

## The Meaning of Small Scale

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### Introduction

When a child gets a toy do they wonder where it came from or how it was made? When a first year design student works on a project do they think (logically) about who will experience his or her design and how it might impact them?

The day that I told my seven year old son that he could be a person that designs Legos when he grows up was a turning point in his appreciation for the things that he plays with. A similar result occurs when I tell a group of eighteen year old first year design students that they will be making something to give away to children. In each instance, their appreciation for what they were doing in the moment grew exponentially.

As the students begin to consider how their design decisions will affect the pre-schoolers, the children that benefit from these toys will start to see how the things they play with can have meaning. Where these new conscious consumers will end up is difficult to predict, but if they can possibly count this moment as a stepping stone to one day be the creator that starts the entire cycle over again, it will be an amazing experience. For the children it is a longer experiment that we might never actually see the results of, but with our design students we can see and experience their growth and thoughtfulness through the years.

*'...the studio is Santa's workshop...'*  
Paul Duffy (class of 2015)

### Precedent: Froebel Gifts

German educational philosopher Friedrich Froebel (1782-1852) acknowledged the importance of play in how children socialize and develop. He created the concept of the 'kindergarten' as well as a set of toys known as Froebel Gifts. (Fig. 1)



Fig. 1. Froebel Gift 5B (building blocks). Froebel USA

The Gifts are activity-based toys that range from spheres and blocks to more advanced skills based objects. Froebel believed that the act of playing allows the child to use their environment as an aid to education, as well as '...create a bond between the adult and the child who play with them.'<sup>lix</sup>

One such person that was influenced by Froebel Gifts and put his discoveries into practice was American architect Frank Lloyd Wright (1867-1959). Wright's mother was a school teacher and had seen the Froebel Gifts at the 1876 Centennial Exhibition in Philadelphia where she purchased a set for her family. Wright is quoted as saying, "For several years I sat at the little Kindergarten table-top ... and played ... with the cube, the sphere and the triangle—these smooth wooden maple blocks ... All are in my fingers to this day ..."<sup>lx</sup>

It should be of no surprise then that Frank Lloyd Wright would introduce his own children to Froebel Gifts. Several of his children, and grandchildren, went on to become artists and architects, with his son John Lloyd Wright even inventing a popular building toy himself; Lincoln Logs in 1918. (Fig.2)



Fig. 2. Lincoln Logs. K'nex, Hatfield, Pennsylvania.

### Prospectus

The first year design students are given the following parameters for the project: How can a wooden toy be constructed no larger than 12" in any dimension; has a movable component or comes apart in some way and has a component dimension of 1/2" thick?

The pedagogical aim of our foundation year is to strip away preconceptions about what constitutes design; to deal with design as a composition of elements in two and three dimensions that the students can experiment with much the same way that they may have played with blocks or Lincoln logs, only now in an increasingly conscious way. After a semester of these abstractions and compositional experiments, students are given the opportunity to design a wooden toy using the knowledge gained from the previous projects in a different visual language. Coupled with the giving of the toy to organizations serving children, this experience broadens the students' outlook on the contribution that design can make to society on the small, as well as large, scale.

After a semester of exercises dealing with the abstract qualities of compositional problem solving, and analyzing and diagramming precedent, the students get this seemingly simple assignment to end their first semester. The idea of a wooden toy does not initially resonate with some of the students as being a serious design experiment. When they are introduced to the toy project, some may see it as a break from what the majority of the semester has been to that point. As the project progresses on a rather quick timeline, and into its completion, the students find a bigger meaning to the project and the potential within their design. Possibly the idea that a child, a tangible someone, would be using their design.

For the first time, the act of design takes on a sense of reality, a consequence to how they choose to assemble their composite parts. Often, thinking about their brothers and sisters, or memories from their own childhood, along with the realization that a child will be receiving their design start to elevate the gravity of the project.

The range of toys varies as the students have become comfortable with the act of design and with the tools of the wood shop. There are always examples of students that really delve into creating something different and at times unexpected. To them, their thought processes have been released, not having to think of tectonics or spatial configurations. Conversely, other students are daunted by the fact that they are not designing for themselves (or their professors) but for someone else. The most successful outcomes are from the students that realize that the toy is no different from any of the previous assignments, the principles and elements of composition and design do not change because of the age of the 'client'. They need to consider durability, ease of use, and safety for the first time.



Fig. 3. Tow truck, mock-up and complete. Tyler Shiner, Marywood University, 2013. Cardboard, Poplar. Each student develops their design from sketch to full-scale cardboard mock-up and the finished working toy over the course of 2 weeks time.



Fig. 4. Telephone, mock-up and complete. Joshua Mann, Marywood University, 2013. Cardboard, plywood, nylon cord. A removable handset and spinning dial, all constructed from laminated plywood, utilizing the striations of the plys to a beautiful effect.



Fig. 5. Toaster, mock-up and complete. Brian Mlodzienski, Marywood University, 2013. Cardboard, Oak, Poplar. In full working order for both versions, the student thought down to the smallest details, the text on the cardboard model and using a lighter species of wood for the toast.



Fig. 6. Post Box. Monica Pacyna, Marywood University, 2013. Plywood. Taking the simple act of sending and receiving a note, and making it into a game.

### Student and Partner Response

Delivery day is scheduled for the last day of the students first semester of university. Their final critiques are past and Christmas break is quickly approaching.

The organizations with whom we have worked have included wide demographic variation, from 'at risk' children, to middle class suburban children. Whatever the case each semester, the culminating experience of delivering 50-70 students, not long removed from childhood themselves, become enlivened as children anywhere from three to seven descend upon the designs.

Pride emanates as each student shows groups or individual children how to use their toy. It is a pride in seeing how their design holds up to the rigor of that first exuberant play coupled with the pride of giving someone an experience that they had not anticipated up to that point. The design students see their work affecting a child, often spending time playing with the children themselves, thus fulfilling Froebel's idea of the bond formed between child and adult. This will serve as perhaps the most honest critique they may ever have.

*'...I did not recognize it as a service project until we delivered the toys. I had worked on the project to look how I envisioned and to get a good grade on it. Once I*

*saw the children playing with all of our toys, I realized that it was benefitting more than myself and my grades; it was making someone happy'*  
Michelle Calabrese (class of 2015)

*'So many toys are now made of plastic and the wooden ones are so expensive, that it is a treat to have been given such a nice selection of them. They are so unique so the children now have the opportunity to play with items they cannot get anywhere else. It is fun to hear them say with wide eyes, 'Look at this!!!' Or, 'This is so neat!!!'*

Gwynne Gilbert, Director Fricchione Day Care Center, Scranton, Pennsylvania.

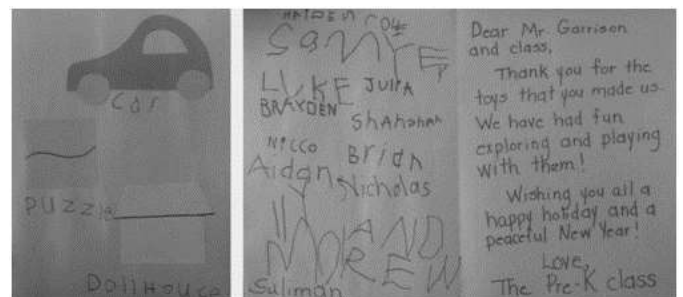


Fig. 7. Thank You card from the Fricchione Day Care Center Pre-Kindergarten Class, recipients of the 2013 toys.

*'Before this project I would have never thought about making something of my own design and giving it away as a form of community service. To me, community service was the act of hands on helping with a task or helping to fulfill someone's needs that they could not fulfill themselves. After the completion of this project I most definitely had a new perception of what community service could entail.'*

Emily Fella (class of 2016)

### Conclusion

Speaking with students, even three years out from the project, they often still hold it as a moment when they became designers. The work that each student put into their toy was beyond being for themselves or for a grade, they saw it as an opportunity to impact a child in a way that maybe they had been impacted in the past. So often our students are left with the feeling that even if they did not fully understand what we asked them to do throughout the semester, if their toy design held up to the scrutiny of the children they know that they understood something.

It is important for students to learn the value of designing for others early on, instead of only being concerned with their own expectations and values.

Their future will not be about working within their own vacuum, the varied needs of others will be part of the design process forever. We must teach our students not to overlook the small things. Those things that might not be as visible to the world at large, but nevertheless have the potential to inform the future generations of designers.

### References

<sup>1</sup> Liebschner, Joachim. *A Child's Work: Freedom and Guidance in Froebel's Educational Theory and Practice* Lutterworth Press: Cambridge, UK p 82.

<sup>11</sup> Alofsin, Anthony. *Frank Lloyd Wright--the Lost Years, 1910–1922: A Study of Influence*. University of Chicago Press, p. 359.