Design vs. War: Modular System of Toys for War-Affected Children

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DESIGN VS. WAR

Modular System of Toys
for War-Affected Children

By Shima Ghaheri

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Fine Arts in Industrial Design

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“If you don’t claim your humanity, you will become a statistic”

-CHUCK PALAHNIUK-
Thesis Committee Approvals

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Modular System of Toys for War-Affected Children
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Shima Ghaheri
Contents

Abstract  8
Keywords
Timeline

01 Introduction  10
Problem Area
Problem Statement

02 Research Considerations  13
Project Rationale and Positioning
Design Thinking Approach
Supporting Research
Statistical Data
Environmental Context
Target Audience

03 Design Process  25
Inspiration and Ideation
Sketches
Selected Ideas
Laser-Cut Patterns
04 Final Concepts

Scenario 1
Scenario 2
Scenario 3
Scenario 4
Scenario 5
Scenario 6
Design Considerations

05 Design Impact

Next Steps
Conclusion

06 Resources

Bibliography
Figures

07 Thank you!
Abstract

Toy and play as integral childhood components have proven to be crucial in child development. [1] It has been adults’ responsibility to provide children with suitable toys or help them find or make ones. However, this task seems to be challenging about children in war zones. Children that still have the rights to be recognized as children, to spend their time playing delightfully, and to grow peacefully.

In this project, first I examine how wars affect lives. To dig into the effect further, I explore the affected war children as the most vulnerable group of the society. Then I study the possible constraints in the process of designing the experience of play for affected areas. Finally, I propose a new packaging style for the products sent to war zones in a way that children would be able to make their own toys and games with the second use of the packages following instructions.

To ensure that I was able to meet my goal to positively impact the world, later in this document, I will discuss impact of my project in the design world.
Keywords

Underserved children, child development, system of toys, play, empathic design, emotional design, war-torn countries, refugees, cardboard, craftsmanship, psychology, humanities

Timeline

Phase 1
- Research
- Interviews
- Meetings

Spring 2017

Phase 2
- Ideation
- Sketching
- Modeling

Fall 2017

Phase 3
- Testing
- Refining

Spring 2018

Phase 4
- Deliverables

Fall 2018
01

Introduction
Problem Area

The act of playing with toys has proven to be a fundamental element in a child’s development. [2] Typically, it is the responsibility of a parent or guardian to provide children with suitable toys to aid in their learning and development, whether they are purchased, hand-made, or improvised. Though considered a trivial task, it can be very challenging for children growing up in war zones to afford this merchandise.

“Non-discrimination is a cross-cutting principle in international human rights law.” [3] The human right to play and achieve some semblance of normalcy should be available to any child regardless of location or circumstance. Figure 1
Problem Statement

I will explore the opportunities of how we can help **war-affected children** continue to **play and learn** by using a **modular system of toys or educational materials**. This modular system is specifically designed and include instructions to be made out of common materials available in war-torn countries. This system of toys will utilize empathy scenarios to ameliorate, alleviate and rehabilitate the **emotional and physical needs** of children’s lives.
Research Considerations
Project Rationale and Positioning

Let's focus on the *Figure 2* and imagine the kind of life this child is experiencing. He is Omran Daqneesh, one of the 75,000 Syrian children [4] who were fighting to survive in August 2016 and one of the millions of children [5] who are struggling with wars every day. He looks innocent, right? Such children, like Omran, need to have the right to express their feelings by playing and enjoying their moments.
These future adults require to learn love, peace, and life aspects through toys and play which has been proven to be crucial in the personality formation. But, how can we effectively design play tools with all the constraints in war-zones? This is the question I am trying to answer in this project.

I will first learn about the children emotional and physical needs in war-zones and then try to propose a novel toy design with the least potential in hand equipment.
Design Thinking Approach

In the process of working on this project, design thinking, Figure 3, [6] will be central to my thinking and research. I will be highly focused on bringing desirability, viability, and feasibility into a harmonious balance and I will demonstrate it in more details at the end of this document.
Supporting Research

Who, how, why and what started the conflict is irrelevant to the children once the killing has started. What matters is how war is affecting children and how we can perform service to prevent further damage, emotionally and physically.

To put the work in context and get a broader view of war effects and toy importance, I review just a few of several related works. In the past decades, more than two million innocent children were killed in armed conflicts and a lot more were physically and psychologically wounded [7]. How children are affected by war, how to rehabilitate them after being affected, and how to make the war zone less severe for children have been subjects of many studies from different perspectives [8].

Wars have more irrecoverable effects on children than adults. Children are forming their future and attitudes. This future generation also needs more attention and love. Severe losses and horror situations are nightmares that affect children psychologically. Also, a landmine explosion kills or injures a child more likely than an adult [9].
Edward Goldson [10] gives an overview of the effect of war on children, both directly and indirectly. He asserts that recent wars include not only injuries and death but also families’ disruption and emotional pain. The author argues war effects by surveying the well-known 20th-century armed conflicts and looking into their consequences.

Moreover, Everett M. Ressler, in a study for UNICEF [11], perfectly covers the war impacts on children such as loss of life, injury, illness, malnutrition, disability, torture, abuse, imprisonment, recruitment, unaccompanied children, psychosocial distress, and educational disruption. He also explores more than one thousand references about services that can be provided for children in war zones.

Learning more about the abject consequences of war makes people think of actions to mitigate lives of affected children. Although many actions have been done throughout the years, still the living situation is miserable. Unfortunately, there are many structural constraints preventing children from being helped in war zones like political, transportation, social, and economic factors. Such constraints limit decision-making ability for this future generation and this is where design thinking focused on doing more with less [12] comes into play.
The problem from an industrial designer perspective is how to improve lives of the vulnerable children by taking into account studied constraints.

As a toy designer, I will revisit the problem as of how I can help affected children by means of toys. How I can ameliorate their moments besides life-saving food, clean water, medicines, and other supports provided for war zones. Children love to play, so how I can use this tool to improve the devastated lives?

Jeffrey H. Goldstein [13] argues why children tend to play, what play teaches them, and how it affects their lives. He asserts that: “important events and relationships in children’s lives are reflected in their play themes. The Play is also a mirror of social life…”. Play as an essential part of childhood has an enormous impact on development and future directions. So, in fact, it is crucial to incorporate various levels of design in providing them with smart and efficient plays in the hope of better lives.
Statistical Data

In Figure 4 I illustrate the number of exposed children to war threats. United Nations Children’s Fund (UNICEF) has noted that 2 million children have been killed by conflict over the last decade; 6 million children have been made displaced; 12 million have been injured or disabled, and there are more than 300,000 child soldiers conducting in 30 different war across the world. [14] This, again emphasizes the need for immediate action to provide comfort to children in war affected regions.

Figure 4

- 250 Million
- 2 Million
- 6 Million
- 12 Million
- 300,000
Figure 5 pictures a comparison between a war-zone child and a typical one. A child in war zone who is supposed to play, learn, and have fun; but however, is facing harsh realities instead. Knowing about such realities and all the constraints, a design idea is proposed in the next section, in the hope of alleviating exposed lives.
Environmental Context

Figure 6

Figure 7
Figure 8

Figure 9
Target Audience

According to UNICEF statistics, *Figure 10*, every one out of six children in the world are affected war. Amongst these children, based on child development psychology, 4-10 years old children are the most vulnerable ones to become traumatized.

In addition to that, as the number of refugees is growing so fast, the average time of person displaced is now 15 years! It could mean the entire childhood, the entire adulthood or for some people the entire life.
03

Design Process
Inspiration and Ideation

I have learned about the bitter war consequences so far. I also know the restraints in sending goods to conflict zones. However, food and medical care packages are usually dispatched to affected areas, thanks to the efforts of the humanitarian aid organization. These packages mostly include the basic needs that are fundamental requirements for survival. But, what about children? We need to support their developmental needs too! I mentioned earlier the critical role of play in child development. However, sending water, for example, instead of toys seems to be reasonable. So, I should think of simultaneously solving two problems. How about packages? All goods are sent in packages. *Figures 11-12.* Yes! Here is the idea! Using the secondary use of materials to serve children.

To be clearer on the idea examples, consider *Figure 13.* Packages with perforations can be thought as of toys for war-zone children. Perforations are small holes in a thin material or web that are punctured with a tool. These holes can be designed in such a way that be assembled to create toys or allusive or even tools. For example, a food container like in *figures 11-12* can be punctured with instructions letting the children discover delightful handicrafts.
Figure 14 illustrates the potential for creating toys with the second use of packages. Children can bring into being characters and form their own stories. Figure 15 represents how this idea can develop the inner talents and grow innovative future adults.

And finally, Figure 16 enlighten how packages can be used to build a better place for children to study and paint. Cogitating the fact that elementary education in conflict zones is not as accessible as it should be, such simple facilities may have a great impact on children development.

With all mentioned, perforated packages are not ideal satisfying all the standards. However, the goal of this project is hopefully coming up with a clever design to ameliorate the children quality of life with the least equipment in hand.
Figure 13

Figure 14

Modular System of Toys for War-Affected Children
Sketches

Figure 17
Selected Ideas

Figure 18

Figure 19
Modular System of Toys for War-Affected Children

Figure 22

Figure 23
Laser-Cut Patterns

Figure 24

Figure 25
Figure 26

Figure 27
Modular System of Toys for War-Affected Children
Final Concepts
Scenario 1

Figure 31

Figure 32
Scenario 2

Figure 37

Figure 38
Modular System of Toys for War-Affected Children

Figure 39

Figure 40
Scenario 3

Figure 41

Figure 42
Scenario 4

Figure 45

Figure 46
Figure 47

Figure 48
Scenario 5

Figure 51

Figure 52
Figure 53

Figure 54
Scenario 6

Figure 55

Figure 56
Modular System of Toys for War-Affected Children

Figure 57

Figure 58
Design Considerations

While working on this project, my biggest challenge was to keep my design as generic as possible, to convince organizations and NGOs to make and ship the similar products to various areas of conflicts regardless of the environment situation. Being aware of different cultures was a necessity to design unbiased. By designing products that are gender inclusive and for a broad age group, the target audience is expanded. Using cardboard as the one and only material, makes this design feasible and accessible with the lowest amount of cost.
05

Design Impact
Next Steps

While practicing universal design in education, my focus will be on providing a philosophical framework for the design of a broad range of educational products, interactive media, and environments in particular for the unfairly affected war-victims and underserved children. This will provide me the chance to make the aspects of the educational experience more inclusive for stakeholders such as students, parents, policy makers, instructors, and administrators in war-torn countries and areas of conflict.

I designed the next page diagram to illustrate a non-linear design thinking path grounded in the concepts of desirability, feasibility, and viability. As a design thinker, I see myself at the center of this system. I will be focused not only on the first concept (desirability) but also on the subsequent two concepts (feasibility and viability) to materialize my goals of a holistic approach to product, service, and experience design; narratives, and activism.
Figure 60
Conclusion

Melissa Fleming in her TED talk, How to help refugees rebuild their world, [15] puts forward the idea of education as a “place of healing, of learning and of opportunity.” She explains, “Not investing in refugees is a huge missed opportunity.”

Leave them abandoned, and they risk exploitation and abuse, and leave them unskilled and uneducated, and delay by years the return to peace and prosperity in their countries. I believe how we treat the uprooted will shape the future of our world.

The victims of war can hold the keys to lasting peace, and it's the refugees who can stop the cycle of violence.
Resources
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