LEARNING FROM THE POSITIVE:

A STRUCTURED APPROACH TO POSSIBILITY-DRIVEN DESIGN

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ABSTRACT

This paper discusses an approach to possibility-driven design as an alternative to traditional problem-driven design approaches. The first parts discuss merits and challenges when designing for possibilities, and present some examples of existing design theories that exemplify the potential contribution of this view on design. Next, a five-staged possibility-driven design process is introduced, in which personal anecdotes are collected, selected, and analysed as a main fuel for the design process. A design case is reported that applied this process to the design of office furniture. A positive, personal anecdote of an office worker about 'dissolving in the moment' was selected as the main design theme for designing a novel experience in the office mediated by a chair. The design case is used to discuss details of a possibility-driven design approach. Finally, we reflect on the suitability of the approach for different design scenarios, its limitations, and possible (future) applications.

KEYWORDS: *Possibility-driven design, experience design, methodology, design case, subjective well-being*

INTRODUCTION

Traditional design approaches mostly focus on 'undesirable' present situations and envision an ideal future state where these situations are resolved. In the words of Roozenburg and Eekels (1995, P.84), 'design is a special form of problem solving. We speak of "a problem" when someone wants to reach a goal and the means to do so are not immediately obvious. Problem solving is the process of thought, in which those means are sought intentionally'. There are numerous examples that illustrate this traditional problem-driven view on design, e.g. faster trains to reach our destinations on time, heaters to protect us from the cold, air purifiers to shield our homes from bacteria, paper clips to keep our sheets of paper together. This traditional problem-solving way of reasoning is relevant since it increases the quality and effectiveness of the products and services we all use, seeks to minimize problematic situations that could threaten our well-being, and generally makes our lives 'easier' and 'better'. However, neutralizing the negative by solving our everyday problems does not necessarily mean delivering a positive and worthwhile experience (Desmet & Hassenzahl, 2012). Focusing on the positive side of the solution spectrum with a possibility-oriented approach promises a fresh perspective on the role of design.

This possibility-driven view on design has recently been proposed in the design research community. In the words of Hekkert and van Dijk (2011, p. 120), 'a designer's job is to look for possibilities, and possible futures, instead of simply solve present-day problems'. Similarly, Desmet and Hassenzahl (2012) call for a transition from problem-solving to exploring possibilities in design, which, regarding the end result, parallels a transition from neutralizing the negative to exploring the positive. They see problem-driven design as 'curing diseases' and as the management of 'hygiene' and 'enabling' factors (2012, p.4). In sum, a possibility-oriented approach to design seeks to explore the role of design in the positive space beyond neutrality (Desmet & Pohlmeyer, 2013). The relevant question for designers is less whether design can create new or support existing possibilities, but rather *how*. How do we design for possibilities? And how does an approach focusing on the introduction of possibilities differ in its process from one focusing on the reduction of problems?

The process of possibility-driven design does not seem as evident and straightforward as its traditional counterpart, and therefore introduces some interesting challenges for the design discipline. In this paper, we focus on the merits and challenges of a possibility-driven design approach and share how we tackled some of the challenges in an illustrative design project. We propose an approach that uses personal anecdotes as a main fuel for the design process; and we outline a possible procedure for the collection, selection, and analysis of these anecdotes. The paper concludes with a critical reflection regarding the suitability of this approach.

The illustrative design case presented in this paper was the first author's graduation project of the 'Integrated Product Design' master's program at the Delft University of Technology, in the Netherlands (Jimenez, 2013). The project was carried out for the office furniture manufacturer BMA Ergonomics in collaboration with the Delft Institute of Positive Design (DIOPD). The project goal was to design a product, product-service combination, and/or office environment focusing primarily on the positive contribution to the workers' subjective well-being.

MERITS WHEN DESIGNING FOR POSSIBILITIES

Possibility-driven design's main value stems from a more positive and optimistic view of everyday life. Design is a discipline with the potential to change our environment and shape our societies. Understanding it exclusively as a way of reducing deficiencies might limit its potential. Consider the example of the Eurostar project given by Rory Sutherland (2012, May 4): 6 million pounds were spent to reduce the journey from London to Paris by 40 minutes. With a reduced amount of this money, he explains, they could have put Wi-Fi on the trains, or even paid supermodels to serve the passengers, and make the journey more enjoyable instead of (just) reducing the journey time. Even though somewhat unrealistic, this example showcases how reframing a situation positively extends the capability of design to innovate.

Design for experience offers a multitude of examples that illustrate the value of providing users with positive experiences instead of merely decreasing the likelihood of negative ones. For instance, Desmet and Schifferstein (2011) assembled a collection of 35 experience-driven design projects from the Delft University of Technology that focus on the experiential side of the process, and how these products aim to evoke a 'pleasant' and 'appropriate' experience. Although varying on intentionality and focus, these projects feature an array of examples on how experience design can do more than neutralizing the negative (see also Hassenzahl, 2010). More recently, some authors in the field of positive design — design for human flourishing — have proposed a possibility-driven view of design whose main focus and purpose is the effects of products on individuals' subjective well-being (Desmet & Pohlmeyer, 2013). The field has its foundations in theories and frameworks of 'positive psychology' and their body of knowledge. Thus, it is not focused on making the lives of miserable people less

miserable by solving their problems, but on creating opportunities to help people flourish. In general, possibility-driven design seems particularly promising when targeting the subjective well-being of individuals and communities (see Ruitenberg & Desmet, 2012; Desmet, 2011).

In a similar way, authors in the fields of innovation and innovation management favour a view of design as an engine for societal, cultural, end economic prosperity (see Buijs, 2012); design as an engine of possibilities. In his famous book, IDEO's CEO Tim Brown (2009), urges for a shift from *design* to *design thinking*, which, he argues, is capable of translating insights into products that will improve lives. This view of innovation has a pronounced emphasis on possibilities and considers the responsibility of designers much greater than solely taking away what bothers people in everyday life.

All authors mentioned above share the underlying view that product design can extend its spectrum to have an even bigger impact, and that possibility-driven design can be a promising road to successful new product development. They support the idea that it might be worthwhile to think beyond directly addressing an insufficiency.

CHALLENGES WHEN DESIGNING FOR POSSIBILITIES

Several challenges can be identified when designing for possibilities. Perhaps the most evident one is the lack of practical knowledge on how to identify and use them in design processes. In the following sections we suggest an approach on how to design based on possibilities. We outline some challenges and how we rose to them in an illustrative design case. This approach makes use of detailed, single incidents from the users' perspective that represent the desirable design goal to determine the underlying and generalizable pattern of one event in order to formulate design specifications that will be applicable to a greater number of users.

The approach, visualised in Figure 1, consists of five main steps. The first step is to learn from positive examples of user experiences by collecting personal anecdotes of the target user group about happy moments; moments that put a smile on peoples' faces (Step 1). This step is based on the idea that possibility-driven design can be inspired by positive 'role models'. These anecdotes are clustered with the use of variables drawn from theory on human experience and wellbeing that is available in (positive) psychology. The resulting happy moment clusters serve as a basis for the selection of the stories to be used in the design process, and provide an overview of the information gathered (Step 2). Next, the selected stories are thoroughly analysed in order to identify general patterns of the experiential narratives (Step 3). These patterns serve as the basis for the ideation phase, ultimately leading to a design proposal (Step 4). Some challenges regarding the evaluation and testing of concepts resulting from possibility-driven design are further discussed (Step 5).
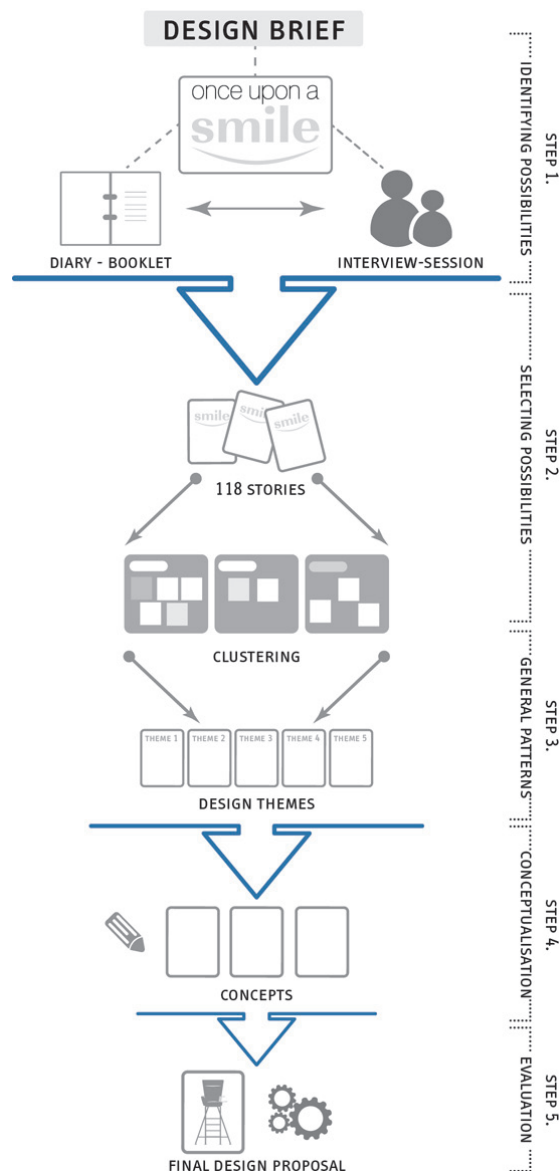
DESIGN BRIEF

once upon a
smile

DIARY - BOOKLET   INTERVIEW-SESSION

118 STORIES

CLUSTERING

THEME 1 THEME 2 THEME 3 THEME 4 THEME 5

DESIGN THEMES

CONCEPTS

FINAL DESIGN PROPOSAL

STEP 1. IDENTIFYING POSSIBILITIES
STEP 2. SELECTING POSSIBILITIES
STEP 3. GENERAL PATTERNS
STEP 4. CONCEPTUALISATION
STEP 5. EVALUATION

Figure 1. Structure design process

Step 1. Identifying possibilities

A problem, or a problematic situation, has always to do with discontentment about its present state, and a common understanding of the existence of a more desirable one (Roozenburg & Eekels, 1996). If the desirable state is to be achieved by reducing the insufficiencies of the current situation, this negative orientation makes the identification of a solution fairly evident and straightforward, e.g. I want my car to be faster or I don't want water coming into my shoes. However, when talking about possibilities, its open-ended nature makes it more elusive to define, e.g. I want to find possibilities to be a better person. Design problems may not always be as pragmatic as avoiding having wet feet, but they can be inscribed inside certain boundaries, i.e. specifications, that lead to a plausible solution, i.e. absence of the problem's main cause. Possibili-

ties, on the other hand, do not seem as easy to spot as they are not necessarily apparent in the current context and are rather found in the design process itself. Yet, design approaches at hand are limited in providing the tools to identify them.

Removing problems, or repairing the flaws, may make situations neutral but not necessarily good. A similar development can be observed in the field of psychology: positive psychology focuses its efforts on optimal human functioning and on studying what makes life most worth living (Seligman & Csikszentmihalyi, 2000). In other words, the goal is to reach an understanding of how and when people flourish, and not just to ensure the absence of unhappiness. Several studies show that happy people, apart from being blessed with some genetic conditions and having fortunate circumstances, usually engage in (intentional) activities that increase their well-being (Lyubomirsky et al., 2005). Certain activities (e.g. nurturing relations, taking care of one's body, committing to one's goals) have been found to particularly boost peoples' happiness (e.g. Lyubomirsky, 2007), although individuals differ in ways to flourish and to find meaning in their lives.

Accordingly, in the present design case, possibilities were found in peoples' daily life activities or situations that they reported to contribute to their happiness (in context), and analysed in terms of how and why people engage in these activities and situations. We believe that possibilities are there to be found, and moments of happiness represent promising entry points. In order to collect these moments, two methods are suggested for the field study: diary-booklets and interviews. The diary is meant for participants to shortly report positive moments from everyday experiences in the context, and the interview aims to deepen the details of these stories. In the following these steps are illustrated for the design case.

Diary-booklet

The diary-booklet was used to collect moments of happiness of ten office workers during the course of five working days. Furthermore, the diaries were intended to sensitize participants regarding the topic of study, i.e., happiness, and thereby to prepare them for the interview. One of the daily tasks, called 'once upon a smile', formed the basis of the user study (Figure 2). In it, participants were asked to report three 'smiles of the day' —moments when they felt happy and fulfilled — and to summarize them using words, drawings, or any other preferred means of expression. Illustrative examples were given at the beginning of the diary. From the total of 150 assignments, only those assignments were included in the further analysis that were fully completed and that related to incidents on a working day. For 32 responses, this was not the case. Hence, the final sample included 118 assignments

Interview-session

The research material for the interview-session was designed in order to find more details about the stories the participants described in the exercise 'once upon a smile' (Figure 3). A set-up similar to that of generative sessions was designed (see Sanders & Stappers, 2012). 'Creating movie scenes' was used

Once upon a smile (example)

Each day starts with an exercise called 'once upon a smile' (today you just have this exercise to complete). In this exercise I want you to reflect on the things that happened yesterday, or the last time you were at the office, and shortly describe 3 moments when something happened that put a smile on your face. Sounds easy right? I made an **example** for you below!

I found this stamp in my desk this morning. My boss put it there because he knows I like collecting these kinds of things.

I liked it a lot!

Yesterday my colleague Astrid took her son to the office. Really cute! We were having lunch in the canteen. Suddenly her son (Willem) gave me a piece of his sandwich because he thought my lunch was too small :)

I had some free time yesterday at the office in the afternoon. I started thinking about my wife and the future house I would like to buy in Amsterdam.

I realized that I don't think too much about the future. That little moment put a smile on my face for the rest of the day.
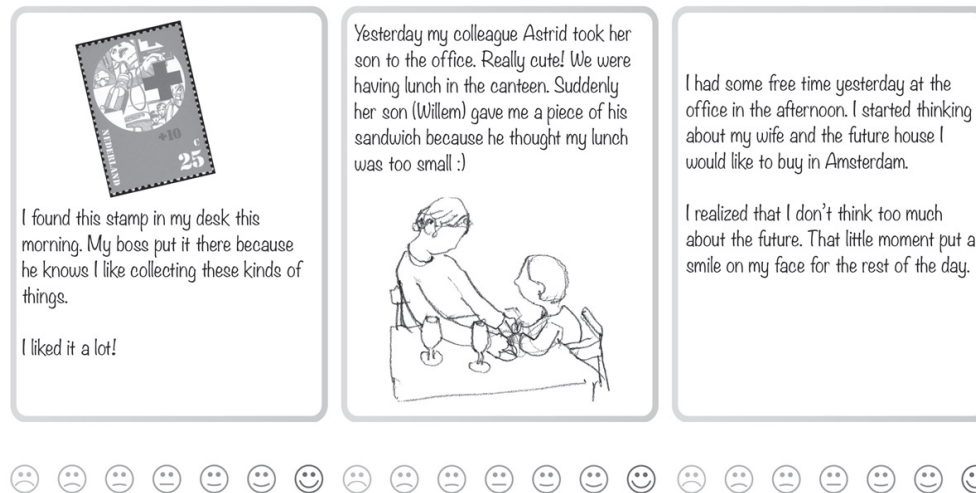
Figure 2. Example of the exercise 'once upon a smile'.

as a metaphor for the session. This way of recalling events into a graphic way was supposed to a) put the respondents in the event again, so that they would easily recall all the sensations and characteristics of the moment; b) inspire the participants to use more ways of expressing their thoughts; and c) make the participants more comfortable about communicating their personal experiences. However, when the actual session took place, the participants did not feel confident to draw and get involved with these generative tools. It was then decided to let them free to express and communicate their anecdotes in the way they felt more comfortable, which was mostly verbally.
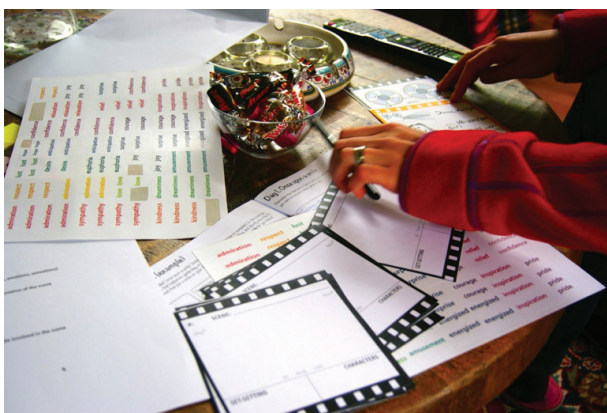
Figure 3. Interview-session

This approach proved valuable as the majority of stories were not related to the work itself that people perform at the office, but rather to small interactions in-between, e.g. social encounters, breaks. This might have been overlooked if the target user group had not been involved in the identification of possibilities.

Step 2. Selecting possibilities

As stated before, the reduction of problems or problematic situations is a typical starting point for many design projects. An agreement of these situations is mostly shared by a group of people. Possibilities do not 'bother us' as problems do, and they certainly do not represent any threat to our well-being. On the contrary, they embody a potential for a 'positive' result that is not as perceptible as the negative result of a problematic situation if not resolved. This makes selecting a possibility over another a more subjective task. How then do we know which possibility to go for?

One dominant theory in positive psychology suggests that subjective well-being is a construct of five distinctive elements; namely, positive emotions, engagement, positive relations, meaning, and accomplishment (abbreviated as PERMA; Seligman, 2011). Seligman suggests that working on each of these constructs can foster well-being, and, accordingly, moments that promote happiness are enclosed inside one or more of these elements. For the approach, it is suggested to cluster the anecdotes by considering the contribution of the moment to each element of the theory (the most dominant one). This step is intended to steer the attention and design efforts towards certain elements of the theory where more anecdotes are present, and to provide an overview of the information gathered. Once this analysis is finished, a number of anecdotes are chosen out of a cluster (consisting of a variety of anecdotes) by considering the richness of the description of the moment (how detailed it is described), how well it represents the cluster as a story in itself, its originality, while at the same time resonating well with familiar experiences, i.e. the feeling of recognition (see Hassenzahl, 2010).

In the design case, many anecdotes were related to the well-being construct of 'positive relations'; situations where participants reported having a meaningful moment when sharing with colleagues. Four anecdotes were selected from this cluster to further use in the design process. Since this cluster contained stories in which the participants interacted with other colleagues, a fifth anecdote was selected from the cluster 'positive emotions' in order to find possibilities in moments of self-indulgence (see Figure 4 for anecdotes selected).

In engineering design, after having outlined a problem statement and a design brief, one important step to address the problem is to turn it into a set of design specifications. These specifications, or design parameters, set the boundaries for the design process, direct the designer towards a feasible solution, and set out guidelines for the selection and evaluation of the final design (see Pahl & Beitz, 1988). Somewhat refined specifications could have facilitated and increased objectivity of the selection process during the design case. Specifications for designing are of relevance in the next step.

Step 3. Aggregating a personal experience to a general pattern

For possibility-driven design, and due to the use of positive anecdotes as carriers of possibilities, we used an experience design approach to infer specifications from the anecdotes, inspired by the work of Hassenzahl et al. (2013). These authors suggest an approach to find patterns underneath autobiographical stories in order to uncover the 'mechanism of the experience'; the elements that make it resonate. They propose the identification of phases, important time points, and significant elements that make the story meaningful for the experiential intention. Likewise, the stories selected are turned into patterns that contain 'experiential specifications'. In this step, it is recommended to use analogies of situations that capture the essence of the experience, and assign them an experiential theme that represents the core of the story.

In the following, this step is described for the anecdote that inspired the final design:

" My office has a special area where the coffee machine is placed. This space is full of colours and comfortable furniture and a really beautiful view over a park. I always go alone there once in a while to think and have some coffee. I feel completely relaxed. What I like the most is that it feels like I am not working anymore!

" Every Friday we work different, things are a bit easier. Today, half of the office was gone. And Marc, who likes creating chaos sometimes, started playing loud music in the middle of the office. All of a sudden, everyone was singing and looking happier. It lasted for a while but it was a pleasant moment. I felt energized and relaxed.

" Last Thursday, I was working very concentrated on a new product I am developing. These last days, a lot of people from my company are taking holidays. That morning Sophie came back from a long holiday in Chile. When I saw her, I had to think on how important she is for the office and for me. I did not realize it when she was not around. I felt enchanted by the fact that she was back at work and I could share again with her.

" I have a colleague that is going through some problems with her marriage at the moment. We have always been quite close to each other, and today, over a cigarette outside, she told me personal things that she would not normally tell anyone else at the office. I kept the secret for myself. I like it that she trusted me. I felt respected for the fact that she believed in me, and caring because I could hear and help her somehow.

" The place where I work is a large shared office with almost 30 people around. All of them have interesting stories to share and sometimes even funny ones. Once in a while I get lost in thoughts (a bit dreamy) and I hear stories from my colleagues. Stories about their private life or just things they like sharing. I am always curious and a bit fascinated by all the things they have to share.

Figure 4. Anecdotes selected

'Dissolving in the moment' anecdote

> My office has a special area where the coffee machine is placed. This space is full of colours and comfortable furniture and a really beautiful view over a park. I always go alone there once in a while to think and have some coffee. I feel completely relaxed. What I like the most is that it feels like I am not working anymore! (female participant, age 34)

This anecdote represents the cluster 'positive emotions'. In practice, you may not like drinking coffee, and your routine when taking breaks at work may be different from the one described. However, you may recognize the feelings reported in it if you were to go through the same situation. Hassenzahl (2010) calls this the 'plausibility' and 'resonance' — feeling of recognition — of experiences. In this case, the participant who likes drinking her coffee in this sensorial place has the facilities to 'let her mind wander' and 'dissolve in the moment', which is the experiential theme assigned to the narrative as expressed in Figure 5.

Figure 5. Picture-metaphor 'letting the mind wander'

The experience of 'dissolving in the moment' at the office starts with a decision to take a step away from your desk. One important canon of the moment is the fact that the person leaves the desk physically (leaving their work), but not the office. People do it with the intention of having a moment of privacy where they are somewhat distant but not isolated from the rest. Having an overview of the surroundings reinforces the feeling.

The experience is ignited by an 'alibi' (i.e. a coffee break) that defines the time frame of the experience and creates an explanation for the moment of seclusion (it justifies the action). The 'space' or 'context' where the experience takes place is inscribed inside certain physical boundaries. This context is a source of delight and pleasure (a treat). The reward is complete relaxation. This space is facilitated and encouraged by the company and it is highly sensorial and 'beautiful'. The moment should not interfere with the working routine but rather let people choose the best moment to take action for themselves. There are three main phases: the person working, the decision to take action (alibi), and the event itself.

To summarize, the key elements of the experience are: the person has this experience alone and for his/her own pleasure

(self-indulgence); the experience can be a routine, but not too frequent; the environment becomes a treat; in this space the person can 'let his mind wander'; there is a certain distance from the working desk; and there is an element (alibi) that justifies the action.

This narrative represents in a more formal and abstracted way the experience described in the story. Once the meaningful elements of the story are dissected and the experience is authored, the process of designing a product to mediate such an experience takes place.

Step 4. Conceptualization

The set of 'experiential specifications' described in the narrative form the basis for the conceptualization phase of the process and for the final design proposal. The experiential intention is the main guidance for the design process, and therefore all the elements of the experience ought to be considered. The experience is put to the fore and shaped by the material designed (Hassenzahl et al., 2013; Hassenzahl, 2013).

The design proposal that resulted in the design case was called *Gibbous Chair* (Figure 6). The Gibbous Chair is an elegant piece of furniture especially designed for the office environment as a resting chair. The chair provides the context to 'let one's mind wander' and 'dissolve in the moment'. This experiential intention is defined and mediated by a number of elements. The most apparent element is the pronounced height of the chair, which is as much as three times the height of a normal (office) chair. This new perspective of the environment becomes a treat for the office worker. Moreover, the elevation provides a moment of seclusion from the environment without being in isolation. The office worker enjoys this moment of pleasure in a semi-private way.

The second element that defines the experiential intention is the 'alibi' that explains and justifies the moment of pleasure. People need to have a reason to sit there, to be entitled to use it. The Gibbous chair provides them with two elements that justify their action: a magazine rack in which office workers share interesting things to read, and a coffee table. These elements aim to have the same effect as the coffee in the original story. The person prepares the coffee, and steps away from the desk in order to have a moment of seclusion. It is important to note that the Gibbous Chair is not intended to be used for work-related activities, and therefore it does not provide the space to do so. For that reason, the coffee table was designed to be too small to be used for work purposes. This connects to the experiential intention, since the moment of pleasure is experienced by stepping away from the desk, and by leaving your work behind for a moment. In Gibbous Chair, office workers find the facilities to enjoy a short moment of relaxation and self-indulgence.

Step 5. Evaluation

Generally, the result of a problem-driven design process, and the concept selection, can be evaluated taking into consideration the design specifications derived from the problem
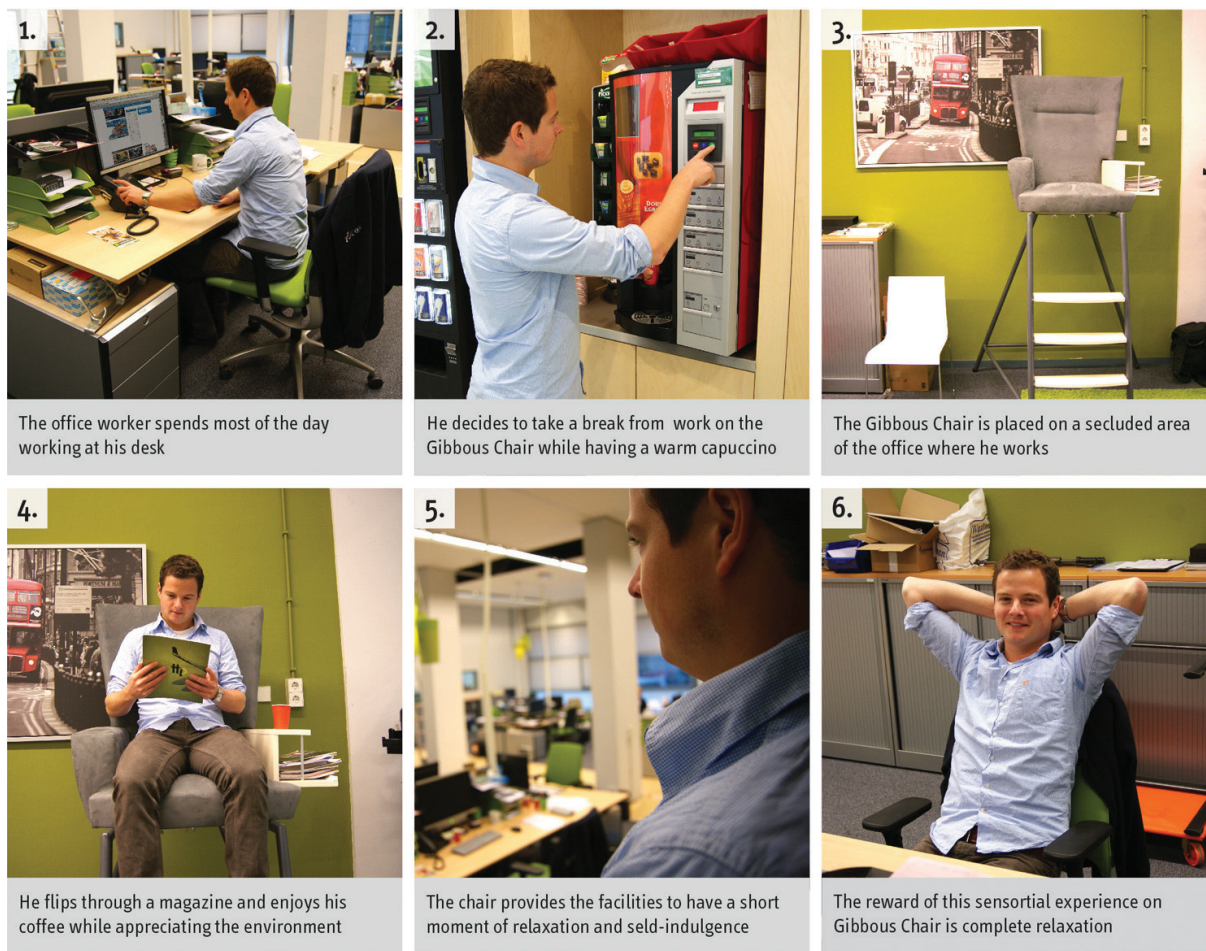
1.	2.	3.
The office worker spends most of the day working at his desk	He decides to take a break from work on the Gibbous Chair while having a warm capuccino	The Gibbous Chair is placed on a secluded area of the office where he works
4.	5.	6.
He flips through a magazine and enjoys his coffee while appreciating the environment	The chair provides the facilities to have a short moment of relaxation and seld-indulgence	The reward of this sensortial experience on Gibbous Chair is complete relaxation

Figure 6. The Gibbous Chair storyboard

statement, the accuracy to accomplish these, and the expectations of the clients. In the case of possibility-driven design there is no need to fulfil or any problem to address. How then can then the results be evaluated?

Usually, the experiential patterns guide the process to preliminary concept ideas. These concepts should be evaluated by considering how well the material recreates the experience targeted, as well as other (more) usual criteria like simplicity, aesthetics, and level of innovation. Moreover, the client and stakeholders should be involved in this process as in most product development cycles. However, since the result of these steps (the concept) embodies an experience, it is strongly suggested to use (experiential) prototypes to recreate the feelings. After all, evaluating (and judging) an experience should take place by 'experiencing' it in a real-life situation, in order to test whether its intended qualities are achieved.

In the design case, a prototype was built and tested in an office setting in order to learn from the experiences of people when the product was placed in their environment. Important findings include the positive perception of the design by most participants, and the rich and varied descriptions of their experiences while using the chair. Some described it as being on a different layer, as a new and fresh perspective, and even as a ski lift bringing you through the clouds.

DISCUSSION

The present paper suggests an approach to possibility-driven design as an alternative to traditional problem-driven design approaches. Note, however, that we do not intend to suggest that the traditional ways of designing should be substituted by a possibility-driven design view, nor do we devalue their results. Many of the problems faced by our modern societies, from hunger to lack of water supplies, need and must be addressed by the powerful tools of a problem-driven approach. Instead, we are proposing a view of design based on possibilities as an addition to current design practices — an addition that offers alternative results that might extend the solution space beyond merely reducing a deficiency.

The steps suggested in our approach parallel those of a classic problem-driven design cycle in that the process follows a linear sequence from an analysis phase to the evaluation of results. Indisputably, the starting point of both approaches is different — if not opposite. One focuses on undesirable aspects in a context, while the other concentrates on desirable aspects. One might wonder, however, if the difference lies only in how to frame the situation, or if it also exists in the design process itself and the steps to follow. In traditional problem-driven design cycles, product design specifications mostly guide the

design process after the analysis phase until the evaluation of the final concept (e.g. Pahl & Beitz, 1988; Roozenburg & Eekels, 1995; Ulrich & Eppinger, 1995). These specifications are generally measurable and comparable (e.g. the chair should accommodate users from P5-P90). In our approach, we suggest to have 'experiential specifications' to lead the design process, instead of solely technical ones. These specifications are to a great extent intangible. On the basis of this, we consider the approach to have indeed certain similar qualities compared to its traditional counterpart, but the focus on experiential product specifications differs greatly from guiding the process along more objective, clear-cut boundaries. This presents certain limitations of the approach. For instance, if you want to increase the efficiency of plane combustion engines, or prevent chemical reactions in intravenous medical devices, an approach focusing on positive experiences might not be as suitable as having a number of technical specifications that guide the process. Moreover, in our approach, personal anecdotes and user involvement was key to finding possibilities since, after all, it was about office workers' subjective well-being. The approach would fall short of tools if used in cases where user involvement is not considered, as might be the case in more utilitarian or industrial settings, i.e. designing new ways of making the process of injection moulding more reliable, or researching how chicken can easily find the food tray in poultry farms.

Our approach to design for possibilities used personal and autobiographical anecdotes as a source of inspiration. We then attempted to cluster them to select five for the design process. This raises an important question: how do we choose the best possibility and why? In the design case presented we decided to select the ones we considered were richer in terms of describing the situation. It was a rather subjective way to decide whether one possibility had more potential than another, and depended greatly on the design team and relevant stakeholders. However, having a clear goal and further specifications regarding the context and/or the users would likely facilitate the selection of possibilities. Specifications and demands can also facilitate the evaluation of the concepts in later stages of the design process.

The main suggestion underlying the approach described in this paper, and the related design case, is the idea that possibilities can be a valuable direction for design and that they can be designed (for). Problems bother us, and they are rendered negative and undesirable. Possibilities, on the other hand, are positive potentials. For the specific design case described, and, in general, for design approaches that aim at designing possibilities to increase happiness, considering theories and frameworks of positive psychology seemed relevant. The scientific study of subjective well-being already took on the challenge of studying the human potentials beyond neutrality. A mixed approach of both a top-down input, i.e. theories, as well as bottom-up insights, i.e. personal anecdotes, was used here. This implies that possible applications of a possibility-driven design approach can go beyond mere pleasure and self-indulgence, to designing for a meaningful, fulfilling, and happy life (see Desmet & Pohlmeyer, 2013). Possibilities can also

present themselves as solutions to problems. In the Eurostar project example, if supermodels were paid to serve train passengers, the problem of people wanting to be on time in Paris would have been solved by introducing something 'positive' that reframes the situation and takes away the undesirable aspects of it. Probably, people would take the train earlier, but perceive the trip as an enjoyable experience. In this case, instead of trying to reduce a deficiency, something positive is added that takes away the negative evaluation of the situation. Likewise, Gibbous Chair presents a positive experience by enabling office workers to have a moment of relaxation and self-indulgence that has been provided by the employer, a fact that can add significance to its user.

The result of the illustrative design case is a new product category — a chair with a different purpose compared to usual (office) chairs. Is radical innovation an implication of the approach? Or can it also be used for incremental innovation? One particularity of the design case presented in this paper was the conceptual freedom offered by the client and the explorative nature of the design brief. These elements, together with the experience methodology (Hassenzahl et al., 2013), steered the process to a novel purpose than what is normally conceived by a chair. However, designing for possibilities can also improve existing products and situations that are already around us (e.g. the Eurostar could have had a certain layout that allows for more interaction between passengers). We believe that embracing possibilities as a fuel for design can bring about improvements to existing products, i.e. incremental innovation, as well as possible changes of frame and meaning to new ones, i.e. radical innovation (see Norman & Verganti, 2014).

CONCLUSION

A possibility-oriented approach to design is not aiming to replace our common understanding of designing as a way of reducing deficiencies. The potential of this approach lies in appreciating both the implications for an alternative culture of innovation on the one hand, and the opportunity to design for a better future on the other — a future offering prospects and potentials. We hope to have shown through the design case that it is possible to design for possibilities, and that possibilities are there to be discovered. We believe that a possibility-oriented approach to design holds the potential of delivering products and technologies that will enable people to explore their capabilities in a more positive and humane way.

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