

The history of Lego

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For my exhibition, I am going to show the history and the movement of Lego. The exhibition is about the past, present and future of Lego about their products, manufacturing, media and the marketing. Lego has been an important childhood toy for more than half a century and has fascinated both children and adults around the world for its simple and multi-coloured bricks. Currently Lego are moving into multimedia entertainment such as TV, films and computer games which makes them one of the world's major brands. They are producing about 1.9 billion Lego elements every year, 2.16million parts are moulded every hour and 36,000 every minute. Lego has been developing their brand in both physical and digital markets. And produces billions of different pieces in various factory across the world (Anonymous, 2011, p. 16).

The rationale for this topic was that it was a big part of my childhood and still plays a part of my life. Lego has collaborated with a major franchise such as Star Wars, Marvel, DC, Harry Potter, etc. Lego is also used to simulating building or car. For example, Lego Architecture simulates the scale model of the named building whereas Lego technic simulates the mechanism of the automotive. Baudrillard (2000, p.2) suggests that "The real is produced from miniaturized cells, matrices, and memory banks, models of control – and it can be reproduced an indefinite number of times from these." So that Lego can replicate something (place, characters, location)

and also it can be used in role play, simulation or creative imaginary play. The format of the exhibition is a journey through past, present, and the future of Lego. The aim of the exhibition is to provide an experience for the viewer to explore the history of Lego. The journey will begin with a view of the past followed by the development of their target market at present and then their future developments with a focus on sustainability. The idea of the exhibition has evolved from Lego developing a new and fresh vision to produce a more sustainable and environmental plant-based polymer in which to manufacture their Lego bricks. Society in general is far more aware of the environment and the sustainability of the Earth's resources. Therefore, Lego have explored and developed new production techniques as well as new and different target markets for its products. Lego over recent years have diversified. Innovative and new ideas and products will be explored in 'present' section of this report. The similar idea to their vision is the concept of 'cradle to cradle design' which explains by Johnson (2007) that

Each material in a product is designed to be safe and effective, as well as to provide quality resources for subsequent generations of products. In other words, materials are conceived as nutrients and designed to circulate safely and productively.

The implementation of cradle-to-cradle means redesign at a system-wide level. It requires the vision to creatively re-imagine industrial practices and to conceive a fully sustainable future.

So, the 'cradle to cradle design' relates to Lego's vision relating to sustainability and its production, and this idea is essential for Lego and other manufacturing company,

as Earth's resources are limited, and this is why Lego is developing their use of materials into plant-based polymer.

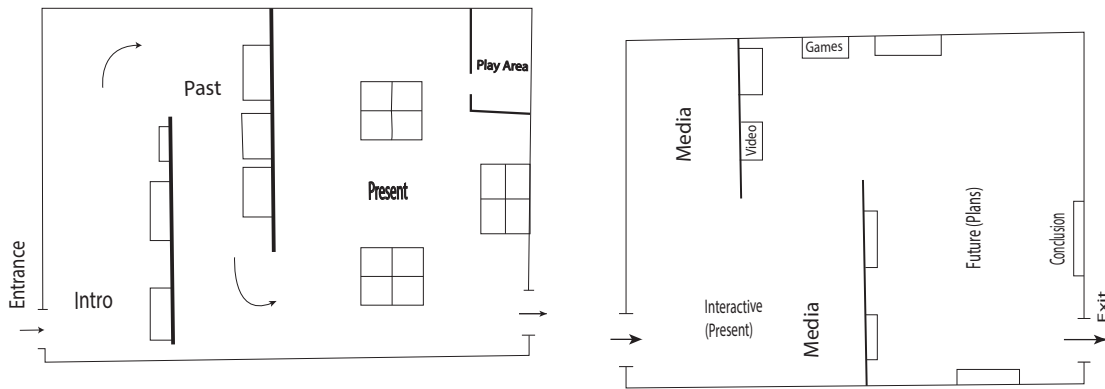


Fig.1: Imagined Exhibition Map

This is the floor plan for my imagined exhibition. The space is completely made up of two rooms with five sections, the exhibition format is a timeline based. So that the exhibition goes past, present to the future, conclusion, exit. The visitors begin their journey from the first room where are an Intro, which describes the journey of Lego has begun. The rationale for this design is that the exhibition is about exploring the journey and I want visitors from every generations to explore history of Lego with the timeline format, so that they will understand about Lego with its background.

According to Foucault (1984)

The space in which we live, which draws us out of ourselves, in which the erosion of our lives. our time and our history occurs, the space that claws and gnaws at us, is also, in itself, a heterogeneous space. In other words, we do not live in a kind of void, inside of which we could place individuals and things. We do not live inside a void that could be colored with diverse shades of light, we live inside a set of relations that delineates sites which are irreducible to one another and absolutely not superimposable on one another.

Therefore, the space that displays every section in exhibition will bring back history relation to their development through time. As Berger (2008, p. 11) explains that “they mystify rather than clarify. The past is never there waiting to be discovered, to be recognized for exactly what it is. History always constitutes the relation between a present and its past.” And thus, the way we see the displays at the exhibition “is affected by what we know or what we believe.” (Berger, 2008, p. 8). So that the visitors can deeply understand their background of the development of Lego.

According to Bachelard (1958) “the tiny things we imagine simply take us back to childhood, to familiarity with toys and the reality of toys.” This links to my ideas of exhibiting that I want all generation to having fun and learn that where they were and where are they going by interacting with the displays.

Past

The ‘Past’ section of the exhibition depicts the past of Lego explores the origin of Lego and its development in the early stages. This section focuses on the story of how the company was established and developed with a little history and background, the section introduces the meaning of name ‘LEGO’, the early scale of production and the business of the company. This section displays their original products. For example, a wooden toy and an including example images. This section

will have displays of past products such as '*The LEGO Duck*' (Lego, 1935) which became selected products news 1935 and the first '*Automatic Binding Brick*' (Lego, 1949) which became a selected products news 1949.



Fig.2: The LEGO Duck (Lego, 1935)



Fig.3: Automatic Binding Brick (Lego, 1949)

Present

The 'Present' part of the exhibition of Lego is how the company has moved into multimedia and partnerships, such as global franchises, films, video, computer games. The exhibition will showcase examples of their products, films, games and other multimedia developments. This section is split into two areas. The first area will

be displays of the current design of themed products between 2000 – 2020.

Examples include *Lego City*, *Lego Star Wars™*, *Lego Technic™* (Lego, 2020). There will also be a play area for children to interact with bricks, such as Lego Duplo for small children. The second area is interactive with a variety of media. This area will include video games, TV series or movies of Lego on monitors with repeating loops of footage, such as *Ninjago* (Lego, 2011), *Lego Movie* (Warner Bros, 2014). There will also be tablets with the Lego mobile app such as ‘*The LEGO® Boost*’ (Lego, 2020). The visitors can learn how the coding can be creative by interacting with tablets which will be displays and they will include those apps.



Fig.4: *LEGO Ninjago: Masters of Spinjitzu: Season 1: Rise of The Snakes* (Lego, 2011 - 2012)



Fig.5: LEGO ® Movie (Warner Bros. 2014)



Fig.6: LEGO Marvel Superheroes 2 (Warner Bros. 2017)



Fig.7: The LEGO ® Boost (Lego, 2017)

Future

The 'Future' section of the exhibition will be looking at the company's target/vision.

The exhibition will explore the manufacturing aspect of Lego bricks. The rationale for this section is that the manufacturing of product can give impact on the Earth's environment, therefore, most of the design and manufacturing companies have a responsibility on sustainability. Barret (2018) notes that in today's world, environmental impact and sustainability are of paramount importance. He goes on to say that the Lego's vision is to be plastic-free (oil-based polymer) by 2030. Currently plastic bricks are made of acrylonitrile-butadiene-styrene, or ABS, a petroleum-based substance that the sugar-based polyethylene can't hope to replace." However, Barret (2018) also states that recent developments in alternative polymers have been explored. Lego has proposed the use of a sugarcane-based polymer, which will reduce the companies impact on the environment.

The exhibition will showcase examples of two different type of plastic bricks:

1. Oil-based polymer
2. Sugarcane-based polyethylene

The rationale for this section in the exhibition is as Anon (2015) notes:

Lego will recruit around 100 people to research, develop and implement new materials for both toys and packaging. The centre will be based at the Lego Group headquarters in Billund, Denmark. By 2030, the company hopes to have found alternatives to all of its raw materials.

As they are developing the materials for their bricks, this will be a huge task for Lego as the business to make every elements of bricks out of sugarcane-based plastic, as their 'promise' is to "zero environmental impact on the planet." (Lego, 2020).

I have showed the ideas of my exhibition for Lego and its development for sustainability. I would like to conclude this report with the 'sustainable design', this is also a part of the topic for this exhibition as it is a main topic for product design degree. Spencer and Porter (2015) describes that why we considering the sustainable design

Rapid increase in consumption has altered household consumption behaviour and resource use, often adversely affecting their environmental footprint. There is, therefore, a pressing need to understand the effect culture has on product interactions, particularly when designing new products and systems for emerging markets.

This is why we considering about the sustainability. As I have mentioned that the society aware of the environment and the sustainability before, which also described on the above quote. Similar to the 'cradle to cradle design' which I have mentioned at the introduction, the 'sustainable deign' is also relates to the Lego's vision relating to the production on the sustainability.

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Figures

Figure 2: Lego (1935) *The LEGO Duck*. Available at: <https://www.lego.com/en-us/aboutus/lego-group/the-lego-group-history/> (Accessed: 26th February 2020)

Figure 3: Lego (1949) *Automatic Binding Brick*. Available at: <https://www.lego.com/en-us/aboutus/lego-group/the-lego-group-history/> (Accessed: 26th February 2020)

Figure 4: (2011) *LEGO Ninjago: Masters of Spinjitzu: Season 1: Rise of The Snakes*. Available at

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Figure 5: Warner Bros. (2014) *LEGO ® Movie*. Available at: <https://www.imdb.com/title/tt1490017/> (Accessed: 27th February 2020)

Figure 6: Warner Bros. (2017) *LEGO ® Marvel Superheroes 2*. Available at: <https://www.amazon.co.uk/LEGO-Marvel-Superheroes-2-PS4/dp/B072JGLJCK> (Accessed: 27th February 2020)

Figure 7: Lego. (2017) *LEGO ® BOOST*. Available at <https://www.lego.com/en-us/kids/games/boost/lego-boost-03c8a71ab07a428fba9fa3b460b387b2> (Accessed: 3rd February 2020)