
Editorial

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Biographical notes: Mathieu A. Gielen is an Assistant Professor in Design for Children's Play at the Faculty of Industrial Design Engineering, Delft University of Technology, The Netherlands. His primary research interest lies in the development of Contextmapping techniques for exploring children's worlds of experience, and translating the findings of such explorations into inspiration for designers who want to cater for children's authentic needs and interests. He is an enthusiastic Lecturer on creating play value. Apart from his academic work, he runs a design studio specialising in products for children's play.

1 Introduction

Where does one find readings about the development of toys and related objects for play?

Students with a desire to specialise in the design of toys, nowadays have several options for educational programmes and courses, spread all over the world. The curriculum of such trainings is quite often similar, and offers a mixture of design aesthetics, ergonomics, business, behaviour and child development issues. Yet, scientific publications about the design of toys are hard to find. Mostly, publications on children's play focus on the child and take the toys as a fact. Research on toys is mostly either historic or tries to categorise toys by their ways of use, or their supposed harmful or educational effects to the user.

Within the design research literature, the design of toys mostly figures as cases, while the real focus of the publications is on design methodology. One example is the exemplary work of Druin (1999) on codesign with children. Matthews et al. (2008) use the development of toys as vehicle for the contemplation on interaction design methodology. In a recent volume of the *Int. J. Arts and Technology*, Bayliss et al. (2009) focus on the role of play 'as a framework and methodology for collaborative design processes'.

Yet, spread over the world, educators are building a body of knowledge on how to introduce students to the relevant topics in effective ways. An exchange of their experiences may accelerate the development of their profession. In the 2008 edition of the tri-annual conference of the International Toy Research Association, an effort was made to bring these educators together in a programme discussing what it takes to teach design

students how to create the best possible toys. The venue, also being visited by representatives from psychology, cultural studies, design history and industry proved to be a valuable opportunity for exchange.

This topic is also the central focus of this Special Issue of the *Int. J. Arts and Technology*. Within this Special Issue, the term ‘toys’ is used in a broad sense, as the physical and virtual objects and surroundings offering opportunities for playful behaviour, including games, playground equipment, real and virtual environments, video games and interactive installations. Eight contributors from design education, design practice, psychology and education research all shed light on what they think are valuable lessons to be learned by prospective toy designers.

The guest editor of this Special Issue, who is himself a toy designer and toy design lecturer, draws from his teaching experience to discuss the gap between play theory and the application of it in a design with high play value, and gives examples of techniques that help students to understand what play is (and what it is not), empathise with children and optimise the tools for play.

The function of toys as means for ‘opportunities and exploration’ rather than being an end in itself is stressed in the second article, by Bekker, Hummels, Nemeth and Mendels. Their discussion of the set up of courses in game design and playful interaction and students’ design cases illustrate the necessity for special attention to the open-ended character of play.

This open-endedness does not imply that a good toy can do anything. In their paper on the design tool ‘Play pyramid’, Kudrowitz and Wallace describe how critical analysis of the play affordances offered by a toy can help classify a preliminary toy design. The same tool can be used within ideation to change a toy, creating a new blend of affordances and thus facilitating new ways of play. The tool is in use within toy design course at MIT.

A recurring value in the papers is the authority of the child to decide if, and how, it will play with a toy. Van Leeuwen and Westwood address this issue most specifically in their paper on the application of child therapist Winnicott’s concept of toys as transitional objects. As a child decides which object it chooses to fulfil this function, designers have no more to go by than to design ambiguous objects that enable many possible interpretations for their meaning; designing transitional objects becomes a matter of increasing likelihood to be chosen as such an object. Van Leeuwen and Westwood also reflect on their experiences with coaching design students in applying knowledge that is as unfamiliar to them as Winnicott’s theory.

From a part of the world famous for its historic role in toy production comes a paper on ‘Hong Kong Hackshops’, an example of how existing toys can be used as the raw material for the creation of new play concepts. Leclerc describes how these pressure cooker style workshops inspire ideation. His sometimes hilarious examples exemplify how creativity is boosted by rethinking and quickly prototyping the meanings of toys. The paper reads as a workshop recipe, inviting readers to try out its effect on their own creativity.

From the same part of the world, the paper of Shiu, Chan and Morgan presents how Hong Kong’s Institute of Vocational Education has shaped its toy design education to support Hong Kong’s ambition to become a centre of toy design and toy brand formation rather than ‘merely’ a hub for the toy production in mainland China. The paper links the educational programme to the commercial context in which prospective toy designers will have to function and showcases some of their students’ most appraised work.

As said earlier, we like to take a broad view on the term ‘toy’ and have defined it to include physical and virtual objects and surroundings meant to facilitate playful behaviour. Many of the design principles are similar or otherwise worth sharing between the disciplines. In his paper on iterative game design, Tan touches upon working methods for game design and, an interesting dilemma for all educators, discusses the balance between several goals of game design education: offering worthwhile learning experiences for students during the design process, practicing professional habits and delivering presentable outcomes in the form of a final (game) design.

The Special Issue ends with a paper from an educational viewpoint. Zuckerman compares the explicit and implicit differences apparent in toys or manipulatives belonging to the educational programmes of Friedrich Fröbel and Maria Montessori. From this paper, it becomes clear that these educational reformers still have relevance today, and the study of their design principles can inspire designers of today’s digital interactive toys and educational media.

Over time, the design profession keeps changing and so does the toy market. This Special Issue gives an overview of current states of practice and invites to continue development. With the diversity of viewpoints brought together in this Special Issue, we hope to bring information and inspire experimentation to all those who are involved in the formation of toy design curricula and those who teach tomorrow’s toy designers. And we believe that the diversity of contributions can also be of value to practitioners who are brave enough to challenge their routines and play around with the thoughts captured in these articles – we hope they make for good toys.

References

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