Designing for Children
- With focus on 'Play + Learn'

Educative creativity and playful interactions.
How toys and products focussed on children's imagination help in developing free thinking and identity.

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Abstract: This paper is aimed to provide an overview on our research and develop design activity by showing two of our projects in progress that focus on the play and learn field: the Monster Scarf and the Maybeings. Both designs concern the imagination provoking attitude as a means to teach self determination of personality and free thinking to the child. Our personal approach mainly includes the use of characters as expressive means of direct communication with the children's mind.

Key words: Imagination, creative play, developmental psychology, characters.

1. 1 Imagination for first (introduction)

space hacking, visual research in Budapest, Amelie Labarthe 2006

Our daily work as designers is motivated by a very defined idea of play, the one that considers imagination and fantasy as a very important tool for children development. For imagination we mean the unique capacity to observe, interpret and reinvent reality that every child has as an innate feature since his birth.

According to the italian 70's designer and creativity theoretician Bruno Munari (who wrote the book *Fantasia* about this argument), imagination is the ability to visualize what fantasy and invention create in a person's mind. Without a guide for this powerful tool, the child will not fully develop his imagination and lose the chance to get consciousness of it. An adult with a good creative education will not have to be an artist of course, as Munari wrote, "a mature imagination will mightly help his self confidence and increase his capacity of problem solving and make decisions even in the case of unforeseen situations." This involves the work environment as well as interpersonal relationships.

In our opinion the idea that the designer is in charge to provide imagination to the child is wrong, our role is to create an environment to let imagination grow and to help children to familiarize with it, in order to give them confidence in its use in every circumstance.

2. Our toy design ingredients.

2.1 Environmental thinking

Oscar's room, creative workshops photo, Amelie Labarthe 2005

The toy seen as an instrument for the projection of emotions and scenarios, would be powerless without the notion of environment. Whether it is to link the playful action to the present physical world or to pretend it's actually another place, the child has this incredible capacity to transform his surroundings to fit his vision. For example the cracked lines on the concrete ground become lianas from the highest trees in the jungle, the

laundry sheets drying on a washing line become a ship to embark on. Children are the masters of this invisible world they imagine without effort, as a natural thing to do, to serve their scenarios of play, as a resource for imagination : something adults tend to forget about when they create for children.

2.2 Rebels

Achille, creative workshop photo, Amelie Labarthe 2005

Children are rebels. They won't necessarily have fun with what and where you expect them to, the whole challenge is to try and meet them in a place where their freedom of imagination is respected. Designers have to consider this factors in their work and take into account the irrational direction that the play action can take, in order to channel its disruptive power in an educative activity.

2.3 Characters

Mr bras crete, creative workshops, Amelie Labarthe 2005

An important phenomenon of our contemporary culture is the prolification of little monsters, creatures and entities simply called "characters". Visually these strange figures take inspiration from the Japanese culture of "kawaii" (translated: cute), western street art, commercial pop culture and the children world. But, from an anthropological point of view, we are used to such representations as far back as mankind's first creations and works of art. A drawn or sculpted creature (inspired from a real or imaginary being) has always had the power to speak directly to the observer, without the need of words or explanations, giving the impression of having his own soul and identity. From Greek masks to gargoyles in the medieval churches, from the Michelin man to the Pokémon, the character culture is around us and inside us. In recent years different creative people, design studios and organizations such as Pictoplasma (a Berlin based organization that collects artworks and create events about the character culture) are studying and focusing on this phenomenon. We both as a studio (The Smths lab) believe in the characters power and use it in our design responses talking about children and adults as well. In a playful scenario, a character can easily be used to transform a functional object in a toy but, more importantly, it can help to strengthen meanings and messages embedded in the same product.

3. SMTH PLAYFUL, creative toys and playful objects
3.1 about the projects
THE SMTHS lab is born in the second half of the year 2009, the following projects are in development and prototyping phase, not into production yet. Although they are quite concrete and well linked to reality, these ideas aren't concluded yet, what we want to share here is the pure essence of their design,which pays particular attention to the users and the effect it have on them.

3.2 "Forget me knot" : The Monster Scarf

"Forget me knot", product photos, Amelie Labarthe 2008

"Forget me knot" The Monster scarf is a long colourful knitted scarf made with chosen colours and soft wool. Being at the same time and a wearable toy and a playful article of clothing, this object finds its collocation in different environments involving children of all ages as well as adults; here we are going to illustrate the first of these functions as it is the main one. This soft playful object can be knotted and unknotted endlessly in order to design different characters with who the child can live short or long play moments until his decision of "undoing" it and start over to create a new one.

The Monster Scarf is meant to encourage a playful and creative attitude towards an object providing infinite character compositions (as many as the knots you can do on it).

The idea for this project takes inspiration from the infinite shapes that a simple line can trace in a three-dimensional space, it's a simple exercise of fantasy that everyone can make by moving a thread in the air as well as observing the evolutions of a light in the dark (both usual children's activities).

3.2.1 Emotional effect
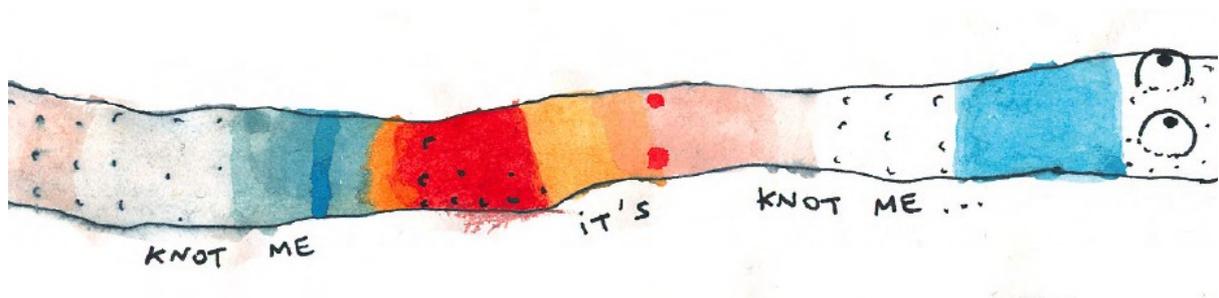
knot me, it's knot me, watercolor drawing, Amelie Labarthe 2008

The Monster Scarf becomes an affective exchange, as the object depends on the child to come to life, it will reward him with a comforting feeling. The material itself is on purpose   comfortable and light (wool), it's the "familiar" effect that the touch can provide that triggers the interaction.

Its use also encourages the user to let things go, as each time the child unknots the scarf, he lose the character he designed, but he will always be able to come up with a new one. It encourages creativity and motricity development (linking a gesture to an idea, developping confidence in actions). This object will proudly wear the stigmatas of time and use. It's like this comfort object you someday elect to be your favourite toy and keep in your drawer for a lifetime, beyond childhood. It loses its colours, its hair sometimes, holes can appear, it starts to smell, and it's all part of the bond that the user builds with

it.   By "adopting" it, the user makes an affective investment, not meant to be something he would want to throw away, somehow anchored in an "emotionally durable" approach to not only designing for children, but for the grown ups they will become.

The monster scarf was selected by "[re]design", for "Doing it for the Kids", an exhibition of sustainable play design. The project explores play types, the importance of play in child development, how toys help mould our kids' values and how they impact on the environment. The exhibition presented examples of sustainable toys and other play resources that inspire designers, educators and parents to be more critical and creative. This itinerant exhibition was seen in London during September 2009 Design Week, in 100% Design Earls Court, and also in Newcastle in October. In January, it will show in Birmingham.

A diverse range of projects were selected to build a rich picture of the possibilities of positive, greener play. They were showcasing examples demonstrating relevance, good design, positive play values, green materials, eco packaging, and lifecycle consideration.
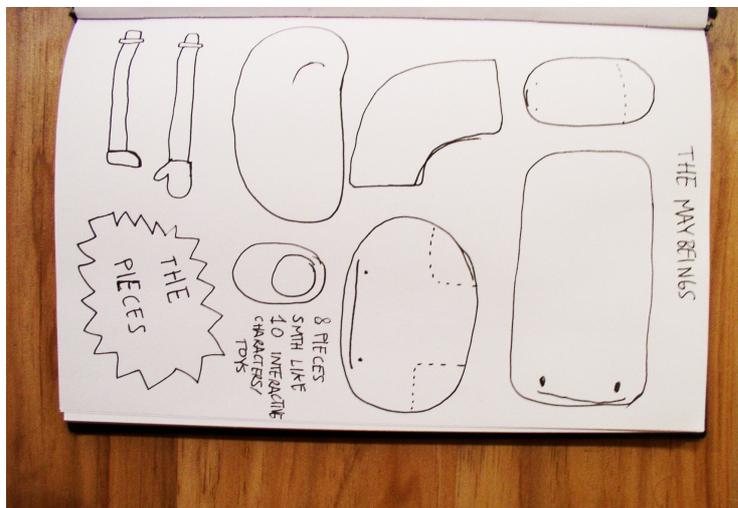
3.3 The Maybeings
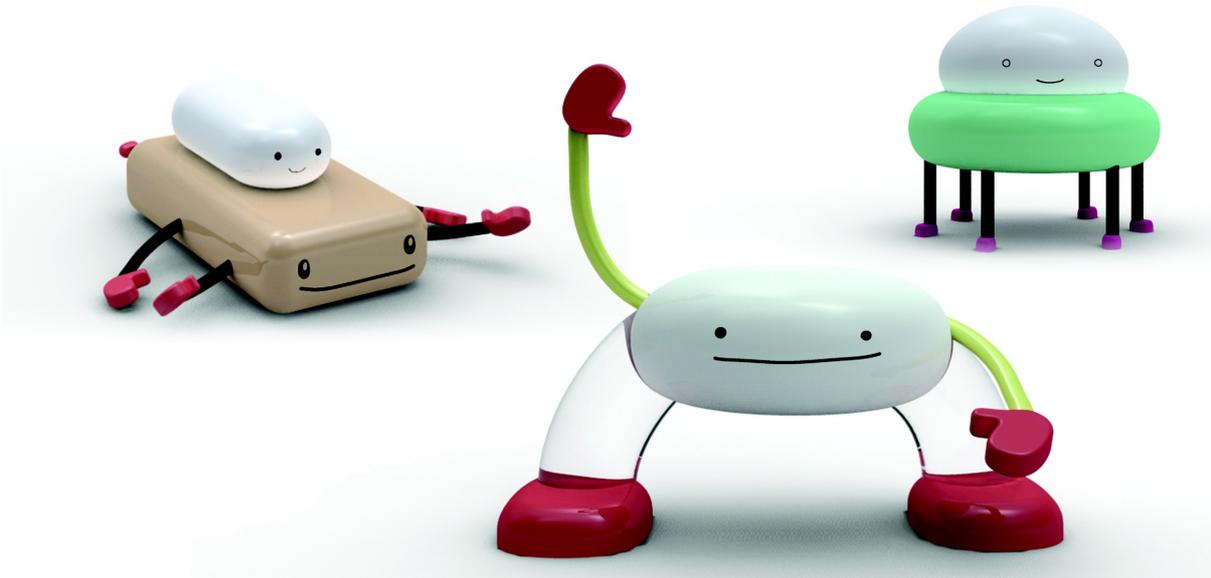
The Maybeings, virtual image, Matteo Oliverio 2009

A family of contemporary toys for children ispired by the concept of the "Imaginary friend". The name is a game of words between "maybe" and "beings" that together give the idea of hypotetical creatures that can live only thanks to imagination.

All the characters are made of pieces from the same collection of body parts. The pieces

are made of different materials, with different colours, textures and physical features (soft, hard, elastic...). Also the joints are of different nature: some of the pieces can be attached to other ones by screw-shaped parts, some other can just be put together having little magnets corresponding to the joint place. By composing the pieces, the child will have the chance to become his friend's creator in a physical way and not only imagined, he will have the power to modify and provide an evolution to this friend when he will find it necessary. The Maybeings can also be joined together in order to create a multiple character, like a couple, mother and son or just friends. This function is inspired by the child necessity to reproduce the social relationships that he sees around him.

3.3.1 Function

the Maybeings parts, sketchbook photo, Matteo Oliverio 2009

The invention of an Imaginary friend is a normal activity of the child' s evolution but, at the same time, a very interesting step for his personality's formation.
During the "friend 's" presence, the child will make experimentations of social relationships, getting used and upgrading his communication skills. For us this phenomenon is very important because it's a very delicate moment in the child's life, a moment in which a not intrusive intervention can help to optimize its good effects. The case of study is also very relevant because two on three children have an imaginary friend, this percentage is provided by a study of the University of Washington and the University of Oregon psychologists (*The Characteristics and Correlates of Fantasy in School-Age Children: Imaginary Companions, Impersonation, and Social Understanding*).
The Maybeings are based on this phenomenon and provide a physical response to it acting as a visualization of the child's imaginary friend. These fancy creatures are specifically designed to embody this ideal spirit becoming automatically each child's friends.

All the character designs do not reproduce, on purpose, any of the real life living beings, they are not humans and they are not animals, there is not a story for them, they are abstract on purpose, in order to not influence (but, at the same time, stimulate) the child's fantasy.

Only the child will have the charge to build up stories and adventures with his componible friend, he will attribute to it a personality that will reflect his perception of the world. How can these toys assure the effect wanted ? For kids aged up to 10 years old, every toy is a kind of medium by which they expresses feelings and imitate the adult world in order to discover it, it's the purpose of every game in general. The Maybeings' particularity is to inspire and invite creativity and imagination as well as possible, avoiding at the same time to provide stereotypes and pre-confectioned stories that can damage fantasy freedom. The Maybeings, thought as a products collection, are going to find their place within different kinds of environment. First of all there is the basic home use, where the interaction between toy and child will be let free to take any kind of shape. It's the free use that, alongside of a good parental supervision, will help the child's imagination's develop in a sane way. Another important use planned for the Maybeings is the therapeutic one within hospital's pediatric sections. Here the hospital psychologists will play the supervising role that will physically deliver the toys to the child's hands. In this case the creative training as well as the social experimentation will have also a therapeutic role helping the traumatized child to rehabilitate emotionally, to face the hospital experience in a familiar state of mind and to get confidence back in interpersonal exchanges.

3.3.2 Research: the Imaginary Friend
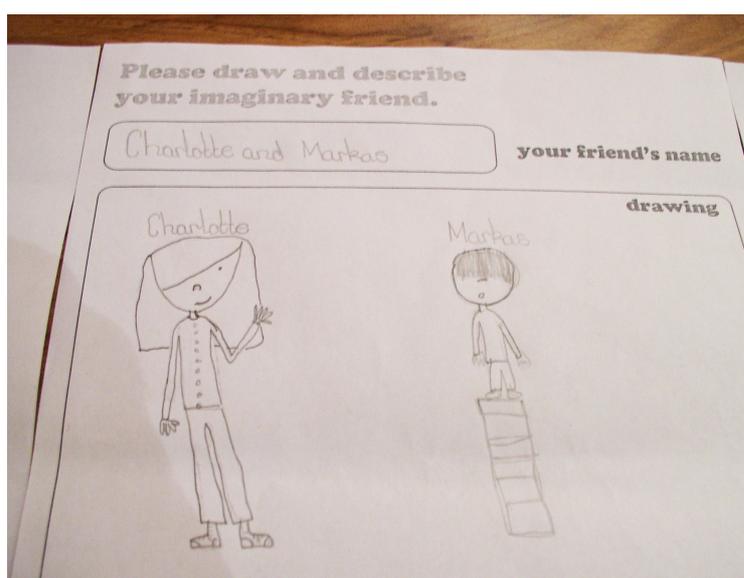
Research survey on the Imaginary friend, Matteo Oiverio 2009

The project comes from the study of the Imaginary friend from a developmental psychology point of view mixed with an interview based research made with children aged between 4 and 10 years old. According to the study made by the universities of Washington and Oregon (*The Characteristics and Correlates of Fantasy in School-Age Children: Imaginary Companions, Impersonation, and Social Understanding)*, the age range for the apparition of an imaginary friend goes from 3 to 8 years old, it's the period in which children are still not able to recognize the difference between reality and imagination. It's very common in this age to play with roles, it can happen, for example, that the child plays the parent's role with his imaginary friend, taking care of him and telling him off when he makes something wrong. It's a kind of behaviour experimentation that the child does in order to get used to and to develop his social relational skills. In order to design these objects in a way that can well respond to these social experiments, we decided to produce a sheet with a little interview for the children in the city of Preston, United Kingdom. The sheet was asking a drawing and a written description of the friend, for both the data we were asking the help of parents or teachers to directly explain the survey and report the written description for the child (for children still unable to do it themselves).

The survey's results gave a good number of useful informations: the children had an absolutely defined vision of the friend (dimension, eyes colour, timings for school, character), we also found out the presence of more than one friend per child, the reason we found for this was the fragmentation of identities in the "role" game before described.

4. Conclusions

The discoveries that come out from this design study are mostly about psychology applied to the positive effects of creative training. In our toys, as well as in other aspects of our practise, we are strongly motivated to keep on working in this direction, considering as a priority the child's mind and the positive effects that an object can have if put in the right environment and situation. During the next months we are going to integrate our philosophy of practise to a project for the Education and Learning department at the V&A Museum of Childhood in London. The project aims at creating transformable play-bags for the young visitors aged 3 years old, useful to discover specific areas of the museum.

We hope that this overview on our current designs and researches is helpful and inspiring for people that share our principles and faith in play. Most projects still being in progress, we will be happy to receive suggestions as well as criticisms to optimize their utility.

Amelie and Matteo

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