POSITIVE DESIGN.

Inaugural lecture — May 24, 2013
Prof. dr. ir. Pieter Desmet

TUDelft
Faculty of Industrial Design Engineering

Positive Design

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Meneer de Rector Magnificus,
leden van het College van Bestuur,
collegae hoogleraren en andere leden van de
universitaire gemeenschap,
zeer gewaardeerde toehoorders,
dames en heren,

Positive Design

Emotion is central to human existence; all of our thoughts, motivations and behaviours are enriched and influenced by our emotions. It is possible for a product — or its use — to stir the same emotions we might experience in response to events, situations, or the words and deeds of people we encounter. Ignoring the emotional side of product experience would, therefore, be like denying that these products are designed, bought, and used by humans.

Introduction

In Delft, we run a course called Design for Emotion. In it, we teach our students how they can design products that evoke positive emotions — products that make users feel good. To get them started, I often ask my students to bring in an example of a product that makes *them* feel good. As you can imagine, they show up with all kinds of products, some more obvious than others: a watch ("It was a gift from my mother"), an electric guitar ("It enables me to express myself"), a phone ("It keeps me connected to my friends"), an ashtray ("It reminds me how I success-fully quit smoking") to name a few.

About two years ago, one of the students brought in this simple black pencil. Can you guess his feeling towards the pencil?
It was *admiration*.

When I asked him to explain why he admired the pencil, he replied simply "I won't tell you, but I can show you." Then, with a hint of dramatic intensity, he carefully placed the pencil on my desk. I stared at it... and nothing happened. "Wait," he said, in response to my puzzled expression, and pulled out a second black pencil from his pocket. He put this one on the table too, next to the first one. The second pencil began to roll; it rolled right off the table and onto the floor.

Then he explained. "When I drop a pencil, I know that the core will break. So the sound of a pencil hitting the floor upsets me. I admire *this* pencil because it has a shape that is too smart to fall; it actually protects itself, in the most elegant way."

All products evoke emotions. Neutral design does not exist. Whether we intend it or not, or are even aware of it, every artifact, system or technology has an emotional impact on those who buy, use or own it... even an object as unpretentious and ordinary as a simple black pencil.

Would you have predicted that student's admiration? I expect not. Why? Because you are not he — you and he are different people. Emotions evoked by products differ from one person to the next: emotions are *subjective*. The admiration is not to be found in the product, it never is: emotions are part of each user, and can never be predicted on the basis of a design alone.

Given this simple fact, it is perfectly logical that, over the years, many people have asked me if I really believe that

Admiring a simple black pencil with a shape that is too smart to fall.

The play-facilitating wheel-chair (Eva Dijkhuis) resolves emotional conflicts between parents and children.

it is possible to design for emotion — that a designer can influence, or even determine, the emotional impact of design.

My answer has always been a simple *yes*. To 'design for emotion' means to create products, services, technologies, or systems that evoke intended (or desired for) emotional responses either directly, via the design (as in the case of the pencil), or indirectly, by activities and interactions facilitated by the design. I have witnessed, many times, that it is indeed possible to do this: products can be intentionally created to evoke positive emotions[1]. One of my favourite examples is the children's wheelchair designed by Eva Dijkhuis.

DESIGN EXAMPLE
PLAYFUL WHEELCHAIR

The wheelchair project was one of the first graduate projects I was involved in here at Delft University. Eva intended for the design of her wheelchair to facilitate and stimulate playful behaviour[2]. In her research, she measured the emotional response evoked by conventional wheelchairs. Because parents are also users, she measured the responses of both the children and their parents. Eva found that the children and their parents had different emotions. For example, the parents experienced positive emotions toward a wheelchair with big handles because these handles facilitated their goal to 'push the wheelchair in a comfortable way.' The children, however, felt negative emotions toward the same wheelchair model. One of their aspirations was 'to be independent,' and those big handles sticking out of the back of the wheelchair clearly express dependency. In other words, the differ-ent goals of the two user groups created conflicting emotional responses. There is no real conflict: the conflict is created by the current design solution. To resolve this, Eva designed a wheelchair that fulfilled both parties' aspirations: it includes a comfortable push bar that can be shoved down behind the seat-back when the child is unaccompanied, rendering it unrecognizable. The resulting wheelchair has a design that makes both the children and their parents feel good.

Yes, we are able to design for emotion, to influence the emotional impact of design. Although subjective, I have found emotions to be less obscure than they appear. In fact, they are *systematic*. Take the pencil anecdote: at first you may not have predicted the student's admiration, yet once I told you his underlying rationale, you were able to empathise with his feelings. Our empathic abilities indicate that even though emotions differ from person

to person, the underlying process that evokes them is organised and universal. Once we have discerned this underlying process, we can understand and even predict emotional outcomes. And this is, I believe, the key to designing for emotions: start from an understanding of the universal principles that determine why and how people experience those emotions.

Twenty years ago, when I was instructed to design a tricycle for children, I was a second-year design student. During one of our meetings, I asked my teacher how best to consider the children's emotions in my design process. I still remember his answer: "There is no rule or guideline; when it comes to emotion, all you can rely on is your intuition." Since I began my research, my main objective has been to detect universal principles of emotion and explore how these can be of use to designers. Today, I will discuss three basic and related principles, and based on these, I will present four of my current research projects. My intention is to demonstrate that these principles are a powerful ally for a designer's intuition. Moreover, I hope to illustrate that increasing our understanding of emotions has exciting implications that extend far beyond an ability to 'make the user feel good.'

Three principles of emotion

PRINCIPLE 1: FUNCTION
Emotions are functional: they help us protect and increase our well-being.

This first principle may be the most basic principle underlying human emotion. Imagine the following scenario: it is a rainy Sunday afternoon, and you decide to bake a cake. You prepare the batter, place it in the oven, and start working on the frosting. The phone rings in the living room, distracting you. So you go and answer the phone, and talk to your friend for a while. When you get back to the kitchen, what do you discover? Your daughter has her hand in the blender.

What would you do?
Would you do like I did — and pull out your camera to take a picture? Or would you yell, run over, and pull her hand out instead? I am guessing the latter (which was actually

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Emotions are functional: they help us to protect and increase our well-being.

Sarah and the blender, giving me a scare! (of course this photo was staged; the plug was not really in the socket).

Me driving my Toyota Prius.

what the father did when he walked in on my photo shoot with my niece Sarah).

That would be a typical example of an emotional response: an emotion is elicited when we are confronted with a stimulus event that requires our immediate participation[3]. In our dynamic relationship with the world, we encounter a constant stream of threats that can potentially reduce our well-being, and opportunities that can potentially increase our well-being. The function of emotions is to help us optimise this relationship, by activating 'thought-action tendencies' that stimulate and enable us to react to these threats and opportunities[4]. You may recognise some of these: with fear comes the tendency to run, with anger comes the tendency to confront, with fascination the tendency to explore, and with sympathy the tendency to express care.

Although this principle may seem somewhat obvious, it does clarify the behavioural implications of emotions (i.e. each emotion stimulates a specific thought-action tendency), and implies that the influence on human-product interaction differs according to the emotion. Moreover, the principle also reveals a rarely recognised quality inherent in our emotions: all of them are beneficial, not just the positive ones. As a rule, all our emotions —both positive and negative — serve our well-being in some way.

PRINCIPLE 2: VALUE
Every emotion reveals a personal value or aspiration.

This is me, driving my bright red metallic Toyota Prius. Imagine you are driving this car — what would you feel? And how do you think I feel? Perhaps I feel proud? Perhaps embarrassed, or grateful, or hopeful, or a combination of those?

I could be experiencing all sorts of emotions, but the point is this: if you knew which emotions I felt toward my car, you would know something about my sensitivities. Our emotions reveal what we want in life, what we value and to what we aspire. Why did that student admire his pencil? Because he values its material properties. Why is a mother afraid of an open blender? Because she values her child's safety.

Emotions are an expression of our values and aspirations: our 'concerns'. We are only emotional about the things that touch upon our concerns — either support or threaten them[5]. And thus, 'design for emotion' is actually 'design for concerns.'

This second principle implies that designing for emotion requires an understanding of what is important to the specific group of users we are designing for: its personal significance. Although values are, in essence, universal (e.g., to be safe, to belong, to have self-respect), depending on the specific usage narrative — including causes and consequences, and the personal history of the person experiencing the emotions — these basic values translate into a complex set of goals, needs, and expectations. Note that people are often not aware of their personal concerns, but their emotions reveal them, and thus the emotions evoked by existing products, both pleasant and unpleasant, are useful entry-points for understanding personal significance[6].

People experience emotions almost all the time. When examining these emotions, you will discover that many are driven by competing concerns:

    "I want a tree in my garden, but I don't want
    shadow in my living room."
    "I want to drive a motor cycle, but I also want to be a
    responsible father."

We have discovered that, for design, these seemingly competing concerns are treasures[7]. Because when we're able to design something that meets both concerns, without compromising, like the wheelchair's push bar, the result will be a design that is both innovative and meaningful to the users.
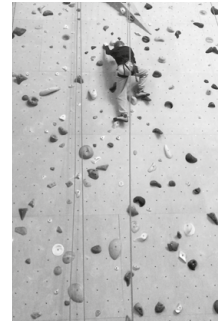
PRINCIPLE 3: OBJECT
Most emotions evoked by products are not about these products.

Emotions are transitive: I am not just angry, I am angry with someone; I am not just fascinated, but fascinated by something; I love someone; I fear something. Emotions can, of course, be directed at inanimate products: I can be disappointed with my new shoes, angry at my car, or even admire a simple black pencil. In these

Every emotion reveals a personal value or aspiration.

cases, the product is the 'object' of my emotions. Surprisingly, product-directed emotions represent only a minor portion of the emotions we experience in human-product interaction.

About a month ago, my nephew Kris and I spent an afternoon indoor rock climbing. It was his first time, but as you can see he showed quite a talent for it. As you might imagine, we experienced a host of different emotions throughout the afternoon: excitement, fright, enjoyment, disappointment, pride, relief, and probably many others. Thinking back on the experience, I could identify only one emotion directed at a product: fascination at the different meanings ascribed to the colours of the climbing holds. All of the other emotions I could recall were related to myself, Kris, or the act of climbing.

This anecdote illustrates that when we see or use products, the majority of the emotions we experience are not about the products themselves. The majority of our emotions are directed at something else[8]. Does that mean that the influence of design on our emotions is marginal? No, it does not. Although only one emotion was directed at a designed object, all of our other emotions were *enabled*, *mediated*, or *influenced* by design: without the rope, the wall, our climbing shoes, and all the other designed technologies involved, we would have experienced no emotion whatsoever. Products themselves evoke emotions, and they also enable and influence *interactions* that evoke emotions: they provide a *context for emotions*.

This third principle implies that we have to look beyond the boundaries of the design itself when searching for opportunities to design for emotion: most design for emotion is designing a context for emotions, which means that designing for emotions is, to a large extent, designing interactions that evoke emotions.

Design Implications
These were but three of the key principles that we have found to be relevant for design. Over the years, we have discovered many more, and there is no doubt that many are still to be discovered. When I present these theoretical principles to design students, some respond with disappointment, because they find them somewhat obvious or even banal. I understand this. Yet principles are not guidelines or tricks: in order for their value to emerge, one is required to invest time and effort in exploring their application. Only then can they have a

Kris, indoor climbing.

Most emotions evoked by produts are not about these products

profound impact on design, by providing guidance and structure to the designer's creative processes. Rather than pointing designs in specific directions or indicating concrete solutions to design problems, when sufficiently understood, these principles help determine what questions we should ask — and answer — about the users we are designing for. This applies to the wheelchair example, and also to my second design example: the in-flight breakfast 'Morning Tapas' designed with KVD Reframing for KLM[9].

DESIGN EXAMPLE: 'MORNING TAPAS'

You may know, from experience, that breakfasts served in economy class during intercontinental flights do not typically evoke strong positive emotions. Some years ago, KLM decided to invest in the quality of their economy class meals. Skilled chefs were invited to improve the quality of the recipes. Unfortunately, the resulting meals (despite being more expensive) did not increase overall passenger satisfaction. Using higher quality recipes did not change the fact that these are mass-produced, precooked and reheated meals. At that stage, KLM contacted us asking if we could help them improve the passengers' emotional responses to the meals. Our approach was in line with the principles mentioned previously: passengers' emotions represent their values and aspirations, of which some, but not all, are about the breakfast. Because the chefs had already trained their focus on the breakfast, we decided to examine which values and aspirations were threatened in the context of the experience. We used the emotions experienced in the then-current context as our starting point. We found that the negative emotions most strongly felt were evoked by the fact that passengers lacked stimulation (they felt boredom), and control (they felt "stuck"). Hence, the two key concerns to focus on in our design were those of 'being stimulated' and 'having control.' Although they were not directly relevant to (or threatened by) the meal, our design intention was to make them relevant. The result was named morning tapas because it was a breakfast that consists of several main elements (warm and hot; savoury and sweet), and some condiments in the middle, like nuts and honey. These elements can be combined in many different ways, allowing the passengers to 'play with their food.' In our evaluation study, we found that the new design evoked significantly less disgust and more fascination than the conventional breakfast.

The Morning Tapas (KVD Reframing) resolves conflicting concerns in the context of flying.

Twenty-five positive emotions experienced in human-product interactions.

Concerns that are activated within the use context are always an opportunity for design — especially those that, at first sight, do not seem to be relevant to the design problem at hand: the power of design is that, by changing this context, it can be made to be relevant to those concerns, and in doing so, relevant to the user.

Beyond pleasure

Even though the increasing interest in product experience is commendable, designers' focus on 'pleasurable use' ignores the wealth of pleasant and unpleasant emotions that may be experienced during product use.

Over the last decade, design researchers have generated a wealth of knowledge about how to design products that evoke pleasurable experiences — products that make users feel good[10]. But a pleasurable experience is not necessarily a meaningful or appropriate one. I believe that there exists an important scientific opportunity to extend our view beyond the generic aim of stimulating pleasure and reducing displeasure.

This belief is expressed in the central theme of my research plans for the coming years: 'Beyond Pleasure,' a theme that presents several exciting research questions. Today I will describe four research projects in which we explore these questions: A — Nuance, B — Richness, C — Virtue, and D — Well-Being.

A — Nuance
Can you make a list of the positive emotions you might experience when using a product? Your list could include emotions like desire, satisfaction, or amusement... or perhaps fascination or inspiration? While drawing up your list, it may dawn on you that the question is slightly more difficult than it sounds. When we put this question to our students, we often see considerable differences in the number of emotions each student can discern: some can name three or four, and others can name up to ten or even fifteen different positive emotions.

In our research, we have found that people can actually experience as many as *25 different positive emotions* during human-product interactions[11]. This list includes at least ten more than our most articulated design students could name; this array of positive human emotions is more nuanced than we often realize. Despite being positive or pleasurable, the emotions themselves are very different: designing for inspiration is a completely

different challenge than designing for relaxation, or for love. And while you may find that this seems obvious, these distinctions have been largely ignored in the design research literature.

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We extend our scope beyond pleasure by studying the nuances of positive emotions that people experience in human-product interactions.

Some of our research questions are: how can we determine what specific emotion to design for? What are the different effects of various emotions on human-product interaction? How can we train design students in these nuances? To what stage of the design process can these nuances contribute?

Jay Yoon is currently working on tools that can be used by design students to develop their 'positive emotional granularity,' or their ability to distinguish between different positive emotions[12]. Ilaria Scarpellini recently developed an interactive database that includes hundreds of examples of products that evoke these 25 different positive emotions, intending to stimulate designers to explore the array of positive user emotions. The premise of these tools is that the ability to design for nuanced positive experiences starts with the ability to distinguish these nuances oneself.

B — Richness
A month ago, Jeroen and I did a parachute jump in honour of his birthday. Afterwards, we agreed that it had been one of the most terrifying experiences of our lives, and simultaneously one of the most exciting. What made it memorable was the interwoven experiencing of positive and negative emotions. Although this is a rather extreme example, the same might be said about most of our memorable experiences: changing jobs, romantic breakups, becoming a parent, travelling... all of these involve complex combinations of both positive and negative emotions.

It is this combination that makes an experience engaging, and creates richness. You may wonder if product design really ought to aim for such rich experiences. True, the

Design students use Emotion Granularity Cards (Jay Yoon) to develop their positive emotional granularity.

Negative emotions in user-product interactions can be plain unpleasant.

The Monster Coach bracelet (Steven Fokkinga) stimulates an active workout by creating the illusion of being chased by a monster

In a restaurant, having a peek at the patisserie case.

mortal terror evoked by jumping from a plane may not be appropriate as the target experience when designing a washing machine. But at the same time, negative emotions are indeed used to create rich experiences in many design domains. A movie without negative emotions (even a romantic comedy) is lifeless, and a game without negative emotions is boring. It is well-known in the fields of art and entertainment that engaging experiences virtually require some degree of negative emotion. But in product design, we have yet to determine when or how negative emotions can be of use to stimulate engaging interactions.

We extend our scope beyond pleasure by investigating how negative emotions can contribute to engaging user experiences.

Some of our research questions are: under what conditions can negative emotions be appropriate or enjoyable? How can we determine which mix of positive and negative emotions is appropriate? How can we help designers use negative emotions in a constructive way?

Steven Fokkinga has developed a framework for rich experiences that explains under what conditions negative emotions can be enjoyable[13]. He is currently testing this framework through a series of design applications. For example, he has created a working prototype of an 'activity coach' bracelet. Wearing the bracelet creates the illusion of a monster that chases you: the fear will keep you motivated[14].

C — Virtues
Imagine the following situation: you are in a restaurant, and you have just finished your main course. The waiter clears the table, and inquires if you would care for some dessert. Earlier that week you resolved to stop eating unhealthy food — so you decline with determination. But when the waiter casually points to their patisserie display case, your curiosity wins ("a peek won't harm me").

You walk over, and this is what you see.
What do you feel?

You would probably experience mixed emotions, because the case represents both an opportunity ("I want chocolate") and a threat ("I want to be healthy"). From the moment we awaken to the moment we drift off to sleep, we experience a constant flow of conflicting pursuits to choose from, and the mixed emotions that accompany the choices between them. The influence of these mixed

emotions on our behaviour is more profound than we tend to realize: they drive us toward behaviour that is either responsible or impulsive:

"I want to lose weight, but I also want to eat that cake."
"I want to do my homework, but I also want to go to the beach."
"I want to go to bed on time, but I also want to finish watching that movie."

These examples can be seen as conflicts between 'virtues' and 'temptations.' They create mixed emotions because they involve different rewards: temptations offer immediate rewards (and come with future costs) whereas virtues promise future rewards (and immediate costs).

Deger Ozkaramanli found that design, by influencing our emotions, affects our decisions to either follow temptations or to be virtuous[15]. Her findings indicate that increasing our understanding of these mixed emotions will open up new and unexplored design opportunities: mixed emotions and value conflicts highlight what is important to users, but effectively prohibit our use of existing ideas or solutions to facilitate their aspirations.

The design industry has been very effective in creating consumables, like snacks and drinks, that stimulate users to give in to their temptations at the cost of their virtues. We are exploring how design can be used to do the opposite: how can we create experiences that enable and motivate users to follow their virtues.

We extend our scope beyond pleasure by studying the influence of emotions on impulsive versus responsible behaviour.

Some of the related research questions are: how can we identify and validate relevant value conflicts? Which mixed emotions are involved in these conflicts? What variables determine the decision to follow virtues or temptations? What strategies can designers use to design for virtue? What are the moral implications of designing for virtue?

Sweet Solutions (Marc Bayona) prints your daily to-do list on a chocolate bar: a little reward that stimulates virtuous activities.

The 40% thesis, showing three main determinants of our happiness (adapted from Lyubomirsky, Sheldon & Schkade, 2005).

Virtues and temptations; the one is not better or worse than the other, but the key to personal welfare is to find a balance between them. We'd like to understand how design can help us in finding and maintaining this balance.

D — Subjective well-being

All products evoke emotions, even designs as humble as a simple black pencil. Fifteen years of research has generated a wealth of knowledge describing how to design products that evoke or facilitate pleasurable experiences — that make the user feel good[16]. I have always defended the idea that our research community is not driven by an interest in using emotions as a means to sell products, but by an authentic interest in using emotions as a means to contribute to the well-being of the people who buy and use these products.

I recently came across a staggering fact: since the 50s, our material well-being has actually doubled: nowadays, we have so many more products, and better products, than back then. Our emotional well-being however, has *stayed the same*[17]. For some reason, all of these marvellous products have not increased our well-being; apparently they do not contribute much to our happiness. For some reason, the positive emotions we experience in relation to our products are fleeting rather than sustainable.

To put it another way: we are confronted with a 'happiness gap.' The paradox is puzzling: we surround ourselves with products that make us feel good, but the very same products do not make us happy. How is this possible? I started reading the literature on happiness, and found that well-being psychologists are indeed sceptical about the contribution of consumable products to human well-being. Consider this famous pie chart, titled 'the 40% thesis,' which can be used to summarize their argumentation[18].

The chart indicates that there are three main factors that determine the differences in people's happiness levels. Surprisingly, only ten per cent of these differences are explained by life circumstances (*what we face*). This means that being rich or poor, healthy or unhealthy, beautiful or plain, married or divorced, driving a brand new car or an old bicycle — all of that only has a small influence on how happy one is. And note that *all design falls within this slice of the pie.*
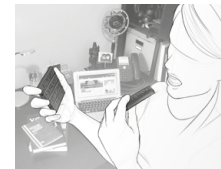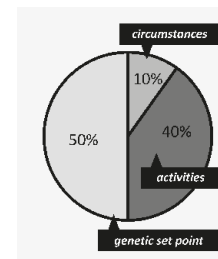
The pie has two more slices. The second is our 'genetic set point' (*who we are*). As much of fifty per cent of one's happiness is inborn, genetically determined and thus not under our control. In other words, some people are born with a greater disposition toward happiness than others.

The remaining 40 per cent of the variance in happiness is explained by how we behave (*what we do*): the daily actions under our voluntary control. It has been shown that if a person changes his or her behaviour, it is possible to increase and maintain happiness over and above the genetic set point. Looking at this pie, it is no surprise that well-being psychologists provide us with the following advice: if you want to increase your happiness, don't buy new products... change your behaviour.

The same well-being researchers have formulated a set of criteria to distinguish activities that contribute most to one's happiness, which can be summarized as four main ingredients: personal growth, affiliation and intimacy, contribution to one's community, and health[19]. These ingredients are universal, and often associated with behaviour that is considered noble and morally just.

Although universal, how these ingredients translate to meaningful activities varies from person to person. For example, personal growth can be articulated via a goal to develop intellectually, socially, artistically, or spiritually. And contribution to one's community can be expressed via the goal to plant trees, use less water, or perform as a musician. The main message here is that if you want to become happier, you should start engaging in those activities that include at least one, but preferably more, of these ingredients.

Perhaps we may sometimes experience that buying products makes us happy. This is possible; new products can indeed create bursts of happiness. But bear in mind that as soon as we get used to our new products, the happiness effects fades away. Happiness created by buying products is fleeting and can only be prolonged by buying again and again new products. The effect of changing our behaviour is not as strong, but it will last much longer.

What does that mean for design?
It clearly indicates that an important opportunity to design for subjective well-being is to be found in the 40 percent slice of the pie: to design for activities that make users happy. Products are not just objects to be purchased;

they also provide a context for behaviour. Design influences the things we do, as is illustrated by the Tinytask design that was created by Hans Ruitenberg.

Tinytask (Hans Ruitenberg) playfully seducing users to adopt new behaviours.

DESIGN EXAMPLE:
TINYTASK

For his graduate project, Hans Ruitenberg explored how a design that specifically stimulates people to change their behaviour in order to increase their sense of happiness[20] might be created. The project was based on a list of happiness-inducing activities developed by positive psychologists. He translated these activities into hundreds of small tasks, or 'tiny tasks,' each printed on a colourful keychain coin. After having received a basic set of coins, the user picks one to attach to her keychain. By connecting the coin, she commits to the task, and is reminded about that commitment every time she picks up her keys. Once the task has been performed, she can remove the coin (and save it or give it to a friend) and attach another one. With tinytask, users are playfully seduced to adopt new behaviours. The concept was tested in a longitudinal study with several conditions: no intervention, tinytask intervention, and an intervention in which the tasks were sent as text messages. A particularly interesting finding was that the happiness effect of the coins lasted longer *than the effect of the text messages. To me, this finding illustrates the power of design: design can literally make our intentions tangible, remind us in a subtle way of our aspirations and keep our successes fresh.*

Tinytask is an explicit design: it was created with the sole intention of stimulating people to adopt happiness-increasing behaviour. Design also contributes in ways that are more implicit.

Many researchers have shown the implicit effects of design on behaviour, and that technology can deliberately be created to influence human behaviour[21]: design enables, facilitates, inspires and seduces behaviour. The 'bag snagger' is a telling example of a product that that produces this implicit happiness effect.

About a year ago I saw documentary featuring interesting people who live in New York City. One of them was a man who had enjoyed a successful career on Wall Street. After his retirement, he started to take daily walks in Central Park. At some point he began to get irritated with the plastic bags he saw hanging in the trees. These bags seemed "there to stay," because the park guards couldn't reach them. The man decided to improvise a simple tool — a stick with a hook — and started to remove the bags from the trees himself using the implement he had designed. After settling into what became a new routine, he realized that he felt more fulfilled with this new endeavour than he ever had on Wall Street. Since it was so effective, the implement was then commercialised as the 'bag snagger'. The most interesting part of the story is that this device has inspired the formation of little groups of 'bag snagging' volunteers, who clean parks on the weekends. Does the bag snagger make them happy? No. But the activity does, and this activity is not only enabled by the device, but also inspired by it: many of these people would not have considered volunteering to clean parks before they encountered the bag snagger.


We extend our scope beyond pleasure by studying how design can contribute to the happiness of individuals and communities.

We have recently begun to explore how we can develop design strategies that focus on specifically enabling and inspiring happiness-increasing behaviour. We have many more questions than answers, but we have taken some important first steps. Irene Kamp is in the process of developing an instrument to measure the happiness-impact of design. Anna Pohlmeyer is developing a framework that includes twenty basic strategies to design for subjective well-being[22]. And together with students and industrial partners, we are using design projects to develop and test structured approaches to design for meaningful activities[23]. We also explore how we can best communicate our findings to designers and design students. An example is a series of posters that we are developing. These posters intend to inspire designers to include the concept of subjective well-being in their design processes.
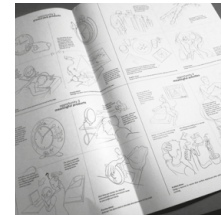

The bag snagger, inspiring people to volunteer cleaning parks in the weekends.

In the elective course 'design for emotion and subjective well-being' 20 students designed 120 interventions that stimulate positive emotions in the KLM Crew Center.
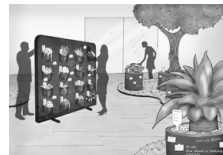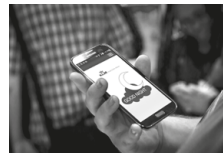
Poster that visualises four main opportunities to design for well-being.

Nowadays, many people ask me: "are you sure that you can design for well-being? — That you can influence or even determine the happiness impact of design?" My answer is "No, not yet, and I don't know if we ever will." But if you ask me if we should try, my answer would be a simple *yes*.

Closing

And so, my esteemed audience, I have come to the conclusion of my lecture. In case you wondered if the title 'Positive Design' represents an ambition to design for pleasure and against all forms of displeasure, I hope to have shown you that, instead, it embodies the intention to design for experiences that are *meaningful* to the user, including all forms of nuance and richness.

I have shown you this wheelchair, designed by Eva Dijkhuis. It is one of my favourite examples because it so elegantly illustrates how apparently conflicting emotions can stimulate creative solutions. I use the example in my lectures to first year undergraduate students. Last year one of these students approached me after the lecture. He told me that he had seen the wheelchair before. I answered that this was entirely possible because the prototype is on display in our faculty. But, he told me, he had heard about this design more than ten years *before* he first entered our faculty. He said, "The student who designed this wheelchair had spent an afternoon at a school to test the prototype. That was my school, and I was one of the children who tested it. I still remember being impressed by the fact that this student had actually made this wheelchair herself!

It inspired me, and at that point I decided that I wanted to become a designer too." I believe in the inspirational power of objects. Design can do *more* than facilitate activities, it can inspire people to explore who they are, who they can be, and how they can be meaningful to others. And to me, dear audience, that is the essence of Positive Design. Here is something to be studied, but also to be cherished, and for designers, something to be proud of.

Gyân Santokhi created the 'thank-you-tree'. The idea was that we all have people who have helped us, or pointed us to the right direction, at some point in our lives. The thank-you-tree offers a place to honour these people. You can write a little thank you label, and attach it to the branch of your liking. If I were to put labels in the thank-you-tree for everyone who has helped me, coached me, supported me on my road to this professorship, the tree would literally collapse under the weight.

For now, I have to restrict myself to thanking those who have played a crucial role in my education and development. Thanks to my graduation team: Gerda Smets, Kees Overbeeke, and Rianne Valkenburg, my PhD supervisors Jan Jacobs and Paul Hekkert, and our dean Ena Voûte for stimulating and enabling me to develop my ideas about emotions in product design. Paul, thank you for your encouragement and friendship all these years. Thanks to NWO for financing my research on the nuances of positive emotions. Eapen George and Jaya Kumar for helping to establish the Delft Institute of Positive Design. Thanks to Eline Wieland for the beautiful movie 'intimate interactions,' and to the DIOPD team for making the fantastic 'Positive Design Day' a reality. Thanks to my partner Jeroen, and all my friends, especially Wim, Jochen, and Mariska, for being my safety net. And finally, I thank my parents, Magda and Willy, for your kindness, your modesty, and your humour, and for your love and unconditional support for every choice I have ever made.

Ik heb gezegd.

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