

The Road to Happiness is Paved with Playful Intentions

LEGAARD Jesper

Design School Kolding

jfl@dskd.dk

doi: 10.21606/drs.2018.390

Through exploring the relation between designing for happiness and designing for play experiences, the paper proposes key elements that constitute meaningful play experiences. The paper proposes that designing for playfulness may also lead to more meaningfully engaging experiences. Meaningful experiences emerge when the activities of the experience comply with the interests, passions and goals of the person having the experience, by which meaningfulness is naturally linked to intrinsic motivation. This is true also for play activities, which are typically defined by e.g. being voluntary activities. Building on conditions for meaningful experiences, the author addresses the element of playfulness as a key to separate what can easily be good and meaningful experiences from experiences of play. The contribution of this paper is to provide an understanding of the components of a play experience and the relation between meaningful and playful experiences. The paper introduces the Play Blueprint, a framework depicting the key components of play experiences, intended as a valuable tool in designing for play(ful) experiences.

play, experience, meaningfulness, playfulness

1 Introduction

A fundamental argument for this paper is that, in order for an activity to be play, it needs to not only be meaningful, but it also needs a grain (or more) of playfulness. This argument also poses the basic condition that all play experiences must be meaningful. Since the emergence of experience design (see eg. Hazzenzahl, 2010 or Jensen, 2013) and positive design (see eg. Desmet & Pohlmeier, 2013) design research has gained increased focus on, and understanding of, what meaningful experiences are and how they can be designed for. We know that meaningful experiences are those that relate to a person's motives, interests and desires (Hedegaard, 2017) which resemble the drivers in play as a voluntary activity that we engage in exactly because it holds meaning for us at that moment. Boswijk (2007) derived 11 characteristics of meaningful experiences such as heightened concentration and focus, timelessness, and emotional engagement. These aspects are all inherent in play activities (see e.g. Huizinga 1955, Sutton-smith 1997, Sicart 2014 or Hedegaard 2017) supporting the argument that play experiences are inherently meaningful. Although play activities



This work is licensed under a Creative Commons Attribution-NonCommercial-Share Alike 4.0 International License.

<https://creativecommons.org/licenses/by-nc-sa/4.0/>

do not have a specific purpose or outcome, the activities in themselves are meaningful and driven by intrinsic motivation.

The second part of the argument; that a play activity also needs to be playful, is supported by the fact that not all meaningful experiences are play. Many meaningful experiences are directed at specific outcomes and has a purpose and goal in real life, i.e. beyond the activity in itself. If I were to spend time helping families who lost their home in a tsunami, it would be meaningful for me because it supported my beliefs and sense of virtue. But it would not be play. A condition for entering the play space is to accept that it is indeed detached from real life, and as such it has its own rules, boundaries and an absence of immediate consequences for 'real life'. One of the most commonly mentioned features of play is exactly this bracketing of the play activity in a time and place of its own, detached from 'ordinary' life (see e.g. Gordon, 2009)

We also see that objects in play are typically 'pretend' objects, just as the play setting is a 'pretend' setting in which everything is possible. This leaves the definition of the play space and boundaries up to the imagination of those who participate in playing. The layer of imagination is one of the characteristics that constitute playfulness, supporting the argument that a play experience needs playfulness in order to be play. The imaginative nature of play was also emphasized by both Huizinga (1955) and Vygotsky (1978), underlining the dependency between playfulness and play experiences.

In order to examine and design for play experiences, the author proposes a framework that aims at operationalizing the components of play experiences. Through the descriptions of the proposed framework it is the intention to further enable a discussion about playful experiences as something that builds on, but is not completed by, meaningful experiences. As a consequence, many experiences that would often be considered play (building with LEGO bricks for example) may not be defined as play experiences, although some of the basic characteristics (such as voluntariness) are present. 'Building' (instead of 'playing') also indicates a specified outcome, which further disputes if it should be considered play, although for many it will still be a meaningful activity. Adding playfulness, however, such as imagination (building a castle where a king lives), pushes the building activity towards a play experience.

2 The Play Blueprint

The 'Play blueprint' is a framework focused on operationalizing the inherent components and structure of meaningful play experiences. The Play blueprint does not include temporal aspects of an experience, but aims at defining the play experience through its components, following the definition of an experience by Gadamer (1975) as a unity of meaning.

A play experience is structured around activities that take place in the play space and is always directed at (and motivated by) the intentions of the persons playing, here described as motive orientations. The term motive orientation (following Hedegaard, 2017) is preferred over alternatives such as 'motivation' or 'intention' because it underlines the directedness of the user's focus towards something desirable.

Play experiences furthermore incorporate elements of playfulness as described above, leading to the definition of three basic categories for describing play experiences in the blueprint; Activities, Motive orientation and Playfulness. There are numerous definitions of what play is (see e.g. Huizinga (1955), Vygotsky (1978), Caillois (1961) or Sutton-Smith (1997)). Focusing on the three basic categories of a play experience offers a perhaps more operational definition of play:

Play is an intrinsically motivated experience centred around explorative activities, igniting a sense of playfulness in those who participate.

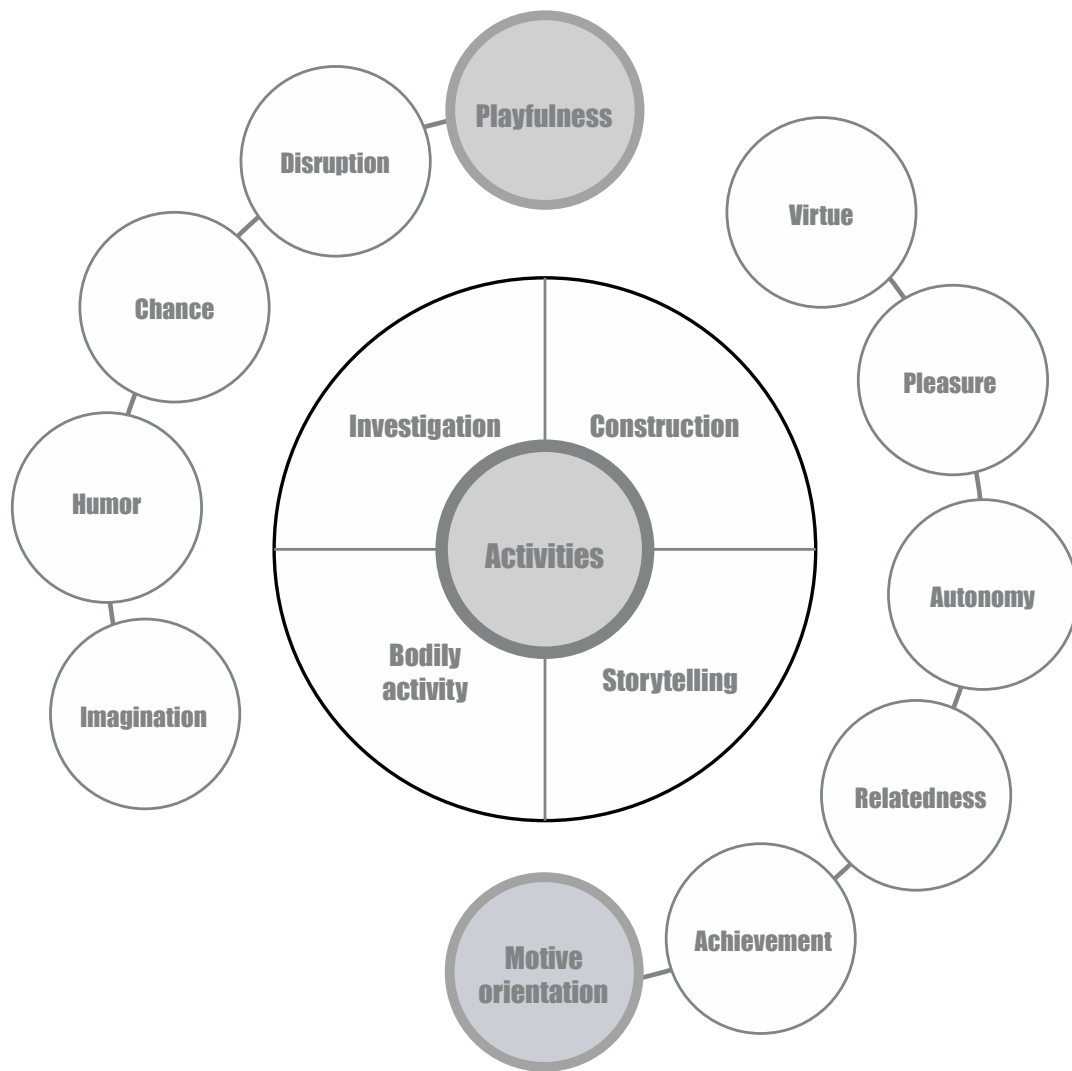


Figure 1: The Play Blueprint

The Play blueprint was developed by firstly aligning and comparing relevant research on play experiences, building also on basic theories from experience design and positive design. It was secondly refined through empirical studies within the Play User Lab (PUL) project, where it was used as a tool to firstly explore and understand playful experiences, and secondly for developing new designs aimed at specific intentions for new play experiences. The Play blueprint was furthermore used as a tool to analyze and design artefacts for new play experiences by 16 students from the MA programme in 'design for play' at Design School Kolding.

The PUL project consists of a series of workshops planned and facilitated by designers and researchers from Design School Kolding with the aim of aiding the participating companies to gain better understanding of, and be able to design for, play experiences. The participating companies work in the fields of play and learning, e.g. toy manufacturers, manufacturers of playground equipment or developers of school interiors. 18 different companies have so far participated in the project, which has also provided a sound basis for empirical research. Each company participated in a series of 8 full-day workshops over the course of 4 months. Some of the workshops involve children both as users in observation sessions and as active participants in the design process. The Play blueprint was trialled and refined during some of the sessions with the participants in the PUL project. Using the Play blueprint allowed them to pinpoint weaknesses in the play experiences currently offered, and start developing ideas about how to, for instance, increase the possibility for achievement as motivational factor. Discussion with participant about the blueprint following the

workshops as well as observations of their process of working with the blueprint, helped refine it to the final version presented here.



Figure 2: Workshop in the PUL project

The framework is called a blueprint because it is intended to be used as a scaffold for understanding particular play experiences through explicating its components, hereby becoming a tool for both analyzing play experiences retrospectively and designing for new play experiences.

In the following section, I will describe each of the three main categories in the framework.

3 Activities

The many theories about play provides us with a smorgasbord of play types (see e.g Caillois, R., 1961; Hughes B., 2002; Fagen, 1981) but for the sake of simplification, these are distilled to four different activities: Investigation, Construction, Bodily activity and Storytelling.

They are considered activities rather than distinctive 'types', because a play experience is rarely restricted to one unique 'type' of play, but rather a combination of activities. Constructing with bricks for instance is rarely only about construction, but typically includes a very important element of storytelling.

The four activities were defined by comparing and distilling theoretical groundwork of play theory, and by empirical research in the PUL project. The data obtained in the PUL project stems from both observations of children's play activities in schools, kindergartens and playgrounds, and from exercises where children were directly involved, developing new designs with the participating companies. In both cases the participating companies structured and distilled the components and activities of the play experiences, which in each case supported the described structure with the four main play activities.

The activities provide a basic structure for a play experience, and a focal point around which the play experience evolves.

3.1 Investigation

Babies and small children are particularly prone to this activity, for instance biting or objects. We do this investigation when we encounter something that is new to us. For small children, it is focused on simple, basic investigations of the characteristics of different objects, but for larger children and adults it becomes more complex, typically focused on the relation between things or investigating social relations between oneself and others.

The concept of investigation is not to be confused with exploration, which is a basic condition for all play activity (De Valk, Bekker & Eggen, 2015). Investigation aims at examining an object or relation, narrowing in on a specific understanding of it, whereas exploration does quite the opposite, opening the experience towards whatever happens, allowing the experience to take new paths (Jensen, 2013).

3.2 Construction

Construction refers to an activity where those playing manipulate their environment to create things. A typical example of a construction activity is building with bricks. But all 'hands-on' exploration through combining and manipulating materials to construct something new are considered construction activities, so other examples could be building sand castles on the beach, or making drawings on a piece of paper.

The act of personalizing the play experience can often lead to incorporating construction activities into the play experience, for instance colouring a plastic sword to give it a more personal expression.

3.3 Bodily activity

Play activities that take place on playgrounds are typically very physically intense, leading to stimulation of the senses and challenging one's gross motor skills. These activities are for example running, jumping, swinging, climbing and other types of physical play.

An example from observations of children at a local playground illustrates how the play activities within a play experience tend to overlap. A group of children were playing on a pirate ship. They would swing from the ship out on a little island using ropes, with the intention of avoiding the enemies who were boarding their pirate ship. So, their bodily activities were founded on the storytelling of the play situation.

3.4 Storytelling

The fourth activity is storytelling, i.e. building and developing the imaginative layer that is inherent in most play activities. I use the term 'storytelling' instead of the term imagination to underline the active development of the story, rather than being just a static imaginative space. Storytelling as activity is part of developing the play space and story amongst those playing. Telling a story can also be play, if the story is developed (thought up) together, where each person in the play activity actively contribute to the story. This is the main difference to imagination in relation to playfulness, which similarly provides an imaginary space one might enter, but in that case, not necessarily take part in developing.

4 Motive Orientations

The motive orientations describe the intentions (of the player) that the play activity is directed at, as stated by Hedegaard (2012: 10) who writes that "in a specific situation a child's motive can be seen as an orientation in the activity setting. A child's motive orientation is expressed in his intentional activities and his wishes". She (ibid: 11) further writes that "an activity can be motivating if it relates to children's already-developed motives", meaning that motivation needs to come from something that complies with the intentional desire of the person playing.

Karoff (2013) provides an example where two children, Aske and Olivia, are playing. Olivia is very concerned with how the peasant family in her play activity drives the production, how the children in the family are doing in school and ensuring that the house is clean and tidy. She lets the family pack a large wagon of vegetables and travels to Askes country to sell the vegetables. In the meantime, Aske is planning an ambush against Olivia. He takes over the business and threatens the family on their lives.

In this example, there is a quite obvious discrepancy between the motive orientations of Olivia and Aske. Olivia is driven by making the family succeed in a way that supports her feeling of virtue. In her play activity, she aims to do something morally good. Aske has a different motive orientation. He is less concerned with the aspect of virtue, but wants to succeed as a warlord. He is motivated by the accomplishment of gaining power and wealth.

The Motive Orientations were extracted from literature such as Karoff (2013), Hedegaard (2012 / 2017), Desmet (2013) and Ryan (2000), and was furthermore confirmed through studies in the PUL project.

4.1 Achievement

In Self-determination theory (Ryan and Deci, 2000) there are three vital components believed to be the main drivers of intrinsic motivation. The first of these components is 'competence', comparative to what Deterding (2011a) describes as mastery. In game design (as in play) the player needs interesting challenges that comply with, and build upon, his skill level. They must be both difficult (prone to lead to failures) but also (at some point) achievable (Chikszentmihalyi, 1990), it is a very important aspect of motivation.

In the Play Blueprint, the word 'achievement' is used instead of the terms 'competence' or 'mastery', because these two words do not imply a reason why, i.e. they miss the direction that supports motivation. (We are motivated to build our competence/mastery because it allows us to reach new achievements).

4.2 Autonomy

The second component in the Self-determination theory is 'autonomy', i.e. doing things in your own way. Autonomy relates closely to the characteristics of play experiences as being free and explorative (Deterding, 2011b). In our studies in the PUL project, we found all three components of the self-determination theory to be present both in the observations of children, and in an exercise, we did with the adult participants. In this exercise, they were asked to build a domino effect chain, and were given challenges to incorporate for instance a bridge or a pendulum in their solution. They noted especially three things in the reflection afterwards that had motivated them in the task; Achievement, autonomy and collaboration. They wanted to make a spectacular domino chain, challenging themselves to achieve a result to be proud of, so many groups added additional challenges, for instance making the pendula start not just one but several rows of dominos. They also appreciated the setup, where they, although they had been given a specific task and had been told where to start and stop, they were free to create the chain and add fun effects to it as they wanted to. We had provided a bunch of different materials – such as cardboard, paper, strings, but also balls and toy-cars for them to pick freely from. Through that setup their experience of autonomy was well supported. The third aspect that had been particularly motivating for them in the exercise was the collaboration with others, leading me to address the third motive orientation stemming from the three components of the self-determination theory; Relatedness.

4.3 Relatedness

In the domino exercise the participants were divided into groups of 2-3 people, each of them being tasked with constructing a specific part of the domino chain, connecting it all in the end as one chain.

The collaboration they had internally in the groups was mentioned as a motivating factor, but also the opportunity to tease and challenge the other groups was important. So, it was evident that the social aspect of the exercise was important for their motivation in different ways.

Relatedness is also connected to achievement and the challenges a person (or group) takes on, because we often do such things in order to be acknowledged, in some cases even admired, by others. Relatedness addresses all these factors – collaboration, teasing, challenging, showing off and other aspects of playing that are defined by the relations between those playing.



Figure 3: Domino building exercise in the PUL project.

4.4 Pleasure

As described by Desmet and Pohlmeier (2013), a key element in design for happiness is the notion of pleasure. The concept of pleasure covers for instance aesthetic pleasure of a product considered to be beautiful, or embodied feedback as mentioned by Sicart (2014), similarly to what Gabler et al (2005) describes as juiciness (in digital game design). Juul and Begy (2016: 1) further describes 'juiciness' as "additional redundant feedback that is not necessary for communicating the game state to players, but rather gives players common superfluous feedback in response to their actions". I, personally, experience pleasure by the feedback I get when the magnet in the power plug for the mac computer makes it 'magically' snap into place. Buxton (2007: 129) similarly describes a positive experience he had with an orange squeezer that added more emotional appeal to the product by the interaction, writing that:

...my pleasure is due to the feel of the action when pulling the lever down. there is a cadence in the action that is almost musical. This is something that no drawing or photograph can capture, since it has to do with feel, and it takes place over time.

If I perform an action that gives me pleasure just once (with a purpose), it is part of a good experience. But if I repeat the action (for instance pulling the plug out simply to put it back in), it becomes a playful action without any other purpose than experiencing this type of embodied feedback again.

Sicart (2014: 4) furthermore notes that "play can be pleasurable when it hurts, offends, challenges us and teases us, and even when we are not playing. Let's not talk about play as fun but as pleasurable, opening us to the immense variations of pleasure in this world".

4.5 Virtue

The fifth motive orientation is virtue. Virtue is described by Desmet and PohlMeyer (2013) as being a morally good person. Virtue can for instance be expressed by doing certain things in order to take responsibility for the environment, but it can also be helping one's parents by doing the dishes. For a

child, virtue is often related to having a meaningful role in the family and taking part in the responsibilities within the family.

You could question whether virtue – as something that in many cases leads to a real and beneficial outcome, for instance getting the dishes done, is still play? But virtue in play is slightly different in that it refers to the imaginative space of the play activity. Being a white knight that saves a princess from a dragon for instance.

We see examples of play-related virtue when children play superheroes or playing house that involve virtuous values of how the members of the family acts in different situations. The involvement of moral values is inherently tied to culture and as described by Bruner (1996), children learn about culture through play. He writes that:

Children show an astonishingly strong "predisposition to culture"; they are sensitive to and eager to adopt the folkways they see around them. They show a striking interest in the activity of their parents and peers and with no prompting at all try to imitate what they observe. (ibid: 47).

In their research on behavioral change in relation to enforcement of policies, Shove, Pantzar, and Watson (2012) draw out similar motivational factors such as personal values – linking to virtue - and social practice – linking to relatedness. They (ibid: 142) note that there are two classic strategies for, for instance, promoting more sustainable ways of life, "one is to persuade people of the importance of climate change and thereby increase their green commitment; the second is to remove barriers obstructing the smooth translation of these values into action. "

BJ Fogg (2009) proposes a similar division between what he describes as motivation and availability. The Play blueprint refers specifically to the first concern - building motivation – due to its focus on meaningfulness of a play experience, whereas the second concern (availability / removing barriers) relates to the basic premise of making the experience available, ensuring a suited threshold for engaging in the experience.

5 Playfulness

As stated in the beginning of this article, playfulness is considered a vital ingredient for an experience to be considered 'play'. But playfulness in itself is not necessarily play, and can be added as a component in other types of experiences, hereby making experiences with a purpose playful. Sicart (2014: 26) describes playfulness as an attitude and further as "a projection of characteristics into an activity" in which case it lacks the autotelic nature that is characteristic of play experiences. Playfulness, in that case, preserves the purpose of the activity it is applied to, relating it to the concept of gamification (see e.g. Chou, 2015).

If we unfold the concept of playfulness using the ESF model by Jensen (2014), we can illustrate the difference between playfulness in relation to open-ended experiences (relating to the term omnidirected in the ESF-model) and goal-directed experiences that are aimed at a specific outcome. As illustrated in the model, this is a significant difference between gamification and play, due to the characteristic of play to be free/open-ended without a pre-defined outcome and, as mentioned above, autotelic. The model also illustrates how the commonly mentioned characteristic that play does not have consequences outside of the play situation relates only to the direct (immediate) experience, seeing that play will always have derived consequences such as developing skills or making friendships.

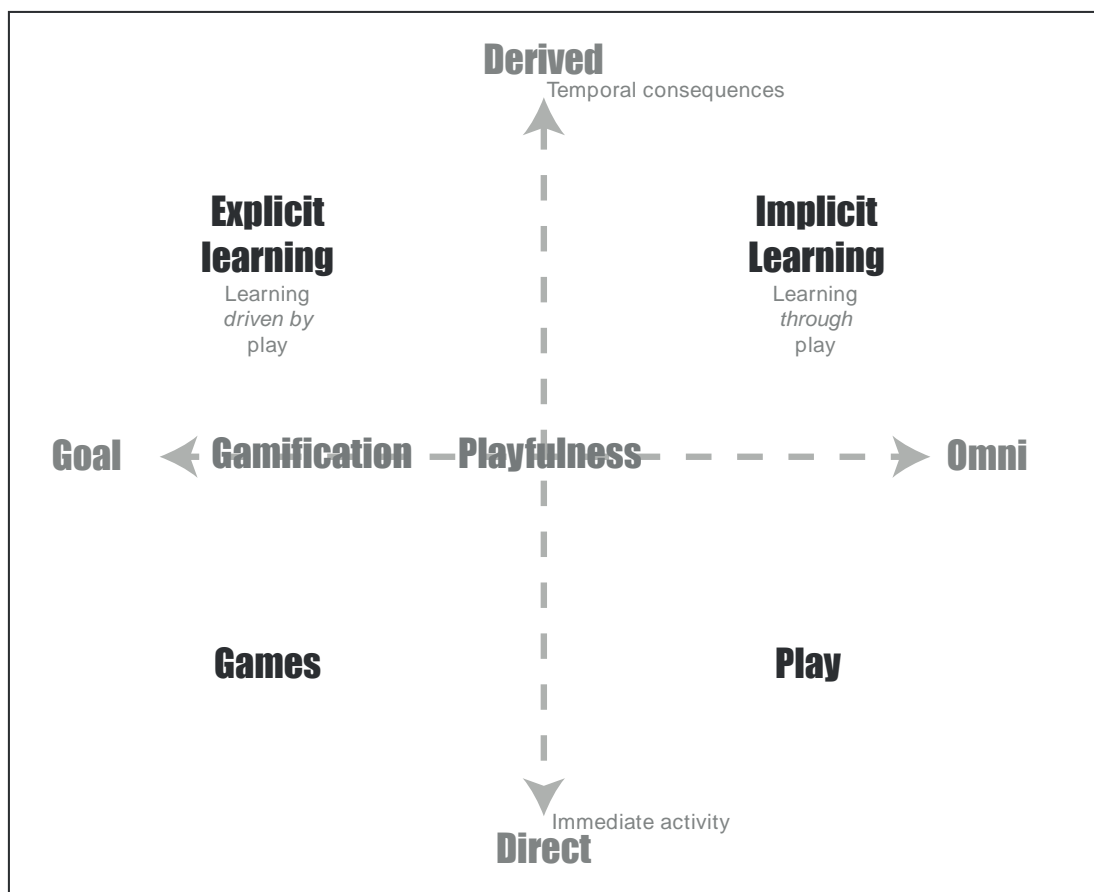


Figure 4: The ESF model with focus on playfulness.

While I will not dive into the aspects of learning in this article, it is interesting how the model also places games and play experiences in relation to implicit and explicit learning respectively, explicating the difference between them, considering learning/development to be a derived outcome of any experience. The term ‘implicit learning’ was coined by Reber (1967) as learning that produces unconscious knowledge, whereas explicit learning is the opposite, i.e. learning with a specified (often quantifiable) goal.

The research by Overbeeke et. al. (2002) underlines the importance of playful aspects in order to create joyful interactions, stating that ‘joy of use’ is not the same as (and in some cases, even opposite to) ‘ease of use’, suggesting a counterpoint to usability. They (ibid: 9) advocate for creating a fuller user experience, writing (about the designer) that “it is his task to make the product’s function accessible to the user whilst allowing for interaction with the product in a beautiful way. Aesthetics of interaction is his goal.” They (ibid: 9) further write that:

Interfaces should be surprising, seductive, smart, rewarding, tempting, even moody, and thereby exhilarating to use. The interaction with the product should contribute to the overall pleasure found in the function of the product itself. The experiential is assumed to lead to joy of use.

These considerations refer to two of the four components of playfulness in the play blueprint; Chance (the element of surprise) and Imagination (transferring human traits such as moodiness to a product personality). Sicart (2014) likewise mentions serendipity (chance) and imagination as vital parts of playfulness, and adds that playfulness is also disruptive. The disruptive nature of a play experience relates to the freedom inherent in play experiences, and the need to push the boundaries when playing. Beyond these three; Chance, Imagination and Disruption, Humour is also

considered an important component of playfulness, building on the research by e.g. Yue, Leung and Hiranandani (2016) and Barnett (1990). While playfulness, as described here, can take part in many types of experiences, I consider it a vital part of a play experience because it encapsulates the attitude of play behaviour. Barnett (1990: 319) underlines the close relation between play and playfulness by proposing that “rather than regarding play as what the child does, the better way is to focus on play as an internal predisposition to be playful”.

5.1 Chance

The characteristic of play as an exploration suggests inherent opportunities to make new discoveries, finding something unexpected or making new connections, in order to maintain interest in the play experience. These aspects can be ignited by a degree of randomness, i.e. a potential for something unexpected to happen. Play has an intrinsic insecurity about where it is taking us, and what is going to happen. Sicart (2014) mentions how serendipity can force us to experience something with playful astonishment. Many board games incorporate the element of chance by including the roll of a dice in the gameplay. We also see chance and surprises in digital products, often described as Easter eggs, i.e. hidden elements that are not part of the function or gameplay but can be uncovered by performing specific actions. In 2009, for instance, Google maps would suggest that you kayak across the Pacific Ocean, if you asked for directions from New York to Japan.

5.2 Imagination

Play demands its own space, bracketing the play activity as separate to ordinary life. Whereas most experiences can be difficult to define in time and space, a play experience has a well-defined time and space. The play space typically unfolds in an imaginative world where everything is possible. If children for instance play with LEGOs (playing, not just building), they can create settings for imaginative play to happen, where princesses and trolls are natural inhabitants.

This creation of a meta-reality within which the play experience unfolds is a typical trade of children’s play (see e.g. Huizinga, 1955 or Hedegaard, 2016), but it also often appears when adults play. We saw this in the previously mentioned exercise in the PUL project, where the adult participants created a domino-brick setup. One of the groups had included a little toy car which would run down a slope to make a jump, hereby hitting the next domino brick. But they had also build a small garage where more of the small toy cars were put because, as they explained, if the first driver doing this extremely dangerous stunt did not survive, a replacement driver would need to be ready.

So instead of considering the toy cars as just a functional mechanism bringing the motion of the domino setup to the next point in a more interesting way, they saw it as a meta reality with a brave little driver, who had been given the task of doing this stunt.

5.3 Humour

In the PUL project, a group of children (aged 11-12) were developing an imaginative land inhabited by unicorns. One of the ideas that would make them giggle each time they told someone about it, was the ability of the unicorns to shoot rainbows out of their rear ends when farting. Such humorous ideas were abundant in the work of the children, and appeared to be a valuable source for energizing their playfulness.

Albeit humour is essentially a social construct (elicited through the interactions and dialogue of people, as in the example above), in-animate objects can also inspire and support humorous situations.

Humour in relation to objects often builds on quirkiness, exaggeration and humanization. At Design School Kolding we developed a new co-creation lab, in which we made movable workstations designed as oversized chairs, because making things out of scale adds playfulness through both imagination and humour. Sicart (2014: 20) also notes that a typical approach to playful interface designs is to make them “quirky and with personality”, hereby humanizing them.

5.4 Disruption

Sicart (2014: 4) notes that “play is always on the verge of destruction, of itself and of its players, and that is precisely why it matters. Play is a movement between order and chaos”. An important characteristic of play is this balancing inside and outside of the boundaries of the play activity, providing openings for non-destructive disruptions. Sicart (ibid: 26) writes that:

Playfulness always respects the purpose of the activity for its own integrity to exist. This does not mean that playfulness cannot be disruptive. In many cases, a playful attitude will result in a relative disruption of the state of affairs, though without destroying it.

Disruption is for example seen when my little son, who is 2 years old, decides to use a hammer to play the piano. It becomes playful because he is doing something unintended to see what the effect will be. This action also supports his feeling of autonomy, because he is disrupting the play experience in his own way, exploring the consequences of doing something unintended. The example illustrates the close link between disruption and creativity, because disruption pushes the exploration process to (and beyond) the edge. Trying out things that were not intended, making new connections, and increasing ones understanding of actions and reactions.

6 Implications for Design

This paper focuses on designing artefacts for play experiences by breaking the experience up in more operational concepts, guided by the ‘Play blueprint’ framework. While a designer’s intentions are never directly transferable to a user’s intentions, this approach to the design process may guide the designer to achieve a better link between intention and the resulting experience. I trialed the model in the PUL project, where participants were asked to use the model to guide the design process. In this case the participants started by defining the different parameters by how they would ideally want the resulting play experience to be like, for instance “initiating but not restricting children’s imagination” or “building competences by making it easy to use but hard to master”. These statements were then used for idea generation, formulating opportunity spaces such as “How might we initiate but not restrict children’s imagination through the product aesthetics?”.

Some of the characteristics of the play experience are, by the very nature of the concepts, very difficult to design for. How do you, for instance, design for disruption? How can a design initiate unintended use if the designer does not know what that unintended use will be? Designing that leaves room for imagination, exploration and playfulness is also difficult. Suggestions to take on these challenges often revolve around the levels of ambiguity in the design.

Design for disruption can be considered a design of open possibilities, leaving room for ‘wrong’ ways of doing that turn out to be interesting twists instead of breakdowns of the experience. Designing towards an openness of user adaptation may at the same time entice the user to immerse in playful exploration.

So, when we use the Play blueprint as a guide in designing for play experiences, some of the concepts can be addressed directly, whereas others are concerned with designing possibilities, providing opportunities for disruption and exploration.



Figure 5: Play installation in Copenhagen. The design aesthetics sparks imagination without defining if it is a squid, a melting Darth Vader, a space ship or something else entirely. It is an interesting example of ambiguity in design aesthetics.

6.1 Student projects – designing play mutants using the Play blueprint

The sixteen first-year students from the new Design for play Master's programme at Design School Kolding did a project entitled 'play mutants', where the idea was to analyse a child's play experience and use the elements from it to mutate an everyday situation/object into a play experience.

The students started the project by observing children playing in a nearby schoolyard, using the Play blueprint to draw out specific characteristics of the play experience. They focused on the activities it contained, the motive orientations of the children, and on which elements of playfulness were present. One of the students had observed a group of classmates in a sandbox, who were touching and exploring the sensory feeling of the sand while building. She noted how pleasure (e.g. letting the sand run through the fingers) worked as a motive orientation, how they explored imaginatively what the sand might become when constructing 'things' with it, how social relations affected their motivation by building something the others liked, or making up exciting stories about what they were building. In many cases the stories had a humorous angle, further enhancing the playfulness of the experience.

These observations were transformed into design principles, e.g. using materiality to enhance the sensory experience, allowing people to build and share something, and supporting imagination and humour. She designed a physical map of Design School Kolding which used different textures for sensory experiences. It was made possible to place different physical elements on the map, hereby building stories about the spaces and different situations people have experienced at the school. You could also move the rooms around, connecting them in new ways, for instance combining the rooms the person used the most, to imagine how the space could be.

The map as such was probably not very helpful for guests at the school, but it was a canvas for sensory investigation and a play space for sharing personal stories in relation to the physical spaces at the Design School.

The other students likewise observed play experiences to create new design principles for, for example, a waiting room at a doctor's office, tools for language learning, or principles for communication on social media. While the focus of their 'mutations' were very different, they all used the Play Blueprint as a focal point, enabling them to better understand the important aspects of the play experience and transform it into new play experiences. These steps allowed the important abstraction from object (e.g. sand) to principle (e.g. sensory experiences) and to a new object (e.g. the map) – a process that Jensen and Coxon (2013) describes as the transition of knowledge. As the example shows, it is not the idea to use all the components described in the blueprint, rather it is valuable to pinpoint which are important and combine those in the new design.

7 Conclusion

The article introduced the 'Play Blueprint' framework, describing what are considered to be the main components of play experiences, building upon theoretical foundations mainly within play, experience design and positive design. Although the proposed framework is not necessarily fully comprehensive, I argue that it covers the essential components of meaningful play experiences. As such it provides a foundation for designing meaningful play experiences, but also for incorporating playfulness in other joyful experiences.

Gordon (2014: 240) establishes a link between play and long-term happiness by noting that "the pleasure engendered by attuned play in the first year of life provides a foundation for life to be joyful". Furthermore, the characteristics of play as something personally engaging (due to being an experience entered voluntarily and experienced in a personal (autonomous) way based on one's own inherent intentions) also infuses the play experience with high levels of authenticity. These aspects were also described by Freud (1955), who regarded the child's play as expressive of personality patterns and internal desires. And as Tuber (2008) mentions (drawing upon the work of D. W. Winnicott) authenticity (the ability to be and act according to one's real self), is a hallmark of mental health.

The title of this paper - 'the road to happiness is paved with playful intentions' – refers to these important connections between play and happiness, encouraging designers to utilize the characteristics of play and playfulness to increase the intensity of an experience. As stated you have to enter a play activity voluntarily and do it in your own way, based on your own intentions and ways of doing. So, it always becomes personally engaging when we enter a play-space. Such experiences can never be designed in themselves, but we can design with the intention of eliciting meaningful and engaging play experiences. The Play Blueprint introduced in this paper can be a valuable tool in that process.

Acknowledgements: The author would like to thank all participants in the PUL project – both adult participants and children, as well as the students from Design School Kolding. Play User Lab is a collaboration under the framework of Design to innovate – D2i. The project is funded by Syddansk Vækstforum, the EU Regional Fund, the LEGO Foundation and Capital of Children, Billund.

8 References

- Barnett, L. A. (1990). Playfulness: Definition, design and measurement. *Play and Culture*, 3, 319-336.
- Boswijk, A., Thijssen, J.P.T. and Peelen, E. (2007). *The Experience Economy: A New Perspective*, Amsterdam: Pearson Education.
- Bruner, J. (1996). *The Culture of Education*. Cambridge, Mass.: Harvard University Press.
- Buxton, B. (2007). *Sketching User Experiences: Getting the Design Right and the Right Design*. Morgan Kaufmann.
- Caillois, R. (2001 [1961]). *Man, Play, and Games*. University of Illinois Press, Urbana, Chicago.
- Chou, Y. (2015). *Actionable gamification: Beyond points, badges and leaderboards*. Freemont, CA: Octalysis media
- Csikszentmihályi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper and Row.
- Desmet, P. M. A., and Pohlmeier, A. E. (2013). Positive Design: An Introduction to Design for Subjective Well-being. *International Journal of Design* 7 (3): 5–19.
- Deterding, S. (2011a, retrieved 21 Aug 2017). *Meaningful play: Getting gamification right*. Retrieved from <http://www.youtube.com/watch?v=7ZGCPap7GkY>
- Deterding, S. (2011b). Situated motivational affordances of game elements: A conceptual model. *CHI 2011 conference proceedings*, ACM.
- de Valk, L., Bekker, T., and Eggen, B. (2015). Designing for Social Interaction in Open-Ended Play Environments. *International Journal of Design*.
- Fagen, R. (1981). *Animal play behavior*. New York: Oxford University Press.
- Fogg, B. J. (2009). A behavior model for persuasive design. *Proceedings of the 4th International Conference on Persuasive Technology*, April 26-29, 2009, Claremont, California, USA .
- Freud, S. (1955). Beyond the pleasure principle. In J. Strachey (Ed.), *The standard of the complete psychological works of S. Freud*, Vol. VXIII. London : Hogarth and the Institute of Psychoanalysis.
- Gabler, K. et.al. (2005), How to Prototype a Game in Under 7 Days, part 4: General Gameplay: Sensual Lessons in Juicy Fun, in *Gamasutra: Features*, October 26, 2005.
- Gadamer, H. G. (1975). *Truth and Method*, Seabury Press.
- Gordon, G. (2009). What is Play? In Search of a Definition. *From Children to Red Hatters: Diverse Images and Issues of Play, Play & Culture Studies*, Vol. 8, edited by David Kushner, 1–13.
- Gordon, G. (2014). Well played: The origins and future of playfulness. *American Journal of Play*, 6(2), 234–266.
- Hassenzahl, M. (2010). *Experience Design: Technology for All the Right Reasons*, 1–95. In Morgan and Claypool.
- Hedegaard, M. (2012). Analyzing children’s learning and development in everyday settings from a cultural-historical wholeness approach. *Mind, Culture, and Activity*, 19(2), 127–138.
- Hedegaard, M. (2016). Imagination and emotion in children’s play: A cultural-historical approach. *International Research in Early Childhood Education* 59 Vol. 7, No. 2, 59-74.
- Hughes, B. (2002) *A Playworker’s Taxonomy of Play Types*, 2nd edition, London: PlayLink.
- Huizinga, J. (1955). *Homo Ludens: A study of the play-element in culture*. Boston: Beacon Press.
- Jensen, J. L., 2013. *Teddybears and talking chairs: Designing from the meaning in experiences*. Ph.D Dissertation. University of Southern Denmark, Odense.
- Jensen, J. L., & Coxon, I. R. (2013). [Innovation from] a shared journey between designers and users: Explicating the XbD process. *3rd INT. CONF. ON INTEGRATION OF DESIGN, ENGINEERING & MANAGEMENT FOR INNOVATION*, Porto.
- Jensen, J. L. (2014). Designing for profound experiences. *Design Issues*; 30(3): 39–52.
- Juul, J. & Beggy, J. S. (2016). Good Feedback for bad Players? A preliminary Study of ‘juicy’ Interface feedback. *Proceedings of first joint FDG/DiGRA Conference*, Dundee.
- Karoff, H. (2013). *Om leg. Legens medier, praktikker og stemninger*, Akademisk Forlag.
- Overbeeke, C.J., Djajadiningrat, J.P., Hummels, C.C.M. and Wensveen, S.A.G. (2002). Beauty in usability: forget about ease of use! W.S. Green and P.W. Jordan (Eds.), *Pleasure with products: beyond usability* (pp. 9-16). Taylor and Francis.
- Ryan, R. M. & Deci, E. L. (2000) Self-determination theory and the facilitation of intrinsic motivation, social development and well-being. *American Psychologist*, 55, 68-78.
- Reber, A. S. (1967). Implicit learning of artificial grammars. *Journal of Verbal Learning and Verbal Behavior*, 6, 317–327.
- Shove, E., Pantzar, M., and Watson, M. (2012). *The dynamics of social practice: Everyday life and how it changes*. Sage.
- Sicart, M. (2014). *Play Matters*. Cambridge, Massachusetts: The MIT Press.

- Sutton-Smith, B. (1997). *The Ambiguity of Play*. Cambridge, MA: Harvard University Press.
- Tuber, S. (2008). *Attachment, Play, and Authenticity: A Winnicott Primer*, Jason Aronson, New York, NY.
- Vygotsky, L. S. (1978). The role of play in development. In M. Cole, V. John-Steiner, S. Scribner, & E. Souberman (Eds.), *Mind in society: The development of higher psychological processes*, 92-104. Cambridge, MA: Harvard University Press.
- X.D. Yue, C.L. Leung, N.A. Hiranandani (2016). Adult playfulness, humor styles, and subjective happiness *Psychological Reports*, 119, pp. 630-640.