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Professionalization of the Discipline of Interior Architecture

Development of a 'Ready to Use Concept' to Intertwine Research and Education

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Within the discipline of interior architecture, this paper takes the example of the specific domain of retail design to illustrate the interrelatedness between research and education at our faculty. We will elaborate on how we came to develop a 'ready to use concept', containing design guidelines and tools, that support students in making informed design decisions. As such, based on several workshops and an extensive literature review, eight tools were developed alongside 127 design guidelines. The tools and guidelines are inherently part of the retail design studio which is taught by a practitioner and an academic trained designer in order to be able to teach the mix of practical and academic knowledge as well as possible. We teach our students to be critical thinkers from the start and to apply scientific knowledge alongside their design skills while designing. Indeed, these students ultimately end up in the professional field and form a driving force for the professionalization process of interior architecture.

Keywords: retail design education; professionalization; tools; design research

Introduction

Educating our students as critical designers has already been at the heart of our interior architecture program since the Bologna process, initiated in 1999, with the integration of design schools into academia in 2013. Mainly in our Master program, the link between research and education is most obvious in the Master proof (thesis + design project), in which their research is blended with the design project. Ideally, the results of the thesis should help to inform and guide the student's design process. Entering our master program, students have to choose one out of four design studios: adaptive reuse of buildings, domesticity, scenography, or retail design. In this paper we will focus on the specific domain of retail design in which specific steps have been taken to intertwine research and education beyond the master proof, and in an early stage of the educational process.

The Need for the Professionalization of Retail Design

Before our specific approach in educating retail design to our interior architecture students, it is in its place to contextualize the specificity of the domain of retail design. Retail design is a rather young domain and still in its development. Yet, there is a need for scholarly knowledge to push professionalization (Quartier et al., 2017). Indeed, the current context of retail is extremely challenging. Both consumers and retailers are changing profoundly during the last decade. Evolutions in technology and society cause the rules of the game to change at an increasing pace: an economical shift that made the consumer the focus of attention; a growing urge for differentiation (Quartier et al., 2017), a world in which looking for new experiences has become an essential aspect of daily shopping life (Petermans & Kent, 2017); and the growth of technology and e-commerce (Linzbach, et al., 2019). Due to the latter, the store has lost its unique position and has become one of the retailer's many channels. Add the impact of the pandemic, and even more questions about the role and meaning of a (physical) store arises. Nonetheless, stores will remain one of the most important channels for retailers to communicate with their consumers (Stephens, 2013; Quartier et al, 2021). Seeing the store as a communication channel, and not only a shopping channel, makes designing commercial spaces rather



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complex. Indeed, the design of retail spaces can be considered as the hypothetical response of the retail designer to the varying aspirations of the different stakeholders (customers and store owners). Although this entails assumptions on how customers will ultimately respond to specific design choices, practitioners today generally do not rely much on knowledge from scientific research, but on their own intuition instead. On the other hand, knowledge validated by scientific research and managerial practice are not being fully aligned within the retail design domain either, making the connection even more challenging. Our aim is closing this already long-existing gap between research and practice, starting with educating our students with an inclusive view of research and practice.

Several Stumbling Blocks Causing the Gap Between Research and Practice

We need to recognize that there are several stumbling blocks causing this gap. First, scientific knowledge is not easily accessible for two reasons: on the one hand, its communication channels are not readily available, on the other, in most cases, designers are not even aware of specialized scientific journals.

Second, most studies only study different design aspects in isolation due to their origin. Indeed, most studies originate in the broad field of marketing and consumer psychology. So, looking at these studies separately, offers few ready-to-use insights for practice because store environments are complex stimuli configurations of multiple retail design variables (Petermans & Van Cleempoel, 2010). Research on this more holistic view on store environment is scarce in literature (Quartier, 2016), and very much needed (Bäckström & Johansson, 2006; Healy et al., 2007).

A third stumbling block is the difference in the status of the results: in the wide field of marketing and environmental psychology, literature results as such are valuable enough for scientific publication, whereas designers would merely consider such results as part of the design process of a retail space. This created a gap between researchers, focusing on research outcomes, and designers, favoring holistic and molar solutions with their skepticism towards these outcomes.

Connecting Research and Education

So, despite the fact that retail design has gained in status in marketing and environmental psychology over the last couple of years (Bäckström and Johansson, 2006) marketers and psychologists seem to have difficulties to translate their results successfully into practical design guidelines. During recent years though, we do notice a shift in the academic literature, whereby more emphasis is put on the managerial implications with explicit attention to guidelines and implementability of the research results. Implementation of research results from a holistic approach, though, often remains limited due to the nature of most studies.

To this end, we took up the challenge to make scholarly research in the field of retailing and retail design accessible through a 'ready to use concept' for teaching and practice (the latter not being the focus of this paper). Indeed, students ultimately end up in the professional field and form a driving force for the professionalization process.

Developing a 'Ready to Use Concept'

The 'ready to use concept' should support both students and teachers. Indeed, teachers who teach retail design in the design studio could benefit from a systematic approach. Teachers and students come and go but the method by which we want to teach retail design to our students should be consistent. So, the purpose of our study, with the 'ready to use concept' as the outcome, can be summarized as follows:

- offering a systematic approach to retail design
- making scholarly knowledge readily available
- help students make more knowledgeable design decisions
- making students aware and support them in establishing the previously defined needed link between retail design practice and scholarly knowledge
- professionalization of the domain of retail design

Methodology

The opportunity to develop this 'ready to use concept' arose from the awarding of a project application (see acknowledgments) where the goal was to help retailers, students and retail designers to develop better and more experiential stores. Within this paper, we focus on the part we developed for students.

All scientific literature around retailing and retail design was collected, read and analyzed. This thorough literature review formed the basis for our 'ready to use concept'. A bibliographic keyword search was conducted to identify studies reporting data relevant for brick-and-mortar store design. We only looked at

peer-reviewed scholarly papers - they are not readily available for practitioners. Databases used included EBSCOhost (including Art and Architecture Source; Avery; Business Source Complete), Science Direct, Scopus, Google Scholar and the Journal Citation Reports. The search was based on terms such as retail interior design, consumer behavior and branding. Typical terms were used, such as brick-and-mortar, atmospherics, experience, senses, etc. 330 Studies were identified, starting as early as 1973 to 2020 (May). We categorized and archived all papers following a typical classification structure, recognizable for designers (Claes et al, 2016): ID and communication, including branding and brand perception; Interior shell including wall, flooring, natural light and ceiling; spatial design, including spaciousness, flow and lay-out, atmospherics and experiential factors, including all senses. Due to the large number of studies in atmospherics and experiential papers a further subdivision was made: sound, scent, touch, sight, taste.

The next step was to determine what education needed to design better and more experiential stores. To this end, as part of the bigger project, several work-shops with both retailers, designers and our students were organized. These work-shops aimed at getting a grip of the design challenges designers (including students) and retailers face when designing experiential retail environments. In a first work-shop the needs and the design journey were identified. A second work-shop focused on defining possible solutions to the previously developed needs linked to the design journey. The idea of developing a knowledge platform sharing information such as tools and design guidelines originated directly from the workshop. Even specific tools were mentioned: a tool to include sensory design elements during the design process (not after), a design check-list, and a communication tool to ease communication between a retailer and a designer at the start of a project. Finally, the 'ready to use concept' was defined and developed: five tools were developed combining both the theoretical insights from the literature review with the practical knowledge gained from the work-shops, (see table 1 for an overview and description of all tools): *the Sensory matrix*, the *Checklist*, and the *Design brief* in combination with *the Retail design index* and *the Retail design process model* (all to improve communication between retailers and designers in the beginning of the design process). These tools, and the design guidelines (organized following the previously mentioned typical classification structure) are readily available on a website since 2017. It needs to be noted that all tools and guidelines are developed on the basic principle that all design decisions need to match the DNA of the retailer and its accompanying storyline. As an illustration of the methodology used, the development of the *Design guidelines* is explained in the next section.

One other suggestion also came to the fore during the second work-shop: developing educative case-studies. These educative case-studies are in-depth case studies which enables the students to learn from best practices. Two different stories are being told in each case study: the one of the retailer (and/or designer), with the how and why of the store concept and design, and the one of the expert (an academic) with the positive and negative aspects of the store based on the scientific insights gained from our literature review. The result is a layered discussion of a store which has both practical and theoretical insights. These case-studies are also available on our website.

More recently, originating again in a funded project (see acknowledgements) of which the aim was to get more insight in sustainable retail design, two more tools and accompanying design guidelines were developed: the *Eco-design wheel* and accompanying design guidelines and a *Material selection tool*. The development of the latter will not be discussed here since it was mainly executed by the two partners of the project. The *Eco-design guidelines* are again based on an extensive literature review. Again, a bibliographic keyword search was performed using the same databases as in the previous study. To develop *the Eco-design wheel* the Lids wheel (Brezet & Van Hemel, 1997) is adapted to the context of retail design and its specificity in the short-term living of stores interiors (seven years). The eco-design tools and guidelines were first added to the website in 2019.

Table 1. Overview of the elements supporting the ready to use concept

<i>Ready to use concept</i>	<i>Definition</i>
Design brief	is a fill-in document that can serve as a conversation piece between retailer and designer at the start of a retail design project (available from: https://www.retaildesignlab.be/sites/default/files/2019-08/briefing_retailer_eng.pdf)
Retail design index	is a guide with the most important terms from the terminology in retail design (available in Dutch from: https://www.retaildesignlab.be/sites/default/files/rdi_finaal_smal_1.pdf)
Retail design process model	is a schematic representation of the course of a holistic retail design process in which all practices and tools during a design process are addressed (see Figure 1)
Design guidelines	are guidelines based on scientific literature to help make more informed design decisions (available from: https://www.retaildesignlab.be/en/readings/guidelines)

Checklist	is a control tool that ensures that you, as a designer, work in a structured way and do not forget anything when it comes to designing a store interior (available in Dutch from: https://www.retaildesignlab.be/en/tools/designer-tools/checklist)
Sensory matrix	is a handy matrix supporting the design process for the translation of brand values into sensory stimuli (available from: https://www.retaildesignlab.be/sites/default/files/2021-03/zintiugenmatrix_grafisch_eng.pdf)
Eco-design wheel	is a tool to help understand all phases of the life cycle of store design, in order to intervene correctly to achieve a sustainable store design (available in Dutch from: https://www.retaildesignlab.be/nl/tool/ecodesign)
Eco-material selection tool	is a tool to help choose experiential materials, with consideration for the environment (available in Dutch from: https://www.retaildesignlab.be/nl/tool/materiaal%20selectie)

Illustration: Developing the Design Guidelines, the Backbone of All Tools

To develop the *Design guidelines* the cooperation between an academic - reading and summarizing all the papers - and an interior architect with retail design and consulting expertise - translating the academic insights into practical guidelines, was established. This to ensure the usability, readability and relevance for our students (and practitioners). A typical flow is combining the results of very specific studies focusing on very specific variables, that are often conducted in a very specific environment, such as a lab or even rendered images (e.g., Schielke & Leudesdorff, 2014). For instance, Babin et al. (2003) and Bellizzi et al. (1983) used a scenario approach to execute the experimental design. Although the authors argue that scenarios are useful from a number of perspectives, for practitioners, from any field, this method lacks credibility. Even more so when talking about 'experience' to designers. In their view, you have to experience a space to really be able to make statements about how someone feels in that space and how that person behaves in a space. So, depending on the viewpoint there lies truth in both of them. For the purpose of this study, however, using the results of Babin's study fails to provide. The study of Bellizzi et al. has a mixed approach using both a lab environment with colors on the wall and photographs of stores. Again, taking only this study into account would not lead to generalizable results. Combining the results and managerial outcomes of both led us to the 'Color your store interior!' guideline:

"Choice of color in a store interior can influence consumer behavior. Color can determine the store and product image, as well as the atmosphere in the store. Cool colors (in comparison with warm colors) in fashion stores lead to higher buying intentions, better evaluations and they also stimulate consumers to return to the store (Babin et al., 2003; Bellizzi et al., 1983)."

Altogether, 344 sources (330 within the experiential field and only 14 within the sustainable retail) led to the development of 127 design guidelines (109 experiential and 18 eco). To each guideline the sources used are added so students can always find the original publication.

Implementation

Within a 3-year bachelor (180 ects) /1-year master (60 ects) academic structure, students have the possibility to specialize in the field of retail design in their master year of interior architecture. In their third bachelor year, the students get acquainted with all four design studios they can select for their master (adaptive reuse of buildings, domesticity, scenography, or retail design). Two thematic design studios per semester are offered. Within the retail design studio, the students are trained in the 'craft of retail design', meaning being able to design a good working store. Indeed, the focus of the design exercise is on developing a floor plan with a well-designed lay-out, an intuitive flow and a look and feel consistent with the retailer leading the assignment (usually this is a chain retailer with an outlet of several thousands of square meters). To this end, in a total of 14 design studio weeks, six are allocated to do research, including getting acquainted with our tools and other already existing tools. Figure 1 shows the *Retail design process model* highlighting the implementation of ours and other tools. The introduction to the tools and guidelines enables them to include scientific insights into their design project at a very early stage of the design process. The following tools are introduced in the third Bachelor retail design studio, as Table 2 shows: the *Design guidelines*, the *Design Brief*, the *Retail Design Index*, the *Retail Design Process Model* and the *Checklist*.

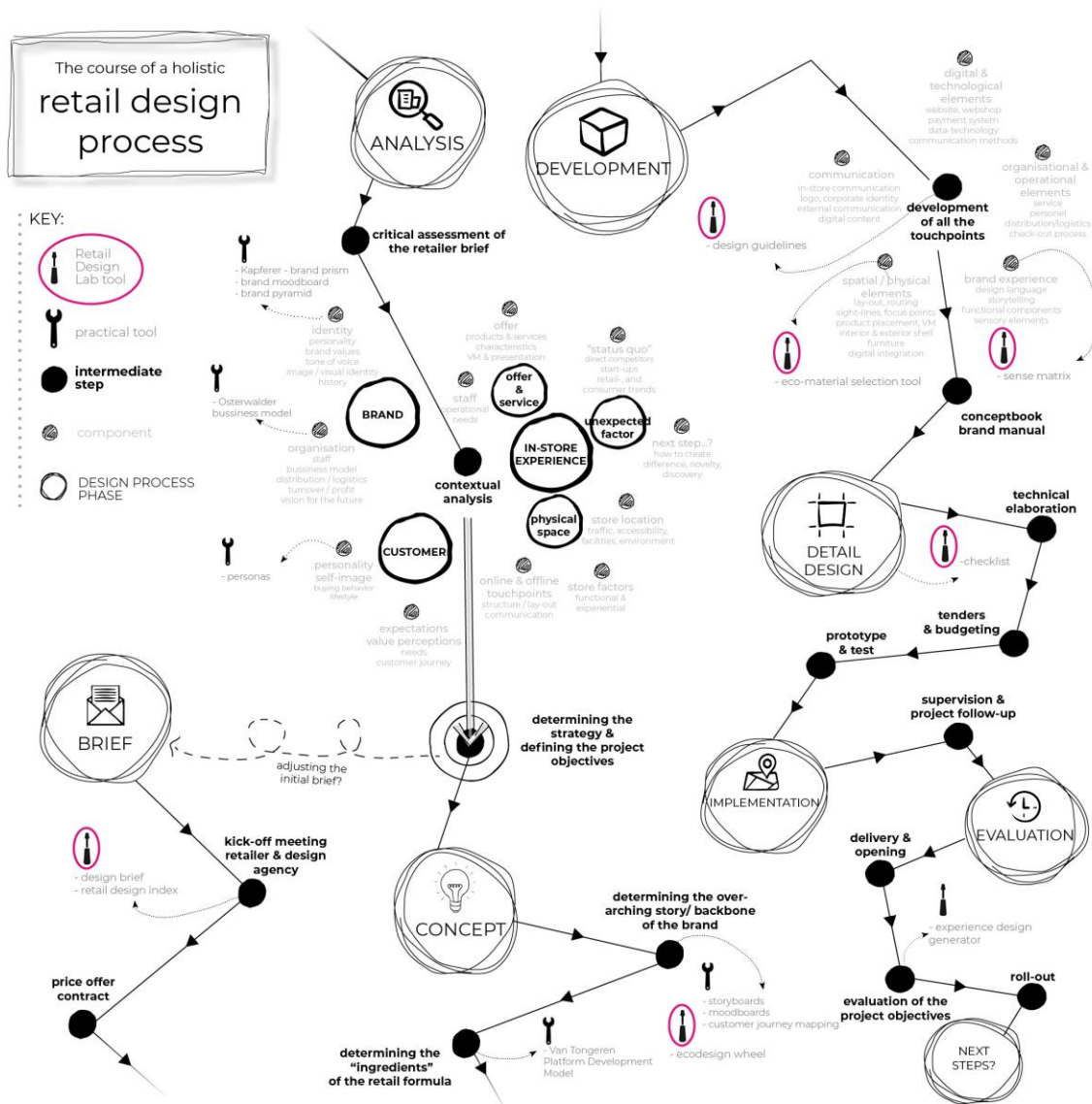


Figure 1. The retail design process model highlighting the implementation of tools

In the studio retail design in the master year the focus shifts from developing a good functioning store to creating experiential retail environments with an eye for sustainable retail. Tools specifically aimed at creating such environments are introduced, again in the beginning of the design process (see table 2): the *Sensory matrix*, the *Eco-design wheel*, and an *eco-material selection tool*. As mentioned in the introduction, students in their master year are also taught to be self-critical, to design and conduct their own research, and to arrive at their own insights in the form of a thesis. This is where knowledge exchange between students, teachers and our 'ready to use concept' happens. Indeed, our online platform continues to grow by adding students' insights to it (e.g., design guidelines or case-studies), which forms an extra drive for both students and teachers.

Note, the fact that a duo of teachers in both retail design studios, one teacher from the field with a rich portfolio in retail design and one of the teachers having, or doing, a PhD in retail design, also mediate the intertwining of research and education.

Table 2. Introduction of the tools in our retail design studios (Ba & Ma)

<i>Introduction of the tools</i>	<i>BA Studio retail design</i>	<i>MA Studio and seminar retail design</i>
Design brief	X	
Retail design index	X	
Retail design process model	X	
Design guidelines	X	
Checklist:		
part one on the craft of retail design	X	
part two on experiential retail design		X
Sense matrix		X
Eco-design wheel		X
Eco-material selection tool		X

Conclusion

This study particularly focused on contributing to the field of education and practice (without neglecting its contribution to the body of knowledge in the field of retail design), by providing academic insights supporting the design process in the form of a 'ready to use concept'. Indeed, guidelines and tools have been developed to assist in making design decisions, without being prescriptive. The creativity and holistic approach of the designer are still needed to thicken the plot. Our first generation of students trained with this 'ready to use concept' has graduated in 2019. Although it is still early to draw conclusions about how these students perform in the field, we have already received many positive comments from the design offices offering an internship to our master students. They specifically appreciate the methodological approach of these students when designing. The students themselves found the use of tools (in general, not only our own develop ones) very helpful. Although some of them take some practice (e.g., Sensory matrix), the students see and acknowledge the potential. Feedback from the teachers reveals that the tools offer a rigid and helpful way to focus on retail design specific design challenges. They indicate that they systematically use the tools to enter into dialogue with the students. The tools form a guideline throughout the design process, always referring back to scientific insights to support the students in making, sometimes difficult, design choices.

Future Study

As mentioned in the introduction, these tools are also used in practice. On the one hand, we use them in our professional training courses, on the other, they seem to find their way to practice quite easily. Google analytics shows that many people are downloading these tools and are visiting the web-pages of the design guidelines. The analytics also show that the latter are most popular. To this end, we will keep investing in gathering scientific insights and getting them to practice. The research our Master students perform forms an important drive in this.

We also started train-the-trainer workshops, being work-shops of one week organized in the trainers to be trained (teachers in this case) home country. So far, five workshops have been organized abroad of which also feed-back from both students and teachers was collected. The most positive one being that the tools are also used outside the retail design studio by some of the teachers, such as in office design, hospitality and even housing. The aim of this trajectory is to come up with a tool-box for teachers which can be used to train themselves with and/or which can be used to teach retail design to students. We are in the process of finishing the tool-box which contains the ingredients of our 'ready to use concept', including tutorials on how to use it.

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