

Towards wise experiences: The role of wisdom in design for well-being

Abstract

Smart products make our lives easier, because we seek for efficiency in life. However, the concept of smartness can have shortcomings for the design contexts of well-being and health, which would require a more tactful approach to deal with sensitive situations. In this paper, wise products as a concept is presented as a natural evolution to smart products. The paper looks for a definition of wisdom suitable for the context of experience design by borrowing perspectives from philosophy, phenomenology, and psychology. The psychological processes underlying the experience of wisdom (cognitive, affective, reflective, and conative) are then mapped on to product experiences facilitating wisdom. With the findings, three forms of product experiences have been proposed. First, the product is inherently wise (knowledgeable & flexible); secondly, user becomes wise (self-determined & assertive) with the product; and finally, both user and product become wise (empathetic and supportive) through continuous interactions. The paper concludes with the suggestion that wise products with their rich properties offer ample opportunities for human flourishing and as a result make our lives better in the long-term.

Keywords

Wisdom, wise products and experiences, human-product interactions, experience design, design for well-being.

1 Introduction

Facilitating human lives has always been the focus of traditional and present-day product design strategies. From scissors to cars and from washing machines to smart phones, objects have been designed to compensate for the lack of human skills and capacity. More than 20 years ago, Norman [1] suggested that people needed smart products to feel smart and efficient. Nowadays, smart products support people almost in every aspect of daily practicalities and even in social contexts. Smart products and other designed objects make our lives easier; because, we feel more complete, capable, and autonomous with their presence and functionality [2][3]. However, does having an easy life equate to a better life? Do people still value being smart to have good quality of life? Are there other ways to improve the quality of life through design?

Design for subjective well-being, as a new design field, tries to answer questions such as above. According to Desmet and Pohlmeier [4], three high-level personal goals that underlie people's need for a better life are the main ingredients for design for subjective well-being. That is, people strive for *pleasure* (e.g., having fun, enjoying being free of problems, relaxing), *virtue* (e.g., giving the right decision, acting properly), and *personal significance* (e.g., being a resourceful person, achieving personally set goals). If all these factors are carefully considered and proficiently applied, the resulting designed objects can have a big impact in our long-term

happiness and well-being. Considering the current design approaches for well-being, perhaps what people need is not more products that make them smart, but products that empower them to achieve and maintain their full potential in a healthy way on physical, mental, and social accounts. Perhaps, people need new products that cultivate wisdom so that in return people can become a little wise too.

1.1 Shortcomings of smart products

As much as smart products support our modern life styles to a great extent, our experiences with them over the years indicate negative effects. By making products smart, designers also create product characteristics that can have unwanted effects on people. Imagine our daily interactions with products that have 'smart' qualities. For example, mobile phones, navigation devices, alarm clocks, televisions, ovens have intelligence embedded (with an operating system, chips, sensors, and memory), can sense activities, collect data, and autonomously take action when needed. As a result, such products demand that the user acts in a desired way; they *exhibit an obvious sense of righteousness* and *show authority* by insisting on drawing attention until the user responds; they are supportive for their own purpose but also very intrusive in the user's other daily rituals creating momentary discomfort while fulfilling their functions. These are short-term positive and negative effects encountered with smart products. While smart products aim to have immediate positive effects, their long-term negative effects should be considered in the design processes. For example, increased versions of autonomy or intelligence embedded in smart products can potentially harm users' act of judgment and sense of control of their lives. In the long-term, interactions with smart products can make users *lazy* in daily events and *less intuitive* towards the actions to be taken, insensitive to their surroundings, *distant* to basic functioning of life, and eventually *dependent* on products. While avoiding such unwanted effects, designers could also reconsider the supporting role of products in the long-term with topics such as wellbeing and healthy life-styles in mind.

1.2 An alternative view?

Imagine a digital alarm clock scenario with the Sleep Cycle (Figure 1), an app for smart phones with accelerometer, by which users again set the alarm clock

to wake up at a certain time. Sleep Cycle monitors users' movements during the nighttime in order to determine in which sleep phase people are in (light / deep sleep or dream state) and only wakes people up when they are in the lightest sleep. The user needs to be *flexible* with waking up times; because, by respecting the user's sleeping state, SleepCycle has a window of 30 minutes for its alarm sound to go off. As a result, the user is supposed to wake up *less grumpy* and start the day *more energetic*. Thus, the SleepCycle, as a smart product, is concerned with the user's immediate context of morning rituals and aims at a pleasurable experience. That is, waking up the person is not the most important function of the product but monitoring the best moment to wake the user up is the essential role of the product. Sleep Cycle is a step closer to becoming a *wise product* because of its *sympathetic*, *humble*, and *suggestive* interaction qualities, its *flexible* and *considerate* behaviour, and *positive* effects on users by making them *open for ambiguity* and *prepare them for uncertainty*.



Fig. 1. Sleep Cycle, an alarm clock app, analyses users' sleep cycle for the optimum wake-up time.

(Image courtesy of <http://www.sleepcycle.com>)

However, such a product concept, which is promising to be wise, can still be improved to be and act wise. Sleep Cycle could further consider the broader context of the user in addition to the user's morning rituals so that it has more insight into the user's current needs and emotional state. Sleep Cycle could eventually have a situation-based interaction with the user and choose behaviour apt for it; its effect on the user could go beyond immediate pleasure and tackle long-term happiness of the user. As a result, Sleep Cycle would offer the user an opportunity to take control

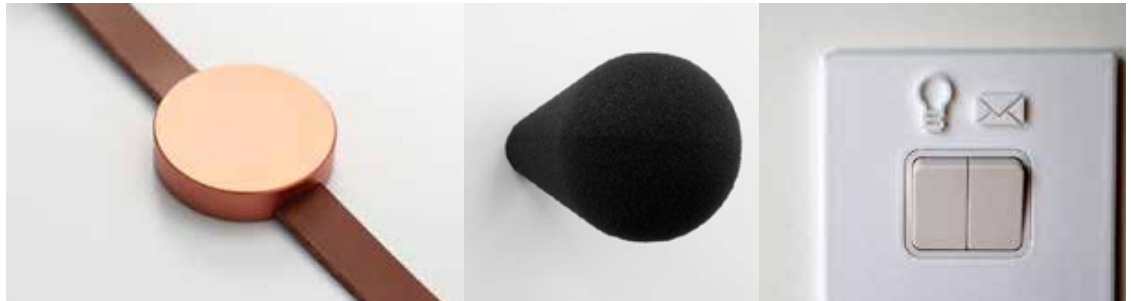


Fig. 2. Some examples for potentially wise products. From left to right: Durr, a shimmering bracelet by Skrekstore; Statistical clock by Dunne & Raby; and Nim, an email switch by Dawes. (image courtesy of <http://skreksto.re/products/durr>; <http://www.dunneandraby.co.uk>; <http://brendandawes.com/projects/sixmonkeys>)

of their lives by making them realize the importance of starting the day afresh and respecting their own biological rhythm. The wise Sleep Cycle would have a reflective role (as opposed to practical) in users' lives: to encourage users to reflect on the basics of life and on their priorities.

2 From smartness to smart products

The Oxford dictionary definition of 'smart' indicates two sub-concepts: being *quick* and having *intelligence*. That is, smartness pertains to quick-witted intelligence provided momentarily as a response to an external stimulus. Smart devices are those that contain digital intelligence and can therefore solve problems and/or autonomously take action when needed. The notion of smart products was introduced in the 1980s with digital alarm clocks, microwave ovens, video-recorders, fax machines or ATMs and in the 2000s smart products included navigation devices, PDAs, phones, autonomous vacuum cleaners, and thermostats. The main function of such products was merely utilitarian: Through user input or data collection and with limited capacity of data interpretation, smart products served a specific need, which was to complement human mental and physical faculties in order to make humans smart and efficient [1]. More importantly smartness was initially considered as an added attribute to the existing product categories. For example, an autonomous vacuum cleaner differed from a normal vacuum cleaner, because it had the ability to function independently of the user. However, with the advancement of technology in 2000s, smart products also existed as a separate product category (e.g., navigation devices, PDAs). These products contained complex information technology

systems and had embedded multi-functionality in order to support users with complex mental tasks and predict the future user-context. Thus, problem-solving nature of the intelligent/smart products has become less of a challenge and more of a mundane design task.

In the late 1990s, first scientific definitions of smart products were given [5][6][7]. Early definitions included key descriptors such as *electronic*, *high-tech*, or *intelligent*. Rijdsdijk and Hultink [8][9] defined *smart products* as products containing information technology in the form of micro-chips, software and sensors and therefore able to collect, process, and produce information. Rijdsdijk and Hultink further explained the role of smart products through seven dimensions: autonomy, adaptability, reactivity, multifunctionality, ability to cooperate, human-like interaction, and personality. A smart product can possess one or more of these dimensions to a lesser / higher degree.

In the current decade with high access to connectability (Wi-Fi, Bluetooth, or GPS systems or complex connected networks such as Internet of Things) and easy data collection through mobile devices and wearable technology, smart products have taken additional roles; i.e., to support people's physical, mental, and social health. Nowadays, people are carrying or wearing portable devices (smart phone apps, Nike+, Fitbit, AIRO) that monitor their physical activities, measure their stress levels, or help them socially connect. By doing so, intrinsic human needs such as competence, autonomy, and relatedness [3] become partially satisfied in the 21st century life styles. Thus, supporting subjective well-being and social development has become a central aspect in the design and development of smart products.

Furthermore, some critical design examples (see Figure 2) indicate simple and elegant solutions that emphasize a new function for smart devices, that is to make users *reflect on daily phenomena*. For example, Skrekstore has designed Durr, a shivering bracelet or in more common terms, a faceless watch that only indicates time through small vibrations every five minutes. The main function of Durr is to make people aware of time perception and train them to rely on their biological rhythm, which means that users will start to gain control of their body. Similarly, inter-connectability of objects (e.g., through Internet of Things) could also result in similar effects on the user. For example, Dunne & Raby, two design professors, came up with Statistical Clock, which checks BBC database for fatal traffic accidents and speaks out a number that indicates the fatalities in that given moment of life. Again, users are triggered to reflect on what the number heard represents in terms of the value of human lives. A third design example is from Brendan Dawes. Dawes designed Nim, which is essentially a light switch to physically turn email off when one leaves the office for home. Nim makes a person question the work-life balance and provides opportunities for people reflect on their priorities in life. Such designs with speculative nature exemplify a natural shift from smart products to wise products.

The aforementioned design examples are symptoms of the change in history of product design: i. not all products need to be designed for utilitarian functions, ii. daily practices and interactions with objects operate in alternative ways, and iii. a new domain for the use of available technology and the databases seems to be emerging. Let us further elaborate these changes. *First*, human needs have been shifting from psychological and safety needs to higher level needs such as belongingness, esteem, and self-actualization (see Maslow's hierarchy of basic human needs [2]). These needs are also in line with intrinsic motivations for people to engage in daily activities and objects such as competence, autonomy, and relatedness [3]. Furthermore, products' impact in our lives also goes further than the individual and concerns people in relationships and in communities. *Secondly*, people started to enjoy the presence of new technologies and what the technology allows them to do. People instantly document important aspects of their lives, publicly share them, wear high-tech devices, and demand immediate response from systems. As a result, our interactions with objects have become more

sophisticated but less intuitive. *Thirdly*, technologically speaking, our society has arrived at an age where collecting data is no longer an issue; people are even willing to help collect data through social media or wearable devices. However, data alone are meaningless. It is more interesting to turn data into information and then into knowledge, and even into wisdom (see Rowley's DIKW hierarchy, [10]). Ackoff [11], Zeleny [12], and Rowley [10], explain that *data* represent properties of objects, *information* is what the objects are, and *knowledge* is how those objects function life. According to these authors, current technologies can achieve until the interpretation of data as knowledge. However, there is a *wisdom* level, which elaborates why those objects exist in life and that level is the most challenging to currently achieve. Once achieved, data could turn into wisdom and systems, using wisdom-related knowledge, will be able to respond to the current trends in supporting well-being of people and societies. As exemplified, the notion of smartness associated to products and systems has come a long way since the 1980s as a result of the shift in and awareness to current human needs, daily practices with objects, and the advancement of technology. However, the philosophy behind the smart products dates back to the early days of smart products. For that reason, wisdom can be a new paradigm for smart products of the 21st century.

3 Wisdom and its role in well-being

According to the Oxford dictionary, wisdom pertains to *experience, knowledge, and good judgment*. Thus, wisdom is fundamentally different from smartness: Smartness relies on quick judgments based on intelligence whereas wisdom relies on the interpretation of multiple, repetitive, or longitudinal life experiences. Earliest studies on wisdom date back to the Aristotle, which relate wisdom to ethical decisions and being virtuous [13][14][15]. Baehr [16] discusses two types of wisdom, i.e., practical and theoretical. Theoretical wisdom concerns the accumulation of knowledge and experience and seeks truth in a universal sense; whereas practical wisdom (also known as 'prudence') is reaching excellence in decision making and acting on critical situations often through common sense regarding knowledge discerning good from bad. Thus, practical wisdom would help individuals flourish, cope with dilemmas or help them resourcefully explain their

knowledge on concrete life events. The experience of wisdom therefore is associated to intuition, values, and emotions, which should help an individual's process of wise decision-making.

Modern views on wisdom [15][17][18] do not focus on excelling as an ultimate human being and is more tolerant towards individuals and suggest that wisdom can be cultivated and acquired in the span of life. Similar to the ancient views, the acquisition of wisdom inherently requires time and effort; education (gaining knowledge and practice), personal experience, and reflections on highly emotional situations (e.g., dealing with dilemmas, uncertainty, or difficult life events) are fundamentally necessary [19]. As a result of such complex factors, people become knowledgeable, mature, tolerant, empathic, experienced, and intuitive. Furthermore, Glück, Bluck, Baron, and McAdams' [20] definition of wisdom is based people's daily experiences. According to Gluck et al. wisdom can have three forms: knowledge and flexibility, self-determination and assertion, and empathy and support. *Knowledge and flexibility* relies on the knowledge gained from experience and operates with the tolerance for both compromise and uncertainty. It concerns applying previously gained knowledge where possible but also accepting uncertainty and trade-offs. *Self-determination and assertion* relies on personal capacity and beliefs and concerns taking control of a situation, relying on intuition, and following one's goals or priorities. *Empathy and support* considers other peoples' perspectives and feelings, and offers or provides social support.

The aforementioned human qualities pertaining to wise people are symptoms that cognitive, affective, reflective, and conative processes underlie experiences of wisdom [19][21]. *Cognitive processes* allow people to obtain knowledge. It is by experience of small and big life events that people gain knowledge about how objects, people, and places are related within a given situation. People learn to make links between cause and effect. Here, Rowley's [10] wisdom hierarchy explains the cognitive aspects of wisdom: not only the identity of the objects but also their role in life has to be understood in order to answer the 'why' questions related to them. *Affective processes* pertaining to wisdom favour eudaimonic rather than hedonic emotions. Thus, temporary feelings are learnt to be discarded in order for greater gain in life. Because, wisdom is most needed when people undergo important and emotional life

events that cause dilemma or have uncertainty (e.g., having to move to a different country for love, having to quit job after having children, or feeling depressed and worked up). As a result, emotion regulation is needed to have emotional mastery in such critical situations. Although affective processes are active in the experience of wisdom, the decision-making processes might be free of affect. The aim of wisdom is to regulate the emotion (e.g., reduce the intensity of the experienced negative emotion) again through reflection. As a result, action tendencies are motivated by cognitive and *reflective processes* not by emotion. Reflection is a process that evaluates and reappraises the current situation with past events for the purpose of predicting the future. The reason for emotion regulation through cognitive and reflective processes is to activate the *conative process*, i.e., to be able to properly act on critical situations. Baltes and Smith [19] propose a framework for how wisdom can be applied in the conduct and understanding of life. According to the authors, wisdom is applied to *life planning* (which future life goals to pursue and how?), *life management* (how to deal best with critical problems?), and *life review* (how best to make sense of our life history and past experiences). The multidimensional nature of the experience of wisdom should be able to help people in dealing with these categories of important actions in daily life. Bluck and Glück [22] also consider wisdom as a means to improve one's quality of life; people, by learning lessons in life, change their attitude towards life and focus more on how they see things rather than what they see. Ultimately, people strive to produce novel solutions to their problems or the critical situations in which they are involved.

All in all, the literature on wisdom supports the possible design directions envisioned for positive design and design for subjective well-being. The three components of positive design (design for virtue, pleasure, and personal significance) can be traced back to the components of the experience of wisdom. Essentially, human flourishing is at the heart of the theories for both positive design and wisdom. Thus, the design for wise products would fundamentally aim at fostering better and healthier lives by offering users the possibilities for personal development, increasing awareness in the self, others and environment, and becoming more sensitive towards the consequences of current events.

4 Prospective characteristics of wisdom implemented in product experiences

4.1 Situations

Critical situations during which users face difficulties to cope with will define the need for wise products. Critical situations may also vary. One way to recognise them would be to observe the emotional impact of critical events on people. For example, in one case, people could be simply stressed due to momentary complications or high-demand for attention; in another case, people may be overwhelmed because they are going through life-changing events or they have experienced a negative event [20]. Wise products do not aim to solve such critical and problematic situations, but rather help people prevent, avoid, predict, and overcome them and possibly regulate the occurring emotions through different approaches such as using empathy and expert knowledge on users' daily routine and life events.

4.2 Role

Wise products are intended to play an important role in fostering better lives (e.g., subjective wellbeing). That is, the concept of wise products is not driven by practical functionality as smart products often are (i.e., increasing performance and efficiency in life), but rather driven by motivational functionality (i.e., achieving intrinsic human values such as gaining self-confidence). As a result wise products tackle personal and social issues hindering well-being and human flourishing (e.g., personal development, mental and physical health, bodily awareness, social interactions). Therefore, the aim would be to support, encourage, and empower people in their quest for meaningful and long-term happiness.

4.3 Function

What procedural properties of wisdom are relevant to the human-product interactions and how can they be implemented in the function of wise products? Again, the mental and emotional activities underlying experience of wisdom observed in the literature review [19][21]) should be visible in the product experiences concerning wisdom. These activities include cognitive, affective, reflective, and conative processing of the critical situation or its components. The function of wise products then should be to trigger these mental and emotional activities during human-product

interactions. With *cognitive* processes, the user/product makes sense of the critical situation, identifies its components, and contextualizes the problem. With *affective* processes, the user/product recognizes and acknowledges the occurring emotion (and its magnitude) and tends to regulate it. With *reflective* processes, the user/product reappraises the negative meaning of the situation and tends to find positive motivations for the future impact of the critical situation. Finally, with *conative* processes, the user/product acts confidently on the situation. These processes are prerequisite and complementary to the experience of wisdom and thus should be active during the human product interactions pertaining to wisdom. Especially, the affective (i.e., emotion regulation) and reflective (i.e., reappraisal) processes are key to wise experiences.

4.4 Effects & Behaviour

The long-terms effects of wise product on users have been mentioned earlier in the paper. While the ultimate goal would be to cultivate wisdom in the society and incite human flourishing, this paper focuses on the positive contribution of wisdom on subjective well-being and physical, mental, and social health. In the short-term, wise products also have a direct effect on their users. During human-product interactions, wise products should make their users feel empowered, supported, knowledgeable, mature, tolerant, reflective, controlled, aware, and conscious (see also Ardel's [24] comparison between intelligence and wisdom for a detailed account). Furthermore, in order to have such effects, wise products' behaviour should be empathetic, sympathetic, suggestive, intuitive, flexible, motivating, autonomous, empowering, supportive, and caring.

5 Wise product experiences

So far, I have used the term 'wise products' quite loosely to present a new paradigm of products as opposed to 'smart products'. However, the objective of design for wisdom is not necessarily to design products that are wise, but to demonstrate that wisdom can emerge in the mutual experience between the product and the user.

5.1 Basic framework for wise product experiences

To be able to discuss the characteristics of wise product experiences, the framework in Figure 3 will be used. This figure essentially summarizes the basic factors that

influence user experiences with products [23] and it also frames the special conditions for wise experiences to happen. These factors will be further explained in detail below using the figure and later used for conceptualizing wise products experiences.

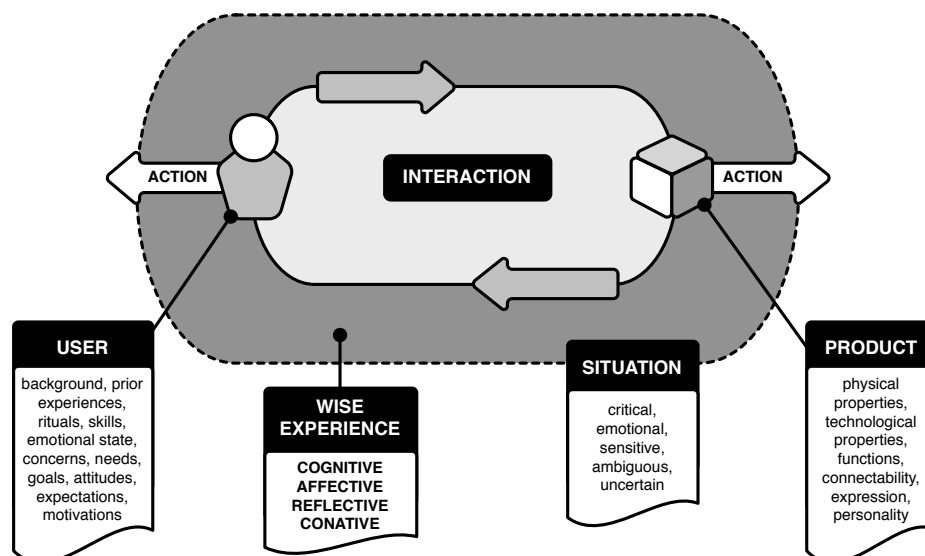
Product properties include sensory properties (e.g., shape, sound, materials, parts), functional properties (e.g., usability, actions, capacity, mechanisms, electronics), and meta properties that indirectly influence product experiences (e.g., situations, culture, locations, related products). Product related physical properties, function, and their roles in daily lives are deliberately designed. *User* related properties, however, are more complex and often idiosyncratic either to a specific user or a group of users that share the same concerns, goals, and attitudes. Users in general feel a certain need and have a clear motivation to use a product, which shape their expectations about the product properties described above. Furthermore, emotional state of the user, their background and prior experiences with products in particular and the world in general influence how they interact with and experience the product. *Interactions* depend on the user and product properties and result in basic *product experiences* (aesthetic, meaningful, and emotional). Users' interactions with product (its physical properties, parts, functionality, etc.) determine how they identify and build meaningful associations with inherent product

properties; consequently, the identified product affects the user either on an aesthetic or emotional level. Furthermore, context (e.g., specific situations, culture, communities) plays an important role to frame product experiences and further actions that need to be taken. In the case of wise product experiences, the context is named as *situations*, which are mainly critical but also emotional, sensitive, ambiguous, and uncertain. Finally, *wise product experiences* should occur within these critical situations. As mentioned above, a typical wise experience yields four stages of mental processing: cognitive, affective, reflective, and conative.

5.2 Three forms of wise product experiences

To summarize wise product experiences and their roles in our daily lives, the three forms of wisdom emerged in Glück et al.'s study [20] will be adopted to the design context (i.e., knowledge and flexibility; self-determination and assertion; and empathy and support). Products facilitating experiences of wisdom could possibly have these forms or emerge in situations that require these forms of wisdom. Each form of wisdom can tackle the components of human-product interactions and product experiences from different angles. The first form of wisdom, *knowledge and flexibility*, can be applied on the product. Because, this form of wisdom relies more on factual knowledge and a sagacious attitude for its utilization. Products can acquire wisdom

Fig. 3. Conceptual framework for wise product experiences



related knowledge (i.e., factual and experiential) rather easily thanks to the ICT technologies and smart systems, whereas for people acquiring factual and experiential knowledge takes long time. As a result, with this approach *product becomes wise*.

The second form of wisdom, *self-determination and assertion*, can be applied to nurture wisdom in users. Because, this form of wisdom concerns human values and helps people discover their individuality on mental, emotional, and physical accounts. As a result with this approach *user becomes wise* with the help of designed objects.

Finally, the third form of wisdom, *empathy and support*, can be applied both to the product and to the user. Because, this form of wisdom tackles social aspects such as communication, negotiation, and cooperation in which more than one entity needs to interact to understand different/opposing views. Therefore, with this approach *both the user and the product become wise* through their mutual experiences and human-product interactions. As a result, wisdom can be acquired, shared and experienced by both entities.

5.3 Three examples of wise product experiences

The aforementioned approaches can also be taken as design strategies to tackle wise product experiences. Below, I will exemplify these approaches in design context and use the basic framework to demonstrate the design interventions for eliciting wisdom. The design contexts used below are borrowed from ongoing student activities (i.e., master graduation projects) concerning design for wisdom (and well-being) at the Faculty of Industrial Design, TU Delft. The author is involved in the supervisory team of all the project ideas presented below.

Product is inherently wise – knowledgeable and flexible. This design context concerns the application of a digital unlocking system for domestic use. That is, users will be offered a digital key to unlock their house. The situation is critical (ambiguous/uncertain) because users may feel distrust towards the system or even feel threatened with hacking. The challenge for designers is to evoke trust in user that the system unlocks only for the authorized. Therefore, in this scenario, the product has properties of wisdom already embedded. The major components of wise experiences (cognitive, affective, reflective, conative) should operate on the

product level. That is, the product maps users' daily behaviour, pinpoints the problem, regulates users' emotions, reflects on the criticality of the situation, and finally takes action. The final action for the digital lock would be to open (or not) the door. Factual knowledge is embedded in the system by using existing data. Experiential knowledge is obtained through daily observations of the user by a network of connected products (e.g., IoT). With experiential and factual knowledge combined, the product becomes flexible in its decision-making process and following action.

User becomes wise with the product - self-determined & assertive. This design context concerns the application of a mobile app that promotes a healthier life-style for young seniors (55+). The health of this age group can deteriorate quite rapidly, especially if they cannot recognize the symptoms of aging. The situation is critical (emotional/sensitive) because aging is a life-changing event and accepting to live with it can be very confronting. The challenge for designers is to make the user self-aware about the current state of their health and conscious about future consequences for living an (in)active life. Therefore, the user needs to gain a wise attitude for preventing health issues. The user learns factual knowledge about health and functions of body offered by the product and relevant experiential knowledge through practices guided by the product. User emotions (e.g., hesitation or distrust) can be regulated by attributing positive meaning to health practices. Potential gains (e.g., long life-expectancy, agility) and losses (e.g., obesity, weak condition) can be reflected upon with the product's motivating intervention. With sufficient emotional and cognitive interventions, the user decides whether or not to act on preventing future health problems. As a result, the user becomes self-determined because s/he feels empowered by the impact of the app and also assertive to take bold steps to act on his/her health. Furthermore, the design of such a product can encompass the properties of a smart product, as long as its interaction qualities indicate confidence, openness, audacity, and willingness to communicate.

Both user and product become wise through continuous interactions – empathetic and supportive. This design context tackles a societal problem such as boredom through a product. Due to

busy social and professional activities, people never have time to be bored. Boredom (i.e., lack of meaningful activities/stimuli) can be beneficial to the organism because bored people, by disconnecting themselves from external stimuli, enter a voluntary reflective process. The situation is critical (emotional and ambiguous), because the person is overactive and has too many options for a desirable activity. The challenge for designers is to intrigue the user to do nothing (i.e., scheduled activities). In this scenario, both the user and product become wise. Product cannot rely much on factual knowledge but on experiential knowledge intrinsic to its user. User identifies daily overwhelming activities and relaxing activities with the support of the product. Both the user and the product exchange knowledge and emotional experiences. Then, both entities put these activities in daily context and life context and discover potential gains and losses. Acting is part of the dynamic relationship between the product and the user. The progressive exchange of experiential and factual knowledge requires behaviour change on both entities and flexibility to adapt to an updated situation. In fact, users become more empathetic with the product and their environment and product becomes more supportive throughout interactions.

5.4 Discussion

The three forms of wise product experiences present us with ample opportunities for design for subjective well-being. The first form (wise product) is a step further from smart products. What is challenging here is the acquisition of factual and experiential knowledge and embedding it in the system providing wisdom to the product. Connectivity is essential for wise products and Internet of Things is a good direction to explore in the collection of wisdom-related knowledge. The second form (wise user) is a typical case of design for behaviour change. The aim of the product is to facilitate wisdom through human-product interactions. Such application of wisdom will have big impact on the physical, mental, and social health of the user. Users will observe a changed attitude towards life. The last form (wise product, wise user) is the most challenging for designers because the occurring interactions are dynamic and unpredictable. Moreover, both product and user change properties over time and desired effects can be observed in the long-term. This form may be more suitable for social issues that require

strong statements. The occurring products may have speculative nature with their novel functionality and aesthetic qualities.

6 Conclusions

In the field of product design, smartness has been explored and adopted as a product attribute that supports people in their daily activities. In this paper, the extreme richness of wisdom as a concept has been illustrated from the modern perspectives of philosophy, phenomenology, (motivational) psychology, and current trends in experience design and societal needs. With a critical look into the literature, the prominent properties of wisdom has been selected and argued as suitable to be applied to the different components of product experiences. Finally, three design strategies for wisdom were presented within the contexts of physical, mental, and social health.

As much as smartness embedded in products would persist to exist for its own reasons, wise products/ experiences, as a new paradigm, should have a special place in product design. That is, design objects of wisdom should aim to empower people in critical daily situations that require it. I further suggest that smartness and wisdom could co-exist because they are complementary concepts. Especially for the implementation of wisdom for subjective wellbeing, a product must first have properties of smartness such as intelligence, autonomy, reactivity, human-like interaction as a baseline, and in addition characteristic qualities of wisdom to have more positive and long-lasting effects on people. As a continuation of Norman's suggestion [1], I believe that current human needs require wise products to stimulate people to act wisely.

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