Design for subjective well-being in interior architecture

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Abstract
Can interior environments engage people in pleasurable and meaningful experiences and thereby have a positive influence on their happiness? This paper discusses why and how interior architects might want to consider implementing ideas in relation to ‘design for subjective well-being’.

Despite of people being the ingredients that bring life to the built environment, it tends to be designed in such a way for them to predominantly only passively absorb the surrounding. Up to date, when designing interior environments, (interior) architects are mainly concerned about the fulfillment of various rather objective considerations. Typical reflections in this respect are: is there enough daylight, how are the acoustics, how is the accessibility and the organization of the inner space? Starting from such premises, the atmosphere of the inner space is given substance. However, empirical studies have shown that long-term happiness is less a matter of one’s circumstances than of the activities that a person engages in. Hence, one could go one step further from viewing the built environment as a static entity, to designing spaces that facilitate desirable activities. In other words, inner environments could aim to stimulate experiences that provide pleasure and meaning to its inhabitants.

Subjective well-being (SWB) is an emerging research topic in the field of design sciences. Design models and strategies are being developed in an effort to increase users’ well-being. However, a detailed understanding of how these insights apply to interior architecture still needs to be refined. For this reason, this paper will firstly outline why interior environments could have the potential to contribute to people’s SWB and thereby to become platforms for the full spectrum of human well-being.

The second section of the paper reflects on how a deliberate focus on SWB will affect the process of designing interior environments. The Positive Design Framework, developed by Desmet & Pohlmeyer (2013), will be introduced to the (interior) architectural community. Interior architects can use this framework as a guide to assist them in the design process of interior environments that aim to contribute to people’s happiness. A number of examples will demonstrate in an interior architectural vocabulary the value that this framework can have for this discipline.
Introduction
In 'The Architecture of Happiness' (2006), philosopher Alain De Botton states: 'One of the greatest (but often unmentioned) causes of both happiness and misery is the quality of our environment: the kind of walls, chairs, buildings and streets we’re surrounded by'. In the book, he argues that where we are highly influences who we can be. This paper tries to answer his appeal towards the community of architects and interior architects, namely ‘that it is architecture’s task to stand as an eloquent reminder of our full potential’. Therefore, the paper will in particular focus on the potential to design interior environments that support pleasurable, meaningful, and virtuous experiences and thus contribute to people's well-being (Desmet & Pohlmeyer, 2013).

Today, people in developed countries are continuously more critical and sensitive about the design of the environments wherein they (have to) pass by or reside (Klingmann, 2007), whatever the exact goal of the visit and the duration of the stay may be. Think for instance about the design of offices, hospital settings and the places we call 'home'. Next to attention for architecture, in the last few decades the ‘inner shell’, or the interior architecture of these settings has also received increasing attention. This is no coincidence, but seems to be rather a consequence of, firstly, the well-developed, extensive material conditions in developed countries, and secondly, of the developments in the professional disciplines of architecture and interior architecture. Up to date, when designing inner environments, many (interior) architects have focused on the fulfillment of rather objective parameters that can contribute to people’s well-being. For instance, when designing interior spaces, the concerned designers tend to reflect about, for instance, the most efficient organization of spaces, the presence of daylight, issues relating to sustainability or accessibility. Starting from such premises, they give substance to the atmosphere of the inner space. In this viewpoint, the inner space is considered as a static, passive platform where human encounters and activities can take place.

In this exploratory paper, we want to go one step further, and elaborate on the potential that interior architecture can have to function as a platform for happiness and human flourishing, i.e. a combination of positive feelings and optimal human functioning (Huppert & So, 2013). Such a vision incorporates a view on interior architecture as an activating and dynamic platform that facilitates the occurring of meaningful activities for its inhabitants. The paper thus firstly explains why interior architects might want to consider implementing ideas in relation to design for subjective well-being (SWB). After discussing the difference between objective conditions and subjective experiences of well-being, the paper points to the value of applying a human-centered perspective in the design process. In a second section, the paper reflects on how an explicit focus on SWB will affect the process of designing interior environments. Here, the Positive Design framework, developed by Desmet & Pohlmeyer (2013), will be introduced as a tool to assist interior architects in their efforts to design for SWB. Examples, discussed in the vocabulary of interior architects and architects who are occupied with the design of interior environments, will help to point to the relevance that the framework can have for them.

Interior architecture as a platform for human flourishing
Researchers from a diversity of domains in architecture have tried to point to the essence of well-being. However, to date, a consensus in this respect has not been achieved (Lee et al., 2001). When thinking about well-being from an (interior) architectural perspective, one can consider the objective conditions of the designed environment as well as of people’s subjective experiences within these. These are also issues that are key to environmental psychology (Kopec, 2006). Typical questions with respect to the first consideration (i.e. the objective conditions of the designed environment) are: ‘Am I physically healthy?’, ‘Do I have a secure shelter?’ The second conceptualization (i.e. people’s subjective experiences in designed environments) relates to questions such as: ‘Can I thrive in this environment?’, ‘Can I develop as a person?’, ‘Does the space foster activities that are meaningful to me?’. In the latter understanding,
There are more facets to subjective well-being than our environmental circumstances.
Interior architecture has the potential to design interior environments that enable people to undertake meaningful activities that contribute to their well-being.

Subjective well-being (SWB) and interior architecture

Subjective well-being will be generally understood here as people’s self-reported evaluations of their lives. This includes the original definition of Diener (2000), highlighting that such evaluations have cognitive as well as affective components. ‘People experience abundant SWB when they feel many pleasant and few unpleasant emotions, when they are engaged in interesting activities, when they experience many pleasures and few pains, and when they are satisfied with their lives’ (Diener, 2000, p. 34). However, SWB as used in this paper also embraces psychological well-being (Ryff, 1989) that further includes aspects such as personal growth and self-acceptance. Finally, as an ultimate goal SWB can lead to human flourishing if several well-being components, such as positive emotions, engaging activities, positive relationships, and meaning are present in combination (Huppert & So, 2013; Seligman, 2011).

A current key question in (interior) architecture is how people experience (interior) environments (Manzo, 2003; Petermans, 2012; Seamon, 2013). If this question is taken one step further, aiming to link interior architecture to research on human happiness, one can ask: can interior environments empower people to flourish in the environments where they reside?

This goes beyond the current common beliefs in interior architecture. Smith et al. (2012, p. 2) recognized that ‘historically, wellbeing and interior design have been linked through the creation of hospitals, doctors’ surgeries and other related facilities for health care and treatment of illness. Recent trends in interior architecture have broadened the scope beyond the medical model of treating the sick, aged and disabled to the wellbeing of all people in their everyday environments (Smith, 2011). However, interior architecture often goes unnoticed in discussions concerning wellbeing’.

A ‘built environment’ always consists of different levels or ‘peels’: architecture, interior architecture, and interior architectural objects. Together, these peels form a ‘whole’ that is understandable and controllable, but that should also be inspiring, meaningful, and empowering from the viewpoint of the people that inhabit the space.

Being happy in an environment is not only a consequence of the architectural shell of the building (i.e. bricks, facade), nor (only) a matter of meeting a requirement list of objective conditions. Instead, being happy in an environment is linked to what people that reside in the concerned environment are able to do with it and in it. In the book ‘A philosophy of interior design’, Abercrombie states (1990, p. 3): ‘... Interiors have a power over us that façades can never have. This is not due to the commonly observed fact that we spend most of our time indoors; it is due instead to the fact that interiors surround us. We do not merely pass them on the street; we inhabit them. When we enter a building, we cease being merely its observer; we become its content. We never fully know a building until we enter it.’ In this citation, the words ‘interiors surrounding us’ still sound rather passive from an inhabitant’s viewpoint, almost as if this person does not have an active role to play here. However, by indicating that people can ‘... become its content’, Abercrombie seems to call for a more people-centered approach in interior architecture.

Abercrombie’s quote inspired the authors to reflect about how places can be interesting touch-points to design for SWB. A simple, straightforward continuum visualizes the desired transition from merely focusing on OWB to also incorporating SWB in (interior) architectural terms:
Up to the end of the 1990s, the way-of-working of many interior architects and architects that focused on the design of interior environments was rather one-way traffic (Edwards, 2011). In their viewpoint at that moment, they knew best how to design environments for the paying client that was sitting in front of their desk. Without consulting the client too much, they tended to consider themselves as the specialists that were able to decide how an (inner) space would best be designed for the client in question (Edwards, 2011). As was mentioned earlier, considerations with regards to OWB were often of leading importance. The user was not consulted very much, and was mainly considered as a rather passive stakeholder. The end results were often rather static environments, to which the user was ‘exposed’. Today, people don’t accept such a relation between ‘designer’ and ‘user’ anymore (Vaikla-Poldma, 2003; Petermans, 2012). In today’s design discourse (but also in public discourse), people want to be heard, and want to see their concerns being translated into the (interior) architecture of the spaces that they inhabit, independent of the length of their stay. This results in the design of environments that addresses people’s concerns, needs, wants, and emotions.

How to design for SWB in interior architecture: the Positive Design framework

The Positive Design framework that was recently developed by Desmet & Pohlmeyer (2013) seems to be a promising approach to consider in further detail for interior architecture. In the following, the framework will be outlined. Furthermore, an example from a master project in interior architecture (Hillen, 2014) illustrates how these insights can allow an interior architect to design for SWB.

The Positive Design framework

In an effort to bring together ‘all forms of design, design research and design intention in which explicit attention is paid to the effects of design on the subjective well-being of individuals and communities’ (p. 6), Desmet & Pohlmeyer (2013) formulated the Positive Design Framework (see figure 2).

Figure 1. Continuum focusing on objective conditions and subjective experiences of well-being in (interior) architecture

Figure 2. The Positive Design framework

Source: Desmet & Pohlmeyer, 2013, p. 7
The Positive Design Framework combines three key components of SWB: design for pleasure (which aims to increase the experience of pleasure and minimize displeasure), design for personal significance (which supports people in pursuing personal goals) and design for virtue (which stimulates people to be a morally good person).

**Design for pleasure**
This component of the framework relates to the experience and feelings of happiness that people extract from enjoying the moment, the here and now. Looking at this component from a designerly perspective, it is clear that design can function as a direct source of pleasure or facilitate pleasurable activities (see Pohlmeyer (2012) on different roles of design for well-being). For instance, the presence of a pet hotel in the direct neighborhood of a hospital environment can bring moments of pleasure to the patients who would otherwise miss their pets. The set-up of the ‘Villa Samson’ in the immediate surroundings of the academic hospital in the city of Brussels, Belgium, is an illustration hereof (UZ Brussel, 2013). Patients are allowed to play with their pet(s) in a home-like environment. This allows them to shortly escape the worries that they experience at the hospital and enjoy the presence of and connection with their pet.

**Design for personal significance**
This component focuses on happiness that emanates from a sense of personal meaning. Pursuing personally significant goals is critical to people’s SWB (Brunstein, 1993). Here, design can be a facilitator to support people to commit to or reach their (future) goals as well as a symbolic representation of personally meaningful values and (past) achievements. Imagine a teenager who is passionate about playing the drums and wants to improve her musical skills in order to join a high school rock-band. This goal commitment will literally bring about a lot of noise in the process. An appropriate space, e.g. with isolated walls, can allow the girl fully express herself, foster her talent, and practice until she is ready for an audition while not “disturbing” those in her immediate surroundings.

**Design for virtue**
This component addresses happiness that is the outcome of morally correct and noble, i.e. virtuous, behavior. For example, Peterson and Seligman (2004) identified six core virtues that are valued across cultures: wisdom and knowledge, courage, love and humanity, justice, temperance, and spirituality and transcendence. A confession chamber in a church is an inspirational example in this respect: the careful design of this enclosed space, e.g. enhanced privacy through auditory isolation, dimmed lighting, and a semi-transparent divider between penitent and priest, stimulates a moment of reflection, serenity, and honesty.

As figure 2 demonstrates, the heart of the framework is where the three components intersect. It is in this area where design stimulates human flourishing, i.e. when pleasure, personal significance, and virtues are in balance.

The examples above show that the outcome of a Positive Design approach might not always differ from already existing designs. There are already many examples of interior architecture that illustrate the three components of the framework (separately). However, the distinctiveness of Positive Design is the explicit intention to increase SWB, which drives the design process from the start. Desmet & Pohlmeyer (2013) propose five characteristics of Positive Design for organizing a corresponding design process.
Characteristics of Positive Design, discussed via the lens of interior architecture

Next, the characteristics are first shortly described and then illustrated via the results of a master design project of a student in interior architecture who applied ‘Positive Design’ (Hillen, 2014).

5 characteristics of Positive Design

Positive Design is possibility-driven, meaning that the design approach aims to ‘focus on supporting existing possibilities and creating new ones, rather than reducing or eliminating pre-existing negative factors’ (Desmet & Pohlmeyer, p. 11). Next, Positive Design requires a balance between the three components of which the Positive Design framework is composed. This does not automatically imply that all three components have to be explicitly present, but that none is harmed. Thirdly, Positive Design calls for a personal fit. SWB is inherently subjective, so it is evident that not all activities are equally suitable for everyone. Therefore, a human-centered approach is indispensable. Designers in general, and interior architects in particular, can aim to create the best possible circumstances for people to ‘be well’ at a particular place by having an in-depth understanding of the users (i.e. inhabitants) and contexts. However, interior architects cannot and also should not have ultimate control over people’s SWB; this responsibility lies in the hands of the people that inhabit the places. Yet, interior architects can design facilitating environments to reach this goal. In this line, design for human flourishing relies on the active involvement of people. Finally, Positive Design projects address wider personal and societal issues, and aims to have a long-term impact on people’s well-being.

Positive Design in interior architecture: reallocating Hoogstraten’s retirement home into a multi-phased life care center

A concrete illustration where the Positive Design framework was used as the instigator for the development of a master design project is the work by Bieke Hillen, a student in interior architecture at Hasselt University. In her project, Hillen (2014) deliberately focused on the rehabilitation of a former retirement home located in the city of Hoogstraten, Belgium, via the lens of Positive Design.

Figure 3. Hoogstraten building
Source: ‘Gaan voor dat gasthuis!’, n.d.

This H-shaped building (see figure 3) is empty since 2012, when the last residents moved to a newly built residential care center in the nearby surroundings. It is surrounded by a park.

The student developed her design project around the concept of ‘the circle of life’. Based on the history of the building (a former hospital-like environment, which later evolved into a retirement home) as well as on current practices and facilities in the broad domain of ‘care’ in Hoogstraten and its nearby surroundings Hillen (2014) came up with three different functions of re-use that she integrated into the building: (i) a birth center for polyclinic laboring (ii) a palliative care center, aimed at people in need of palliative care of different age groups (iii) a student study center.
The three different functions were integrated as separate, but gently interwoven floors in the building. The trigger behind this set-up was Positive Design: from the very start of her project onwards, the student was convinced that discretely interweaving these different functions could have positive SWB effects for the various target groups of people passing by or residing in the building. Her design was thus developed by looking at the possibilities that the building offered, instead of focusing on its problems (possibility-driven approach).

**Ground floor: birth center for polyclinic laboring**

On this floor, there is an inviting reception desk, and a flower and book store, where visitors for any of the building’s residents or inhabitants can pass by. In the right wing of the floor, the student integrated four cabinets, each with adjacent rooms, where midwives can work and can guide women throughout their pregnancy and the process of giving birth. In the left wing of the building’s ground floor, two course rooms were integrated. Here, information sessions for pregnant women or for young mothers can be organized.

The student also invested in the set-up and organization of the park surrounding the building. People who reside at the various levels of the building can meet up here in an informal atmosphere.

**First floor: palliative care center**

The care center that the student designed, functions both as a day care center and a place for permanent residency. She integrated eight rooms for terminal patients who need the presence of help on a continuous base, but she also foresaw the necessary place for six people who were still able to reside at home in the evenings and during the week-end.

On the first floor, different communal spaces were planned (such as an open kitchen space, a library, and a living room), but also private rooms where residents could take a step back from the in-house activity and enjoy the privacy and quietness of their proper ‘home place’. In her design set-up, she thus aimed for people to truly feel at home by enabling them to consciously choose for being present in open or enclosed spaces. In this way, people could choose if they wanted to be actively involved in activities such as cooking (active involvement), or if they wanted a moment for themselves and / or their loved ones (personal fit). In this example of design set-up, the Positive Design characteristic of balance is also present.

Figure 4. Interior architecture of bedroom for palliative care patient

Source: Hillen, 2014

Hillen (2014) was very keen to prevent designing a typical hospital room, which (in a Belgian context) usually does not have many interior elements present that people can use to make the room truly ‘theirs’. Among other features, each room had a specific, easily adaptable lighting system and a personal musical
installation. As a way of subtle and tender interaction between the residents of the different floors of the building, pictures of the babies who were born in the rooms on the ground floor of the building were hung in the hallway of this floor.

Second floor: student housing and student study center
The design foresaw rooms for individual and collective studying. The last few years, all the more students seem to like to study in quietness, gathered together in public places such as for instance at a library. With her design, the student wanted to create an answer to this recent trend. Next to these study rooms, also four small student housing projects were integrated. These small residencies were meant for students who followed training in the remainder of the building (for instance nurses in training), or for foreign students who studied in the nearby surroundings. As figure 5 illustrates, this floor includes a communal kitchen, and a communal space with a small food and drink bar, where people can meet up.

![Figure 5. Interior architecture of one of the communal spaces on the student housing floor](Source: Hillen, 2014)

The communal spaces throughout the building (of which also the large park surrounding the building is an example) were open to residents and loved ones visiting people who were residing on the different floors of the building. In this way, interaction and involvement with others was facilitated. In the end, every design effort that the student put into this project aimed at a long-term positive impact for all people residing in this building.

Hillen’s project demonstrated how a design concept can be developed by looking at the possibilities that a building offers instead of focusing on its problems. For instance, due to issues of building stability, in her design project, Hillen (2014) could not pull down several walls to create more fluid transitions between the diverse rooms and hallways. Instead of fizzling out how she could overcome these structural problems, she looked for interior interventions that would encourage residents to participate and contribute to communal activities across generations. Social connections and relatedness are important components of SWB (Huppert & So, 2013; Lyubomirksy, 2007; Seligman, 2011). She came up with flexible walls in communal spaces to enable people to create intimate or more public spaces where they could undertake activities and share experiences with others to the extent that they personally preferred. Her project illustrates how a Positive Design approach can guide the design process of an interior architect, with the long-term well-being of future residents in mind.
Critical reflections about applying Positive Design in interior architecture

This paper introduces the framework of Positive Design (Desmet & Pohlmeyer, 2013) to the discipline of interior architecture. It is suggested that interior environments have the potential to contribute to the subjective well-being of residents and visitors of the space beyond ensuring favorably objective conditions.

Interior architects can apply the framework and characteristics of Positive Design according to their respective needs and wishes in the design process. Thus, they can work rather freely with these concepts. Generally speaking, interior architects seem to appreciate the presence of a sufficient number of ‘degrees of freedom’ in this respect. As a consequence, different designers using the same guidelines and working on the same assignment will naturally lead to different outcomes, e.g. a different student working on the Hoogstraten building would have had other suggestions to increase the SWB of people residing at the site. Nonetheless, in either case, the deliberate focus on SWB and characteristics in the design process will have a distinct contribution to stimulate human flourishing in interior space than without this guidance.

Yet, specifics of the respective design discipline always need to be taken into account when introducing a general framework for it to be applicable in design practice. In interior architecture, there is, for instance, the issue of ownership. When an interior architect works out a particular design concept, he always works for a particular ‘client’ (i.e. the person who initiates the designer’s work and pays the bills). But this ‘client’ is not always the same person as the future resident or ‘user’ of the designed space (Petermans, 2012). Hence, when a person inhabits an interior space, one can wonder who the ‘owner’ is. In case of a private home that one owns, the answer is rather clear. But what about office environments, retail environments, or different kinds of care-related environments, such as in the project discussed above? An ‘inhabitant’s perspective’ might in these cases be more important than a ‘paying client’s perspective’. Such considerations add a layer of complexity to the design process for interior architects.

Similarly, the issue of ‘permanence’ of the design is rather distinct in (interior) architecture compared to many other design disciplines. Permanence is often linked to a particular financial investment. For instance, when an interior architect is assigned to develop a new concept for a private home, the paying client has thoroughly reflected about appointing a particular interior architect and will likely be rather hesitant to ‘undo’ the design shortly after the realization of the project. In terms of ‘life expectancy’ of the design, the adaptability of the design seems thus rather limited after the realization of the project. One way to address this challenge might be the realization of ‘generous designs’, or, in other words, designs that allow to be modified or to be adapted to the needs and wants of the end user, which can change over the course of time (see, among others, Plevoets, 2014). An interesting example in product design is the Tripp Trapp chair, a comfortable and ergonomic chair that can grow along with a child, from newborn baby to adult. The chair allows parents to engage the child in all their activities, and it can be personalized to one’s proper needs and wishes. As such, this chair is an example of a generous design object that can be altered to the changing needs and wants of a family. In interior architecture, similar projects can be mentioned: next to the student design project discussed here above, one can for instance think about a large villa that has literally become too big for its inhabitants after the children have moved out. In such cases, it is interesting for interior architects to consider a new subdivision of this villa in different housing units.

As the example of Hillen demonstrated, Positive Design can be implemented in diverse sorts of environments, which range in temporality of the concerned inhabitants’ stay. Environments range from places where people stay for a short time (such as a visit to a doctor or church), to a ‘longer time’ (such as an office or stay in a hospital environment for giving birth), to a ‘long time’ (such as a studio, apartment, service flat or house where one resides for X months or years). This research opportunity also corresponds to the viewpoint of
Interior environments that stimulate human flourishing can have valuable repercussions for society in general. In the particular case of healthcare institutions, the combination of healing environments and Positive Design appears worth further investigation.

This paper introduced Positive Design specifically to interior architecture, with a focus on the designer's viewpoint. For future, empirical research, it would be interesting to involve various other stakeholders in this respect in order to investigate how these people experience interiors that have been 'positively designed'. These insights will further contribute to planning and designing the built environment for more happy people.

References


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