

Title

Child's Table-In dialogue with everyday objects

Name

Tian Tang

Seat of learning

School of Design and Crafts, University of Gothenburg

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## Abstract

This project aims to discover play archetypes in everyday objects, redesign them in order to embrace children's vivid activities and enhance the play value of ordinary things. By a simple declaration: play dissolve in daily life, I try to provide a creative environment for children.

Everyday objects, play value, children, environment

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# INTRODUCTION

## Background

Play is the theme I have been working on during my study at Child Culture Design. This project both started from some thoughts during my study and some questions I am searching for the answers for.

## What is play?

‘They tell the child: that work and play, reality and fantasy, science and imagination, sky and earth, reason and dream are things that do not belong together.’ ( Loris Malaguzzi, The hundred languages of children, 1998). By bring functional and play together, I aim to encourage children to have a playful approach to reality. Play is more than fluffy animals, pink castles and soft surface.

Design as stage or platform for vivid activities. Design as a platform for children to build up friendship, to conduct play activities and to create meanings to daily life. ‘Design things as unfinished and broken objects. Let the children themselves make them whole.’ ( John Maeda, Designed for kids, 2008)

One of Reggio Emilia’s philosophy is environment as the third pedagogy. Environment should be carefully designed to be able to carried out educational projects, serves as a social network platform and encourage cooperation and friendship. On the other hand, furniture have an important roles of shaping space. In this context, furniture should help shape space experience and being a carrier of meaning.

The child is attracted by a world with fluid and sensuous forms and attached to them in an ambiguous way. Objects are not just what they are. They appear as ‘images’ with inherent possibilities. ( Buytendijk, 1933)

I also started from formulating questions like the followings which shed light on children’s perception, the role of environment, and how design can help building a creative environment. These areas are of great interest to me.

- What aesthetic mean to children?
- How objects influence children’s perception?
- How children perceive every objects and the meaning to them?
- What is the role of environment in the child development?
- When design for children, how to keep the balance between ‘defined’ and ‘open ended’
- The sensible connection between things

## Goal

I believe that child furniture is not only functional, not either only playful. A child furniture at first by itself is functional which makes it easy to be use. Then lies the second level where informal, subtle play value can be found after the first sight. My goal is to discover the play signal and enhance the play value of everyday objects in order to provide the possibilities for exploration and arouse curiosity by daily interaction with the objects.

Client of this project is Tian Tang Design which is my own studio. Results should fit in what Tian Tang Design is doing which is to provide high design value furniture with focus on building creative environment for children.

Another aim in my degree project is to develop systematic means to achieve this goal which is play dissolve in daily life. By knowing my goals and means at the same time keep practicing, I believe I will get more closer to a better result which comes from a sound process.

Expected result includes both an artefact and a design process. The artefact is a child furniture in both private and public places which triggers play activities. Target group is 3-6 years old children. And a specific design process

## Demarcations

I am not going to make toys, wood is priority material. I am not going to make outdoor furniture or play-ground equipment.

## IMPLEMENTATION

At the beginning of this project, I began to think about what I should promote through my products and what is the point to make. I did this pre-study through study visit to Reggio Emilia Region in Italy; reading publication from Reggio, books about preschool research and bench marketing. And also from the accumulated knowledge and experience of my two years study in Child Culture Design.

I admire Reggio's approach of learning from reality. Waste material like the water bottle, buttons, plastic pieces becomes artistic pieces through children's creation. There are not many figurative toys, rather things of geometric shapes, different material from industrial waste. This encourages children's imagination and triggers exploration. I felt that children should have eyes to discover the beauty of daily life.



©Tian Tang

My research can be divided into two parts: children's activities and children's environment based on our study visit to Reggio Emilia last December. At that time I wanted to create something that gives space a strong playful and creative character, some signals that are so intense once children come into the space, they should feel the attracting atmosphere. I have some ideas like hanging atelier based on composition play and hanging hat studio based on role play. The idea is to explore the fusion between furniture and interior. 'Boundless' is the word I was thinking of with a purpose to promote activities at the first sight.

Two steps L shape bench serves as a social platform inspired by plazas in Italy, it is a meeting area in the classroom, a place where children meet in the morning to discuss program of the day.



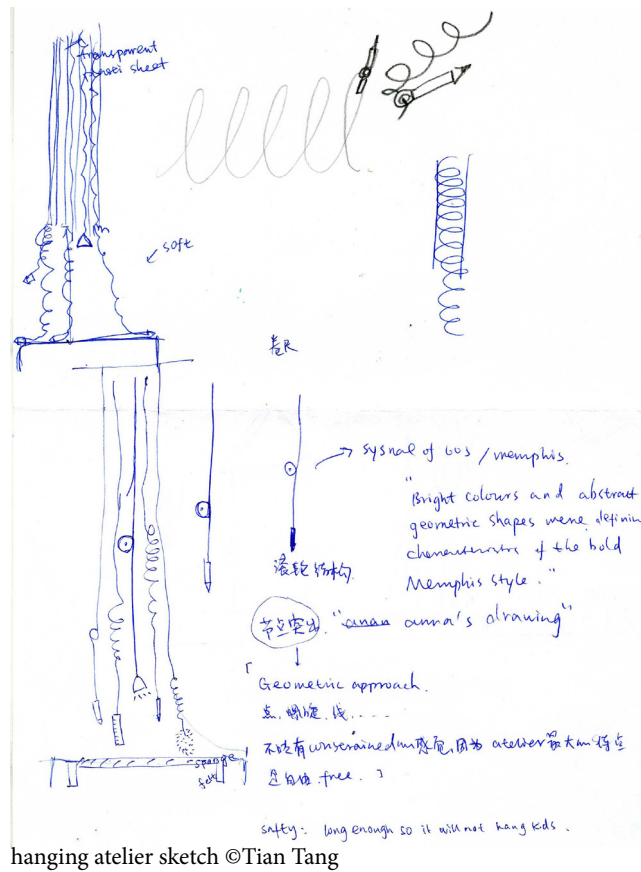
©Tian Tang

Shelf and cotton net both serves as the exhibition of children's work and space dividers. Furniture as environmental fabric of information( children, spaces, relations, 1998) .



©Tian Tang



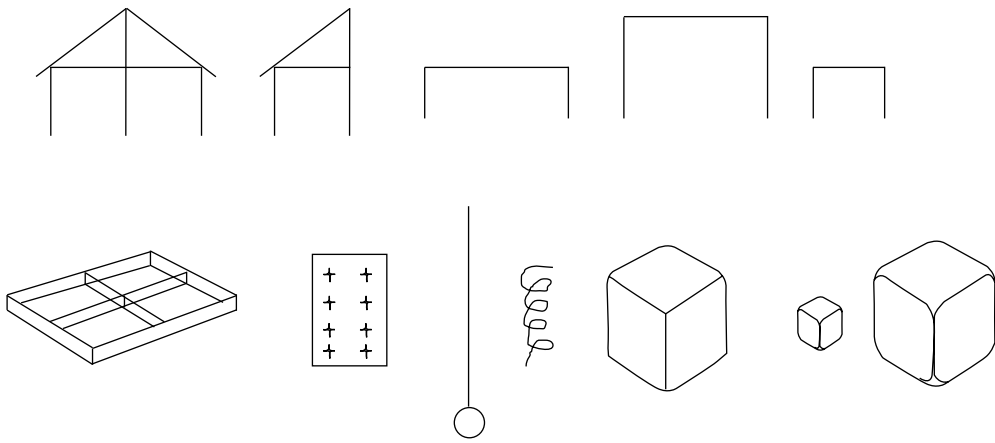


Then I began to study the form of daily objects which embed play signal. I collected things either in real objects or in photos, such like a dice, house models, blankets, material like metal spirals, semi-transparent paper etc. The aim is to extract the `play form` and apply them in an another use context. On the other hand, I also investigated into children`s play activities and moment, trying to extract the archetypes of play, such as never know what is happen next, symbolic play, action and reaction, look through, secret, collect things, and space experience. These are the play value I want to achieve by giving play a shape.

In this way, I developed a dice stool, which I called `kick, roll, sit`. What differs a dice from a cube is its six round corners, this feature affords dice stool to be kicked, roll and of course sit. It is the memory of rolling dice that drives kids to kick and roll the stool, once they did it, a closer understanding of the dice form will happen thus creates the joy of understanding. I have made a full scale model of dice stool using foam and tested it in kindergarten. Kids recognized it , sit on it, and roll it directly.

Another model I had made is house table. Idea comes from a picture ( see this picture at Appendices) where there is an ordinary table with an umbrella hanging by the edge. Roof, raining day, two people encounter under roof emerged in my mind directly. It is amazing how a combination of an umbrella( play signal) and a table can give so much imaginative scenario! I felt strongly this is what I should aim for. Simple objects with a hint! I came with an idea of slightly `folding` the table in the middle, thus create a house shape at the same time two architectural drawing table. Is not it wonderful with this overlapping image and meaning? I made some different expression of the tablehouse. Then comes a balance between `defined` and `open-ended` form which was one of my questions to answer in this project.





Archetype of daily objects ©Tian Tang



Archetype of play ©Tian Tang

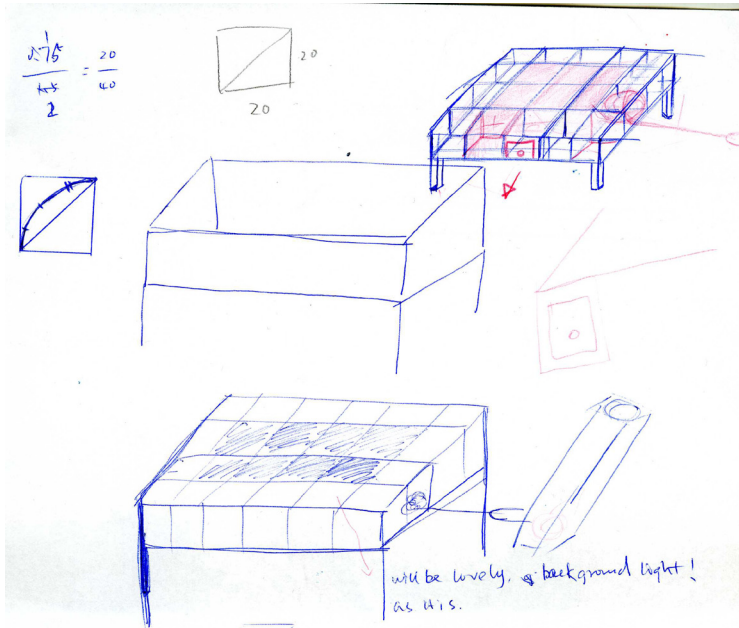


Kick, Roll and Sit model ©Tian Tang

I had more ideas like use raffia to make a carpet creating playful tactile feeling and space volume out of an ordinary rug which inspired by the island we went one weekend. Some ideas such as explore transparent material for the storage of playing things with a purpose to make small things more visible and appealing.

In one word, in the idea generation stage, I tried to explore the play feature in daily objects and apply them in a different way to trigger play which should inherit in its own function and usage.

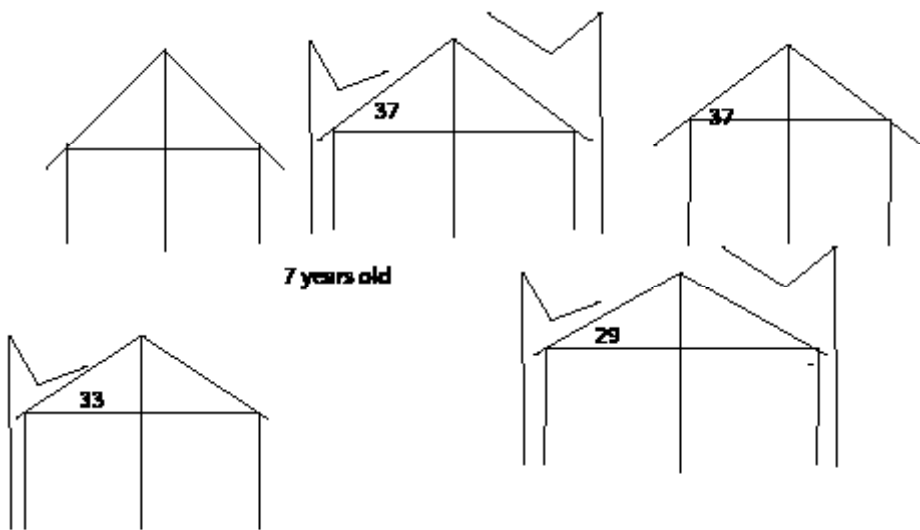
Then I came to the evaluation part of all the ideas. The criteria includes if the concept is understandable, is it the right choose for material, is it appropriate, how is the product life later...I chose the tablehouse to work on. I emphasized on designing overlapped details of both a house and a table such as the roof, the curtain and the eaves. I further developed the proposition based on keeping the gestalt of both house and table, ergonomic and material. A scale model was developed and a rough full scale mock-up was developed to test the ergonomic. However, one weekend I bounced into a blog which spotted a child furniture called 'deskhouse' by a Spanish company whose idea is exactly the same as mine. Even though material and shape is different, I chose to give up this proposal. I was quite upset and stressed by the time. I went back to the dice, developed it, gave up again. I came up with a star blanket which was a cut-out blanket for kids to build their tent as well as a storage for building blocks...Ideas came a lot but judgment lost. I felt that I was confused and lost my judgment. I came back to read classic design books and talk to myself, trying to get a feeling and mapping where I was and what was I doing and how should I continue. I tried to find the value of my ideas and to find a way to evaluate and develop it into a right direction. Words like 'Appropriate', 'inherit into life', 'people dream of different lives' (ettore sottsass) ran into my mind. I began to look back my ideas, is it appropriate, how people use furniture in real life, what value people are expecting for? I began to feel that a product is not only a demonstration of a idea, it has to consistent with your idea and to be understood by users at the end. In order to play, a piece of furniture has to involve very well in people's life and their living environment. And I defined more what play is in this project. Play is about finding your own identity, discover yourself, and the function of furniture is to help create rich scenarios in the limited space, to enrich the storytelling atmosphere in children's environment. In this sense, products should be open ended for different people, it should have the ability to evolve during the time.



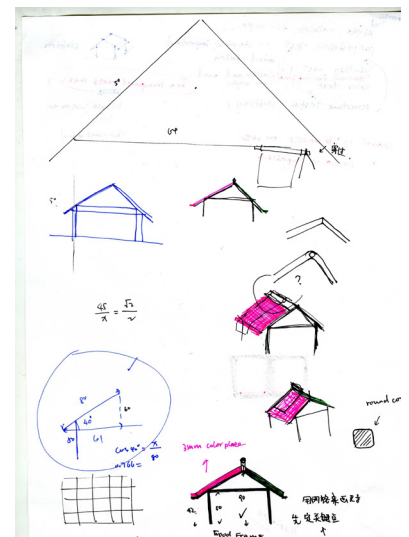
boxes sketch ©Tian Tang



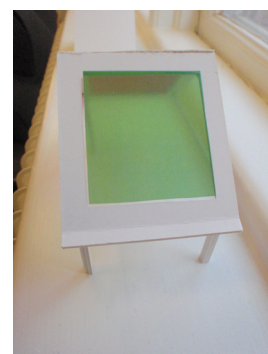
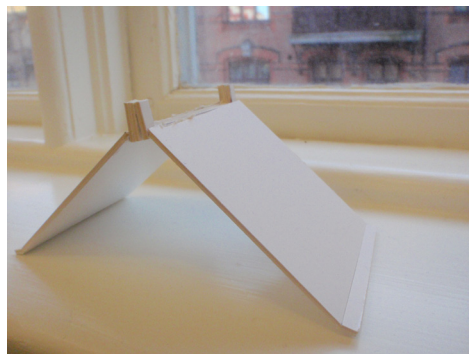
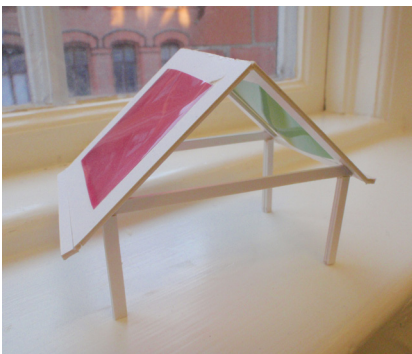
star blanket model ©Tian Tang



Tablehouse sketch ©Tian Tang

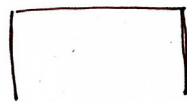


Tablehouse sketch ©Tian Tang



Tablehouse scale model ©Tian Tang

I began to have a closer look of what is already there in children's life and how I can improve them to give more play value. An ordinary children's table catches my attention. A table by itself is a very architectural shape, tabletop is roof, legs are columns. It shapes space both upper and under. Again I thought of the house, actually a table by itself is already a house. I should try to make it more open ended based on this archetype. Simply a thin tabletop as roof and four thicker legs as columns. Considering the space, I want as open structure as possible, so vision will not be blocked and play activities will happen more naturally. But how I can provide a play signal which makes table more interesting and how I can shape the space under in a more distinct way and still let it open. Then I thought of light, use light to create space, which is more sensitive and softer, and more open! And a pulling string is the play signal at the same time gives the tabletop a roof feeling. I remembered in my childhood, the last thing I done before sleep was to pull the string, associated with the sound 'Di Da', at that moment night embraced me and stars went to sleep. For me this sound and action is an emotion hint. It makes something starts and ends.



"A table is very architectural.  
Its legs are like columns and  
its top is like a roof."

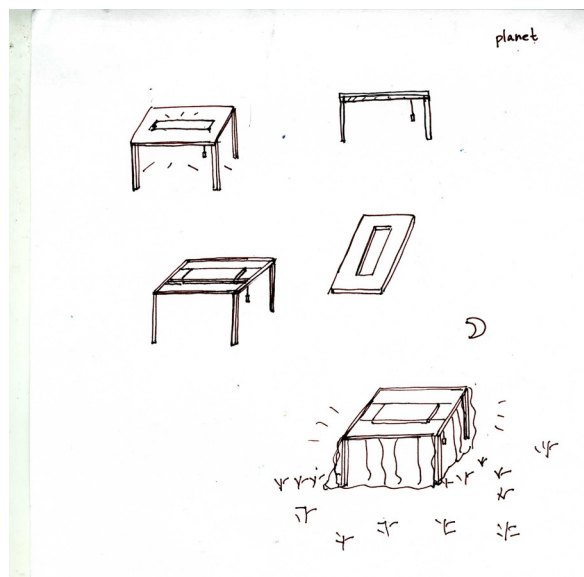
- Junya Ishigami

I like the notion of pulling a string  
then the corner turns light.

"Di Da"

It is a ritual for me when I was  
a kid, to pull the string before sleep  
as if I have sent the stars to sleep.

sketch ©Tian Tang



sketch ©Tian Tang



Then I came to the model making phase. I went to kindergarten to measure the sitting height of the 4 years old kids which is 56-58cm height. And the circumference of 3-4 years old children is around 2 meter. The height of a table for 3-5 years old is often around 56cm. Based on the measurement, I made the table 58cm height, and a square tabletop with a side length of 73cm.

I made the tabletop thinner than the legs to give a feeling of a roof. By removing the beams between the legs, I tried to make the under space more open at the same time to keep the gestalt of a roof and a table. Considering the shape of the tabletop, a square shape makes most use of the space than rectangle shape at the same time transcend a message of `togetherness` and `coziness`.

LEDs were chosen as light source to put inside the thin tabletop due to its low heat generation. A classical pulling string as switch to work as a play signal and action to turn on the light, thus create small space by light.

Regarding to light source, milky plexiglass as a `ceiling lamp` was considered as well as star textured light. I feel the stary light would be more interesting for kids than the plain `ceiling light`. Something I took into consideration is that if the star shadow will make the product too figurative, then maybe it will take away the pureness expression of the product. Here is my thinking process:

``Concerned if the stary sky is too strong that people can not see the concept behind. The concept is about create space and lightscape in children`s environment. And it does not necessary to be a house, not have to stick to the lamp image, because the plain big white light is not as interesting as stars for kids which is 3-5 years old. the proposition and form of the table is already complete or consistent of the idea ( to create space) . Maybe I should not say that it is a house, rather it is a space. And the action of pulling the string is like sending stars to sleep. It does not necessary to be a lamp in this way. It should be a bit fantasy, imaginative, more storytelling. The form or structure is plain by itself which is versatile to involve in daily life, but the details or ideas should be imaginative. The little prince word “When he lights his street lamp, it is as if he brought one more star to life, or one flower. When he puts out his lamp, he sends the flower, or the star, to sleep. That is a beautiful occupation. And since it is beautiful, it is truly useful.”can be my words to explain.``



photo ©Tian Tang

## RESULTS

### Overall description

By simplifying table's structure, its minimum outline creates both a table and a house archetype with a purpose of enrich space experience within children's environment. Pulling string indicates a lighting function under table which help soft the space and compose a rich lightscape.

Child's Table is both functional and poetic to embrace children's daily use and generate imaginative scenarios. Target group: 3-5 years old child. Size: 73\*73\*58cm(H)

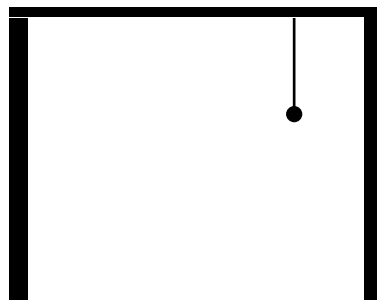
Material: Massive Ash, Veneer Ash, LED, Felt ball, String



photo ©Tian Tang

### The gestalt

A table is more than a table from a child's perspective, it is a blank canvas for drawing, hiding, play house, a stage and so on. Thus a table is reduced to its essential gestalt in child's eyes: four legs, one roof. This idea triggers me to reduce table's structure as much as possible, only left these five element, in order to get a clear gestalt at the same time leave an open area for kids' activities. The result becomes a familiar table, but more than it is.



illustration©Tian Tang



## The context

The use context of Child's Table is both for private and public places. A close look at the private home reveals that living space becomes smaller and smaller, stuff that we fill up a home are on the opposite, become more and more. However home should be a blank canvas which carries our habits, it is a 'photo collage' which is mixed by different taste, different use and different lives.

Therefore I want to make the 'struction of the space' such as table, chair, shelf to support different lives style. They should in a way shape the structure or space at home, but at the same time 'disappear' thus leave the space for people to live. Child's Table is as minimum as it could be, however the innovative building structure makes it as strong as it can be. Ash surface makes the table durable enough for kids rough play. Instead of stunning color, wood tone makes the table melt into the environment.

## The usage



photo ©Tian Tang



photo ©Tian Tang



photo ©Tian Tang

## Light

Inspired by Le Corbusier 's word 'Light create ambiance and the feel of a place, as well as the expression of a structure.', using light for shaping space came to my mind. Light is soft, immaterial yet volumable. It changes by the time, by the surrounding, by the mood, it is living material which I like most. Light has different texture which give a rich form or pattern to a simplicity shape. The use of light in this project is aiming to help compose a rich lightscape in children 's environment. The light is coming from the tabletop, leaves dots shadows on the floor, like branches and leaves shadows in a bright summer night. The light is more of a storytelling, create darkness rather than functional lighting which is already achieved by ceiling light, table light or floor light. A bit figurative light effects aims at providing imaginative scenario at the same time to make a contract of simplicity structure. I chose LED because it gives a soft and tender light which creates a semi darkness and makes no harm to children 's eyes. The switch is inspired by the pulling string which used a lot in my childhood. Red ball made of felt is the end of the pulling string which gives a visual attraction, serves as a play signal arising curiosity. I like the tactile feeling of pulling string, rather being static, it gives an action, a sound as feedback and swings by the wind, it is a multisensory approach to the detail of a child product.

## The detail and stability

The tabletop is 22mm thick, legs are 44mm thick, the idea is to make all the junctions invisible, no screws in the appearance, pure as a whole piece. The thin tabletop is of less strength, and the overlap areas between tabletop and legs are too less, there is nothing to support between the leges.

The design largely challenges the traditional table structure. After four days hard work with a skilled carpenter, we came up with veneer ash MDF with aluminium frame which strength the mdf board. Massive ash legs are screwed into the tabletop with two screws, and then cover the inner tabletop with a ash lid which is fasten in the middle by only a small screw. At the end, the result looks simply beautiful with a stable structure.



photo ©Tian Tang

## Package

The way of construction solves the problems of flat package. Child's Table come with a inner tabletop with all the LED installed inside, a lid, four legs, nine screws and an instruction for assemble. The method to assemble is like this: screw four legs in the tabletop, cover the lid and finally fasten the lid to the tabletop by one screw from underneath.



photo ©Tian Tang

## **Material**

Finally I chose solid Ash because of its light tone color. The idea is to make the object less massive, to be more inherit into the environment. White painting was chosen at the first hand, but it was given up due to the durability in a child's context where products should be able to stand for children's rough play and also have the expression of welcome to play. Wood surface becomes even beautiful after use, its aging tells story.

## **The measurement**

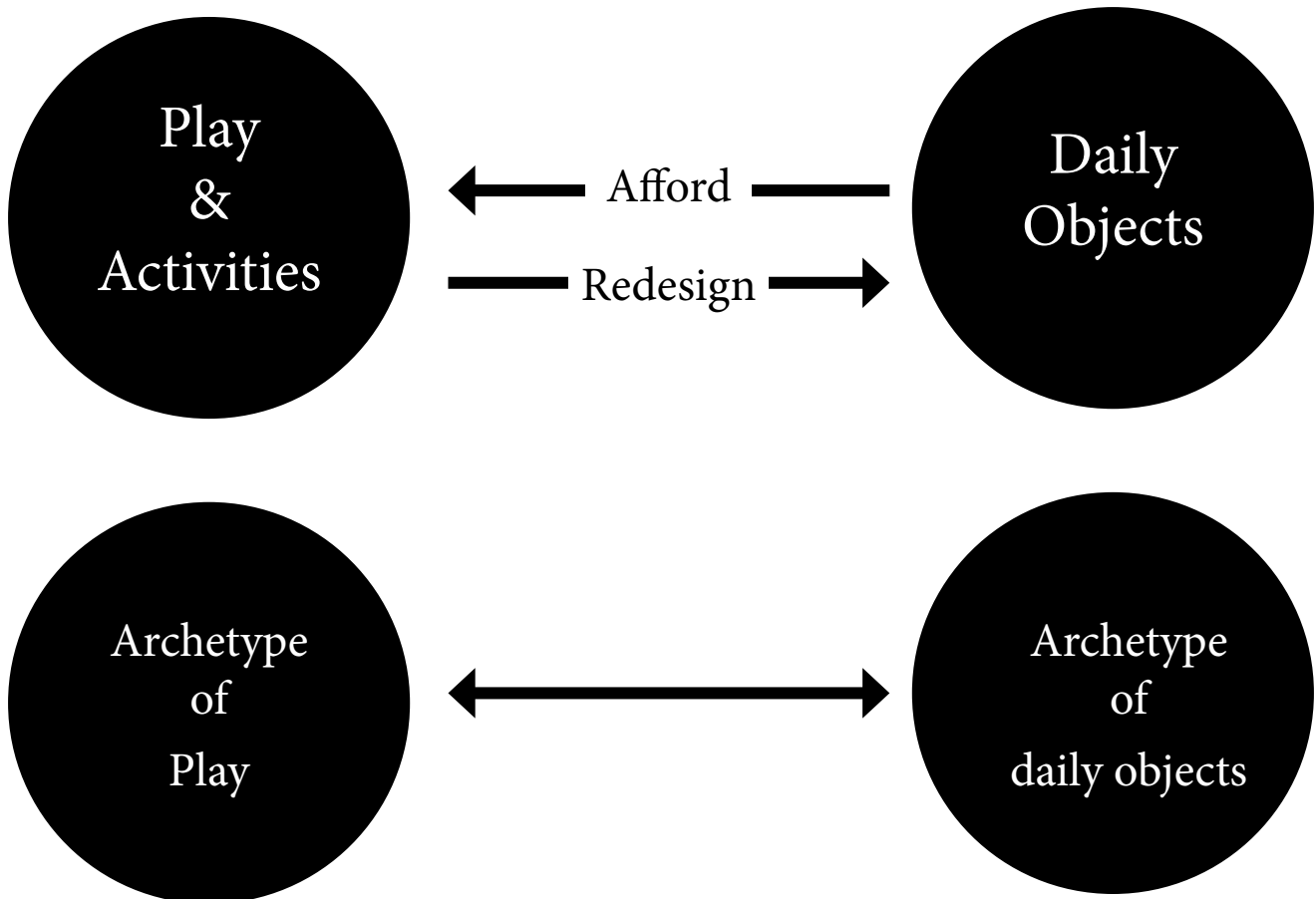
The result as you see is 58cm in height, 73cm in width and 73cm in length. The height is for 3-5 years old children, can be used as a studio table, a daily table. The square tabletop aims to create togetherness, embrace children to work together. Another thought for the square is that in the setting of kindergartens or public places, it is easier to make a long rectangle table out of several square tables. Square is kind of module unit shape which is easily to combine and handle with. Regarding to the tabletop size, it allows 2-3 targeted kids to play under, up to 4 kids to sit around. The sitting height is around 56-58cm for a 4 years old child.

## The process

To define my process is another goal of my degree project. One can say that my work is a semantic approach. Start from finding both archetypes in daily objects and in children's play behavior. By doing this, to see how I can connect both archetypes thus stimulate play activities in everyday life.

An archetype is a universally understood symbol or pattern of behavior, a prototype upon which others are copied, patterned, or emulated. Archetypes are often used in myths and storytelling across different cultures. (wikipedia, 2011)

In fact, children only play with objects that appear as images. To appear as an image means, that the objects 'has' a dynamic, virtual gestalt and therefore every object seems to be more than it is from children's perspective.



### Answer questions

What aesthetic means to children?

`Express the aesthetic dimension as an essential quality of learning, knowing and relating. Pleasure, aesthetic and play are essential in any act of learning and knowledge building. Learning must be pleasurable, appealing and fun. The aesthetic dimension thus becomes a pedagogical quality of the scholastic and educational space. `( Carla Rinaldi, children, spaces, relations, 1998)

How objects influence children's perception, even later knowledge?

`A child who is able to assemble and disassemble possible realities, to construct metaphors and creative paradoxes, to construct his own symbols and codes while learning to decide the established symbols and codes. A child who, very early on, is able to attribute meaning to events and who attempts to share meanings and stories of meaning. `( Carla Rinaldi, children, spaces, relations, 1998)

How children perceive everyday objects and the meaning to them?

These elements are not isolated but are part of a `context of meaning`, where objects engage in dialogue and are part of a shared problems or subjects of investigation. ( Carla Rinaldi, children, spaces, relations, 1998)

What is the role of environment in the child development?

The pedagogical project must be interwoven with architecture project in such a way as to support the processes that take place in this space, the processes of learning, teaching, sharing and understanding. ( Carla Rinaldi, children, spaces, relations, 1998)

How to keep the balance between `defined` and `open ended` element in designing for child?

Define the assemblance of two objects, open for children to construct metaphor, story and relations.

The sensible connection between things

Aesthetic is defined by Bateson `sensitive to the pattern which connects.`(children, spaces, relations, 1998)

### Future development

I see this product as a start point to explore how furniture defines space and encourage children to explore informal play area. I would like to develop a series of furniture which shaping space experience in the future. By using wood as main body construction, I am interested in cooperating other vivid material to enrich the scenario experience. Daily, vivid material interests me because they are very much connected to the life itself, tangible, playful and flexible. One example can be a plant stand leaning against the wall which is buildt by a wooded rectangle frame with lace net in between. Plants grows and spreads along the lace, giving a feeling of a open, green roof, casting leaf shadows on the floor. Without taking too much area at home, it forms a cozy small area for children to read, rest, play house and hide. By cooperating daily material, I want to formulate my design language which is a combination of wood structure and vivid material as a vessel for children's ever change activities.

## **Conclusion**

Every question and every assignment requires a systematic approach, with which he meant that every issue has its own logic. The method of the child represented a way of approaching the world. Like a child, he questioned everything and assumed new and unusual standpoints. This is a totally different standing point than that of the designer who works from the perspective of knowledge and insights. (Bright minds, beautiful ideas, 2003)

After defining the goal which is play dissolve in daily life, I am trying to form my own systematic approach towards this goal. As Bruno Munari mentioned above, I tried to play with form without formal rules. I tried to define play signal in different objects. What makes a toy a toy? What makes play start? And then tried to combine functionality and play together. I finally form my semantic methods almost like children's symbolic play. This process is very fun to work with, makes me happy and gives me child's perspective. When people asked me, how you differentiate yourself from other designers? I said that I start from child's perspective! I think I will keep on working with this process and to reach the goal, it takes time to exercise again and again.

## **Reflection on the learning process**

The tricky part of this project is keeping the balance between analytical approach and hands-on exploration. Analysis gives me a guidance or criterias during the process, but sometimes I felt that it is easy to being stucked by the analysis, and the product at the end becomes an demonstration of a theory which makes the product dry and boring, lost its depth of meaning and open interpretation by different people. To get the vivid product language and not making the product having distance from people, I felt that hands-on explore material and shape forgetting every rules, theory, just follow your hands, your eyes and your heart. In this relax way, I can explore the uncertainty more which is most appealing element, I think, in children's product sortment. As Bruno Munari once said: 'one obstacle to understand art is trying too hard.'

Another hard part is how to write project description. 'To state a problem clearly and completely is not nearly as easy as it many sound.' (George Nelson). Sometimes a problem is not a true problem; sometimes a problem is too abract that it doesnot make any constrain; sometimes a problem is just a problem for yourself which definitely beyond what design can solve because design is to solve people's problem. Therefore to define a problem needs careful obversation of life, talk to people, compare, know the request of the time and society, and the most important is know your means and goals as design is always a collective creativity. Project goal should not be too abstract that it loses the constraint and concrete demand, at the same time should not be too detail that it loses the exploration in the process. Regarding to define a goal of a project, it is important to differentiate the concept and the solutions, it can be different solutions to achieve the same concept.



## SOURCE

Carolyn P. Edwards, Lella Gandini, George E. Forman ( 1998). The hundred languages of children: the Reggio Emilia approach--advanced reflections. 2.ed. Greenwich. Ablex Publishing Corporation

Phyllis Richardson ( 2008). Designed for Kids. London. Thames & Hudson Ltd.

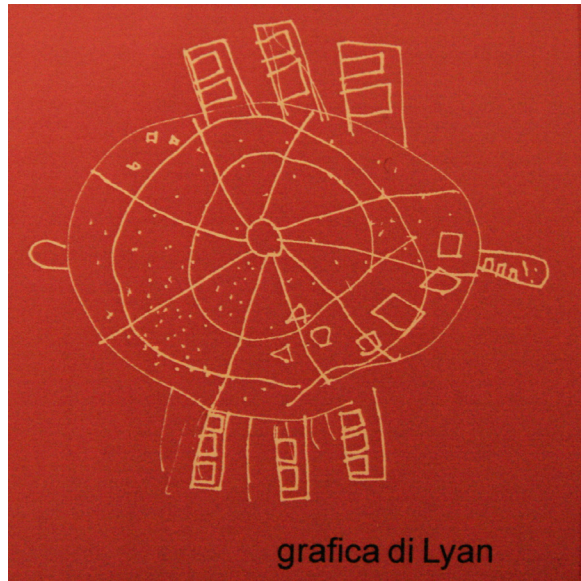
Buytenddijk, F.J.J. ( 1933). Wesen und Sinn des Spiels. Berlin: Kurt Wolf Verlag.

<http://en.wikipedia.org/wiki/Archetype>, 2011

Ceppi, Giulio, Ed.; Zini, Michele, Ed. ( 1998). Children, Spaces, Relations: Metaproject for an Environment for Young Children. Italy. Reggio Children

Ed Annink, Ineke Schwartz ( 2003). Bright minds, beautiful ideas: parallel thoughts in different times : Bruno Munari, Charles & Ray Eames, Martí Guixé and Jurgen Bey. Nederlands. BIS Publishers.

APPENDICES



Reggio Publication



Alexander Calder and Contemporary Art: Form, Balance, Joy, 2010