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Editorial introduction to Designing for Play as Cultural Production in Childhood. Seeking new grounds.

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In 2021 the BIN network (Børneforskere i Norden - [Children's Culture Researchers in the Nordic Countries]) invited researchers from all over the world to meet in order to explore potential relationships and bridges between two research areas, childhood studies and design, that share an interest in play as a topic of research.

The conference invited both practitioners and scholars to participate to empower and enrich a landscape for conversation and development in order for the areas to inspire each other. Over 400 people from all over the world participated in sessions during the two-day conference.

Based on the conference, we invited authors to contribute to this special issue of Conjunctions. Transdisciplinary Journal of Cultural Participation with the title *Designing for Play as Cultural Participation in Childhood. Seeking new grounds.*

WHY BRIDGING?

The two areas of research share a common interest – play – but they also differ in their approaches and emphasize different aspects of their research. Childhood studies examines childhood, children and children's production of meaning related to their lives with interests and friends. Research in childhood studies leads to an understanding of various concepts and theories related to childhood, such as play and peers. However, the impact of this understanding is sometimes limited, especially because the effects of decisions outside academia are not always incorporated. This field could benefit from design research as it can offer a bridge towards impact through the development of concrete solutions. Design research emphasizes the impact on the outside world in the form of prototypes and design knowledge. However, this field could benefit from the more nuanced view of the role of play for children as provided by childhood studies.

In the following paragraphs, we will explore the two research areas in terms of purpose, knowledge and theory, methods and impact in order to come to a nuanced view of barriers and potentials for bridging between the two areas.

WAYS TO DO THE BRIDGING BETWEEN CHILDHOOD STUDIES AND DESIGN

Purpose

Since the 1980s, childhood studies has seen a strong movement against developmental psychological approaches to childhood. According to childhood studies, the tendency within developmental psychology has been to approach the child from the idea that the child is not a being – yet, but it is on its way to becoming somebody. Thereby, the child comes forward without agency or with missing abilities, on its way in the development (James & Prout, 2014; Qvortrup, 1994). Childhood studies insists on the opposite by investigating children's participation in their social and contextual everyday life, approaching children as beings in their own right, with agencies, interests, feelings, friends and dreams and, as such childhood studies is interested in listening to the voices of children (Ødegaard & Borgen, 2021; Sørenssen, Tatek, & Ursin, 2021). A core goal for childhood studies has been to produce new ideas and theories about children following the English childhood sociology aiming at the child as a human being in its own right (James & Prout, 2014; Jenks, James, & Prout, 1998; Ødegaard & Borgen, 2021; Jenkins, H. (Ed.),1998). As stated in the goals of Norsk Center for Barndomsforskning [Nordic Centre for Childhood Research] when it opened in 1981: The purpose is to "create new knowledge about and insight into children's conditions and how these insights affect children's development" (Mjaavatn, 1983, p. 7).

One context in which the voices of the children and the social relations between children and their preferences could be explored and acknowledged is through their playing together. As stated by the Danish child culture researcher Mouritsen: "By this is meant the expressions of culture that children produce in their own networks; that is, what with an overall term one could call their play culture. It consists of a raft of expressive forms and genres, games, tales, songs, rhymes and jingles, riddles, jokes and whatever else falls within classic children's folklore; but it also includes sporadic aesthetically organized forms of expression associated with the moment, such as rhythmic sounds, joshing, teasing, walks and sounds" (Mouritsen, 1998 p. 6).

According to Mouritsen, understanding and valuing play in all its messiness becomes a point in itself, and it becomes possible by taking notice of the details, exploring the details and valuing the details of children's play. The messiness is not only related to the concrete empirical expression of play activities, but also in how play is conceptualized when insisting on and creating knowledge about play. Knowledge is created in many different research disciplines and contexts (Johnson, Eberle, Henricks, & Kuschner, 2015) and there are no clear definitions (Sutton-Smith, 2001). It seems that this is a part of the ontology and epistemology of play – the fluctuation and messiness (Skovbjerg, 2021), but an important point here is to take it seriously as a field of research and to make the cultural production visible, pointing to theories and concepts of play.

Also in design for play and design for children, there has been an increasing focus on taking children's voices, wishes and needs into account when designing children's environments. Due to The United Nations Convention on the Rights of the Child (UNCRC), adopted by the UN General Assembly in 1989, the focus on children's voices has increased in play design and their opinions taken into account in matters that affect them, and thus in solutions created for them (Crowley, Larkins, & Pinto, 2020). One design field that addresses design for children is the Child Computer Interaction (CCI) field, which is particularly interesting when bridging between childhood studies and play design research.

Knowledge and theory

An important form of research in the play design research field is called Research through Design (RtD). RtD examines how to generate design knowledge through the making of prototypes and

designs (Giaccardi & Stappers, 1997). Within RtD, the research focus on play and playfulness has increased over time. Furthermore, while until recently, many studies in this area of research focused on describing a single design artifact (so-called artifact-centred studies), a trend is now visible to focus more on generating diverse forms of knowledge that can be applied beyond just the one case study (Giannakos, Papamitsiou, Markopoulos, Read, & Hourcade, 2020). This generated knowledge can take on different forms, such as design principles or design guidelines, which are specific for the play design research field. However, design is often seen as an interdisciplinary field, where knowledge from other domains is used to create new ideas, inform design decisions and evaluate the quality of the designs.

One challenge in RtD is to determine what knowledge from which disciplines can be included in the RtD process (Skovbjerg, Bekker, d´Anjou, Quiñones, & Johry, 2021). In designing for play, knowledge from disciplines, such as developmental psychology, sociology, childhood studies and folklore can inform design research directions. However, even if it is clear where theories can come from, in the field of CCI it is sometimes unclear exactly how those theories are used (Antle & Hourcade, 2022) and this is also the case when looking more explicitly at design for play (Skovbjerg et al, 2021). It is a challenge of doing justice to the nuances of the conceptualisations, and integrating the theories in a correct and meaningful manner (Antle & Hourcade, 2022). By bridging between childhood studies and play design research, a dialogue between the areas can support developing better reflections about what theories are used and how the conceptualisations in relation to play make sense.

Methods

Both childhood studies and play design have developed a broad landscape of new types of research methods to capture the expressions of children and to get an understanding of children's voices. Within childhood studies, these new methods draw on anthropological approaches (Højlund & Gulløv, 2003; Sørenssen, Tatek, & Ursin, 2021), ethnography, and visual ethnography (Rasmussen, 2018)), often with the help from children (Clark & Moss, 2011). For example, Clarke (1999) asked children to take photos when doing fieldwork among them and Corsaro (2003) let children write in his field notebook when doing his fieldwork in kindergarten exploring their peer culture. More recently, Skreland and Lund (2021) outlined how to interact bodily with children during research, and Nome (2021) described how to perform participatory observations when videotaping children's everyday life. Finally, Melhuus (2021) addressed how materiality can be captured as actors emphasizing both place and children while Grindheim (2021) outlined how agency can be traced by identifying emerging actors in intra-activities. Those are examples of a constant development of new types of methods aimed at understanding children's lives close to the involved children's experiences: inviting the children in, not only as objects in a study, but as participants, and as co-producers of knowledge about their lives. The aim is to understand phenomena like children's play within their cultural contexts, instead of looking at children's play as a statement of specific theories, with specific political goals or educational and pedagogical purposes. The development of new types of methods aimed at capturing the voice of the child and children's lives is still a strong practice within childhood studies and play research.

In design research, a special form of research is called Research into design (RiD). RiD examines design processes itself, and has a strong focus on methods to capture the voice of stakeholders, such as children, to ensure that their wishes, needs and values are integrated in the design (Giaccardi & Stappers, 1997). One specific form of user involvement used in play design research is the participatory design (PD) approach. The PD approach goes further than just capturing children's voices, but aims to empower children and see them as co-designers. In PD, there is a strong political aim coming from the work with labour unions. RiD researchers, especially when designing for

children and play, distinguish a whole scale of approaches to involve children in the design process, from least to most empowered. Druin (2002), for example, defined four different roles for children during the design process: users, testers, informants and design partners, with design partners being the most empowered role as envisioned in PD. Recently, others have developed an even more nuanced view on children's roles, such as Barendregt, Bekker, Børjesson, Eriksson, and Torgersson (2016), who described the evolving and changing roles of children, teachers and designers during a design process, and Schepers, Dreessen, and Zaman (2018), who added a role such as PD process co-designer. Another recent topic within RiD is to examine approaches for and potential benefits of longer term involvement of children in the design process (Schepers, Schoffelen, Zaman, & Dreessen, 2022).

Childhood studies and design research thus share this interest in capturing children's voices when being interested in play. However, while play design research focuses on developing methods using a framework of empowerment as found in PD, childhood studies are relatively agnostic to matters of empowerment.

Impact

For childhood studies the most important impact of research has been the awareness of children's everyday life and experiences for research. Childhood studies criticized earlier research for not understanding childhood in society in the broadest sense, but only approaching the child as a part of the family (James & Prout, 1997; Sørenssen, Tatek, & Ursin, 2021). And when researchers approach children, they are often described as passive and not as having any agency. Childhood studies instead points to children's capabilities to take part in both the formation of themselves, and to make their actions, transformations and contributions to culture production visible (Sørenssen, Tatek, & Ursin, 2021). Children and adult cultures are intricately interwoven across time and space (Lee, 2001; Mannion, 2010; Ødegaard & Borgen, 2021); they cannot be separated and they relate, inspire and transform in that interwovenness. Making that transparent and visible for the past forty years has had an impact on how children are approached in our contemporary Western societies.

For the design field, the awareness of impact is also important. According to the review study of Kawas et al. (2020), the authors mention three ways they hope to realize impact: to raise awareness to impact practice and raise cultural awareness, to support the IDC community by promoting new models, methods or theories for future research in CCI, and to not only impact the research community itself but also policy makers, parents and teachers. A recent study on future directions for research in CCI suggests that research is done to contribute to better products and thus better lives for children (Antle & Hourcade, 2022). The authors state that developing research prototypes can contribute by exploring the technological boundaries that are not (yet) commercially viable, or work on research that is too innovative for industry, and finally for creating communication tools to reflect on what values we find important for children, and what kind of technologies we should and should not design for children.

Exploring how the two areas work towards impact can extend the forms of impact in the two fields: childhood studies' view on impact can be informed by how design research leads to concrete solutions and play solutions for children's lives, and the play design research field's view on impact can be enriched through collaboration with childhood studies to explore how a variety of models, theories and theories from childhood studies can be applied in play design research.

There will be challenges to taking the next step in bridging these two areas – some more related to childhood studies, some to design.

We pointed to the possibility of childhood studies strengthening their impact in the world outside academia, but the question is if researchers within childhood research are interested in approaching that impact and also if they are interested in collaborating with the design field. Will the

childhood field leave the critical approach and be pragmatic, aiming at impact to a further extent by involvement with the play design field? And in connection to this potential, will the childhood field work further with children's relation, connection and interwovenness with the rest of the world?

On the other hand, we might ask the play design community if they have enough understanding to apply concepts and insights from childhood studies in a nuanced way. Additionally, we might ask if they are interested in and able to find experts from the field to provide these reflections and apply also the fluctuation and messiness of the conceptualisations and definitions even if it is difficult?

For both childhood studies and design, there are challenges concerning how explicit to make the bridging but we state the importance of explicitly brinding and continusly explore how the briding can be made.

ARTICLES IN THIS SPECIAL ISSUE

By presenting the purpose, knowledge and theory, methods and impact for studies in childhood culture and play design research, we hope to have shown that the areas share many common interests and hopes for the future. The purpose of raising awareness about children's lives, supporting children's participation and incorporating children's voices in creating the future is important. Furthermore, trying out methods, and even developing new methods that support children's participation and capturing their voices is crucial for realizing these aims. The articles presented in this special issue share the themes of pointing to awareness of children's lives, participation and voices as well as trying out new methods and there are examples of how the bridging between childhood studies and play design can be applied:

- In the article *Participatory digital gameplay narrative design for public space sustainability management: empirical research with primary school children*, Panagiotis Tragazikis and Dimitris Gouscos present a study with the purpose of inviting children to make stories by creating digital mini-games. Inviting children into the design process of creating their own stories and making them co-designers, the article is an example of the bridging of childhood culture and design. By telling stories about their peers and environment, the children create cultural artifacts, and the article shows the value of letting the children have the chance to do so as a part of the design process. The article bridges between childhood studies and design through a participatory design process, even though the bridging is not made explicit.
- In the article *Multilingual children's mathematical engagement with apps: what can be learnt from multilingual children's mathematical and playful participation when interacting with two different apps?*, Silje Fyllingsnes Christiansen presents a study exploring two different apps and to what extent the possibilities of playful participation are possible. By drawing on knowledge from digital playfulness, Christensen shows the link between the sandbox-like environment driven by surprises and the value of playful mathematics participation. Taking agency and having the possibility to explore and engage children into playful processes as core values, Christensen points to the importance of app development taking that into consideration. The impact of the apps is therefore related to what extent they invite for creativity and negotiation. Thereby the bridging between studies of childhood cultures and play design surfaces by how children's overall interest in playing and exploring are crucial for if and how children interact with apps designed for interactions made by grown-ups.
- In the article *Technology, participation and bodily interactions in nature: The potential of mobile technology in situated learning*, Gitte Balling, Theresa Schilhab, and Gertrud Lynge Esbensen test and discuss the Danish communication and entertainment app Tidslommen, developed by Museum Vestsjælland. Drawing on knowledge from media studies, studies in children's culture, educational neuroscience and educational anthropology, a sensory ethnographically

walkthrough method is undertaken. The study reveals how the app connected the location (nature) with the cultural history, the past with the present, and the analogue and digital approaches with perceptions. Thereby the bridge between studies of childhood cultures and play design is surfaced by undertaking an ethnographic study to investigate what a designed product can enhance and connect.

- In the article *Child-centered design decisions - how children's participation in the design process influences design students' decisions when designing for play*, the relationship between design decisions and play is investigated by Karen Feder. Drawing on design approaches that emphasize children as relevant protagonists in design processes, qualitative interviews and reflections from 16 design students as well as an in-depth case example are analyzed. The analysis reveals that when working together with the children from the beginning of the process, the design students experience new ideas and opportunities, as well as the inclination to make professional decisions based on more relevant insight. Feder shows the bridging by taking children's voices seriously, introducing methods for the design students to approach those, and she shows how findings from these methods have impacted the designs. In that way she shows the bridging by both pointing to the processes and the specific designs.
- In the article *Democratic Design Through Play*, Annelies Vaneyken, Lieselotte van Leeuwen, and Catherine Paterson integrate Flemming Mouritsen's concept of child culture, approaching child-citizenship and concepts of free play to discuss how participatory design practices can stimulate child and adult cultures to permeate each other and by doing so, enable democratic interactions. The discussions draw on two snapshots that illustrate how a not predefined design and the ambiguity of objects can help to carve out spaces for children's autonomous play in a museum full of fragile artifacts. Thereby the bridge between studies of childhood cultures and play design is surfaced by depicting the interwovenness between how the design process is performed and how children can exercise their citizenship.

With this special issue we hope to reinforce the bridging where childhood studies and design share the same vision of play, and of the importance of conceptualizing childhood based on children's visibility, children as participants with important voices about their own lives and the importance of taking children's needs into account.

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