

Fizzy & Stickz: take the woods to the hospital

Design by Boudewijn Boon

Text by Pieter Desmet

A rock isn't just a rock. It's a *gemstone*. An elf lives in a hollow oak, a fallen tree branch is a knight's sword, and you can make a kettle of witch's soup with a bucket full of leaves. The woods are a wonderful place to play. But what can you do if you can't bring a child to the woods? You bring the woods to the child! This is the essence of *Stickz*, a set of soft, ambiguous branch-shaped objects designed by PhD candidate Boudewijn Boon. Sometimes, a design is so apt that you can't help but wonder why it wasn't thought of before. A design with a primary attraction that immediately raises everyone's curiosity. *Stickz* had that effect on me. My first response was 'wow', and I immediately understood the importance of these objects.

Playing at the hospital

Boudewijn studies how young children (2-9 years old) can be encouraged to engage in physical play in the context of a hospital. At this age, children develop important motor skills that form the foundation for their future physical activities. If, due to disease or injury, they are confronted with long-term hospitalisation, the development of those motor skills can suffer. Movement constrictions limit the stamina and muscular strength, which influences their daily functioning in the short and long term.

In order to prevent stagnation, it is very important for these children to stay active. This brings various chal



allenges. First, physical activity is often impeded by the disease or injury itself. Additionally, many children feel frightened or anxious in the unknown environment with often unpleasant medical procedures. Parents can also have an overprotective attitude, at the expense of the child's initiatives. But, the physical environment also plays an important role. The interior of hospitals is optimised for safety, hygiene and comfort; not for physical activity. Medical equipment limits mobility and the beds discourage children from being active. Boudewijn wondered: "How can designers create space for young children to play and move in a hospital environment?"

Playscapes

Boudewijn was inspired by outdoor play in a natural environment. Particularly in that kind of play, such as in the woods or the park, children get a lot of exercise. On the basis of his analysis, he developed *Playscapes*, a design perspective in which three core qualities of outdoor play can be introduced in a hospital environment: physical, spread out and free play.

- **Physical play** - Rolling down a hill and climbing trees. Physical play has great variation in terms of gross motor movements and makes use of the large muscles.
- **Spread out play** - Playing in the playground,

but also in the bushes and underneath the picnic table. Spread out play is uninhibited by the boundaries of the appointed playing field.

- **Free play** - A stick becomes a magic wand and pine cones become hedgehogs. Free play is unstructured, spontaneous and without rules set up in advance.

Fizzy & Stickz

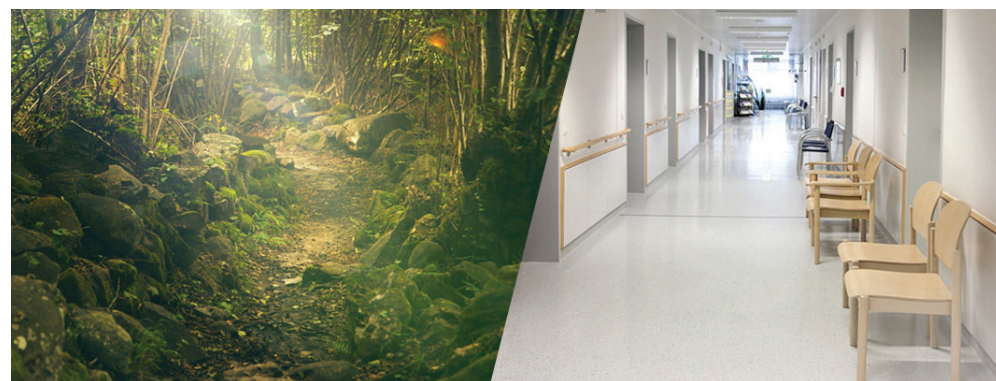
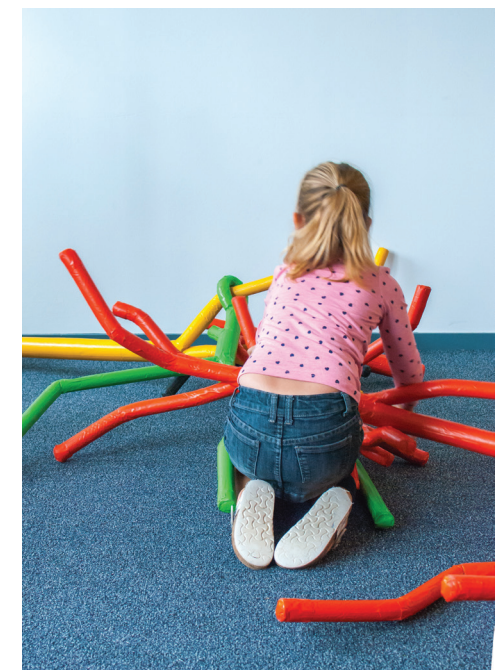
Boudewijn studies how the three Playscape qualities can be used in hospitals by means of design interventions. He does this by means of two designs: Fizzy and Stickz. These are suitable for both playing with others and individual play. Fizzy is a soft ball with a will of its own: It wiggles to draw your attention, rolls away when you approach it, shakes when it's picked up hard and purrs when it's stroked. With this behavioural repertoire, he invites the children to follow him and to play with him, while the child can give his or her own meaning to this (for instance Fizzy as a ball or Fizzy as an animal). Stickz is a collection of soft, branch-shaped objects. The branches differ in shape, colour and size. They have ring-shaped endings that can serve as handles or connections. The Stickz invite children to drag, carry and build. The multiple shapes encourage fantasy. A single branch can be a sword or an animal, a built structure can be a fort, but also an airplane or palace.



Fizzy in action



Stickz in action



The Playscape perspective: outdoor play as inspiration for the design of hospital environments

Research by designing

Fizzy was tested in patient rooms, and Stickz in a semi-public waiting room. For Boudewijn, Fizzy and Stickz are a means to conduct his research: "They are a medium to gain insight into the interactions between the children, their parents, brothers and sisters, and the different healthcare professionals. Fizzy and Stickz have given me greater understanding of everyone's role in encouraging and supporting physical play." By testing the prototypes in the

hospital, he is able to further develop and detail the Playscapes perspective. But Stickz is much more than that - it is a design with a convincing value on its own; a design that deserves to be made and used. Therefore, an alternate version of this is currently being created for application in the Prinses Máxima Centrum. In doing so, Boudewijn develops both knowledge and implementable designs. In my opinion, a beautiful example of how research and designing can reinforce each other.



Boudewijn Boon developed Fizzy and Stickz as part of his PhD research under the supervision of Pieter Jan Stappers (PhD supervisor), Marry van den Heuvel-Eibrink (PhD supervisor), Marco Rozendaal (PhD supervisor) and Janjaap van der Net (external advisor). The study is part of the "Meedoen=Groeien!" project, a collaboration with the Revalidatiefonds and the Prinses Máxima Centrum for children's oncology. Meedoen=Groeien! is financially supported by the VriendenLoterij. Boudewijn is a member of the TU Delft *Connected Everyday Lab* and the *Delft Institute of Positive Design*.

For more information, see:

<http://www.meedoenisgroeien.nl/>

<https://www.tudelft.nl/io/over-de-faculteit/persoonlijke-profielen/phd-kandidaten/boon-mjb/>



Colophon

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