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Lina Dahlström is a designer with 12 years experience in working with product development for children and youth. She graduated with an MFA in Child Culture Design from HDK-Valand in 2022. It wasn't until becoming a parent herself she started reflecting upon children and their role in society. It opened up for reflection of how participation is essential for the development of children's capacities and how our surroundings are actively hindering its design. Since then she has been working collaboratively with children to promote their active participation through norm-critical thinking.

The Speculative Grocery Store Project

Growing norm-critical perspectives together with children through speculative co-design

Lina Dahlström

Abstract

Children between 0-15 years make up a third of the world's population today globally, despite this fact society is largely adapted to an adults' physical but also cognitive capacities. This adult norm limits children in their everyday lives, what places and ob-jects they have access to but also what activities they can take part in. This also affects how they are perceived in society – as not yet full-worthy citizens.

However children are not little adults and the general consensus is that products and environments should be designed to match their capabilities and keep them safe. I argue in this thesis that by thinking in this way we limit the spaces children can have access to as well as restricting their agency in what activities they can take part in. Children move in a variety of environments where the reality is that most of these spa-ces and their objects are not designed with them in mind- even a little.

The project uses a speculative approach to explore how children, through the process of co-designing, can become aware of and question the adult norm in society. The finished design aims to encourage the continuation of that same norm-critical thinking in those who interact with it. Here using the grocery store as a context for material manifestation.

The children taking part in this project were recognized as co-designers whose opinions and ideas were as important as the adult designer's. They were encouraged to use their imagination to think of an alternate future without limitations. The participants described their ideas by drawing, model making and playing to test their ideas and inspire each other which generated a discussion of imagined futures. The result- an interactive grocery store called "Barnens affär" was exhibited at the 2022 Gothenburg Science Festival in Nordstan in may. And the public was invited to experience and help to continue shaping this possible imaginary future.

Keywords

Child culture design, speculative co-design, norms, childism

Introduction

If you ask a two-year-old to wash their hands on a standard height sink, you will soon learn how difficult this seemingly simple task can become. Whilst observing a child's daily life, one starts to notice that most things that surround us seem to be designed for an adult's body and mind. It becomes clear that society is built upon an adult norm and these norms affect how children are being perceived, as not yet full-worthy citizens, limiting the ways they have agency to influence their everyday life.



Children navigating a world designed for adults

Adults as the norm

Every third year *Statistics Sweden* (Statistiska Centralbyrån, SCB) publish a report on Sweden's population. Children between 0-15 years are now almost a third of the world's population and around a fifth of Sweden's population during 2020 (SCB, 2020). So why is society largely adapted to adults' physical but also cognitive capacities? Jenette Sundhall argues in her article *A Political Space for Children? The Age Order and Children's Right to Participation* that the age order of an existing adulthood "is so fundamental to being seen as a full human that we view it as natural that children

are considered not yet fully human” (Sundhall, 2017) which may be an underlying reason why society is not shaped for them.

John Wall puts forward an alternative of social arrangements in his book *Ethics in the light of childhood*, where he argues that children are “the most marginalised group in all of history” (Wall, 2010). He introduces us to a new term, childism, that much like humanism, feminism and environmentalism is used to transform moral thinking, relations, and societies in fundamental ways. He imagines a future where society not only sees children as equals but also cherishes what differentiates them (Wall, 2010).

But children are not little adults, they differ in capabilities, cognitive skills like judgement and decision making, emotionally, and physically. *Ergonomics for Children* is a book that provides guidance for designers working on products for children, stating that products and environments should be designed to match their capabilities and keep them safe (Lueder, Berg Rice, 2008). No one would argue about that, however, by thinking in this way, we limit the spaces children can have access to as well as restricting their agency in what activities they can take part in. The reality is that children move in a variety of environments where most of these spaces and their objects are not designed with them in mind, not even a little.

The United Nations Convention on the Rights of the Child, (Barnkonventionen, UNCRC), works as a legally-binding international agreement stating the rights of the child regardless of race, religion or ability. The convention consists of 54 articles stating the rights in civil, political, economic, social and cultural aspects for every child. Article 12 in the convention speaks about children’s right to participate in society, the respect of children’s

views and the right to give their opinions freely on issues that affect them. Adults should listen and take them seriously. On January 1st 2020, the convention became incorporated into Swedish law. This means that children's roles in society were clarified as a legal entity, giving children a greater focus in situations that apply to them.

However in most societies, adults continue to assume they know best. They presume to have the wisdom, the experience and the knowledge to act in children's best interests. Gerison Lansdown (2005) writes in the article *The Evolving Capacities of the Child* about how the Convention on the Rights of the Child demands that we promote, respect and protect children's own capacity to take responsibility for those decisions and actions they are competent to take for themselves. Opportunities for active participation are essential for the development of children's capacities. Promoting children's participation is about fulfilling children's right to be active citizens in our societies. This also means helping them to firstly become aware of the injustices in order to be able to question them.

Using Design as an Agent of Change

In Speculative Everything, Anthony Dunne and Fiona Raby (2013) introduce a method where design is used as a tool to create not only objects but ideas. Speculating about a possible future, thinking through design rather than through words and using the language and structure of design to engage people. This is a way to generate a dialogue and a discussion about the kind of future people would like, or not like. So, I question, how can this be done in collaboration with children?

One example of speculative design made with a participatory process with children is *Speculative Co-design of Robots* where we are introduced to an approach of speculative co-design through which both children and adults can design alternate futures together in a facilitated workshop setting. An imaginative process that explores limitless possible futures with opportunities for different groups of participants to build on one another's ideas in an intergenerational fashion. The participants describe, draw and create physical models to test their ideas. The models stimulate a discussion of what the future could be like including ethics, infrastructure and other dynamics of this world (van den Bergh, Robert & Zilberman, 2016).

Another example is British designer Onkar Kular who has long used design as a tool to engage with and question contemporary social and cultural issues. His work shows the benefits of using spatial experiences to convey a message. The designs are often a combination of objects, environments and storytelling mediated through exhibition and performance (Kular et al. 2013). His central interest lies in creating scenarios for speculation and engagement using design in creating experiences. In *Risk Centre* he explores the subject of risk in an exhibition setting, intended to physically engage the visitor in the many ways risk is recognised, assessed, conveyed, and regulated.

In this project, I use a speculative approach to explore how children, through the process of co-designing, can become aware of and question the adult norm in society. Their input will result in a material manifestation in the shape of a spatial, interactive experience through which the public is invited to consider, reflect and help to continue to shape a possible imaginary future.

I will below present some of the methods used within a facilitated workshop setting with the aim of growing norm-critical perspectives together with children through speculative co-design that will generate material to inform the design outcome.

Design for Co-design interactions

Workshops were planned using norm-critical methods from NOVA: *Tools and methods for norm-creative innovation* (Alves, 2016). NOVA contains concrete tools and hands-on methods for anyone who wishes to achieve norm-creative solutions - that is, solutions that are inclusive, accessible and sustainable. As an example "The Lever Bar" is one activity that suggests creating equality among different groups requires positive special treatment - a reverse of the privileges.

Inspired by NOVA, my sessions were conceptualised around the question - *what would the grocery store look like if children made the decisions?* Using a place from the everyday, in this case the grocery store, helped frame my research question at a relatable and child appropriate level. It was also a way to communicate the general idea of children as the experts and to offer the opportunity for ownership of the project from the start.

I collaborated with children from six to nine years in two sets of workshops. Firstly during three workshops (Part 1), and later on during an additional three (Part 2) workshops. Each session was organised around questioning the different obstacles and barriers that children experience in a grocery store. These had been identified in previous observations and categorised. Different activities were planned in order to give children an opportunity to express their ideas through different types of media.

Physical barriers: how can children reach, pull, lift, carry and place?

Cognitive barriers: how can children understand?

Social barriers: what are children allowed, or not allowed, to do?

Becoming Aware of Norms through Play

In my research, I have argued for the need of children to become aware of norms in order to question them. As an introduction, a playful activity was prepared in the shape of a fictional shop with the aim of becoming aware of norms. The children were asked to 'do their shopping' and to help them they had a toolkit of helping devices. The shopping list was impossible to read without a coloured lens and the groceries were way beyond their reach in height and could only be taken down with different tools such as a hook, robotic hand and a catcher. Finally, to figure out what and how much to pay they had to use a specially designed measurement stick to decode the strangely shaped "money" (Fig. 1). This activity was kept playful and light but even so children quickly started questioning the design of the fictional store and it became easy to continue the conversation and relate it back to experiences within real stores.



Children shopping at different heights and (fig 1) the money they used

Picture References as a Discussion Tool

As a discussion tool, a big piece of A1 paper was used with pictures representing physical, cognitive or social obstacles attached to it (Fig. 2). Children were asked if they could recall similar situations that were not represented on the paper, if they could think about any possible solutions to these obstacles and what those could look like if it was a store for children.

The pictures explained situations that sometimes can be hard to express with words and children would point and share their own experiences. This exercise also helped to communicate the goal of the model making workshop that would take place after.



Fig 2: Pictures representing physical, cognitive or social obstacles attached to it

Model Making

The main part of the workshop was about letting children use drawing and model making to visualise their ideas. A variety of materials such as cardboard, styrofoam, sticks, pencils, glue and tape were provided. The children were quick to make use of the material in different ways. (Fig. 3) The “doing” also created a space for dialogue between children in the group that gave as much insight as the models themselves. Audio recording was used during all sessions.

One important aspect was the power relation between adult and child and different solutions on how to balance that. Child H made a store with shelves that were locked and only children had access to it and therefore could choose what to buy. Child L made a special room for adults to wait and rest while kids do the shopping. Child S made certificates for adults that should be signed by their child in order to have access to the store. Another theme was how the children thought of inclusive solutions not just for them but for all visitors of the store.

E: "You can choose language in the store so everyone can understand... the store can talk."



Fig 3: Model making workshop, exploring the materials

Sign Making

One session was based around what is and isn't allowed in a store and what rules should be applied to the children's store. I had beforehand prepared material for making signs where they could express their ideas (Fig. 4).

Me: Can you scream in the store?

L: If you are a baby, if you have a reason for it.

Me: But why do you think parents usually say that you are not allowed to?

S: I can not read minds but ... but I think it's because they want to show that the children are good and that they are good parents. So that there will be no chaos in the store so they won't be ashamed of their children.



Fig 4: Model making workshop, exploring the materials

Conclusion

The result shows children's ability to become aware and critically reflect upon and imagine new solutions in a workshop setting. The children taking part in this project were recognized as co-designers whose opinions and ideas were as important as the adult designer's and project initiator's. They were encouraged to use their imagination to think of an alternative future without limitations. The participants described their ideas by drawing, model making and playing to test their ideas and inspire each other which generated a discussion of imagined futures.

The findings gave insights for further developing a spatial experience, an exhibition, where people all ages were invited. The result, an interactive grocery store called "Barnens affär" (Fig 5-7), was exhibited at the 2022 Gothenburg Science Festival in May. Visitors were invited to consider, and help to continue to form, this possible imaginary future through dialogue, drawing and playing. It also became clear that the participating team of children developed a strong sense of ownership and pride over the result and continued to shape the space as their own.



Fig 5: Barnens affär exhibited at the 2022 Gothenburg Science Festival

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