

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Liza Hidding
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Studio	
Name / Theme	Explorelab
Teachers / tutors	Leontine de Wit, Erik Jan Hultink, Hubert van der Meel
Argumentation of choice of the studio	Besides a passion for interior design and heritage architecture, I am highly interested in business models and branding strategies. Therefore I take part in the Entrepreneurship Annotation (tbm) and was able to formulate my own combination project which consist of both architectural design and branding strategies at Explorelab.

Graduation project	
Title of the graduation project	Architectural Branding
Goal	
Location:	Rotterdam, Central district: Luchtsingel, Hofbogen, station hofplein, Park Pompenburg
The posed problem,	<p>In research, there is little knowledge about branding principles used for architectural design. More defined, the relation between brand identity and architectural design elements, in which the design elements will reflect the brand identity according their meanings.</p> <ul style="list-style-type: none"> <i>Retailers and architects struggling with communicating brand values in-store, and do not make fully use of the benefits of the communicative power of architectural design (Teufel & Zimmermann, 2015, p. 8; Zuidhof, 2007, p. 23; Raffelt, 2012).</i>

	<p>*Raffelt did an explorative study on which brand personality impressions are triggered by specific architectural prototypical designs. In her study she used images of buildings which were evaluated by experts and consumers.</p> <p>This study was a first step in linking consumer responses to a new brand communication tool: Architectural Branding. Some limitations:</p> <ol style="list-style-type: none"> 1. <i>Only a few specific architectural elements were linked to personality impressions and the focus was on the overall perceivment (exterior) of the building.</i> 2. <i>Using images is mentioned as a limitation because of missing experience in comparison with a real building (Raffelt, 2012, p. 91)</i> <p>Interesting proposals for further research:</p> <ol style="list-style-type: none"> 1. <i>Making an extension towards interior design. (Raffelt, 2012, p92)</i>
<p>research questions and</p>	<p>Research goal:</p> <ol style="list-style-type: none"> 1. More concrete insight into which architectural design elements trigger certain personality impressions in a spatial architectural design, including: interior and exterior. This research will focus on the elements: Shape, Composition and Material. 2. Create architectural branding guidelines with the results of the studies, to be able to better communicate brand identity through architectural design. <p>Main question: How to design 'architectural-brand-fit', driven by brand identity?</p> <p><i>'Architectural-brand-fit' is defined as: the perceived fit according customer evaluations, between the brand identity and the spatial design, where brand unique associations are supported by architecture. When consumers see a connection between the brand identity and the associations they experience from the design, a high 'architectural-brand-fit' can be measured.</i></p> <p><i>The term 'architectural-brand-fit' is proposed based on the term: 'new-product-brand-fit' (Bouten, et al., 2011, p. 7)</i></p>

	<p>Sub questions:</p> <ol style="list-style-type: none"> 1. What personality impressions and associations are triggered by a spatial design? And what is the relation between the associations and the specific architectural design elements? 2. Which architectural design elements, are associated with a specific personality dimension? 3. How are design elements integrated to communicate a given brand identity?
<p>design assignment in which these result.</p>	<p>The design will be an example of how the results of the research can be used and applied in the design process.</p> <p>The chosen brand for the design is the online brand: Airbnb. The goal is to translate their online brand identity to an offline 'Experience store'. The function of the place will also reflect the brand and might exist of a hospitality function mix: Service, Brand experience, Travel agency, City lounge, B&B.</p>
<p>To answer the main project question: How to design 'architectural-brand-fit', driven by brand identity?</p> <ol style="list-style-type: none"> 1. The research will define relevant terms regarding Architectural branding principles and will identify the relation between brand personality impressions and architectural design elements, in order to help architects set the right design goals that will 'fit' the brand identity. 2. The design can be seen as a case example, in order to show how the results of the research can be used and applied in the design process. In addition the design process will give more insight in what steps can be taken to create a total design, including the integration in a context, the use of natural light and for example additional furniture. Finally, the 'architectural-brand-fit' can be measured during the process with a personality dimension scale to reflect on the representation of the brand (based on: Govers, 2004). 	
<p>Process</p>	
<p>Method description</p>	
<p>1. Research:</p> <ol style="list-style-type: none"> 1.1 Literature review 1.2 Exploratory interviews with branding experts <p><i>(Roland van der Vorst, Sijja Bakker, BR-ND Kim Cramer & Alexander Koene)</i></p>	

1.3 Study 1: Semi-structured Expert interview

Expert interview on personality impressions and associations regarding a 3D scale model.

- Participants: Purposive, expert sampling approach – The participants were all selected on their particular expertise. The criteria was; two participants with an expertise in product communication and meaning, and two participants with an architectural expertise and experienced in analysing 3D scale models.

The participants (N= 4; 2 male, 2 female) are all employed at Delft University of Technology. Two within the Faculty of Industrial Design Engineering, one promoted in meanings of materials and is associate professor, and one promoted in product communication who is a product engineer and assistant professor. Two of the participants within the Faculty of Architecture and the built environment, who both are architectural engineers and chair of 'form and modeling studies'. One of them worked as an architect in the field and is now an associate professor. One promoted in virtual context and is assistant professor.

- Materials (stimuli): Two architectural scale models. Both are based on the Airbnb brand identity which is defined and simplified in four different personality dimensions. 1. Friendly/Welcoming; 2. Caring/Trustworthy; 3. Cheerful/Playful; 4. Discover/Adventure. The design of model A is based on the building of station Hofplein and reflects the personality dimensions 1&2. The design of model B is an imaginative intervention which can be integrated in the building of station Hofplein and reflects the personality dimensions 3&4.
- Procedure: The interview started with a really short introduction about myself as a graduate student. The first question for the interviewee was to summarize his/her field of expertise. Followed by the presentation of the first model. Model A & Model B, were both shown to the interviewees but in different order to the participants within the faculty of Industrial Design and also for the participants within the faculty of Architecture and the Built environment. The participants were able to touch and turn the model in any direction. The following questions were asked structurally (1) What are your first associations regarding this model?; (2) If you think specifically in terms of personality traits, what kind of traits would you assign to this model?; (3) Can you specify why you assign these traits regarding shape, composition and used materials?; (4) Model A: What advice would you give to make the model more friendly & trustworthy? Model B: What advice would you give to make the model more cheerful & adventurous?; and the last (5) What kind of brand do you associate with the model? When interesting answers were given, following-up questions were asked to gain a deeper understanding. After the interview, the results were coded, translated from Dutch to English and clustered on: Free associations, Personality dimensions, Shapes, Compositions and Materials. After a clustering analysis, the list of personality items were cleaned. Items with identical meanings for instance, Bipolar and Hybrid, were combined and represented with the most suitable item.

1.4 Study 2: Generative research – Group session

Student group workshop on how to communicate a given brand identity in architectural design

- Participants: Purposive sampling approach – The criteria for the participants was undergraduate student within the faculty of Architectural design and the Built environment.

The participants (N= 4; 1 male, 3 female). Three undergraduate female students from the Faculty of Architectural design and the Built environment of Delft University of Technology. One male graduated student from Communication and Multimedia design of The Hague University of Applied Sciences, who was an exception of the sampling criteria.

- Materials (stimuli): The group session was guided by a student creative facilitator within the faculty of Industrial design of Delft University of Technology. Different creative techniques were used to collect data, food and drinks were provided to keep the energy level of the students high, and the following materials were used;
 - (1) Clustered associative generation with post-its and a big poster divided into clusters: Materials, Shape & Composition.
 - (2) Making/rebranding a paper cup, with provided materials like colored paper, wooden sticks, copy markers, glue etc.
 - (3) 4W2H brainstorm on the brand, using posters and post-its and a given briefing on the brand identity, the problem: How to communicate the 'brand' in architectural design using materials, shapes and composition as design elements? And information about the location including images of Google maps and images of dominant elements
 - (4) How to.. idea generation, using posters and post-its, and stimuli images of different products and buildings that were in-line with the brand identity.
 - (5) Selecting concepts, using monopoly money
 - (6) Drawing concepts, using white drawing paper, markers and pencils.
- Procedure: The whole session took 6 hours, including breaks, dinner and presentation of the final concepts. The session started with an introduction assignment to get to know each other by giving a true statement about yourself and a drawing game to trigger the creativity.

The first associative generation on three given personality dimensions:

a. Friendly/Personal; b. Cheerful/Playful; c. Discover/Explore

The participants had to generate specific materials, shapes and compositions associated with the given personality dimension. They called ideas out-loud and wrote them down on post-its and put them on the right place on the poster. Photos were made during the assignment and all ideas were collected and digitalized in a document.

The second assignment, redesign a paper cup, was done in couples. Each couple got a specific brand; Google or Airbnb. After the design they gave a story about their cup, which was recorded.

After the redesign, the couples were mixed again and got a briefing about the brand identity, Google or Airbnb, how to.. question and information about the context. They got some time to read the briefing and discussed their first interpretations.

The third assignment was a brainstorm on the provided brand, to get to know the problem, with the 4W2H technique. Who, What, When, Where, How and How much. Associations on those items were generated on post-its and discussed.

The fourth assignment was to redefine the 'How to' question based on their own interpretation of the problem after the orientation phase. The first ideas were generated on the new question. After a while, inspirational images were presented to give the participants more ideas. When the idea fluency went down, the facilitator gave the whole group a new way of thinking out of the box: What if people could not walk? New ideas were generated on this perspective.

The fifth assignment was to cluster all the generated ideas, and find suitable category names to the clusters.

The sixth assignment was to value three of the most interesting and suitable ideas of the participants own interpretation, with monopoly money. After the valuation, all ideas were took apart and discussed which idea or idea combination would be worked out in a concept drawing.

The last assignment was to develop a concept drawing of the selected idea(s).

The session ended with a presentation of the concept.

2. Design:

2.1 Choosing the brand: Airbnb + Analysis brand identity

2.2 Choosing the location that fits the brand strategy/identity

2.3 Explorative expert interviews

(Location luchtsingel Tim Peeters, ZUS architecture and urbanism Rotterdam & Inspirational talk Steven Steenbruggen, Architect Volkshotel)

2.4 Concept on Urbanism level, Concept on local level, Concept on Building level etc.

2.5 Select architectural elements according research and brand analysis

2.6 Develop concept and design

Literature and general practical preference

Main Literature theories used as point of departure:

1. Raffelt, U., 2012. *Architectural Branding, Understanding and Measuring its Relevance for Brand Communication*. Norderstedt: Books on Demand GmbH.
2. Karana, E., 2009. *Meanings of Materials*. Delft: Technical University of Technology
3. Govers, P., 2004. *Product Personality*. Delft: Technical University of Technology
4. D'Astous, A. & Lévesque, M., 2001. A Scale for Measuring Store Personality. *Psychology and Marketing*, 20(5), pp.455–469.
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6. Bouten, L.M., Snelders, D. & Hultink, E.J., 2011. The impact of fit measures on the consumer evaluation of new co-branded products. *Journal of Product Innovation Management*, 28(4), pp.455–469.
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8. Cramer, K. & Koene, A., 2010. *A scientific study on brand appeal*. [Online] Available at: <https://issuu.com/br-nd/docs/23plusone> [Accessed 2 April 2016].
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Additional Literature:

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Kapferer, J. N., 1992. *Strategic Brand Management: new approaches to creating and evaluating brand equity*. London: Kogan page.

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Keller, K., Apéria, T. & Georgson, M., 2008. *Strategic Brand Management, A European Perspective*. Harlow: Pearson Education Limited.

Kesteloo, M. & Hoogenberg, M., 2013. *Footprint 2020, Offline retail in an online world*, Amsterdam: Booz & Company.

Kotler, P., 1973. Atmospherics as a marketing tool. *Journal of Retailing*, 49(4), pp. 48-64.

Kotler, P. & Rath, G., 1984. Design: a Powerful but Neglected Strategic Tool. *Journal of Business Strategy*, 5(2), pp. 16-21.

Lakhoff, G., 1987. *Women, fire and dangerous things: what categories reveal about the mind* /. s.l.:The University of Chicago Press.

Lakhoff & Johnson, 1980. s.l.:s.n.

Nistorescu, T. & Barbu, C., 2008. Retail store design and environment as branding support in the services marketing. *Management & Marketing*, pp. 11-17.

Olsen, E., Cooper, R. & Slater, S., 1998. Design Strategy and Competitive Advantage. *Business Horizons*, 41(2), pp. 55-61.

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Teufel, P. & Zimmermann, R., 2015. *Holistic Retail Design - Reshaping Shopping for the Digital Era*. Amsterdam: Frame publishers.

Zuidhof, J., 2007. *3D In-store Design, Towards meaningful brand experiences in physical in-store environments*. Enschede: University of Twente.

Reflection

Relevance

Current changes and challenges in the Retail landscape, demands for people to close the gap between architects and Brand management, who yet do not speak the same language. In contrast with a lot of research on branding principles for product design and brand extensions, there is little knowledge on branding principles regarding architectural design. However, the retail industry is now in demand for architects who do understand how a building should function as brand communication channel and how to design brand experiences with the use of architectural elements.

In order to achieve desired brand impressions and apply architectural branding effectively, this research will take the next step in identifying the different meanings that can be communicated with specific design elements.

The results of this study can be further developed into:

1. A framework/selection tool for architects, to help them select the right elements and design goals.
2. A framework for brand management, to be able to explain their goals and desires to the architect. (Speaking the same language)
3. A measurement/analysis tool; to analyze existing cases and measure the 'fit' with the brand identity. The tool can help to find the 'communication errors' and the framework can give an answer on how to improve the weak spots, in order to communicate the right personality.

Planning semester 1

Week	Date	Official issues	Research Tasks	Design Tasks
3.1	Febr 08-14		Introduction	
3.2	Febr 15-21		Introduction	
3.3	Febr 22-28		Plan	
3.4	Maart 29-6	Meeting 1 R	Plan	
3.5	Maart 7-13	Meetin 1 D	Plan	
3.6	Maart 14-20		Literature study	
3.7	Maart 21-27		Literature study	
3.8	April 28-3		Literature study	
3.9	April 4-10	Meeting 2 R/D	Literature study Analysis Airbnb	Analysis Airbnb
3.10	April 11-17		Literature study P1 presentation P1 written proposal	P1 presentation P1 written proposal
4.1	April 18-24	P1	Conclude findings Write Introduction Write Findings	
4.2	Mei 25-1		Select personality dimensions Make framework meanings	Select Airbnb values Select Metaphors (1+2)
4.3	Mei 2-8		Select building qualities (1) Design cube models (1)	Select building qualities Design cube models
4.4	Mei 9-16		Select building qualities (2) Design cube models (2)	Select building qualities Design cube models
4.5	Mei 16-22		Study 1: Testing	Testing
4.6	Mei 23-29		Write Results	
4.7	Juni 30-5		Study 2: Workshop session	Select location + Analysis Select building
4.8	Juni 6-12		Finalize report Presentation	Make design concept Presentation
4.9	Juni 13-19	P2 17 juni	Presentation	Presentation
4.9 + holiday			Write report	

Planning semester 2

Week	Date	Official issues	Research Tasks	Design Tasks
1.1	Sept 5-11		Finalize report	Concept design Urban scale + Maquette 1:500 context
1.2	Sept 12-18		Finalize report	Building scale analysis
1.3	Sept 19-25		Finalize report - Hardcopy	Building concept development
1.4	Sept 26-2			Design building 1/100 (concept, structure, climate)
1.5	Oct 3-9			Design building 1/100
1.6	Oct 10-16			Design building 1/50
1.7	Oct 17-23			Detailing 1/20 + 1/5
1.8	Oct 24-30		Hand in final report	Detailing 1/20 + 1/5
1.9	Nov 31-6	P3		P3 presentation Design 1/100: Floorplans, Sections, Elevations Situation 1/500 with Floorplan Section 1/50 part of elevation and section and floorplan Facade view, with horizontal and vertical section 1/20. Sketch details 1/5 , Maquette? Climate design & Structure
1.10	Nov 7-13	P3		P3 presentation
2.1	Nov 14-20			Develop all drawings
2.2	Nov 21-27			Detailing
2.3	Nov 28-4			Detailing
2.4	Dec 5-11	P4		P4 presentation Situation drawing 1/1000 Floorplan 1/500 in Situation Design 1/100: Floorplans, Sections, Elevations Partial Section and Floorplan 1/50 Façade view with horizontal and vertical section 1/20, Details 1/5 (Interior furniture 1/1)? Maquette? Climate & Structure
2.5	Dec 12-18	P4		
2.6	Dec 19-25			Maquette
-	Dec 26-1			Maquette
-	Jan 2-8			Rendering +Drawings
2.7	Jan 9-15			Posters + Maquette
2.8	Jan 16-22			Presentation
2.9	Jan 23-29	P5		
2.10	Jan 30-5	P5		