



Researching subjective wellbeing in an (interior)architectural context:

Apparent, less apparent and illusionary differences between two fields of expertise

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Abstract

One could state that the aim of wellbeing has long been implicitly present in architecture and interior architecture but is now emerging, maybe not yet as an explicit design approach but at least as an explicit goal of research within these domains. Generating knowledge on ways in which the built environment can contribute to the subjective wellbeing of its residents, however, entails the merging of expertise from fields that are quite distinct. Although researching the interactions of the physical environment (architecture and interior architecture) and more subjective, human-related aspects (social and behavioural sciences) is of course hardly a novel paradigm in itself, the practical, methodological and epistemological properties commonly associated with these two fields can be very different and the new research domain of “design for wellbeing” tends to push these differences to their extremes. In this contribution, I provide a personal account, from the perspective of a researcher in (interior) architecture with a background in psychology, of what I consider apparent, less apparent but sometimes also illusionary differences between these two fields and how these impact our ongoing process to establish and develop a research program on ‘Designing for More’.

Subjective wellbeing and the (interior) architectural context

The search for a “good life”, what it entails and how it can be achieved, has long fascinated humanity and continuous to do so, in sometimes very different guises. Holt (2006), for example, caricaturizes the history of happiness through different bumper sticker equations: happiness=luck (Homeric era), happiness=virtue (classical era), happiness=heaven (medieval era), happiness=pleasure (Enlightenment era), and happiness=a warm puppy (contemporary era). Indeed, thinking about happiness is hardly a novel endeavor, but its systematic, empirical study has only fairly recently been initiated. The landmark paper of Diener in *Psychological Bulletin* ‘Subjective well-being’, for example, is dated 1984. Today, the issue of subjective well-being can be considered to constitute an important and relevant research domain. To quote Harvard psychologist Dan Gilbert (2012): “*Papers on happiness are published in Science, people who study happiness win Nobel prizes, and governments all over the world are rushing to figure out how to measure and increase the happiness of their citizens*”.

Notwithstanding the increasing attention for positive psychology, happiness or subjective wellbeing – note that there is indeed considerable variability in terminology used in the literature, for the present purpose, however, these nuances are not so relevant, so I will use these terms interchangeably – a potential factor that has been surprisingly rare in these discussions is that of the design of the built environment, i.e., architecture and interior design. Searching

in this literature for “wellbeing” and “architecture”, one will of course find several studies that take the physical or built environment into account, but these typically tend to focus on more general, high-level spatial concepts (e.g., the abstract concept of “home”), on housing quality as an “objective” wellbeing measure, or on approaches that are primarily aimed at reducing ill-being rather than promoting (subjective) wellbeing (e.g., literature on “healing environments”). Fortunately, today the issue of design for (subjective) wellbeing in the built environment is starting to emerge as a distinct field and more and more empirical research is being published that specifically addresses happiness in relation to the physical environment (for an example in the more professional literature, see ‘Building Happiness’, edited by Wernicke 2008). To be clear, within the domains of architecture and interior architecture, one could argue that the aim of wellbeing has long been at least implicitly present in the sense that architects with their designs have always aspired much more for their residents than merely providing them with the basic need of shelter. Although it might not yet be an explicit design approach, happiness does begin to constitute an explicit goal of a line of systematic, empirical research that positions itself at the crossroads of two research domains: one focusing on the physical environment (architecture and interior architecture) and another on more subjective, human-related aspects (social and behavioural sciences, including positive psychology and happiness studies).

At this intersection, generating knowledge on ways in which the built environment can contribute to the subjective wellbeing of its residents thus entails the merging of expertise from fields that are quite distinct. Researching the interactions between people and their environment is of course not new in itself – especially the field of environmental psychology targets the symbiotic relation between people and their environment and there are efforts to apply this knowledge directly to design (e.g., see the textbook by Kopec 2006). Notwithstanding this obvious overlap, “designing for (subjective) wellbeing” does seem to be an emerging discipline that sets itself apart with a stronger emphasis on its position as a practice-based design discipline combined with the ambition to integrate theoretical knowledge from this relatively new field of happiness (see also for example Desmet & Pohlmeier 2013; Hujala, Rissanen & Vihna 2013). The practical, methodological and epistemological properties commonly associated with the fields of (interior) architecture on the one hand and that of positive psychology/happiness studies on the other hand can, however, be very different and this new combination tends to push these differences to their extremes. In what follows, I want to discuss some of these differences, as a way to reflect on the particular nature of this new, emerging field and on how this could further develop. The discussion of these differences is not the end result of a systematic review of the literature, but stems from a more autoethnographic perspective of an individual researcher making the transition from one field of expertise to the other.

A first-person account from the intersection of two fields of expertise

Having finished a master in psychology and a Phd on aspects of visual perception, I started to work in an architectural department about a decade ago. With a background in the social and behavioural sciences (SBS), I became involved in a variety of design research (DR) projects on aspects of the built environment - the latest of which is designing for (subjective) wellbeing - that were always executed in collaboration with architects and interior architects. During this transition from one field of expertise to another, and for a long time thereafter, I have experienced several “moments of wonder”, when I encountered protocols, habits, opinions or procedures that were both new and in some way surprising to me and I would like to take up these experiences to address some of the issues that might become relevant for a field drawing heavily from these two research traditions.

I have come to label these experiences under three headings: apparent, less apparent and illusionary differences. *Apparent differences* are those aspects, properties or dimensions that I experienced to be different between the two domains and that would, in my view, also be readily identifiable as such by researchers entering the field. *Less apparent differences* is the category of features that seemed similar at first sight, but on closer examination either revealed some non-trivial or important differences in the specifics or were the result from quite different epistemological foundations. *Illusionary differences*,

finally, are those aspects that despite their difference in appearance in the two domains, have struck me as in essence being manifestations of the very same things. In the remainder, I will not discuss these as separate categories, but will organize the paper topically. As will become clear, several of the discussed topics do in fact resort under different categories simultaneously, depending on the level at which one approaches them.

Before reflecting on some of these differences, a disclaimer: needless to say that the social and behavioral sciences domain of wellbeing and the domains of architecture and interior design are obviously vastly more extensive than the particular case of what I have experienced or can even consider here. Nonetheless, the aim of this autoethnographic approach of drawing on personal experience is to identify and discuss potentially relevant issues that might transcend the anecdotal and resonate with something larger, or in other words: seeking to describe and analyze (*graphy*) personal experience (*auto*) in order to understand cultural experience (*ethno*; see Ellis, Adams, & Bochner 2010). In the final part of the paper, I discuss what the implications of these differences might be, both for the emerging discipline of "designing for (subjective) wellbeing" in general but also in particular for a specific line of research we are developing within our own research group.

Experiences from confronting research approaches

On the temporal distribution of quote usage in conference presentations

Using quotes in communications or presentations of research is standard practice in many research fields, including architecture and social and behavioral science. However, one particular aspect that has intrigued me after having made the transition to design science, specifically concerns the different usage of quotes. Based on a personal experience of a recurring pattern in a (still relatively small) sample of attended presentations at architecture and psychology conferences, I want to put forward the hypothesis that there indeed exists a less apparent difference between design science researchers and social science researchers, namely in the probability distributions of using quotes in publications in general and in conference presentations in particular. To be more concrete: I have the impression researchers from a design background generally use more quotes overall and they tend to use them at the beginning of their talks, while social scientists tend to use less quotes and use them primarily near the end. As an illustration of the latter, see for example the publicly available TED-talks on happiness of psychologists Daniel Gilbert and Nancy Etcoff. These examples are of course cherry-picked but without awaiting confirmation or disproof of this hypothesis by a systematic review, I already want to speculate that this hypothesized difference is indicative of differences in the underlying epistemological make-up of researchers within these respective fields. There are evidently many different reasons for using quotes in these presentations, from explicitly subscribing to a certain mission statement over simply illustrating a particular phenomenon to using it as an argument from authority, and I certainly do not assume a simple one-on-one mapping between research domain and quote usage. I do, however, suspect that a combination of methodological and epistemological factors that differ between these two fields, can indeed lead to differences in the way quotes are being used. I address a few of these factors next.

The demarcation issue: when is research research?

Although controversies exist regarding the scientific status of some methodological traditions in some of its academic subdomains, social and behavioural sciences as academic research domains generally strive to be (and to become viewed as) a scientific discipline. This generally makes the demarcation between research as a knowledge-producing activity and the application of this knowledge by practitioners quite clear. When I entered the field of spatial design sciences, however, I was initially quite surprised to find that this demarcation line of what was considered research and what not, was far more fuzzy. Discussion on this issue regularly involved the possible role of academia for design practice ("interesting at times, but mostly irrelevant") and the role of designing versus research ("designing is doing research"). These discussions have since evolved dramatically and become much more nuanced,

both in the department and in the field as a whole, but this still remains an issue to this very day – for example, the first two sentences in a recent article in the journal *Design Issues* on research and design are: “*This article inquires into the uncertain positioning of research in the field of architecture as design discipline. No consensus exists on the nature of architectural research because multiple interpretations are used in practice, education, and academia*” (Van de Weijer, Van Cleempoel & Heynen 2014, p. 17). Fortunately, this ongoing debate about the status of research and the relationship with professional practice also seems to be accompanied both by a freedom and flexibility to think about alternative and innovative ways of knowledge production, which seems much harder to accomplish in more established disciplines, and by an opportunity to bring research and practice closer together.

Tacit knowledge, empirical support and the issues of plausibility and credibility

In one of my first discussions about the research project of a master student in interior architecture, one of the design supervisors once remarked that it was completely unnecessary, even ridiculous, to want to include a source for the statement that chairs that are oriented towards one another would lead to more social interactions than if they were oriented away, as this was simply common sense... As a researcher coming from the behavioural sciences, in which probably one of the most frequent demands from reviewers is to provide sources for statements made, this was quite surprising. I later experienced that such radical dismissals were the exception, but that there does seem to be a more subtle, a less apparent difference in how researchers from the two fields relate to external sources of information in communicating their research results, knowledge and beliefs regarding people-space interaction.

Depending on the context, the terms are used in various ways, and sometimes also interchangeably, but within the literature on belief acceptance (e.g., Castelfranchi 2004), ‘credibility’ of a piece of information refers primarily to the sources providing this information (external) while ‘plausibility’ refers to the receiving person’s evaluation based on their existing knowledge/beliefs (internal). SBS-researchers are usually educated to give (much) more weight to credibility than to plausibility (the latter of which is more prone to selective attention, halo-effect, confirmation bias, ...). Together with the ability to frame your statements in a valid theory, empirical support for a given claim is one of the main factors driving this credibility (which is why, yes, many SBS-researchers sometimes expect sources for seemingly trivial statements). In design disciplines such as architecture the role of tacit knowledge and subjectivity comes much more to the fore (see e.g. Cross 2006; Schön 1983), which might tip the balance for many researchers from this field more towards the plausibility of statements, hereby reducing the need for including external validation of their beliefs. Such a difference would of course be relative, and it is clear that an extreme reliance on one or the other runs the risk of leading to either a rigid and conservative research environment lacking novel and fresh ideas or one consisting mainly of ideas without proper context or grounding in reality (the widely read ‘The architecture of happiness’ by De Botton 2006 has received some criticism along these lines). One of the interesting aspects of confronting two research traditions, however, is the opportunity for their respective strengths to enrich and inspire one another, as argued for example by Kesebir and Diener (2008) who confront questions and answers on happiness that were put to paper by philosophers throughout history with empirical findings of modern behavioural science. The domain of designing for (subjective) wellbeing might promise a similar opportunity.

The level of description and the applicability of research results

Given the shared content of the people-environment connection, it seems evident that the main difference between the two domains constituting a “designing for (subjective) wellbeing” field would concern the entry level at which this connection is approached: researchers from SBS are mainly interested in the people part, while the design researchers focus on the physical environment. Although this is probably the case for many projects, I actually consider this to be more of an illusory difference to some extent, not so much because both domains are essentially interested in precisely connecting the two, but more because there are differences which I feel are far more

profound when comparing these domains. One of those less apparent but more profound differences in my experience is the applicability of research results and the relative weight this factor carries during the planning phases of the research. To summarize bluntly: SBS researchers strive for results that are valid, design researchers strive for results that are useable. Most researchers of course wish for their results to be applicable and striving for useable result also implies one believes these results to be valid, so the difference is indeed subtle. To give an example, collaborating in a project about lighting in retail design in my first years at the department, I was involved in setting up experimental studies investigating effects of lighting on the perception, emotion and behavior of people. With the analytical mindset of an SBS-researcher my first instinct was to approach the issue at the level of the elementary, “objective” building blocks of lighting (color temperature, intensity, spatial layout): establishing their respective influences on people would then allow to formulate guidelines for lighting designers. The design researchers involved, emphasizing the holistic nature of designs, argued that given the many interactions between these elements, the possible combinations (i.e., the problem space) were far too many to investigate, but more importantly, that designers indeed work with these low-level, objective parameters, but in essence do not think about (describe) the world at this level (but rather, for example, in terms of atmospheres, i.e., the solution space). Experimental studies approached from this level of description would then indeed be much closer (usable) to how designers effectively work, even they would prohibit being able to uniquely attribute effects to specific properties of the physical environment (e.g., intensity; see for example Quartier, Vanrie & Van Cleempoel 2014). To be clear, this is not about fundamental versus applied research, but about a prior intentional stance of how one starts out on a research project. This difference in perspective has, in my view, stronger consequences in choosing how to invest the limited resources researchers have, what types of questions they should address and how the world should be carved up in order to best study it (i.e., the description level).

Developing a combined research approach

The instances of apparent, less apparent and illusionary differences I have discussed here have been prompted by personal experiences, but address topics that are familiar for anyone interested in research methodology. These topics are of course also interrelated and there exists a considerable literature on the unique properties of designing (see Van de Weijer et al. 2014, for a short overview). However, as argued before, analyzing “designing for (subjective) wellbeing” as a confrontation of two research traditions was a way to reflect on the larger issue of how this new field should best develop as a distinct research domain if its aim is both to stimulate the pursuit of knowledge on how to increase happiness through the built environment and to fuel architectural practice to create and realize designs that actually accomplish that. In our case, this reflection not only concerns the domain as a more general, abstract, notion but also applies at the operational level of developing concrete research projects (hence also the autoethnographic approach).

Within our research group in a faculty of architecture and arts, we are currently in the process of establishing and developing a line of research, which we have named “Designing for More”. This term, originally coined by Herssens in her Phd on inclusive design (2011), has been adopted to indicate our mission to do research with the ultimate aim of supporting designers to create architectural spaces which achieve more, both in terms of broadening the diversity of potential users as in creating added value for that user (more experience, more happiness). A team consisting of people with backgrounds from both the design sciences (e.g., architecture and interior architecture) and the social and behavioural sciences (e.g., marketing, communication science, psychology) are working on topics that essentially center around the interactions and connections between people and the spaces they reside in. More specifically our research has been revolving around three topics: retail design, universal or inclusive design, and, most recently, design for (subjective) well-being. Advancing and expanding such a line of research, especially with the aims sketched above, could therefore follow to some extent the lines along which the

field of designing for happiness can, or should, develop. In line with some the elements discussed here, this could involve at least three components.

First, real collaboration with design practice will be invaluable. As mentioned, the different roles in the relationship between design academia and design practice have not yet been fully defined. This indeterminate situation might be viewed as a real opportunity to explore and foster different types of collaborations and stimulate genuine two-way communication, so that both knowledge creation and design can benefit. Second, the type of research questions that we address should be formulated as much as possible in a designerly language, but also be framed within the existing (theoretical) knowledge. A multi-disciplinary approach is thus advisable, even in the very early stages of formulating research questions. Finally, without going into detail in the different ways it can be used as a research method (e.g., see Van de Weijer et al 2014), it is clear that designing itself should take a prominent place in this research program. Taken together, these factors could constitute a valuable strategy to further the field of designing for (subjective) wellbeing by really exploiting the opportunities that arise from merging expertise from different research traditions.

Acknowledgements

I want to sincerely thank all the members of the ArcK research group in general and the people involved in Designing for More in particular for valuable discussions.

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