Schools have in previous studies been identified as key sites for joint construction and learning of stereotype masculine and feminine identities and behaviors among children. At the same time as striving to fulfill policies and regulations on equal rights and opportunities (Heikkilä, 2016; Paechter, 2007). Such guidelines include the UN Convention on the Rights of the Child. It states that all children should have the right to develop to their full potential, to play, to express their opinions, to gender equality etc. This regardless of gender, ethnicity, religion, language, abilities or any other status (United Nations, 1989).

In Sweden, where the case study in this article is situated, public schools are obliged to actively and systematically ensure equal rights and opportunities, regardless of the children’s gender, ethnicity, religion, disability, sexual orientation, transgender identity or expression, and age. The regulations for public preschools in Sweden – providing care for children from 1-5 years of age before entering the elementary school – further underline the obligation to respect human rights and basic democratic values, This includes freedom, equality, gender equality, integrity, solidarity. It is specified that no child should be delimited by stereotype notions of gender in the school. The preschool is to enhance knowledge and values among the children, based on an established value system (Andersson Tengnér and Heikkilä, 2017). These clearly articulated values in preschool contexts are considered to challenge established notions of masculinities and femininities as fixed identities among children (Paechter, 2007). They thereto challenge the myth of the natural and innocent childhood where gender equality interventions are superfluous (MacNaughton, 2000). This adds a ‘heteroglossic’ understanding of gender inequality to the dominating ‘monoglossic’ dito (Francis, 2010). This by recognizing the occurrence of individual, gender-transgressive performances beyond those dualistic notions of femininity and masculinity that have served to maintain patterns of gender inequality. This highlights the constant negotiation of norms in everyday life in public schools, concerning what is possible, right or wrong, normal and deviant etc. (Andersson Tengnér and Heikkilä, 2017).

Previous studies distinguish stereotype norms in several everyday operations of preschools. This includes their activities, interaction and premises. Boundaries and hierarchies regarding gender and other social factors have been distinguished in the construction, denomination, placement and usage of both rooms and materials (including toys, literature etc.) in the preschool settings. Various rooms, materials, colors and symbols are ascribed stereotype notions both by the staff and the children. The color pink is for examples primarily linked to girls and femininity, and toy trucks to boys and masculinity. The size, furnishing, decoration, naming, visibility, flexibility and equipment of the rooms in preschools have been proven to affect these notions and determine the delimitation of children’s play and learning (Andersson Tengnér and Heikkilä, 2017; Paechter, 2007). The central position of toys in children’s play can have both amplifying and moderating effect on the gendered segregated toy preferences that are adopted at an early age. Toys are also used by the children to negotiate gender (Heikkilä, 2016; Serbin et al., 2001).

Play has been proven to be essential to children’s learning and development. Play requires equity and equality, at the same time as forcing children to relate to prevalent power relations in the situation, the organization and the society. This may result in segregated and hierarchical play (Davies, 1989/2003; Heikkilä, 2016). These power relations are manifested both in the interactions among the children and between the children and the preschool staff (MacNaughton, 2000; Paechter, 2007). The staff has in Swedish studies been proven to use softer voices, more words and more intimate body language when interacting with girls. The demands placed on boys by the staff are correspondingly lower regarding rules, behavior, social skills, maturity and independency (Andersson Tengnér and Heikkilä, 2017, Heikkilä, 2016). Thorough self-reflection among the staff is required in order in order to change such stereotype interaction, based on a common knowledge-base regarding norms and power (Andersson Tengnér and Heikkilä, 2017; MacNaughton, 2000).
Research Design

The study is designed as a single case study of the reconstruction process of preschool premises in a Swedish municipality. The single case study design has been proven to be fruitful when exploring new complex contemporary phenomena in real-life contexts. There, the researchers have limited control over events and where the research questions begin with ‘how’ or ‘why’ (Yin 2009). The single case study approach was thus esteemed as the most promising approach for developing new knowledge on the complex topic of social innovation values in preschool reconstruction. The case was chosen due to its unique ambitions to reconstruct preschool premises based on clear values of democracy and gender equality in relation to children’s play and learning. The access to this case was ensured by pre-established contacts between the municipality in charge of all public preschools and the scientific leader of the study. This was based on to the latter’s extensive record of studying gendered relations in preschools. Three preschools were singled out for reconstructions in dialogue between the municipality and the scientific leader. The study was enabled by a research and development project funded by Sweden’s national innovation agency VINNOVA during 2016-2019. The project aims to promote knowledge on norm-critical innovation processes, through the reconstruction of preschools. The study encompasses the first phase of the project, where prevalent boundaries for children’s equal play and learning in the preschool premises were identified as a basis for subsequent reconstructions.

A participatory research approach was essential to enable a scientific study of the reconstruction process. This encompassed continuous dialogue and interaction between the municipality, the architects, the preschools and the university throughout the process. The participatory research approach prescribe joint knowledge development by researchers and those stakeholders in society that are concerned by the studied issue. This in order to make the developed knowledge more socially robust and thereby increase the contextual validity of the study (Aagaard Nielsen and Svensson, 2006; Coghlan and Brydon-Miller, 2014; Gunnarsson et al., 2015; Reason and Bradbury, 2008). The municipal representatives, the preschool staff and the architects were mainly involved via interactive dialogue sessions, continuously arranged during the process. There, the planning and insights were jointly discussed, based on previous theoretical and practical knowledge on norm-creative processes in preschool settings.

The children at the pre-schools, 3-5 years old, were involved through photo elicitation, where they were given cameras with which they freely took pictures of their everyday preschool premises. This was followed by individual discussions with each of them about their chosen motives, conducted by one of the researchers. To let very young children (3-5 years) articulate their perspective on which places that are important for them through photos, has in previous studies been perceived as an apt method for understanding the way the children creates meaning in their everyday pre-school contexts (cf. Andersson Schaeffer, 2014; Clark, 2010). All parents were informed about this procedure and requested to approve through consent forms. Participatory observations were thereto carried out at the three preschools, in order to distinguish the usage of the premises by the children and staff. This triangulation of data collecting methods concords with Yin’s (2009) perception that the richness of the studied phenomenon in single case studies requires multiple data sources. This in order to grasp the numerous relevant variables. The study is further based on document studies of project documents, where guiding values for the process are formulated and the reconstruction phases are described. Literature reviews of social innovation values and contextualization, as well as social norms in public school settings, also informs the study.

The gathered data was initially sorted into an encompassing chart, mapping normative boundaries and hierarchies in the three preschools. The results from the chart were then used as a springboard for designing a ‘provotype’ of the most undesirable preschool construction imaginable. The provotype amplified the most excluding and delimiting features in order to evoke critical insights into normative play and learning. The provotype was used as an anti-vision when outlining the reconstructions in the three preschools. This study focuses the identified boundaries in the preschool premises as outlined in the chart and as converted into the provotype. These boundaries were analyzed in the light of previous studies on social innovation and on social norms in public schools. The analytical ambition was to further expand existing social innovation theories on the role of norms and values for practical transformation (i.e. to obtain analytic generalization).
Results
The main aim of the studied process was to carry out reconstructions in three public preschools in a municipality in mid-Sweden. This in order to enhance equal play and learning among children, beyond delimiting norms regarding gender and other social factors. The experiences and results of the process were intended to be used as inspiration for the design of new standards for preschool reconstructions. The process was motivated by the need to renew the outdated Swedish preschool constructions from the 60’s and 70’s. These were designed for a more delimited mission than today. Preschools were earlier primarily required by public law to provide care for children, as a complement to the care provided in their homes. This mission has subsequently been expanded to encompass prerequisites for children’s play, learning and development as well. This includes prevention of delimitations and discrimination due to stereotype norms regarding gender, ethnicity, religion, disability, sexual orientation, transgender identity or expression, and age. These requirements are the same for public and private preschools in Sweden.

The management of the public preschools in Sweden are carried out by municipalities. The mid-Swedish municipality in charge of the concerned preschools in this study had thereby a legal incentive to find new ways to more socially inclusive premises and operations. Also the preschool staff called for more knowledge and practical tools for fulfilling their pedagogical mission regarding equality and norm-awareness. The studied process was hence guided by the vision to enable developing, creative play for the children through equal, inclusive and norm-aware preschool premises and operations. The dual aspiration in the process was to enhance the preschools’ fulfilment of national obligations regarding equality and inclusiveness, and to inspire playful learning and development among all children, regardless of social factors. The reconstructions were intended to provide new solutions, new configurations and new patterns of play and learning. More norm-aware preschool rooms were to shape the play in an equal and inclusive manner. In turn, more equal and inclusive play was to shape the rooms in a norm-aware manner. The children’s voices were perceived as especially important to acknowledge in the process. This since they are seldom consulted on matters that concern their everyday situation in the preschools, despite public regulations stating that they should be enabled to influence that.

By combining data from the photo elicitation, dialogue sessions and participatory observations, prevalent boundaries for equal and inclusive play and learning in the preschools were identified in a joint chart. These have been sorted in three main boundaries, described below.

Boundary 1: Disabling vs Enabling Rooms
This boundary concerned the discerned impact of the interior arrangements in the preschools on the inclusiveness and norm-awareness in children’s play, learning and development. One of the identified arrangements included the placement of shelves with materials (toys, literature, etc.) on an accessible or inaccessible level to the children. Another included the formal and informal naming of the rooms. These reflected more or less stereotype norms in regard to gender and other social factors, such as “the doll room”, “the workshop” or “the girls’ corner”. Differences were also detected in the usage of various rooms. Some were dedicated to specific activities or interests, while others were not used at all. Some were distinctly predetermined regarding how they were intended to be used, with fixed walls, furniture and specific materials. There were several cases of separated rooms for different types of materials (including toys, literature etc.), activities and even children (e.g. day-care vs night-care).

The size of the rooms were also distinguished as affecting the usage and play. Limited physical space often implied limited mental space. Some rooms were more messy and noisy than others. Predetermined, separated, small and noisy rooms seemed to result in homogenous groupings of children playing and residing there. Especially in regard to gender and age. Some cases of more varied usage of rooms were detected. This included children creatively shaping their own new rooms within the existing rooms, by rearranging the interiors. This was enhanced by rooms that enabled and inspired creative usage, e.g. in terms of movable or temporary walls. A sub-boundary of insight vs hiding places was thus discerned. This highlighted the need among the staff to maintain an insight into the children’s play and behaviors. Which contrasted to the need among the children to obtain free play, hidden from others. The former
need was enhanced by numerous windows, not only towards the outdoor premises but also between indoor rooms. The staff would sometimes impose restrictions on the maximal number of children playing in the same room. Thus delimiting the children’s chances to hide among – and from – each other. The ability to rearrange furniture and materials by the children themselves, seemed to increase the opportunities for creating hiding places for free play. Safe spaces, such as cozy sofas, were also experienced as a kind of hiding places.

**Boundary 2: Predetermined vs Undetermined Furniture and Materials**

This boundary concerned the intended or interpreted usage of, and identification with, varying objects in the preschool premises. Some identified furniture and materials exposed a stereotype gendered predetermination. This by being denominated as “girls’ dolls”, “boys’ traffic carpet” and “girly costumes”, or being designed in colors and forms that were primarily associated with either gender. Other predetermined norms of how to use the furniture and materials, and by whom, were also distinguished. This included the intended use of the reading corner by primarily calm children.

There were several instances of unreflective presence of certain furniture and materials. These deviated from the inclusive ambitions of the preschools and their regulations. There was also instances of broken furniture and materials, that could not be used in the intended manner. The prevalent furniture and materials were sometimes used in a more creative and flexible manner than intended. Some children would play under the furniture or move the furniture and materials from their original placements. Such usage was enhanced by less predetermined furniture and materials. This was sometimes enforced by inspiring materials, that encouraged and enabled creative usage.

**Boundary 3: Staff vs Children and Children vs Children**

This boundary concerned the discerned hierarchy between staff and children. The former possessed the ability to determine the latters’ play, by deciding the norms, rules and limits for the play and usage of rooms, furniture and materials (including toys, literature etc.). Expectations among the staff were distinguished regarding how the children ought to behave in each room. Their expectations also concerned how the interiors were to be properly used. Certain activities were for example expected to be performed at certain places. There was a perception that each child ought to like everything – or at least something – in each room. A general need perceived by the staff was to keep down the sound level in the play and premises. These expectations were related to the staff’s ambitions to ensure a safe and healthy work environment for themselves, as well as for the children. They were also intended to uphold the formal rules and regulations of the preschool. The staff reported feeling torn between the ambitious regulations, their concern for the children, and the practical delimitations in the everyday operations of the preschool.

In some regards, the staff’s expectations served to reinforce or challenge delimiting norms regarding gender and other social factors. The most commonly reinforced norms regarded gender stereotypes. This resulted in gender segregated and hierarchical play and usage of the rooms. Boys were generally allowed to take more place, physically and auditorily. These norms were also reflected among the children. They often described girls and boys as separate categories in their everyday life at the preschools. The children’s pleasure in doing unwarranted things, and thus breaking prevalent norms, was however also distinguished. The children imposed expectations on each other – and on themselves – regarding both gender and age when playing in and in other ways using the preschool premises. Boys generally acted more messy and noisy, while girls acted more decently and calmly. The responsibility and worry for the consequences and perception of the play were generally ascribed to and undertaken by girls. These patterns of interactions seemed to be influenced by the level of normative predetermination in the preschool premises. Low levels of flexibility in materials (e.g. toys and literature), furniture and rooms seemed to result in more stereotype interactions and attitudes.

**The ProTOTYPE**

The boundaries described above guided the design a prototypical in the project of the most undesirable preschool construction imaginable. The most excluding and delimiting features were there amplified. The ambition was to evoke critical insights into normative play and learning among the involved
stakeholders. This would serve as inspiration for the outline of the most inclusive and equal preschool imaginable. The prototype was illustrated as a digital sketch of a preschool with different rooms. This including a hallway, a dining hall, playrooms and a control room for the staff. The hallway was designed as a small room with bad lighting, broken windows, ragged wallpaper and cramped with shoes and outerwear. The dining hall was designed as a huge room with a big table to which the children were locked during meals, and with a corner of locked toys where a few children were seated. The playrooms were designed as small rooms with distinctly predetermined activities and toys. One room was specifically designed for girls in a stereotype girly manner, with pink colors, frilled curtains and dolls. In another room, all toys and literature are places on high shelves, unreachable for the children. The control room was designed for the staff’s supervision of the children’s activities and behavior, with joysticks and buttons for various commands. The personnel in the control room are depicted as puppets on a string, supervised by cameras, illustrating their own powerlessness in the preschool system.

Discussion
Social innovation, as novel approaches to meeting social needs, delivering social benefits and address social problems (cf. Brundenius et al., 2016; Moulaert et al., 2013), is in the studied case motivated by the perceived need to ensure equal and inclusive play, learning and development in public preschools. The reconstruction of outdated preschool premises can be regarded as a more effective, efficient, sustainable and just way to fulfil the expanded requirements for Swedish preschools (cf. Andersson Tengnér and Heikkilä, 2017). The tendency to underscore the moral virtues and ethical norms of social innovation (cf. Jessop et al., 2013), is challenged by the studied case. This as it is based on clear moral and ethical incentives, in line with the preschools’ prescribed mission to enforce values of equality, inclusion and democracy in their operations (cf. Andersson Tengnér and Heikkilä, 2017). It thus concords with the impact of norm systems on organizational and societal change, highlighted in previous studies on social innovation (cf. Jessop et al., 2013). This especially regards the aspiration to counterbalance social exclusion (cf. Brundenius et al., 2016), in terms of unequal rights and opportunities regarding play, learning and development, related to stereotype notions of gender, ethnicity, religion, disability, sexual orientation, transgender identity or expression, and/or age (cf. Andersson Tengnér and Heikkilä, 2017).

By the studied preschools’ focus on gendered and other stereotype norms in the reconstruction process, they share similarities with previously identified aspirations of gender equality in social innovation processes. This is perceived in their identification of unfulfilled needs of improved gender equality in the preschool context. It is also identified in their development of new solutions that serve to diminish segregating, hierarchical and stereotype notions of gender in the preschool operations (cf. Lindberg et al., 2015; Lindberg and Berglund, 2016). By their ambition to enforce norm-awareness in their operations, the preschools add an intersectional dimension to their innovation process. This includes aspirations to improve the well-being, life-quality, relations and empowerment among disadvantaged children (cf. Brandsen et al., 2015; Nicholls et al., 2015). They thus serve to expand the knowledge on how social service innovation can challenge and change delimiting norms when identifying and addressing needs within social services. The same goes for the empowerment of service users, the transformation of relations among service providers and users, as well as the safeguarding of universal access to equal social service provision (cf. Martinelli, 2013). The normative focus of the studied case serves to highlight social innovation as an ideologically and locally contextualized process (cf. Cattacin and Zimmer, 2016). This reflects the cultural dynamics and political processes in the municipal preschool context (cf. Brandsen et al., 2016; Jessop et al., 2013).

The local contextualization is further discernable in the studied case by the materialization of the immaterial norms and values in its focus on preschool premises. More norm-aware preschool premises were intended to shape the play in an equal and inclusive manner. More equal and inclusive play was correspondingly intended to shape the premises in a norm-aware manner. This is in line with previous distinctions of stereotype norms in several everyday operations of preschools, including their premises (cf. Andersson Tengnér and Heikkilä, 2017; Paechter, 2007). The boundary chart, delineating disabling and enabling factors for equal play and learning in the preschool premises, reflects and expands previously identified boundaries and hierarchies regarding gender and other social factors in preschool
rooms, materials and interaction (cf. ibid). Similar to conclusions from previous research, various rooms, materials, and colors were ascribed stereotype notions. This was done both by the staff in their interaction with the children, and by the children themselves while playing and participating in other activities (cf. ibid). The name, size, intentions and usage of various rooms served to delimit or enable equal and inclusive play and learning. This also concerned the placement, interpretation and usage of toys and literature in these rooms. This is in line with previous distinction of size, furnishing, decoration, naming, visibility, flexibility and equipment of preschool rooms as determining such delimitations (cf. ibid).

The studied case especially helps highlight how predetermined, separated, small and noisy rooms tend to result in gender and age homogeneity in groupings and play. While undetermined, rooms — large enough to enable creative usage and rearrangement by the children — seemed to facilitate diversity. This reflects the duality detected in previous studies, where play is considered to require equity and equality at the same time as being embedded in prevalent power relations in the immediate and distant surroundings (cf. Davies, 1989/2003; Heikkilä, 2016; MacNaughton, 2000; Paechter, 2007). The resulting everyday negotiations of norms, identified in previous studies of school settings, are thus perceivable in the data as attempts to obtain free – and to some extent hidden – play among the children. There, prevalent norms regarding what is possible, right or wrong, normal and deviant etc. seem to be challenged and perhaps changed (cf. Andersson Tengnér and Heikkilä, 2017; Paechter, 2007).

The free spaces created in such play share similarities with the ‘clearings’ identified in previous research on social innovation. There, unoccupied gaps in social landscapes are used for developing new practices independent of established structures (cf. Segnestam Larsson et al., 2015). The ability to exploit such clearings is, according to the data, dependent both on the disabling and enabling character of preschool rooms and materials. It is also dependent upon the power relation between the staff and the children, as well as between children. The data helps highlight the power among the staff to determine the norms, rules and limits for children’s play and usage of rooms, furniture and materials. At the same time as acknowledging the occasional helplessness among the staff in relation to preschool regulations and practical delimitations. Also the power relations between the children are highlighted. Boys generally were allowed (and expected?) to act more messy and noisy, and girls more decently and calmly.

Similar to the conclusions in earlier studies on social innovation, the ability to exploit clearings for social change seems in the studied preschool setting to be dependent upon a combination of bottom-up initiatives by the children to create spaces for free play, and top-down reorganization by the staff and the municipality to ensure prerequisites for equal and inclusive play and learning (cf. Moulaert et al., 2013). We suggest that these multi-level entries to transformative clearings can be labelled as ‘reactive clearings’ and ‘proactive clearings’, respectively. The former refers to the spontaneous identification of free-zones by the children, e.g. behind a coach. The latter refers to enabling room design and usage, allowing norm-challenging play not only as an adverse reaction to delimiting spaces. Such multi-level transformation has previously been identified as crucial to social innovation (cf. Brandsen et al., 2016; Lindberg, 2014).

Social innovation as a simultaneously processual and effectual phenomenon can be distinguished in the case’s combination of stakeholder involvement with clear incitements and visions among these (cf. Moulaert et al., 2013). The incentives encompassed e.g. the municipality’s ambitions to find new ways to more socially inclusive premises and operations, the preschool staff’s ambitions to obtain more knowledge and practical tools for fulfilling their pedagogical mission, and the children’s ambitions to obtain free, creative and norm-challenging play. The studied process thus serves to illustrate how a combined processual and effectual dimension of social innovation processes can motivate the involvement of concerned stakeholders in identifying and addressing social needs. It may also motivate the construction of new forms of cooperation across organizational and sectorial boundaries. This in order to realize sufficiently encompassing solutions to complex societal and organizational challenges (cf. Lindberg, forthcoming; Lindberg and Nahnfeldt, forthcoming).
The various vantage points were reflected in the conversion of the identified boundaries in the chart into the provotype, amplifying the most excluding and delimiting features in the preschool premises as a springboard for outlining the opposite in the subsequent reconstructions. The provotype reflects an understanding of (gender) inequality in school settings, that in previous research has been denominated as ‘monoglossic’. From such a perspective, dualistic and stereotype notions of femininity and masculinity – as well as of other social factors – seem to maintain patterns of gender inequality and fixed identities among the children. This is obtained through distinctly predetermined rooms, activities and toys (cf. Francis, 2010; Paechter, 2007). By amplifying pre-existing elements of exclusion and inequality in the preschool premises, the provotype serves to challenge the previously identified myth of the natural and innocent childhood, where gender equality interventions seem superfluous (cf. MacNaughton, 2000). This helps distinguish the role of guiding norms and values for materializing socially innovative change, transforming a monoglossic understanding of equality into a heteroglossic one. The latter not only acknowledges the occurrence of individual, gender-transgressive performances, but also enables these by norm-aware premises (re)constructions (cf. Francis, 2010).

This transformation reflects the established notion of social innovation as a transformation of institutions, in this case of public preschools. Oppressive power structures, in terms of delimiting norms regarding gender and other social factors, are challenged and changed. This is obtained by collective agency of concerned stakeholders initiating empowering social relations. In this case, this takes place both among the children and between the children, preschool staff, municipality representatives etc. (cf. Moulaert et al., 2013). The institutional transformation is however so far delimited to the three studied preschools. The actual effects of the upcoming reconstructions remain to be scrutinized in both the short and long term. As noted in previous studies, however, cumulative effects of small-scale solutions might be more important to organizations and society in the long run (cf. Brandsen et al., 2016). This since it is difficult to directly apply complex solutions to wicked problems from one context in another, without considerable translation and modification (cf. Segnestam Larsson and Brandsen, 2015).

The need for theoretical engagement with the complexity of dynamic processes, discontinuous and unpredictable systems, articulated in earlier research (cf. Moulaert et al., 2013), is underlined in the studied boundary chart. This in terms of the complex hierarchical and delimiting relations between the staff and the children, as well as between the children. In the provotype, these are amplified in terms of a contradictory control room, ensuring the staff’s supervision of the children’s activities and behavior, at the same time as exposing the staff’s own helplessness as supervised puppets on a string in the preschool system. The actual ability of undetermined rooms, furniture and materials to evoke equal and inclusive play and learning, is however still undetermined. The same goes for hiding places, delimiting the staff’s insight into the children’s play. Children’s free play might just as well involve hierarchical and norm-preserving interactions. This highlights the further matter of diverging interests among the involved stakeholders. The children’s aspirations of free, creative and norm-challenging play might clash with the staff’s aspirations of democratic and developing play. This concords with the conclusion in previous studies regarding the contested character of values, actions and outcomes in social innovation processes (cf. Segnestam Larsson and Brandsen, 2015).

Conclusions
The case study of a Swedish process for preschool reconstruction exposes that the contextualized norms and values of equality and inclusiveness are materialized in boundaries of gender and other social factors in the preschool premises. The boundary of disabiling vs enabling rooms concerned the discerned impact of the interior arrangements in the preschools on the inclusiveness and norm-awareness in children’s play, learning and development. The sub-boundary of insight vs hiding places concerned the need among the staff to maintain an insight into the children’s play and behaviors, contrasting to the discerned need among the children to obtain free play, hidden from others. The boundary of predetermined vs undetermined furniture and materials (including toys, literature, clothing etc.) concerned the intended or interpreted usage of, and identification with, varying objects in the preschool premises. The boundary of staff vs children concerned the discerned hierarchy between staff and children, were the former possessed the ability to determine the latter’s play, by deciding the norms, rules and limits for the play and usage of rooms, furniture and materials. The adjacent boundary of children vs children concerned
the discerned restrictions in regard to various social factors that children imposed on each other – and on themselves – when playing in and in other ways using the preschool premises. These boundaries were further materialized in the **provotype**, manifesting the most excluding and delimiting preschool (re)construction possible.

Social innovation can in the studied case be discerned in terms of a value-based reconstruction of public preschools as a solution to a perceived need to ensure equal and inclusive play, learning and development. The normative focus of the case serves to highlight social innovation as an ideologically and locally contextualized process, reflecting the cultural dynamics and political processes in the municipal preschool context. It thereto serves to highlight the materialization of norms and values in relation to the rooms, furniture and materials of public preschools. These were ascribed stereotype notions both by the staff in their interaction with the children and by the children themselves while playing and participating in other activities. Delimitations to equal and inclusive play and learning were identified in the name, size, intentions and usage of various rooms, as well as the placement, interpretation and usage of toys and literature in these rooms. The children’s attempts to obtain free spaces for play, where prevalent norms could be challenged and perhaps changed, were enabled by ‘clearings’. That is unoccupied gaps in the social landscape of the preschools, that were exploited for developing new practices partly hidden from the established structures. This was enhanced by rooms, furniture and materials that enabled and inspired creative usage. This included movable or temporary walls and less predetermined design. In this, we perceive both ‘reactive clearings’ in terms of spontaneous identification of free-zones by the children, and ‘proactive clearings’ in terms of enabling room design and usage.

The clearly stated moral and ethical incentives in the studied case, in terms of the preschools’ prescribed mission to enforce values of equality, inclusion and democracy, address the tendency to underscore the moral virtues and ethical norms of social innovation. The findings help distinguish the role of guiding norms and values for materializing socially innovative change. This especially regards the transformation of a monoglossic understanding of equality into a heteroglossic one. The occurrence of individual, gender-transgressive performances, is then not only acknowledged but also enabled by norm-aware premises (re)constructions. The results thus indicate a norm system impact on organizational and societal change, as highlighted in previous social innovation studies. This especially regards the aspiration to counterbalance social exclusion due to stereotype notions of gender, ethnicity, religion, disability, sexual orientation, transgender identity or expression, and/or age. The study thereby contributes to expand the knowledge on how social service innovation can challenge and change delimiting norms when identifying and addressing needs within social services. The same goes for norms when aspiring to empower service users, to transform relations among service providers and users, and to ensure universal access to equal social service provision.

The study responds to the call for theoretical engagement with the complexity of dynamic processes. This is obtained by highlighting the complex power relations between the staff and the children. These are perceivable in the former’s ability to determine the norms, rules and limits for the latter’s play and usage of rooms, furniture and materials. At the same time, the occasional helplessness among the staff in relation to preschool regulations and practical delimitations is noted. The studied case thereto serves to illustrate how a combined processual and effectual dimension of social innovation processes can motivate the involvement of concerned stakeholders. This encompasses involvement in identifying and addressing social needs, as well as in the construction of new forms of cooperation across organizational and sectorial boundaries. The main contribution of the study thus concerns how social innovation norms and values are contextualized and materialized in a preschool setting. This specifically regards how norm-critical insights into enabling and disabling rooms, furniture and materials can be translated into norm-creative materialization in preschool premises. Further research could scrutinize data from other preschool contexts in Sweden and internationally, in order to expand and nuance the above conclusions on the contextualization and materialization of social innovation values. Since the main focus of Western universities is placed on commercial and technological innovation studies and support, such studies could serve to further expand the societal role and benefits of university knowledge development and innovation (cf. Brundenius et al., 2016).
References


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