Design with benefits

Hearth fire nights and bittersweet chores

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Designs with benefits: hearth fire nights and bittersweet chores

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Abstract: This paper presents 'designs with benefits' by capitalising on the joint benefits of sustainability and wellbeing. Designs with benefits are proposed through four 'in-between' themes for design goals as a new direction in supporting sustainability through design. We conducted post-hoc case study research on student projects from two studios: a studio working on sustainability, and a studio working on wellbeing. We searched for aspects in the sustainable studio's work that would promote wellbeing, and, conversely, for aspects in the wellbeing studio's work that would promote sustainability. Looking at three student projects we selected from each studio resulted in four themes we propose as in-betweens to open the door towards crossover approaches. They are: open reflection, pathway activities, resource and material preservation as side effect, and broader insights. Examples of design work illustrating the themes are given and implications for sustainable design discussed.

Keywords: design for sustainability; design for wellbeing; case study; crossover

1. Introduction

This paper proposes a new direction for design for sustainability. We propose an alternative to encouraging a particular behaviour change: design should look more towards people's motivations in relation to their lives in general and the interrelation of personal and ecological wellbeing. We tentatively call this new direction 'designs with benefits'. This door has already been opened a little by contributions of, for example, Niedderer (2007) on mindful design, and Boon, Wever and Quist (2015) on virtue ethics and character development that can support sustainability. We now want to push the door wide open.

This paper explores possible links that can be made through design to people's wellbeing within the context of sustainable living. While these are usually presented as being in

conflict with one another, we want to investigate where they might overlap or strengthen each other. We firstly look at current approaches to the design goals of behaviour change, wellbeing and sustainable homes, before proposing the new direction of 'designs with benefits', reached through 'in-between' design goals. Six student projects from two design studios – one on sustainable homes and one on wellbeing, respectively – will demonstrate the potential overlap of the two and the open space to design for the in-between.

1.1 Behaviour Change

Design for behaviour change seeks to address a multitude of application domains, e.g. sustainability, health and wellbeing, safety and social design (Niedderer et al., 2014). These goals are formulated in a way that is rather distant to people's own lives and motivations, and, in this vein, the logical next step seems to be to formulate some kind of preferred behaviour that is desirable to attain the goals. In fact, most design for behaviour change models have a preferred target behaviour in mind, as Niedderer et al.'s careful literature review shows (2014). It is then the aim of the designer to stimulate this behaviour and/or hinder 'undesirable' behaviour (Niedderer et al., 2014, for an exception see mindful design by Niedderer, 2007). While many designs try to persuade people of something that the designer believes is 'right' or 'better', people's own goal-setting and priorities come in second place. How much am I, as a person, as a consumer, involved in the attempts to change my behaviour? Do I have the opportunity to set priorities and make choices? And what is the link of behaviour change to a person's wellbeing? Predominantely, wellbeing is discussed in the context of 'health and wellbeing', and hardly in terms of 'subjective wellbeing' (Niedderer et al., 2014). Wellbeing can, however, also be the main objective of a design (Desmet & Pohlmeyer, 2013). We will explore this potential here.

1.2 Wellbeing

In the same period that the approaches to behaviour change have emerged, much progress has also been made in the field of design for happiness and wellbeing (e.g. Desmet & Pohlmeyer, 2013; Pohlmeyer, 2012). Happiness is not a frivolous desire of those who have nothing else to worry about. In the 2011 UN resolution 'Happiness: towards a holistic approach to development', the general assembly agrees to be "*conscious that the pursuit of happiness is a fundamental human goal, [and …] that happiness as a universal goal and aspiration embodies the spirit of the Millennium Development Goals […]*". Furthermore, empirical evidence also shows a number of happiness advantages such as that happy people are physically healthier, show more prosocial behaviour, and have more satisfying relationships (Lyubomirsky, King, & Diener, 2005). It thus seems reasonable that happiness and personal wellbeing should be factored into approaches promoting health and societal challenges in general. But what about sustainable home use? How can design contribute to people's quality of life beyond short-lived, materialistic pleasures (Pohlmeyer, 2012)? Research has shown that gratitude and savouring the good things in life can have a substantial effect on people's happiness (Wood et al., 2010). Thus, Pohlmeyer (2014)

suggests as one starting point to design for happiness to support people in taking notice of, enhancing, and prolonging positive events and circumstances. This rather frugal approach to design for wellbeing by appreciating the existing stands in contrast to traditional consumption behaviour. The brief to the students in the wellbeing studio was to prolong and enhance the affective benefits of positive experiences by supporting people to actively pay attention to and appreciate the positive (and existing), i.e. to savour (Pohlmeyer, 2014).

1.3 Sustainable Homes

The reality of climate change urgently requires changes in citizens' behaviour because their energy use is increasing, leading to CO2 emissions that contribute to irreversible climate change. However, doubts have been raised whether current Design for Sustainable Behaviour (DfSB) approaches actually succeed in promoting sustainability (e.g. Kuijer & Bakker, 2015). In a broader view, organisations tend to view residents as risks rather than partners in sustainable innovation (Lee, 2008). Energy savings after innovation measures often disappoint. This effect is often attributed to residents' lack of engagement in saving energy (Galvin, 2014). This thinking leads to seeing residents as more of an obstacle to, than the beneficiaries of drives to make homes more sustainable. The first author's starting point is to involve people in the generation and consideration of their own futures. In that, Boess seeks to facilitate citizens' awareness in the *process* of acquiring or using technology or buildings, thus enabling them to understand and appropriate them (Boess, Pasman and Mulder, 2012; Boess, 2015). Initial research into such processes revealed that in eliciting citizens' participation in large-scale environmental measures such as building insulation, it is key to address concerns first that may be more immediate to them: a new kitchen or bathroom, or a safe playground for the children (e.g. Breukers, van Summeren & Mourik, 2014). The brief to the students in the sustainability studio was, accordingly, to design for citizens' needs and ability to participate in a process of sustainable renovation.

2. Designing for environmental sustainability and subjective wellbeing, without compromising on either

Our reflection was sparked by an initial insight into the attitudes of the students in the sustainability studio. Early on in their project, some of them complained that they were asked to force people into sustainable behaviours, while this was explicitly not their brief. This seems to correspond to earlier findings that unfortunately, people tend to have a negative connotation of environmentally friendly behaviour in relation to hedonic goals and related costs (Corral Verdugo, 2012). When people hear sustainability they somehow assume a lack of wellbeing and humor as if it is a matter of 'either or'. However, first research evidence supports the notion that environmental and personal wellbeing are compatible and even mutually reinforcing (Corral Verdugo, 2012; De Young, 1996; Kasser, 2009). We expand on this initial effort to combine sustainability with pleasurable and meaningful experiences by exploring ways that wellbeing could contribute to sustainability

and the other way around. In the following, we focus on subjective wellbeing as an essential part of designing for sustainability, not as an alternative or as an optional extra.

2.1 Method

Selecting design projects for closer analysis

Following our goal to describe designing for environmental sustainability and subjective wellbeing without compromising either, we selected six projects (out of the ca. thirty projects in the two studios) in which we saw an overlap in the perspectives for closer analysis. We sought to identify the ways that the selected projects addressed both goals.

Case study design

We treat the six student projects as cases, contributing to our challenge of developing theory that innovates on existing knowledge on wellbeing and sustainable design to facilitate both. We used a multiple case study approach as Runeson and Höst (2009) formulated it for software engineering. Our research context is similar in that it is about a particular phenomenon, in our case the overlap between sustainability potential and wellbeing potential, and how it plays out in a number of design processes, in which we seek to find new and possibly improved approaches to that phenomenon.

> It involves "investigating contemporary phenomena in their context, using multiple sources of evidence, and information is gathered from few entities (people, groups, organizations) with a lack of experimental control." (Runeson and Höst, 2009, pp. 132-133).

We conducted a qualitative data analysis of the six individual design cases and triangulated the data by combining two observer perspectives on the topic: the ones of the two authors. Hence, despite our involvement coaching and judging the students' work, this was observational case study research (Runeson and Höst, p. 134) because we conducted the analysis *after* the projects had been finalised. We interpreted the student's choices and research findings according to our research challenge.

3. Results

The six cases prompted a number of realisations in aligning sustainable design and design for wellbeing. These realisations are pinpointed as 'in-betweens'.

The in-between design goal themes were identified by checking for instances in which the student projects addressed concepts from existing knowledge on wellbeing and sustainable design, respectively. To be included, these had to be integrated in one project. The students themselves had not always made this integration on purpose. It is shown here as our perspective and interpretation of their completed projects.

With regard to each project's potential to facilitate wellbeing, we used a matrix developed by Pohlmeyer (2012), which proposes that products can be a source or resource (i.e. symbol, enablement or support) of wellbeing. With regard to each project's potential to facilitate

sustainability, we matched the projects' content with a number of notions that have been put forward as facilitating sustainability: direct understanding and usability (e.g. Wever, Van Kuijk & Boks, 2008), active involvement (e.g. Boess, 2015; Mont, Neuvonen & Lähteenoja, 2014), and a social practice (e.g. Kuijer & Bakker, 2015).

Table 1 Summary of each student project and the in-between that we found in them. The pale green (dotted) colour indicates that the student was in the studio indicated in the heading. The pale red (solid) colour indicates the potential the student's project had for the other goal.

student project	**student's design goal**	**wellbeing potential Products as ...**	**analysis of the in-between**	**sustainability potential**
Colour pebble by Justus Kuijer	enable direct feedback to resemble an earlier experience, of a hearth fire	**source and resource** engaging, meaningful	**Theme 1 open reflection** the student found it has the side-effect that people invent their own new practices - they appropriate it	direct feedback provides **understanding** for residents that a delay-based system is responding, reducing over-regulation (e.g. turning heating control up high)
Welcome Home by Staffan Till	create awareness of surroundings, invite to act on them and hence take care of them, turn heating or lights on or off more thoughtfully	**enabling** mindfulness and relationship with the home through accomplishment	**Theme 2a individual pathway activities** the student sought an indirect route to sustainability via an enabler of subjective wellbeing: **mindfulness**	**active involvement** and accomplishment of arranging one's own lamp leads to a new behaviour possibility for the resident: **taking care** of a new or temporary home
Smart Dwell by Sofia van Oord	design activities to generate critical mass to influence other stakeholders about sustainable energy options	**source** hedonic pleasure, **symbolising** and **supporting** collective meaning and future empowerment	**Theme 2b collective pathway activities** the student was inspired by her research to create an **enjoyable** way to **work towards** a future goal	devising for a joyful and normal **social practice** - a party - to convince others of the desirability and feasibility of sustainable renovation (e.g. solar panels)

Move Mind by Kiki Ottenhoff	enrich daily routine by prolonging a specific positive experience and invite new habits in the home context	**habit-changing** effort **supporting** happiness-enhancing habits a **symbolic** representation of a meaningful activity	**Theme 3a resource preservation** we interpreted this as leading to sustainability by supporting **happiness-enhancing habits**	enabling transfer of a joyful habit from outside to inside the home. As a side effect, this also saves energy because **less heating** is needed
ReLove your shoes by Felix Marschner	facilitate emotional connection to re-appreciate the old, foster dedicated care of possessions	**enabling** an experience of emotional connection through dedicated care (bittersweet chores)	**Theme 3b material preservation** the student saw this as leading to sustainability by supporting **attachment**	direct **material** saving through preservation and non-replacement of material artifacts
Explor-dinary by Julia Mattaar	take notice of the environment you traverse daily to discover the beauty in ordinary things	**source** hedonic pleasure **enabling** directing our attention to our daily surroundings, fostering attachment and attentiveness **symbolising** the everyday as the extraordinary	**Theme 4** we saw this as facilitating **broader insights**. **Awareness** of surroundings is preparation for sustainable ideas and responsibility	**active involvement** and accomplishment of taking note of the surroundings of the home enhances caring and engagement with it, inspiring to **tend to** it

In the sustainability studio, the three featured students made the realisation themselves that they could 'cross over' into subjective wellbeing, whereas in the wellbeing studio only one of the three purposely made this crossover. The other two students developed designs in which the user is not actively or primarily concerned with sustainability, and instead reduces resource or material consumption indirectly or gains broader insights through personally desirable activities. This has also been previously identified as a strategy of facilitating sustainability (e.g. Lorek & Vergragt, 2015). The projects are presented in the following per 'in-between' theme.

3.1 THEME 1 Open reflection: a hearth fire night

Justus Kuijer designed for people's life with new technologies in a renovated home, e.g. a new floor heating system. It is pleasant to the touch of the foot and you don't need to turn it up much to feel warm. But there is no radiator anymore; the control becomes a small box on the wall with numbers on it.

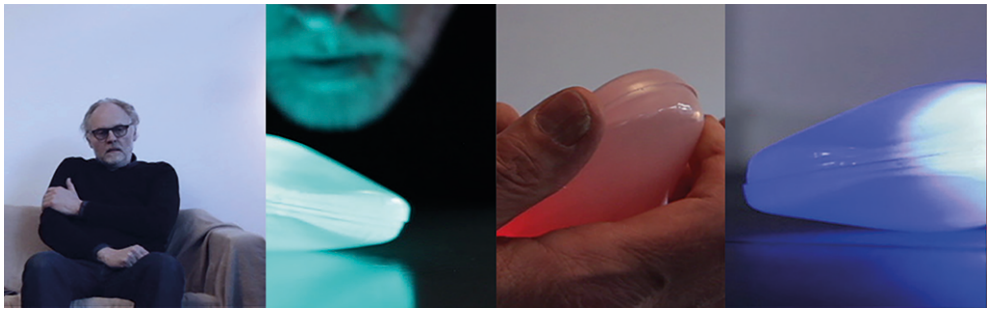

Figure 1 Justus Kuijer's project Colour pebble. A focal point in the home, like a hearth fire.

In this design (Figure 1), people can directly influence the warming up or cooling down of their new floor heating from anywhere in the house. It enables people to see and feel what the heating is doing. When warming up, the pebble glows red, when cooling down, blue, and when holding the temperature, green. This way, you not only understand that it will be nice and cosy very shortly, you also have a tangible presence of the heating, just like people have a tangible presence with a fire in a hearth. When testing a prototype of his design in a home, Justus Kuijer saw how people were appropriating the coloured pebble into their lives. They carried it with them around the house and invented games and new practices with it.

The reflection that this product invites is not a reflection on energy use. In fact, no indication of energy use is given. This object reduces information to a minimum. However, the information provided is immediate and people can integrate it in their lives by giving the pebble and the information their own meanings. In this way, the product facilitates open reflection and conceivably leads to reduced energy use by reducing the reflex many of us will have had at one point: turning up the heating fully to make it heat faster (although that does not make it heat faster). Through the reassurance and direct feedback, we can experience more calm, trust and affection for the heating system in our house.

3.2 THEME 2a Individual pathway activity to sustainability and wellbeing: for example through mindful personalisation of one's new home.

Staffan Till designed for young people who only have a weak identification with their temporary home, for example a room in a student accommodation or an interim home.

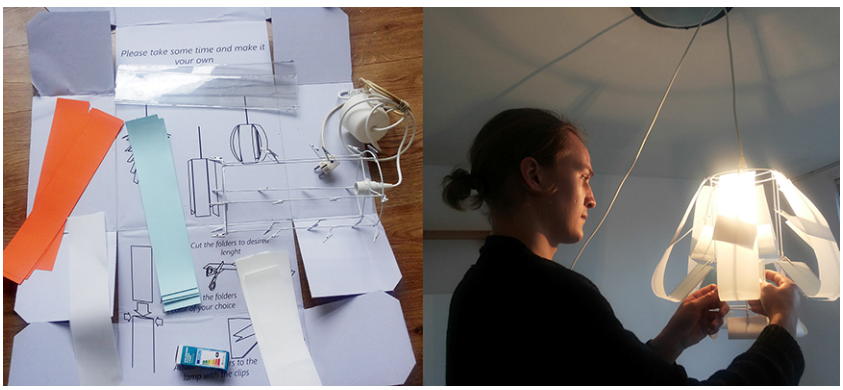

Figure 2 Staffan Till's project, Welcome Home. A warm invitation to engage with the new home.

What if there was something you could use to make the new house your own, in an easy and pleasant way? A welcome-box from the landlord could be waiting for you as you enter (Figure 2). In it, you find a lamp with a lampshade to help you get started in your new home. The lampshade is easy to adjust. You can create pleasant, personalised light at home.

Being able to easily adjust objects of use in the home to one's desires fosters attachment. It makes a use value directly apparent, for example a more pleasant quality of light. This leads to a sense of accomplishment. This in turn may make people more inclined to change things to suit them better. They may be able to integrate this noticing of opportunities for change into their habits. This can tip the balance towards becoming aware of energy in their home (for example a heating that is on high for too long, or a light being on or off) and to adjust it.

3.3 THEME 2b collective pathway activity to sustainability and wellbeing: for example moving pleasurably towards a future goal together.

Sofia van Oord's project was inspired during the analysis phase of her project: she encountered students in a shared flat who had teamed up to pursue their shared passion of making the building they live in more sustainable. Being students, they had no capital and no long-term prospect of recouping the investment. They created a foundation in which they asked alumni for funds, and then convinced the landlord to use the funds for solar panels on the roof, with energy savings going back to the foundation. Impressed by this positive energy and joint initiative, Sofia van Oord designed a communication set for tenants with similar ambitions, so that they could in turn convince fellow tenants and landlords. Inspired by the student culture she herself is a part of, she wanted to combine with having a good time. She threw a party that contained conversation starters - cups, hats, balloons and garlands that would inspire dreams and plans to improve the sustainability of the building they lived in, for example to get solar panels (Figure 3) and support collective meaning and empowerment. The party-set she iteratively developed also contained ways to then engage stakeholders with the resulting ideas, for example by sending a letter to the landlord.

A participant: "Then we can build (the ideas and communication tools) ourselves, that's really nice!"

Figure 3 Sofia van Oord's project, The party set. An enjoyable way to embrace and communicate sustainable options.

3.4 THEME 3a resource preservation by enabling happiness-enhancing habits

Kiki Ottenhoff's project goal was to help young (15-30 years) amateur ballroom dancers to prolong the feeling of excitement and fun that they have during a ballroom dancing lesson at home. She tried out different design ideas like stickers of footsteps that resemble a dance move, but realized through user tests that these are too prescriptive (Figure 4). The footsteps would quickly become boring, and participants missed an element of surprise.

Figure 4 Early explorations in Kiki Ottenhoff's project.

Kiki Ottenhoff wanted to leave ample room for the dancers to think back (and forward to) the dance lessons and to practice moves. Kiki Ottenhoff decided to only put a silhouette in the spotlight to ensure that MoveMind is a subtle reminder that fits very naturally in the home environment and can be ignored if so desired. Rather than randomly suggesting dance moves to practice, MoveMind picks up sounds that are already in the environment, e.g. on the radio, and indicates that this is a tune the person can dance to. All dancers who saw the prototype were drawn to it, because it appears like a desirable invitation and not an obligation. Amateur dancers are already motivated and excited about their hobby. MoveMind becomes a symbol of it, enabling them to savour it and get active (Figure 5).

The student herself was not too keen on this being regarded as a sustainability-related project, since she thought it might dim the wellbeing focus of her idea. However, we noticed a side effect: the more active activities like dancing would become a normal thing to do at home, the less heating people would need. Being cold at home sometimes results from immobility. While this example only applies to people who already have a dancing hobby that they love, the design direction opens up intriguing possibilities for sustainable design.

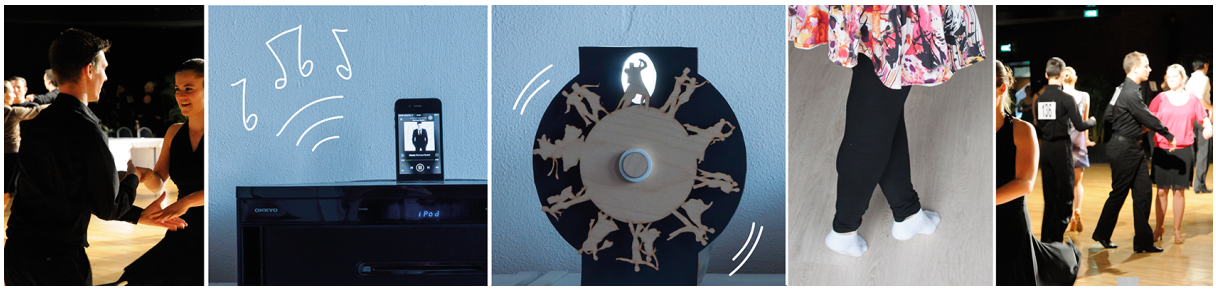

Figure 5 MoveMind, Kiki Ottenhoff's design for happiness-enhancing habits with the fortunate side effect of preserving resources.

3.5 THEME 3b material preservation by enabling emotional connection through dedicated care or... bittersweet chores

Felix Marschner's goal was to facilitate young adults, who like to follow trends, in building an emotional connection to possessions, and use them over a long period of time despite changes in fashion. He sought to foster attachment through re-appreciation of the existing through detail-focused care. He identified five clusters of possessions: 'hot new stuff' might eventually become ‘obsolete and outdated’, a ‘memento’, or ‘evergreen’, but it can also work the other way around: an object that is ‘usually used’ but with reduced value or outdated can gain new value and use as an 'evergreen'. He then sought to support this effect with regards to sneakers. Participants perceived initial prototypes that facilitated efficient cleaning as a mandatory and formal, unloved chore:

“Phew, that takes long...”

“It feels like something mandatory... not satisfying.”

Conversely, with a new kind of cleaning kit that enables users to painstakingly focus on details and intentionally take time (thus, at the deliberate cost of efficiency), some people realized that they still liked their shoes and that they now looked better than before – both incentives to start wearing them again (more often). To create an intimate setting, the rubber lid of the kit can be used as a mat in the living room or even sofa and the collection of tools conveys an entire ritual (Figure 6). The kit is branded to appeal to young adults, who do not usually associate maintenance and cleaning utensils with high-value branding. Some qualities the new kit evoked, according to participants:

“It felt very purposeful and engaging.”

“It was slower, but also more precise. I liked the experience of it.”

Figure 6 RElove your shoes, a sneaker cleaning kit by Felix Marschner that fosters attachment to shoes through the practice of taking dedicated care.

3.6 THEME 4 broader insights

Julia Mattaar's goal was to enable people working in 9 to 5 jobs to consciously take notice of their environment while on their way to/from work. The experience should enable people to discover the beauty in ordinary things, in an unforced and subtle way.

Julia Mattaar found in her research that people appreciated a slight variation in their daily routine, but this interruption needs to be as subtle as possible. Her attention soon turned towards the little things one can notice about one's environment, and the potential for small surprises by seeing the familiar environment through different eyes. Themes like 'something symmetrical / green / soft' invite people to look at different things than they normally would. Taking notice, adding variety and capturing it with a photo, keeps the activity interesting over a longer period of time.

Julia Mattaar's design ‘Explordinary’ is a smartphone app that offers the user one theme at a time (Figure 7). The user receives the challenge to find something in his/her environment that fits this category. Once a picture is taken for a certain theme, the user can view the pictures taken by nearby users for that same category, which could tempt him/her to also locate these. After completing a number of themes, the user will have the opportunity to order a set of postcards with a selection of the taken pictures. The cards can be kept as a physical memory or sent to a friend, making the everyday route as special as a touristic highlight.

At first sight, this last project seems far away from sustainable design. Yet it is close to insights that already exist in the field: a broader engagement with a neighbourhood is a useful prerequisite to any initiative seeking to engage residents in neighbourhood or home improvement efforts (Breukers, van Summeren & Mourik; 2014, Boess, 2015). A tool like this could stimulate people to realise their own values and needs for their neighbourhood, and learn to look more closely than usual at what makes up our environment.

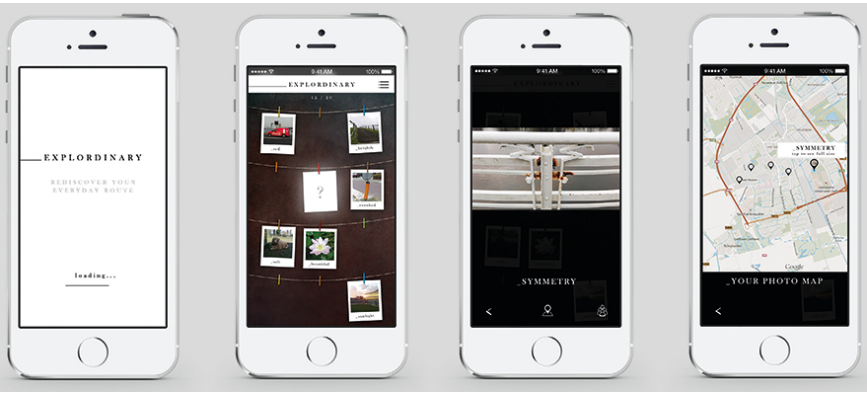

Figure 7 Julia Mattaar's project Explordinary, a smartphone app to take notice of the local environment.

4. Discussion

In the students' work, we identified four 'in-between' themes for possible design goals that led to the added benefit of either wellbeing in a sustainability project, or sustainability in a wellbeing project. The four themes are:

As added benefits in design for sustainability:

- Open reflection via an object that people can appropriate

- Via pathway activities evoking mindfulness or pleasure

As added benefits in design for wellbeing:

- Resource and material preservation by stimulating wellbeing in areas where resources or material can be saved
- Broader insights into an aspect of daily life facilitate engagement with it, which is also a prerequisite for many sustainability initiatives.

Positive experiences as goal

The projects all sought to enable a positive experience of subjective wellbeing of some sort, with behaviour changes merely being a consequence of that primary goal. For example, Sofia van Oord's and Staffan Till's pathway activities and Julia Mattaar's broadening activity enable people to discover new possibilities. People rather than design processes take care of the behaviour change that in turn leads to iterations in concepts.

Wellbeing and practices

People's needs for wellbeing are part of the experience design literature (Hassenzahl, 2010). The practice framework as discussed by Kuijer and Bakker (2015), on the other hand, emphasises normality as a condition of people's sustained engagement in practices. The students' projects often bridged those concepts. An example of connecting with normal practices is Sofia van Oord's party set, that enables people to approach something unfamiliar and unexpected, a future renovation, via the pathway activity of a pleasurable and meaningful party, an activity they already know as normal. Another example is Julia Mattaar's enhancement of a normal daily routine through directed awareness, which conceivably has the added effect of broadening people's mind and becoming more open towards changes than they would otherwise be. As inspiration in their projects, some students used existing insights from both wellbeing and sustainability research. Justus Kuijer's Coloured Pebble and Felix Marschner's RElove your shoes were both inspired by a practices approach to design (Kuijer and Bakker, 2015), yet applied it differently: Justus Kuijer, by designing for an extremely simple practice that leaves space for appropriations and ideas, and Felix Marschner, by designing for a practice in which people interweave possessions with an activity of care. RElove your shoes was also inspired by Chapman's (2009) emotional durability framework and Russo's (2010) analysis of love for products.

Experiences and sustainability as side effect

Products and resources can escape the rapid cycle of consumerism if the user and the product or resource becomes connected in shared stories and the unremarkable fabric of daily life. The RElove kit was designed as an object of delight in itself, but key to the project are the interactions with it, facilitating an intimate chore to nourish the passion for and commitment to the shoes. Material preservation is the side effect. Similarly, Kiki Ottenhoff designed MoveMind as an object of delight that would become intimately connected to someone’s favourite activity, dancing, with the side effect of resource preservation.

Generalisability to society

Kuijer and Bakker (2015) argue that life practices emerge as historical, social and material rather than individual phenomena. While we agree with this position, the work presented in this paper reveals the benefits of a careful focus on wellbeing when designing for sustainability. This focus creates unexpected scenarios that nonetheless connect with what people experience as normal, as acceptable, practicable and desirable. To connect the tri-partite practices model of skills, stuff and meaning with the focus on wellbeing, we note that the latter generates insights for possible links between the three parts of practices. Such possibilities, or one might also call them scenarios, should always be iterated further in the context of use, with and by people. Citizen stakeholder groups are increasingly networked on the topic of sustainability, and designers should seek their collaboration and influence. The students featured here closely connected and iterated their projects within real-world situations and how people live their lives in them.

Goal setting in design

This research arose from two connected problems for goal-setting in design: a double focus, here on wellbeing and sustainability, and an approach to design that included, built on and adapted people's life practices. Design operates in a situation of uncertainty and complexity, which has led to multiple design tools that enable us to simulate various aspects of reality and to open the design process to participation and to a broader societal concern (Lee, 2008). The notion of 'designs with benefits' leading to 'in-between' design goal themes, we expect, can be a helpful approach to remind us to open up the design process and to design with people, rather than on people. We identified four such themes in a sample of six out of thirty projects, yet there may be more.

Looking back on the brief for the sustainability students, there is a clear need for careful briefing as design for sustainability is a behaviourally complex topic that needs skills development beyond simply setting it as a goal in the educational domain. The same goes for designing for wellbeing. Some students working on wellbeing had experienced hesitant reactions to the suggestion that their work might also benefit sustainability. The term seems to have evoked connotations for them that would diminish the intended wellbeing effect. If students – and others – have those kinds of reactions, sustainability surely needs to shed its image of manipulating or depriving people of something. The design goal themes presented here illustrate a first step in this direction. Fortunately, research evidence underscores that environmental and personal wellbeing can be favourably compatible rather than mutually exclusive (Corral Verdugo, 2012; De Young, 1996; Kasser, 2009). In this paper, we widened this perspective to the design field by capitalising on the crossover of wellbeing and sustainability and opening an intriguing new area of deliberately designing for the in-between.

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