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Delft University of Technology Faculty of Architecture and the Built Environment Master Thesis, Explorelab 22

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	THE IMPROVEMENT OF	
ARCH	ITECTURAL BRAND COMMUNICA	NOITA

PRFFACE

This research is the first part of my masters' graduation project, at the Architecture and the build environment faculty, of the Technical University Delft. The overall project consists of two different parts, first a research study, followed by an architectural design.

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 and followed several business and branding related courses. Driven by an interest and curiosity in the combination between architecture and branding strategies, I joined the Explore Lab 22 studio, which gave me the opportunity to develop my project about both fascinations and resulted in the topic of this project:

'Architectural Branding' - The Improvement of Architectural Brand Communication

The main objective was to learn as much as possible about branding and use this knowledge to explain how architecture can play an important role in brand strategies, and find a way to translate the identity of the brand into architectural design.

That is why this project aims to deliver an example of an architectural branding strategy. This strategy consist of adding a physical channel to an existing online business model, and second how this channel should be designed to reflect the identity of the brand.

The latter topic is particularly researched in this thesis, and addresses the relationship between architectural design elements and the meaning it has to people when evaluating the design. The results will help me in selecting the right attributes to built brand identity.

A case study is chosen for this project, to show how the results of the study can be used in a design assignment for an online brand that goes offline.

This report describes the outcomes of my research and the brand analysis of the case study. In the end, all findings are used to define my design assignment and will steer my design decisions in the next part of my graduation.

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At last a big thank you to my family, friends, housemates and my boyfriend Joris, for supporting me in many ways during moments of headaches but also joined my moments of over excitement.

I hope you all will enjoy reading this thesis as much as I enjoyed researching this topic.

Liza Hidding

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ABSTRACT

Purpose – This study was written for the new generation of retail designers and brand management, and provides knowledge on to design a high 'architectural-brand-fit'. The focus of this study will lie on the relationship between architectural design elements and the perception of specific brand associations which are triggered by the design. The architectural design elements will be evaluated according their shape, composition and material characteristics.

Design/methodology/approach – This research adopted a qualitative approach using expert interviews and generative design sessions which were draw on observations and photographs.

Findings – The interviews demonstrate that some personalities are strongly linked with specific design attributes like; 'Friendly' which is connected with curved shapes and an open composition. Whereas other personalities are perceived from the effect of contradictive and or integrated elements like; 'Intellectual' which is perceived due to the integration of all elements together. In addition, the generative design sessions confirmed some relationships of personalities and attributes from the first study, but also added new elements. The third study resulted in a method that can be used in the development of a design concept, driven by brand identity.

Research implications – The research implications are that the role of architecture is changing towards being a brand communication channel, but it is not yet well understood how the brand identity can be translated to a physical manifestation, in order to trigger the right brand associations and design a high architectural-brand-fit. For designers and architects, building the identity for a branded space presents opportunities to create a distinctive architectural style.

Originality/value – The originality of this research lies in its interdisciplinary approach, which uses both design and management literature and a prototypical and generative methodology to examine the relationship between design elements and specific brand associations that are triggered.

Keywords – Architecture, Branding, Spatial design, Brand associations, Brand personality, Spatial personality

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PART I

INTRODUCING ARCHITECTURAL BRANDING

1. ARCHITECTURAL BRANDING

1.1 Branding in Architecture

Currently, designing architecture for a brand cannot be done without an in-depth understanding of branding anymore. Because this thesis aims to improve architectural brand communication, first a literature review provides relevant issues in this field of expertise.

In the next paragraphs, you will discover that brand management is in demand for 'the new generation' of multidisciplinary retail architects, who understand the principles of 'Architectural Branding'. This way of designing uses the full communicative power of architecture, to capture brand unique associations. However, designers are struggling with this demand, and literature provides very little knowledge on how to do this. Insights from this literature review are used to define relevant research questions. In addition, Chapter 2 elaborates on the meaning of brand related terms that are mentioned in the introduction, and explains the essence of branding.

In the next section, you will find out why branding became important in the first place, how this and the online retail revolution has changed the role of the physical store and why brand management's interest in architecture has significantly increased.

Brand is key to differentiate

With too many brands in our current retail landscape, it becomes hard for retailers to distinguish themselves from the competition and for people to choose between the offer overload. From branding theory we can learn that the brand is the key to both problems. Retailers can use the brand to relevantly distinguish from the competition (Keller, et al., 2008, pp. 32-33) (Teufel & Zimmermann, 2015, p. 17) (Zuidhof, 2007, p. 14) and the brand can help people to ease the problematic character of making choices (van der Vorst, 2004, p. 33).

The brand can establish these advantages, because it provides three basic functions. At first, a brand can touch the things we find important in our lives, according to Cramer & Koene (2010, pp. 3-5) and therefore the brand enables us to identify and connect with a brand that reflects our personality. Second, the brand can steer our expectations about products and services, because the brand recalls all kinds of associations we have created in our minds while using the brand. And last, it provides visual recognition. According to van der Vorst the visual identity of a brand can bind non-related 'things' (e.g. products, advertising, store design) together, and this is the most powerful intention of branding (2016). Chapter 2 elaborates on this theory.

So, the need for differentiating changed the importance of branding in our retail landscape. But the introduction of the world wide web, and its impact on our purchasing behaviour, increased this importance even more. Online stores changed the role of physical stores to play in the future, in order to successfully manage the changing market (Teufel & Zimmermann, 2015, p. 6) (Frijters & van Beekhoff, 2013, p. 13) (Kesteloo & Hoogenberg, 2013, p. 4). Figure 1 illustrates this change and is explained in the next paragraphs.



Figure 1: Illustration of the changing role of the physical store

From sales function to brand experience

The last few years, we have seen bricks-and mortar stores disappear and others struggle to survive the online retail revolution, because offline stores are having a hard time beating digital benefits, like; total transparency, internet prices, customer reviews and online stores being accessible 24/7. Consequently, retailers became aware that the mind-set of online and offline stores being rivals had to change towards both channels being complementary. Even though physical stores can't compete on digital benefits, they can dominate concerning experiences.

Namely, the elements that make up the store environment stimulate all our senses. There are many variables (e.g. odor, light, material) a retailer can use to influence the experience of consumers. For this reason, many retail professionals agree, that architecture is not only interesting from a sales perspective, but from a branding perspective as well. Therefore, offline stores are gradually shifting to brandlands, where consumers can really interact with the brand in a physical environment.

Multiple researchers demonstrate the power of architectural design in facilitating brand communication. The next section takes a deeper look into what the impact of architectural design is on brand related parameters.

The power of architectural design

At first, in-store communication is proved to be the most influential touchpoint on brand consideration, in comparison with other touchpoints, because customers have a high attention level in-store (Peck & Wiggins, 2006) (Baxendale, et al., 2015, p. 236). Touchpoints are all brand-related stimuli (e.g. advertising, in-store design, products) that are a part of a brand's design and identity, and provide a direct or indirect contact with the user. Chapter 2.2 and 2.3 provide more background information about brand touchpoints and how people use these touchpoints to develop an overall brand impression, which is called brand image.

Second, customers consider the in-store environment as a reflection of product and service quality, which means that the design of the environment can modify the brand perception of customers (Nistorescu & Barbu, 2008, p. 11). If for example high quality materials are used in a store design, the quality impression of products displayed in this environment will automatically increase.

Third, the store environment offers a three-dimensional environment where the communication is entirely controlled by the brander (Zuidhof, 2007, p. 14) (van der Vorst, 2004) (Kotler, 1973). Therefore, the environment is one of the two key touchpoints, together with brand advertisement, to influence the brand image of customers in a way the brander prefers. All other touchpoints are provided by second parties like word-of-mouth, as described in Chapter 2.2.

With this knowledge, brand management's interest in architecture has significantly increased. They are convinced that architectural design can communicate the identity of a brand in a way no other touchpoint can, and are therefore willing to invest in good design.

However, when asking brand managers and retail architects how their brands are translated to the three-dimensional in-store environment, it appears that in most cases, it is no more than the brand's two-dimensional style guide that is extended to the three-dimensional design of the store (Zuidhof, 2007, p. 23). Stores differ in style, but the communication concept is the same.

1.2 Call for improvement of architectural brand communication

In other words, most brands do not make fully use of the benefits of the physical store in order to empower the relationship between the brander and brand user. Creating a competitive, strongly differentiated retail environment, takes more than specific knowledge on business-, brand management or architecture (Teufel & Zimmermann, 2015, p. 8).

Our retail landscape calls for designers with an in-depth understanding of retail's parameters, which include communication, graphics, space and the digital sphere (Teufel & Zimmermann, 2015, p. 8). With the use of all these parameters, desired brand impressions can be achieved in-store. This holistic approach, is necessary to better translate the brand identity into architectural design.

Previous research

In research, there is little knowledge about branding principles used for architectural design. In particular, the relationship between brand identity and architectural design elements, in which the design elements reflect the brand identity according their meanings. While, this relationship is often explored in product design related research. Chapter 2.3 explains how several researchers address this issue, by linking design attributes to the personality of a brand. Then, Chapter 2.4 gives an overview of relevant studies that are used as reference for this thesis.

The most important reference study is done by Raffelt, who did an exploratory study (2012) 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 customers. This study was a first step in linking consumer responses to a new brand communication tool: Architectural Branding.

However, some limitations in this research are interesting to explore. First, only a few specific architectural elements were linked to personality impressions, which is not enough to develop a comprehensive design framework. Second, the focus of the research was on the overall perception (exterior) of the building. Another limitation is the lack of experience in the use of images as stimuli, when comparing it with personality impressions perceived from a real building (Raffelt, 2012, p. 91). Besides these limitations, Raffelt proposed an extension towards interior design for further research (Raffelt, 2012, p. 92).

1.3 Contribution of this thesis

At first, this research aims to find more concrete insights into which architectural design elements trigger certain personality impressions in an architectural design, with a particular focus on interior design. With these insights, a second goal is to create a design framework and architectural branding guidelines to support decision making in the design process and achieve desired brand personality impressions. These goals have led to the main research question:

How to design 'architectural-brand-fit', driven by brand identity?

'Architectural-brand-fit' is defined as: the perceived fit according customer evaluations, between the brand identity and the design, where brand unique associations are supported by architecture. When customers see a connection between the brand identity and the personality impressions they experience from the design, a high 'architectural-brand-fit' can be measured.

Brand identity is defined as: an idealized concept produced by the brander, which is used to specify the essential meaning, intention, and vocation of the brand. This includes its: individuality, long term goals and ambitions, consistency, values, basic truths and recognition signs (Kapferer, 1992, pp. 32-34) (van der Vorst, 2004).

The main research question is subdivided into the following sub questions:

- 1. What personality impressions and associations are triggered by architectural design elements? And what is the relationship between the associations and the specific elements?
- 2. How are design elements integrated into a design concept to communicate a given brand identity?

Relevance

The retail industry is now in demand for architects who 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 explain their goals and desires to the architect; and (3) A measurement tool; to analyse existing cases

¹ The term 'architectural-brand-fit' is proposed based on the term: 'new-product-brand-fit' (Bouten, et al., 2011, p. 7)

and measure the 'architectural-brand-fit'. Such a tool can help to find the 'communication errors' and the framework can give suggestions on how to improve the weak spots, in order to communicate the right personality.

1.4 Overview of this thesis

To answer the research questions and develop a design assignment for the second part of this graduation project, this thesis is divided into four main parts: (1) Introducing architectural branding, (2) Designing architecture, driven by brand identity, (3) Analysis of the brand Airbnb, and (4) Findings and Contribution to the design. Figure 2 shows how the parts interrelate in this thesis.

Part I: Introducing Architectural Branding

Chapter 1 is an introductory chapter in which the significance of architectural brand communication is explained. Chapter 2 describes the essence of branding. The chapter explains what brand identity is, and how touchpoints are used by the brander as mediator to interact with the brand. Furthermore, we look into the process of how users evaluate their experiences with touchpoints, which results in brand image development. The chapter ends with explaining what brand personality is, how researchers use personality to categorize brands and what the contribution of brand personality is to design. These theories serve as a starting point for the establishment of the studies in Part II.

Part II: Designing architecture, driven by brand identity

The second part aims to provide support in the design process. Chapter 3 addresses the first sub question and consists of two studies. Study 1 exists of expert interviews on personality impressions and associations regarding a 3D scale model, which are designed according own interpretation and literature findings. In Study 2 participants were asked to think up and relate different design attributes to a given personality. Results of both studies are processed in a personality framework.

Then the focus shifts from the meaning of design elements to the development of a design concept in Chapter 4. Study 3, a generative prototyping study, explores how participants integrate different elements in order to communicate brand unique associations and provides an answer on the second sub question.

The results are used to evaluate the architectural portfolio of a case study in Part III.

Part III: Analysis of the brand Airbnb

In this part, the brand Airbnb is chosen as a case study. Analysis of this brand will help to define the design assignment in Part IV, and to explore the right architectural design goals in the second part of the graduation project. Chapter 5 first explains why Airbnb is chosen as a case study and second, presents the brand identity. The brand identity is divided into: the business model, the brand concept and the visual identity.

Chapter 6 illustrates the architectural identity of Airbnb. Seven designs; two office buildings, two accommodations and three event spaces, are evaluated according their appearance and personality. After the analysis, an assessment indicates a consistency problem and gives recommendations for an architectural branding strategy.

Part IV: Findings and contribution to the design

Chapter 7 concludes the findings of all previous parts and explains how this knowledge contributes to the architectural design that has to be developed in the next part of the graduation project. This part includes, a design assignment which describes a programme, the choice of location, and proposal of the concept.

This thesis ends with a reflection and what the further possible research directions can be.

PART I

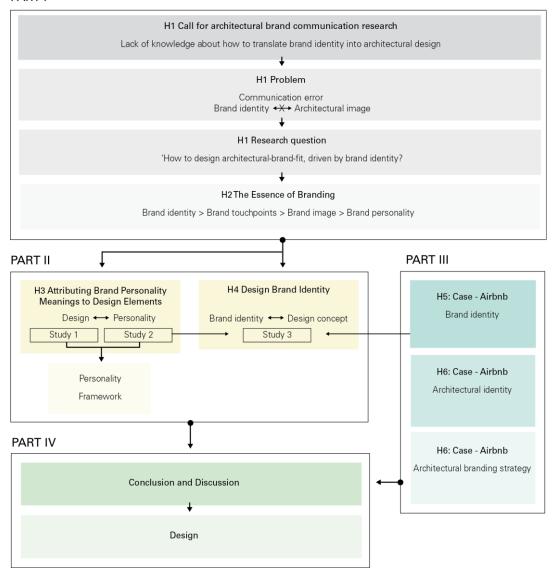


Figure 2: Overview of this thesis

2. THE ESSENCE OF BRANDING

The starting point for designing 'architectural-brand-fit' is to understand how architectural design effects other brand related parameters and vice versa. Knowledge of branding is therefore an essential strategic tool to support design decisions. In fact, it is through the integration of branding based methods that the design project may achieve a unique asset for brand communication.

This chapter describes the essence of branding, extracted from literature findings and interviews with several branding experts in the Netherlands. At first, we take a look on the sender side, followed by a brief explanation of which components are used by the brander to build brand identity. The second part gives an overview of communication channels the brander provides to reach users, and additional channels of external parties. The third section explains how users create a brand image based on their experiences with brand touchpoints, and what kind of associations are part of a created network in the user's brain. This chapter ends with those associations that describe the brand according human characteristics, the so called 'brand personality' impressions. The latter, is frequently used in design related literature studies and also forms the basis of which this thesis is based on. Figure 3 gives a summary of this chapter and illustrates how the most important aspects influence each other.

2.1 The essential variables of the brand identity

In general a brand is a simplified reflection of a company and facilitates the interaction process between the company and users. When creating a brand, at first it is the duty of the brander to specify the meaning of the brand into a brand concept, as explained by Roland van der Vorst. This concept reflects all characteristics of the company preferred by the brander. It should by all means describe the following aspects; position, vision, mission, company values and personality (Kapferer, 1992, pp. 32-34).

With this idealized concept, the brander provides rules to bind a variety of different products and services into one concept. This results in category boundaries, and gives ease of evaluation for brand users whether 'things' are a member of the brand or not, and also if a member is more or less prototypical.

To support the categorization process, the brand provides a recognition function. Binding non related 'things' together, whereas the appearance is perceived as equal, is the most powerful tool of branding according to van der Vorst. Therefore, a brand needs a unique and consistent visual identity. Elements such as the logo, typeface, color scheme and symbols are a part of this. Companies are willing to invest in creating a strong visual identity, because in fact recognition is key in a competitive market. Through this, it is essential that all communication channels should deliver a concerted and synchronized brand message to users (Karjalainen & Snelders, 2010, p. 8).

The formation of the concept, category boundaries and visual identity, as shown in Figure 3, is called brand identity. In this, the brander has to define what characteristics must remain permanent (e.g. core values), and what may evolve over time (Kapferer, 1992, p. 35). The brander can modify the concept, in order to remain relevant for brand users. Enter into dialogue with those users is essential to support brand innovation. More about the user side is explained later in this chapter.

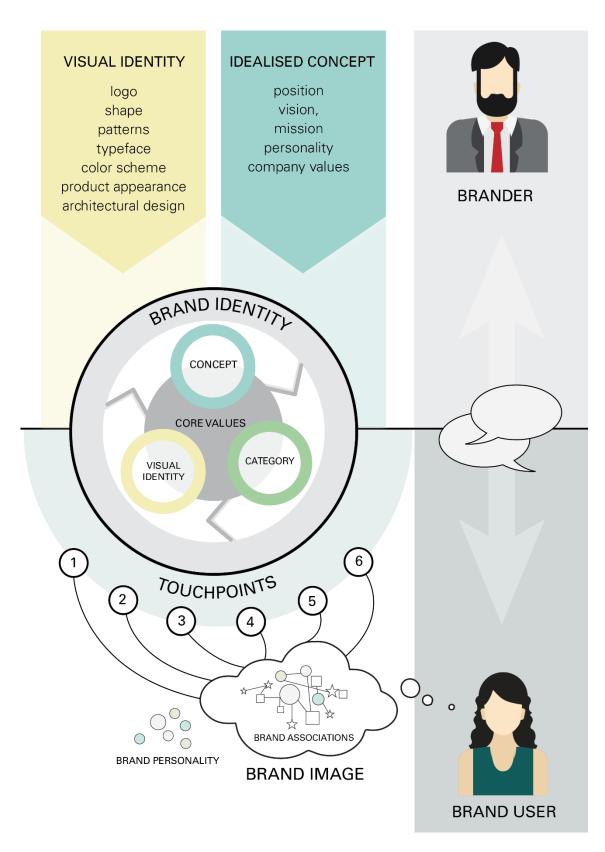


Figure 3: Infographic - The essence of branding

2.2 Brand touchpoint as mediator for interaction

To reach users and for them to interact with the brand, the brander translates the brand identity into a variety of communication channels. All brand-related stimuli that are a part of a brand's design and identity, and provide a direct or indirect contact with the user are called touchpoints. According to Baxendale, et al. there are two types of touchpoints that are initiated and controlled by the brander; brand advertising and in-store communications (2015, p. 236). Packaging, marketing materials, products, web interface and store design are examples of these types. Other touchpoints are provided by external parties, namely retailer advertising, word-of-mouth, peer observations and traditional earned media (Baxendale, et al., 2015, p. 236).

Comparison of different types of touchpoints, show that in-store communication is in general most influential, regarding the impact on brand consideration, followed by peer observation and brand advertisement (Baxendale, et al., 2015, p. 236). The highest ranking of in-store communication, is partly the result of a high attention level users have in-store, and a mix of multi-sensory types of communication (e.g. employees, display, products, visuals).

2.3 Relationship between touchpoints and the development of brand image

All experiences with brand touchpoints have an impact on how users perceive the brand and how they form an impression in their mind. This overall perception is called brand image. This image develops over time, and can be seen as a network of all kinds of associations (e.g. functional, emotional, images, personality impressions) as illustrated in Figure 3.

When designing for a brand it is important to understand how users interpret brand communication and form opinions. This knowledge can help the brander to take control and create success by coincide the intended brand identity and the perceived brand image. For this reason, a lot is written about brand image in literature. The next paragraphs discuss how several researchers categorize brands regarding different personality and emotional associations, followed by the contribution of brand personality to design.

2.3 Categorizing brands according brand personality associations

At first, most researchers categorize brands according personality impressions. Aaker was one of the first that argued that users attribute personality characteristics to brands and products. And, thus she shifted the focus from 'brand as a product' to 'brand personality'. Her study identified five basic brand personality dimensions termed; Sincerity, Sophistication, Excitement, Competence, and Ruggedness (see appendix 2.3 A) (Aaker, 1997, p. 352). In her point of view, any brand can be categorized according these dimensions.

Second, Kim Cramer and Alexander Koene of BR-ND, explained in an interview how they categorize brands according emotional associations, because a brand is able to touch things we find important in our lives (Cramer & Koene, 2010, p. 5). They call these emotional associations 'drive domains' and distinguished twenty-four different domains into five categories termed; basic, attraction, self-

development, vitality and ambition (see appendix 2.3 B). To create an appealing brand, it is best to represent domains of all different categories. In addition, it is the combination of an uncommon set of domains, that increases brand differentiation and thereby companies can relevantly distinguish from competitors.

During the interview, we discussed that it is hard to categorize brands according associations, because a brand is meant to be a unique concept. When trying to connect them with a generalized category, this uniqueness is not taken into consideration. Though a lot of researchers are using this method to find generic communication principles.

2.4 Contribution of brand personality to design

After Aaker's introduction of personality dimensions, several design related studies used this categorization method to explore the influence of physical appearance (e.g. products, architecture) on personality perception. The following studies gave inspirational insights for this thesis.

A first example is a contribution to the field of product design, by finding out which product appearance characteristics people associate with a particular personality characteristic (Govers, 2004). The results can help in the design process of creating products with a pre-determined personality.

Second, Raffelt distinguishes four different brand personalities as presented in appendix 2.4 C (e.g. Temperament, Competence, Attractiveness, Naturalness) and gives advice on how these brands should be communicated best, regarding the overall appearance of a building. In addition, she gives an understanding of which brand personality impressions are triggered by specific exterior design attributes. Her study results in four prototypical architectural branding designs. (e.g. Disruptive, Harmonious, Progressive, Massive) (Raffelt, 2012). However, as discussed in the previous section, using prototypical designs will exclude brand unique associations. Therefore, Chapter 4 will include a study to find out how unique associations can be integrated in the design, with support of personality related design attributes.

At last, D'Astous & Lévesque created a store-personality scale for marketing practitioners to understand how their customers perceive their store. However, no method is given for architects and brand management on how to built store-personality. We know how to measure it, but not how to built.

This thesis follows the insights presented by previous researchers, and other important brand related knowledge. All things led to the design of three different studies, with the aim to improve the communication of brand identity, and find a way to integrate brand unique associations with supportive brand personality based design attributes.

PART II

DESIGNING ARCHITECTURE DRIVEN

BY BRAND IDENTITY

3 DEVELOPMENT OF A PERSONALITY FRAMEWORK

3.1 Attributing brand personality meanings to design elements

From the previous chapter, we learned that people use personality characteristics when evaluating architectural design. For this reason, architects should pre-determine the personality they want to express before the design process starts. Only than you can measure whether this desired impression is also perceived in that way, or not.

So, to design a high architectural-brand-fit, it is important to understand what the influence of physical appearance is on personality perception and what the meaning is of individual elements. Processing this knowledge into a design framework helps designers to select elements according their personality meanings.

In the following sections, two studies are reported. Study 1 reports an exploratory study investigating the relationship between architectural design elements used in a 3D scale model and perceived personality impressions. In this study the differentiation of architectural design elements are categorised according shape, composition and material attributes. A 3D scale model was chosen as stimuli because a physical model will correspond more to real life experiences, in comparison with images. Also, people may more easily describe the model when they can touch and turn the model freely and second, they are able to imagine walking through the designed space.

Since part of the goal of this thesis was to create a comprehensive design framework, preferred was to use two different models with different overall personalities. Four design experts describe their impression of both models. Their responses were content analysed and the answers that contain personality related characteristics were selected and attempt to link up with specific elements in the scale model. Finally, results are processed into a design framework.

Study 2 aims to verify and complement the design framework composed of study 1. In this study a group of participants were asked to associate specific shapes, compositions and materials according a given personality.

Both studies consist of a generative design approach by bringing the people we serve into the design process. The advantages of this generative approach is that the users can give a deeper understanding of what they think, perceive and experience from stimuli such as prototypes which are used in study 1. These insights can clarify if assumptions about which personality associations should be triggered were right or wrong, and can help designers adjust the design to increase the architectural-brand-fit.

On the contrary, the interviews and generative sessions can also have some disadvantages. Namely the participant can give answers with the aim to please the researcher. Also, the receiver, in this case the researcher, can colour the message, e.g., by his or her own interpretation which will result in untrustworthy findings (Sanders & Stappers, 2012, p. 69).



3.1.1 Method study 1

Participants – (Purposive, expert sampling approach) The participants were subjectively (purposive sampling) selected on their particular expertise, because their experience increases the quality of the results. 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 modelling 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.

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 (see Appendix 3.1 A). 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 (see Appendix 3.1 B).

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. A interview guide is shown in Appendix 3.1 C.

After the interview, the results were translated from Dutch to English, coded and clustered on: Free associations, Personality dimensions, Shapes, Compositions and Materials. After a content and clustering analysis, the list of personality items were cleaned. Items with identical meanings (e.g. 'Bipolar, 'Hybrid'), were combined and represented with the most suitable item. In the end the personality related characteristics were attempt to link up with specific elements in which they base their perception on.

3.1.2 Results study 1

Overall personality perception

The verbal descriptions of the first thoughts and associations given by all interviewees in general consists of specific characteristics of the 3d scale model, (e.g. 'open', 'integration of shapes') and different functions, programs and purposes (e.g. 'office building', 'exhibition'). These results show a low frequency in use of personality characteristics to evaluate both models.

In the second part of the interview, the participants were specifically asked to describe the model according personality characteristics. Model A was for example perceived as 'contrasted' and 'solid' by all of the interviewees. The following examples of statements support this observation:

(Model A - Contrasted) 'It is a schizophrenic person, because there are two styles in one model. When you turn the model 90 degrees you can perceive a total style change. The front side is like a wine cellar, and when you make a quarter turn, you are in the modern ages (Male 1). '

(Model A - Contrasted/Solid) 'The model to me looks indecisive and hybrid. It is solid but soft on the other hand. Inside you can see the fragile material glass, which is protected by concrete. The concrete is really solid and caring (Female 2).'

These quotes also illustrate that the 'Solid character is perceived from the concrete material, and is compared with other elements in the model, like fragile glass. That is why all participants perceive the model as 'Contrasted'. More contrasting personalities were mentioned in the interviews, namely 'Modern - Classic' and 'Playful – Calm'. The latter observation is for example perceived from the following statements;

(Model A - Calm) 'I would say that the model is very stable, experienced in life, calm and solid (Male 1)'

(Model A – Playful) 'From the inside the model is playful and cheerful, the glass volumes invite you to come play on the roof (Male 2).'

As said, 'contrasted' and 'solid' were mentioned by all of the interviewees regarding model A. However, other verbal descriptions, were very personal and only given once. Model B had more single used dimensions (e.g. 9 of the total categories of 15) than model A (e.g. 7 of the total categories of 20).

Two of these specific single dimensions regarding model B were 'protective' and 'modern';

(Model B - Protective) 'The Perspex cube is there to protect what is inside (Female 2).'

(Model B - Modern) 'It has a modern look, modernism with perforated volumes, asymmetrical compositions and without decorations (Male 2).'

All personality characteristics occurring in the given descriptions, were isolated and counted. Appendices 3.1 D1 and D2 present numbers of all personalities mentioned by each interviewee of both model A and model B. Subsequently, the ranking in Appendix 3.1 E shows which personalities are mentioned most often.

Fout! Verwijzingsbron niet gevonden. gives an examination of the full set of dimensions. Personalities mentioned by one interviewee are considered as less valid, and therefore removed from the general conclusion. To conclude, in general model A was perceived as; 'Contrasted', 'Solid', 'Classic' and 'Friendly'. Model B was overall described as; 'Intellectual', 'Forcy', 'Daring' and 'Professional'.

Fout! Verwijzingsbron niet gevonden. also highlights in blue the personalities that were supposed to be expressed in both scale models, (e.g. for model A: 'Friendly', 'Caring' and for model B: 'Playful', 'Discover'). Concerning model B, assumed is, that 'Discover' which is not directly mentioned by the interviewees, can be seen as part of the 'Intellectual' and 'Daring' categories. Both dimensions are associated with; 'searching', 'poetic', 'symbolic value' and 'excitement' as shown in Appendix 3.1 D2. The ranking shows that the desired personalities are not well communicated in both models. Further analyses was done, to link up the personality impressions with specific elements in the design, to find the elements that cause 'communication-errors'.

Desired personality VS Perceived personality ranking					
Model A	Amount	Interviewees	Model B	Amount	Interviewees
Contrasted	10	4	Intellectual	10	2
Solid	9	4	Forcy	4	2
Classic	7	3	Daring	4	3
High-tech	4	1	High-tech	3	1
Experienced	3	1	Professional	3	2
Friendly	3	2	Open	2	1
Balanced	2	1	Playful	2	2
Curious	2	2	Balanced	1	1
Introvert	2	1	Edgy	1	1
Modern	2	2	Intriguing	1	1
Not cheerful	2	1	Modern	1	1
Playful	2	2	Modest	1	1
Calm	1	1	Protective	1	1
Caring	1	1	Rather masculine	1	1
Down-to-earth	1	1	Warm	1	1
Elegant	1	1			
Fragile	1	1			
Iconic	1	1			
Natural	1	1			
Soft	1	1			

Table 1: Ranking of desired and perceived personality impressions

The personality impressions that were perceived from specific design elements were extracted from the verbal descriptions of both model A and model B. The following statements are examples of relationships that are found;

(Concrete - Arch - Friendly) 'The concrete arch structure brings a friendly feeling (Female 1).

(Green - Dynamic - Playful) 'The floor is like a playground with dynamic placed squares and the use of green grass (Male 2).'

Results are categorised according materials (see appendix 3.1 F), shapes (see appendix 3.1 G) and compositions (see appendix 3.1 H).

The results regarding shape show, that it is possible to distinguish two main groups of personality characteristics. The two groups more or less represent a soft, friendly personality and a more masculine, professional personality. The first group can be characterized by rounded shapes, and the second is dominated by geometric, rectangular shapes.

Also a conclusion could be made about what attributes had a dominant factor in the representation of a specific personality. For example 'introvert' and 'extrovert' can only be perceived when the composition consist of a closed vs open character. In this case the attributes shape and material will not influence the perception of the personality. Knowing what the dominant attribute is to communicate a personality, gives you the opportunity to be creative with the subordinate attributes.

While some relationships between personality impressions and specific attribute characteristics could be made easily, some were connected to the combination of elements. As explained in the previous section model A was perceived as 'contrasted', because of the combination of different elements. For example the material use of concrete and glass which have contrasting characteristics namely, solid vs transparent.

All relationships found are processed into a personality framework (see Appendix 3.1 I). The personality framework, can be used to set design goals or helps to find communication errors in an existing design. The next paragraph will give a review on the architectural-brand-fit of both model A and model B, in order to show how the framework can be used.

Review scale models

Regarding model A, a low fit is measured. The model is only perceived as 'friendly' by two interviewees. Also 'Caring' is not well perceived from the model, which is mentioned only once. The personality framework shows, that a friendly personality can be achieved by: a more open composition, use of color or natural materials, and rounded shapes. Adding more openness and color can increase a friendly feeling.

Model B has a better fit with the desired personality than model A. Especially the discover part is well associated. All interviewees were looking for a poetic story behind the model. However, the model is more perceived as high-tech and professional than perceived as playful and cheerful. These are contrasting feelings. The communication error is caused by the dominance of rectangular shapes. Adding curved shapes and replacing some wooden or concrete like materials for metal will increase playfulness.

GARDEN SHAPE Spiral 9ch Hoorn Kermis Stoeperst Maderials

3.1.3 Method study 2

Participants – (Purposive sampling approach) The criteria for the participants were undergraduate student within the faculty of Architectural design and the Built environment.

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.

Stimuli - The group session was guided by a student creative facilitator within the faculty of Industrial design of Delft University of Technology. To collect data, a clustered associative generation technique was used. Post-its and a big poster, divided into attribute clusters (e.g. 'Materials', 'Shape', 'Composition'), were provided. Besides, food and drinks were served to keep the energy level of the students high.

Procedure - The associative session took 2,5 hours, including a coffee break. 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.

After the introduction, the creative facilitator explained the associative assignment to the participants.

The participants had to generate specific materials, shapes and compositions associated with a given personality couple. The first couple given was; 'Friendly/Personal', followed by 'Cheerful/Playful', at last 'Discover/Explore'. They called ideas out-loud, wrote them down on post-its and put them on the right place on the poster. Photos were made during the assignment (see Appendix 3.1 J).

After the session, all ideas were collected, digitalized and translated from Dutch to English. After a content analysis (see Appendix 3.1K), attribute types with similar characteristics and specific examples were removed, to form a recapitulative list containing attribute qualities (see Table 2).

3.1.4 Results study 2

The participants came up with all kinds of attribute types regarding the given personality couples. Most of these types had similar characteristics such as; 'loopings – spiral', 'ductile – elastic' and 'modified – plastic'. Those attribute types with similar characteristics and specific examples (e.g. rubber, water) were removed from the list and represented by a general attribute quality (e.g. transparent). Table 2 presents all qualities that are associated with the given personality couples.

Results in Table 2 show, that the personalities 'Discover-Explore' and 'Cheerful-Playful' are much alike in their representation. Attribute types such as modified materials (e.g. plastic, rubber, mirrors, smart), a mix of different shapes (e.g. rectangular, curved), and a-symmetrical compositions can support the communication of both categories. However, these categories differ most regarding the use of materials. Whereas 'Discover – Explore' can rely on both natural materials (e.g. Lava, Moonstone) and modified materials, the personality couple 'Cheerful – Playful' is more associated with the latter one. In addition, a 'Friendly-Personal' personality, is best perceived from a harmonious composition, created with natural materials (e.g. wood, wool, ceramics, glass) and preferably curved shapes.

Friendly - Personal				
Attribute	Quality			
Shape	Curved			
Material	Local			
	Natural			
	Soft			
	Transparant			
	Warm			
Composition	Balanced Centred Corners Harmonious Inviting Low			
	Open Surrounded Serene Small			

Discover - Explore		
Attribute	_	
	Quality	
Shape	Angular	
	Big	
	Irregular	
	Freely curved	
	Mixed	
	Vertical	
	Stairs	
Material	Bright colored	
	Dark colored	
	Innovative	
	Mixed	
	Semi-	
	transparant	
	Stimulating	
	Transparent	
Composition	Active	
	Dynamic	
	Contrasted	
	Detailed	
	Integrated	
	Layers	
	Off centre	
	Overlapping	
	Random	
	Small	
	components	
	Surprising	
	Julphishig	

Cheerful - Playful		
Attribute	Quality	
Shape	Curved	
	Ductile	
	Wrinkled	
Material	Colored	
	Dirty	
	Ductile	
	Organic	
	Hard	
	Reflective	
	Modified	
	Soft	
Composition	Alterable	
	A-symmetrical	
	Dynamic	
	Integrated	
	Lively	
	Contrasted	
	Overlapping	
	Pattern	
	Pell-mell	
	Provocative	

Table 2: Personality and related attribute qualities

The goal of this study was to complement and validate the design framework that is processed from study 1. The next section provides a comparison between both studies and ends with the development of the design framework.

3.1.5 Development of a personality framework Comparison personality framework study 1

When comparing the framework of study 1 (see Appendix 3.1 I), with the framework of study 2, (see Appendix 3.1 K), some remarks can be made. Almost all attribute types named in study 1 were also mentioned in study 2. The only exceptions that only appeared in study 1 were; orthogonally compositions and geometrical shapes, which are related to the personality couple 'Discover-Explore'. These attributes were mentioned because they were perceived as elements with a strong poetic meaning. Also, regarding 'Playful –Cheerful', the materials steel and glass are mentioned in study 1, but not specifically in study 2.

Contrariwise, study 2 have resulted in a lot of additional attribute types, which are strongly in-line with the results of study 1. Some of them are concrete examples (e.g. Wrinkled shape, mirror, composition with raised floors, multiple layers) and others are new qualities (e.g. centred composition, ductile shapes, elastic materials) A new personality framework containing the results of study 1 and study 2 is presented in Appendix 3.1 L.

3.1.6 Discussion

The goal of this study was to develop a comprehensive design framework, which supports designers to select design attributes according their personality meanings. 14 main personalities were extracted from both studies.

Balanced, Caring, Classic, Discover - Explore, High-tech, Introvert, Modern, Neutral, Playful - Cheerful, Elegant, Experienced, Extrovert, Forcy, Friendly – Personal, Professional, Masculine and Solid

Deliberately chosen is not to reduce those items to a smaller number of generalized personalities like other researchers did, because it is the designers job to choose which unique set of personalities is desired to communicate. Since the studies focused on the personalities 'Friendly - Personal', 'Playful – Cheerful' and 'Discover - Explore' it probably ruled out the possibility of finding attribute types that could be linked with the other personalities. Therefore less attribute examples for the personalities like 'Professional' and 'Masculine' occur in the framework. However, the results give a sufficient base to find communication errors in the design and gives some design suggestions to increase the architectural-brand-fit.

Limitations

The results of study 1 are based on a small group of interviewees and 2 scale models. This may be seen as a shortcoming, especially for the acceptability of the end results. Another limitation of this study is that I used free descriptions. Free descriptions were seen as the best format for discovering what people really think of the scale models. Asking respondents to rate the product variants on several personality characteristics would have given more insight in how the desired personalities would have been evaluated. For example I could have used symbolic shapes that expresses a personality, for the interviewees to point on what elements they base their perception on.

Another remark is about the used materials in the scale model, which were too abstract. The interviewees had a lot of freedom in imagination. They filled in a material themselves. Nevertheless, they also used their own interpreted material in formulating their personality impressions.

The use of personality impressions in study 2 allowed for a comparison with the results of study 1. However, full comparability is difficult because study 1 consists of an integrated spatial design, and study 2 was based on single associated design elements. It is not been validated how these differences could influence the results

Also the associative assignment was done within the group and out-loud. This way of generating ideas was chosen, because the fluency and creativity will increase when people are able to elaborate on ideas of other people. However, the data could have been influenced by a dominant participant. This was not taken into account with the examination of the results. Next time it would be wise to, identify which participant had mentioned specific elements, in order to increase the accuracy.

3.2 Conclusion

An important issue to note is that the personality framework can only be used as an inspiration source for designers to select attributes and substantiate their choices. The framework provides mainly attribute qualities that the designer can use to select specific elements. The specific attributes are included in the framework only to provide an example of the most obvious design elements.

An interesting result is that some personalities rely on a dominant attribute characteristic, as explained in the introvert vs extrovert example, whereas those personalities is only perceived from an open/closed composition. The designer can use this knowledge to determine which subordinate attributes he can use to play with.

This framework will be used to analyse the personality impression of different buildings designed for the brand Airbnb in the next part of this thesis. This will be done by analysing images and isolate different shapes, materials and compositions. Then, the personality meaning of those design elements are provided by the design framework.

Also the framework will be used during the design process. First a set of desired personality impressions will be determined. Then attribute qualities suggested by the framework will be considered when making design decisions.



4 FROM BRAND IDENTITY TO DESIGN

4.1 The translation of brand unique associations

Chapter 2 describes that architectural design should communicate brand unique associations and also achieve desired brand personality impressions. The design framework, that is developed in the previous chapter, only provides guidance to the personality issue. So, knowledge about how to translate brand unique associations is required. Therefore, the study in this chapter investigates how architectural elements are combined to reflect a desired brand identity impression. The study design is based on a generative approach and compares the outcomes of two different brands (e.g. Google, Airbnb), which have similar personalities. Four students, with a creative background were asked to develop conceptual ideas of one of the brands. Both words and drawings are used in the concept development process.

The creative session was observed, and all outcomes were digitalized. All results were evaluated on the specific story that was meant to be communicated, and how this story was translated into an integration of compositions, materials and shapes. In addition, the framework is used to evaluate what personality impressions are communicated in the different assignments.

4.1.1 Method study 3

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.

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 during the assignments:

- Rebranding a paper cup Paper cup, colored paper, wooden sticks, copy markers, glue
- Brand brainstorm Posters and post-its, a given briefing on the brand identity (see appendix 4.1 A/B) the problem: How to communicate the 'brand' in architectural design using materials, shapes and composition as design elements? And information about the location including maps and images (see appendix 4.1 C)
- Idea generation Posters, post-its
- Selecting concepts Monopoly money

Drawing concepts - 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 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 Google or Airbnb brand identity. They got some time to read the briefing and discussed their first interpretations.

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

The fifth assignment was to rate 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. Photos were made during the assignment (see Appendix 4.1 D).

4.1.2 Results study 3

Rebranding Paper cup

The first assignment was to redesign a paper cup that represents the brand Airbnb and for comparison the brand Google, who both are similar in trying to make their appearance 'Friendly' and 'Playful'. Both couples discussed some first thoughts about the brand, and came up with a concept based on their brand image. They used provided materials, to make a prototype of their ideas. For Airbnb this resulted in a dynamic organisation of multiple cups, as Figure 4 illustrates. All used cups were customized with different materials and colors. The whole setting represents the diversity and uniqueness of all homes listed on Airbnb. For Google the cup was a reflection of the contrasted sides of the brand, namely: Professional and minimalistic, versus friendly as well as playful.







Figure 5: Google paper cup

Both couples used similar materials, compositions and shapes to communicate the personalities 'Friendly' and 'Playful', as illustrated in Table 3. The table also shows the differences like a 'plain' material and 'straight' shape which are only used for Google and therefore the personalities 'Professional' and 'Modern' are not shared. The story behind the personalities also causes different outcomes. In this case, Airbnb is represented with multiple cups that all have their own unique appearance. A single cup in this design is not able to tell the Airbnb brand story, according the participants, however together they are representing unique listings on the Airbnb platform.

Google is represented by two contrasting sides and highlights the different personalities 'Professional' and 'Playful' of Google. It is not surprising that this strategy was used for Google, because 'Playful' and 'Professional' uses attribute characteristics that are contrasting (e.g. curved vs straight, natural vs colored, harmonious vs dynamic). Representing both conflicting personalities in one object is rather difficult. When all attributes would have been mixed in one surface, it is assumed that the overall personality perception would be only 'Playful'. Because, the more aroused personalities will overrule the more balanced personalities. This can be prevented by defining clear areas, surfaces or volumes with their own personality.

	Airbnb		Google	
Composition	Dynamic ensemble Dynamic surface Harmonious Serene	'Playful' 'Friendly'	Harmonious Serene Dynamic Layered	'Professional' 'Friendly' 'Playful'
Material	Wooden sticks Aluminium Colored Paper Metal	'Playful' 'Cheerful' 'Friendly'	Plain Colored Paper	'Professional' 'Playful' 'Cheerful'
Shape	Horizontal Round Wrinkled irregular	'Friendly' 'Playful' 'Cheerful'	Straight Round Wrinkled Freely curved	'Modern' 'Friendly' 'Playful' 'Cheerful'

Table 3: Comparison paper cup design

4W2H

Both couples did an exploratory brainstorm on the brand after reading the briefing. They collected information regarding, target groups (who), value propositions (what), when the target group needs the product (when), where the product is used (where), how it is used (how), and all things related with amount (how much). All results are presented in Appendix 4.1 E.

'How to ..?'

A next step in developing a design concept was to change the original 'How to' question: 'How to communicate Airbnb's/Google's brand identity in architectural design, using: shape composition and material as variables?' to a new question based on the insights of the 4W2H brainstorm technique. This resulted in:

Airbnb: 'How to communicate; 'Discover new things guided by locals', in architectural design?

Google: 'How to communicate; 'Innovation and interest people in a building', in architectural design?

Both questions provided a more specified problem statement, and a start for a new brainstorm. Interesting is, that the Airbnb question focuses on a story 'Guidance by locals', which don't include any brand personality dimensions. In contrast, Google integrated 'Innovation' as a personality or brand value. Besides, the participants aimed for a design concept that is able to 'interest people'.

During this brainstorm, first participants called out-loud ideas that came to mind first. For Airbnb some examples are; 'Meeting place', 'Small pavilion', 'Signs & symbols'. For Google this resulted in; 'Self-cleaning materials' to communicate innovation, and 'Stimulus', 'Colors vs Blanco' for attracting people's attention.

Second, when the fluency of generating ideas decreased, inspirational images were presented to give the participants new ideas and the creative facilitator asked the participants to find answers on: 'What if people could not walk?'. Ideas for example were; 'moveable façade and spaces', 'Train', 'Implement memories' and 'Propellers' to blow people through the building. All results of the whole brainstorm regarding the brand Airbnb are presented in appendix 4.1 F and regarding the brand Google in appendix 4.1 H.

Clustering

To create order out of chaos, all ideas were clustered. A suitable name was given to each of the clusters that could represent all related ideas. The following clusters were made:

Airbnb: Recognition signs, Innovation, Changes, Surprise, Conveyance, Guidance

Google: Explore, Getting information, Fun, Personalization, Digital, Movement, Tools, Shopping, Innovative, Open vs Closed, Labyrinth/Layers

Concept development

When all clusters were made, each participant could select three ideas, and rate the ideas with monopoly money. After discussing the selected ideas, they made different drawings to illustrate how the ideas could communicate the chosen brand identity.

For Airbnb, the aim was to make a concept related with 'Discover new things guided by locals'. The ideas that were chosen to make this concept were: 'Interactive globe', 'Signs & Signals', 'Façade openings to provide different views', 'Meeting place', 'Digital information', and 'Open accessible'. With these ideas the concept was elaborated into several drawings, which are shown in appendix 4.1 G.

These drawings also show chosen attribute characteristics to communicate the brand identity. An interactive Globe was integrated into the Yellow bridge along a route. People are able to turn the Globe around, to make it more playful. A second concept relies on different openings in the façade, to provide different views on the world. In this design people had to open different sizes of rectangular window shutters. These shutters form a dynamic composition and can be perceived as 'Playful' and 'Cheerful'. A last drawing was made of a cubic semi-transparent building, with organic shaped wooden passages. The whole building relies on a central composition, were people could meet. Green grass was also integrated in the design. These natural materials, curved shapes and centred composition, are rather communicating a 'Friendly' personality.

For Google, the aim was to make a concept related with 'Innovation and interest people in a building'. The valuated ideas were combined into two main concepts. The first, as shown in appendix 4.2 I, illustrates a room that people could experience through a virtual reality glasses. This concept was based on an interactive approach, which let people made changes in the room by moving a cow or place interior walls. The idea behind the design was to show new Google product innovations and keep people interested in visiting the room, because the room will never be the same. Another idea was an ensemble of different little buildings, whereas their place in the plan could easily be changed. This is based on the same aim for dynamic changes over time. An 'innovative' and 'playful' personality can be perceived from this dynamic appearance.

4.1.3 Discussion

The purpose of the study was to explore how brand identity is communicated with an architectural design concept, and especially how specific attributes are chosen during the concept development, to articulate the personality of the brand.

The observation of the design process shows, that the participants did not use the brand personality at first to develop a main problem statement, or not at all. Instead, they formed a particular story based on what they thought a key value is the brand offers to users (e.g. 'Guidance by locals'), or they integrated a design goal (e.g. 'Interest people'). This may due to the fact that design students use a different unconscious design process, were normally no personality associations are used to steer design decisions.

The drawings, do show elements that are communicating a 'Playful' and 'Friendly' personality. Especially a dynamic composition dominates in both concepts for Airbnb and Google.

A conclusion can be made, that the use of attributes related with personality dimensions will only be used after a main 'brand concept' is developed. This brand concept is used to develop an organizational and building plan. The personality dimensions and attributes are used as an additional method to steer design decisions on a more detailed scale. It is the 'brand concept' that makes a design unique, and the desired personality impression that strengthen the architectural-brand-fit.

Limitations

An important limitation to this study is the time restriction. Assumed is, that with more time the quality of the design concepts would have been more elaborated. The step to choose between different design attributes and characteristics was not well executed due to limit of time.

Another limitation to this study is the use of a location for the design assignment. In the end the location was not specifically used to make a design. So for future research, a location could be omitted.

4.2 Conclusion

From this study we can learn that the development of a design concept takes some important steps. As Figure 6 illustrates, first a brief analysis of the brand identity is required to select which brand unique associations and brand personality impressions are desired to express in the design. Then, the set of brand unique associations can be used to develop a clear story and attribute qualities can be selected from the design framework to support personality impressions. This will result in a list of design qualities to achieve. The design process can continue when adding a programme and location.

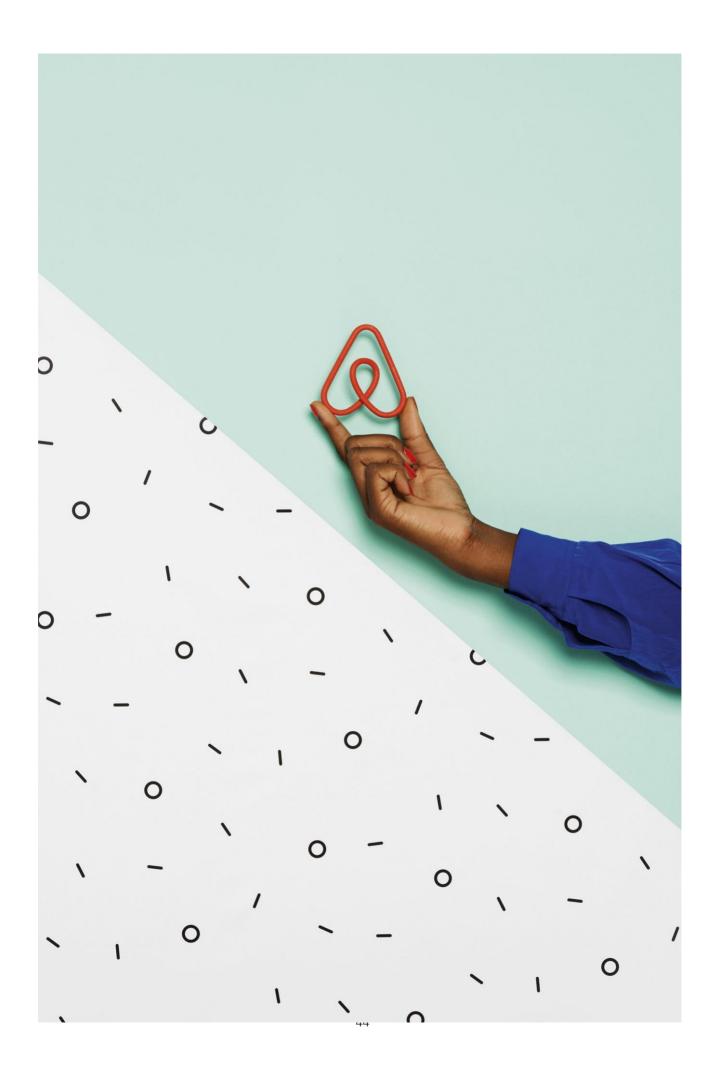


Figure 6: Development of a design concept driven by brand identity

The next part of this thesis provides the case study that is addressed in this graduation project, the brand Airbnb. Chapter 5 presents an analysis of the brand identity. Then we focus on the architectural identity of Airbnb in Chapter 6. In the end, both chapters aim to provide the required knowledge to pass the first four steps of Figure 6.



ANALYSIS OF THE BRAND AIRBNB



5 AIRBNB, BRAND IDENTITY

5.1 Case study selection

From a branding point of view, we learned that it is important to have a consistent and unique design language, in order to maintain and improve brand awareness and recognition. To be able to research how brand identity can be translated into an architectural design language, it was important to choose a brand with a well-known and strong brand identity, but lack of a consistent and unique architectural identity. Also a brand that can benefit from new value propositions and a physical channel. This requirement resulted in the online service brand: Airbnb.

In the next two chapters, first the brand identity will be presented, based on their positioning, business model and visual recognition signs. Followed by Chapter 6 which will show the current architectural portfolio and the consistency problems Airbnb is facing. In the end this knowledge provides possible directions for new products and services that can be part of the design concept. It also provides which brand unique associations, and brand personality impressions are desired to express, and last which visual signs can be used for recognition. This results in an architectural branding strategy on how to improve recognition and increase the architectural-brand-fit in the future.

5.2 Introducing Airbnb

Not just sharing homes, but sharing experiences with local hosts and live like one, are the main reasons people choose to travel on Airbnb, which is founded in San Fransisco in 2008, by Brian Chesky, Joe Gebbia and Nathan Blecharczyk. For a long time people thought Airbnb was just an online platform about renting houses. However, from the moment the company relaunched the brand in 2014, they distinguished themselves from competitors, by focussing on how their brand could touch things people find important in their lives. Things like; the desire to feel welcomed, respected, and appreciated. Creating a community-driven hospitality brand makes people remember the importance of belong somewhere, and gives people the opportunity to 'live' in interesting places all over the world, even if it's just for a night. According to van der Vorst, they followed an old branding-law: If people know what you do, add more abstract symbolic meanings, so they also know how you feel (2014). In this way Airbnb can distinguish from competitors like Couchsurfing and Wimdu who offer similar functional benefits.

Importance of the brand for online service

Selling an online service brand can be a big challenge, because it is intangible. The brand is therefore your only experience point for people to connect with. Airbnb was aware that the way they represented the brand to the world before the relaunch had not fully captured their idea of belonging (Chesky, 2014). Therefore, Airbnb is taking her mission on community-building to a whole new level by expanding the value proposition and adding physical channels. Airbnb is creating new types of commerce and new types of social change to make the intangible brand physical for users. Recently, august 2016, Airbnb introduced a new design division tasked with inventing these new futures for the company, called Samara. The aim is partly to expand Airbnb's range of products and create new services and revenue streams for the community. Joe Gebbia, one of Airbnb's founders, revealed that among others they hire; architects, product designers and writers, that will serve the community and help creating new brand experiences (Kuang, 2016).

5.3 The brand concept

Airbnb operates as a reliable transaction facilitator between people who have space to spare with those who are looking for a place to stay. Travelers can explore millions of listings, whether it is an urban apartment or a floating house, anywhere in the world at any price point. Guests can build real connections with their hosts (see Figure 7) and immerse themselves in the culture of their destinations through a platform that builds trust within the community of users by providing host protection insurance, as well as a rating and review system (Airbnb, 2016).

Airbnb's mission is to help creating a world where you can belong anywhere in the world. Airbnb believes that they can create a world where everybody is opening up their homes, and travellers can live the place, instead of just travelling to it.

5.4. The business model

The business model of Airbnb is analysed according the nine building blocks of the Business Model Canvas by Alex Osterwalder & Yves Pigneur (2010). This section presents most important aspects found.

At first we take a look at the **customer segment**, Airbnb is targeting. The main customer segments are hosts and travellers from all over the world. Hosts are defined by Airbnb as people who own property and want to earn money by renting out their spare space. Also them who want to meet new people and sell their unique experiences. Hosts can accept or reject a booking after reading reviews of the traveller. Travellers can be distinguished in two groups, namely holiday and business travellers. They are the people who prefer to stay in a homey environment for a cheap price or want to explore cultural experiences with a local host. They can book a space or an experience (e.g. bike tour, cooking workshop) by paying through the Airbnb portal.

Second, we take a closer look into Airbnb's **current value propositions**. The value propositions of Airbnb what differentiates the brand from the competition, is a strong community feeling for both hosts and travellers. In addition, the following value propositions are important for hosts; 1) Earn money by renting space or selling travel experiences on free listing community platform, 2) Home insurance, 3) Free photo shoots, and 4) A rating and review system. Value propositions for travellers are; 1) Book a homestay instead of hotel, 2) Corporate & Business travel program, 3) Book an experience with a local host, like a cooking workshop or sailing trip, 4) Facilitates booking process, 5) Rating and review system.

As described in the previous section, Airbnb introduced Samara, to invent new products and services to serve the community and create new revenue streams for the company in the future. The new value propositions can either serve hosts, travellers or the interaction between both segments. Hosts can for example benefit from products and services that help them improve their hosting skills or increase safety. Products or services for travellers can focus on increasing travel comfort or provide activities to explore a place in a more unique way. The end of this chapter provides concrete examples and used to develop a programme for a new physical channel.

The third building block of the business model canvas is about **customer relationships**. Airbnb has a wide range of ways to communicate with hosts and travellers, all with different goals. Some examples are; thank you notes, advertisements, personal help when bookings are cancelled, evaluation forms, reminders and

information about new developments. In all ways Airbnb focuses on the personal touch so people feel welcomed, respected, and appreciated.

Then the **channels** they use to either provide value propositions or maintain customer relationships, are mainly available in digital forms. Airbnb.com, mobile app and Apple tv, (see Figure 8 and Figure 9), are used as booking platform and main customer service point. Customer service is also reachable trough facebook chat, email and local phone nr. For marketing management, both online and offline channels are used. Online channels like their website, social media, email, a variety of community blogs² and offline channels like accommodations (see Figure 10), exhibition stands and offices. So, Airbnb uses physical channels for marketing purpose, but not yet for product sales or service. Chapter 6 describes more about the role of those physical channels.

Currently, the online booking platform creates **revenue streams** for Airbnb. Creating an account on Airbnb is free for all users. However, when a booking is accepted, both host and traveller need to pay usage fee for the mediation service. This price is a percentage of what the host demands for the accommodation. The booking and monetary transactions are done on Airbnb's platform. The commission for hosts is 3% and for guests varies between 6-12%, depending on the subtotal of the reservation³. The higher the subtotal price, the lower the percentage. Thereby, guests can save money when booking a bigger listing. Airbnb payments will collect the total fees from each guest either at the time of the booking request or upon the host's confirmation of the booking (depending upon the guest's payment method). Airbnb will hold the full payment until 24 hours of the scheduled check-in time, then the host will receive the payout. The following section illustrates a rough calculation of earnings made by Airbnb this year in the city Rotterdam. Data for this calculation is perceived from: https://www.airdna.co/city/nl/rotterdam. Appendix 5.4 A shows more details of this calculation. Important to note is that the following information should be perceived as a rough indication, numbers are based on average data.

Example - The first property in Rotterdam was listed on the platform in 2010. In the next years the amount of listed properties has grown fast, and reached this year a total amount of 1269 listings. Listings vary from 'shared rooms' to 'private rooms and 'entire places'. As shown in Appendix 5.4 A, a distinction is made in listing types and the amount of rooms they have. 'Private room', '1 bedroom' and '2 bedrooms' types are most listed in Rotterdam. The average price a night is \$69.78. This knowledge, and data about the amount of days listings were rented during a year is used to gain insight in what the total price of all listings together in one year is. This price is more or less \$5.325.00 according calculations. Then, the revenue streams for Airbnb is depending on the commission fee they take from this total price. Taking an average commission of 12% means that Airbnb makes roughly \$600.000 to \$650.000 a year from listings in Rotterdam. This number will double in 2017, when the current growth of listed properties continues. However, my prediction is that in the future this growth will decrease, because it becomes harder every year to win trust of citizens to open up their homes. Also, limitations are imposed by the government concerning home rental.

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² All online channels provided or maintained by Airbnb: Airbnb: com, airbnb.com/pineapple, blog.airbnb.com/, community.airbnb.com/, create.airbnb.com/en/home, airbnb.design, samara.airbnb.com & twitter.com/airbnbsamara, twitter.com/Airbnb www.facebook.com/AirbnbNederland/?fref=ts, www.instagram.com/airbnb/,

³ https://www.airbnb.nl/help/article/384/what-are-the-service-fees/

Important for Airbnb is, to win trust of citizens in order to maintain growth. Also, Airbnb should provide good information about home rental regulations. In addition, to spread risks Airbnb is creating new revenue streams for the future. More concrete examples are discussed later in this chapter.

To deliver the value propositions to Airbnb's community, some **key activities** are required. Therein, we can distinguish three main activities: 1) Development and management of the distribution channels (Platform and mobile apps), 2) Manage customer relationships including marketing, and 3) the revenue streams. Some examples of activities that are less obvious, but also important to serve the community are; offer emergency training for hosts and provide electronic locks, helping in accommodate refugees and organize events

The types of **key resources** that the value propositions require can be subdivided into; Online distribution channel, physical homes of local hosts, Offices, Intellectual (brand patents, copyrights, customer databases) Humans (skilled employees, Local hosts, Travellers, photographers) and financial (Investors)

To make the business work, reduce risks and keep on growing, Airbnb has some **key partners** in play. Despite, a lot of partnerships are found⁴, both short- and long- term, merely an overview of interesting types of partners will be described. One of the most important are the tourism ministries in various countries. Laws and tax rules around Airbnb is still a difficult issue. Other partners include; investors, photographers, designers such as architects and brand agencies, safety experts, social support organisations like refugee centres, sharing economy experts, promotional partners, electronic lock companies and Airline companies.

The **main costs** of Airbnb are related to maintaining and developing the online platform, marketing and sales. Concrete examples are; Technological Set up & running costs, Salaries to permanent employees, Payments to freelance photographers, Office building maintenance, Promotional costs, and Sponsorships

Conclusion

A strong community feeling and a new way of thinking about home is what distinguishes Airbnb from competitors. Besides the fact that Airbnb maintains great success, some opportunities were found. At first, Airbnb's mission is to help creating a world where you can belong anywhere. That means that everybody has to open up their homes. This mission requires to win trust among those people who are not yet convinced. Creating a place were those people can physically interact with travellers, the brand and products that can take away trust and safety boundaries, are opportunities to support the existing online community platform. Second, predicted is that home rental regulations can form a risk for Airbnb and reduce growth in the future. By creating new products and services, Airbnb can rely on different revenue streams besides the current commission fees. Those products and services can focus on either the host or the traveller. All new products and services that are related with 'Hosting', 'Home' or 'Travelling' can be part of the Airbnb brand.

⁴ https://www.guesty.com/blog/history-airbnb-partnerships-timeline/



Figure 7: Interaction between host and guests

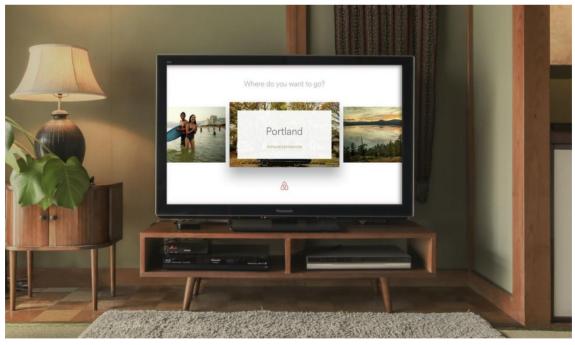


Figure 8: Airbnb on Apple tv



Figure 9: Online Airbnb platform

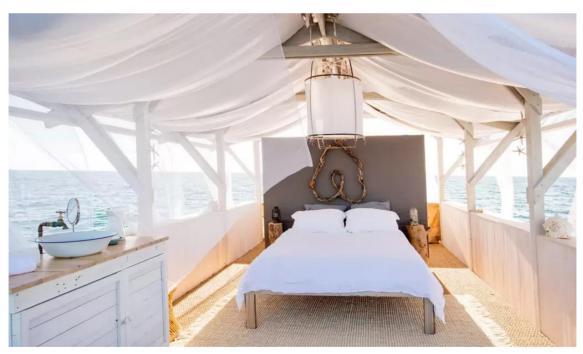


Figure 10: Airbnb accommodation, Great barrier reef



Figure 11: The Airbnb logo



Figure 12: Color scheme

5.5 The visual identity

With the rebrand, Airbnb didn't simply updated its logo and design, but made sure all new visuals and signs contributed to their new core message 'Belong Anywhere'. The company responsible for the creation of this new symbolic identity was DesignStudio. They are sharing the design process and meaning of the new identity on their website⁵.

The visual identity is more than symbols and signs, they have redesigned the entire Airbnb experience. They updated everything from immersive, cinematic photography to typeface to color schemes, to better reflect the people who make up Airbnb's community. Connecting design, storytelling and marketing together, added a lot of value to the company which is recently awarded a valuation of \$30 billion (Newcomer & Huet, 2016). The general tone of voice is welcoming and informal, with the aim to bring people together with personal connections who might have different cultural backgrounds. Therefore, the logo, typeface and colors are selected according their global accessibility.

The logo

The logo (see Figure 11) exists of the word Airbnb and a symbol, which is called the 'Belo'. The symbol is reflecting the brand principle of 'belong anywhere'. There are four meanings behind the 'Belo'. Namely, (1) people; a person with their arms above their head, (2) places; a location marker, (3) love; a heart upsidedown, and (4) Airbnb; represented with the letter A.

The used font in the logo is simple, so that is could easily be read by all users. In addition, the logo can be customized by anyone using the online tool: create.airbnb.com/en/home. With this tool, Airbnb tries to strengthen the feeling of users being part of the brand.

Typeface

Their primary typeface, Circular Std, is used in the logotype and across many aspects of their material including the website and adverts. The rounded, open countered letterforms are in line with the logo, to maintain a consistent visual language.

Color scheme

Color use is essential in contributing to a consistent and unique design language. The scheme Airbnb utilises consists of strong colors to highlight important things, as well as neutral colors that are used for general information as presented in Figure 12. All colors can be characterized as warm. The 'Rausch' color is the most important, and used as recognition sign. Tints at intervals of 10% can be used to create hierarchy in the design.

⁵ https://www.wearedesignstudio.com/works/airbnb-rebrand/

Digital presentation

The web interface (see Figure 9) looks clean and uses blocks to highlight different issues similar to other websites that are using the same type of template. It is the content that makes the website unique in their appearance.

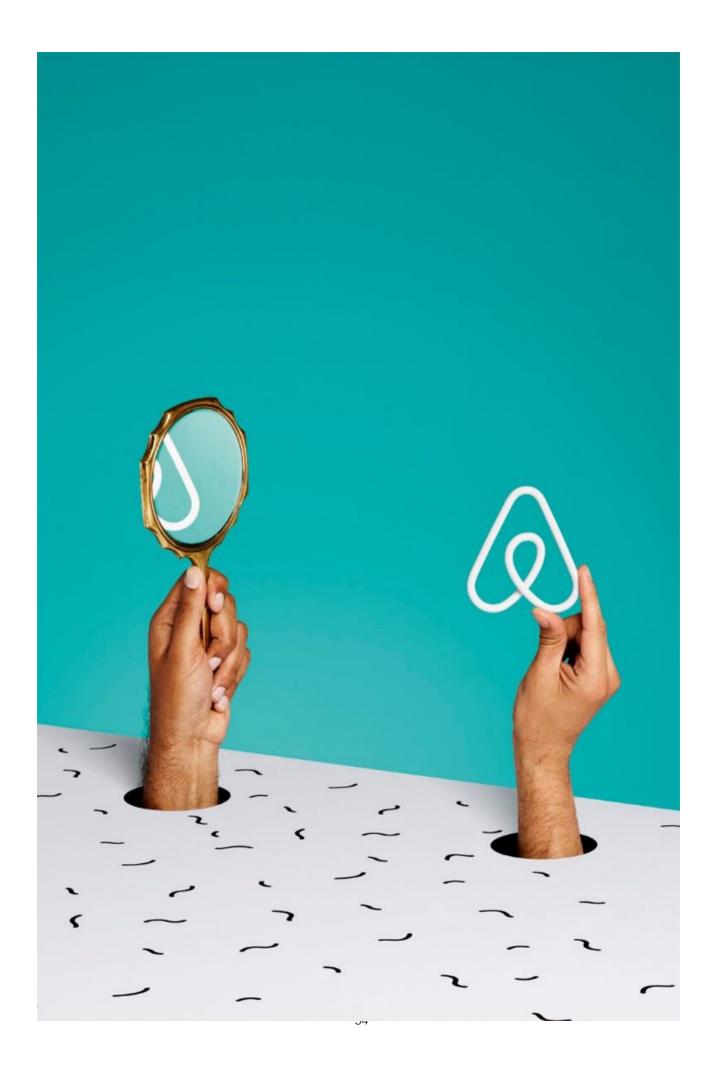
5.6 Conclusion

In this chapter, an analysis of the brand identity of Airbnb is presented. To sum up, Airbnb operates as a reliable transaction facilitator between hosts and travellers. In this case, hosts can earn money by listing their homes or provide local activities on the Airbnb platform. Travellers can explore unique places anywhere in the world and build real connections with local hosts. The main challenge for Airbnb, is to let more people open up their homes, in order to reach their most challenging mission: Create a world where everyone is opening up their homes, so you can belong anywhere. Insights of the brand identity provide the following brand unique associations; 'Community feeling', 'Unique variety of places', 'Interaction between hosts and guests', 'Live like a local', 'Unique city experience', 'Hosting', 'Travelling', 'Home' and 'Belong'. These associations will be used to develop a design concept in the next chapter.

Analysis of the current business model shows that Airbnb has one main revenue stream, commission fees of Airbnb listings and activities provided by local hosts. The listings and activities can only be booked online. To maintain relevant in the future and reduce risks two business model opportunities are suggested: 1) adding new revenue streams earned from new products or services. These products and services can focus on either the Host (e.g. increase hosting skills, increase home safety), or the traveller (e.g. increase travelling comfort, provide ways to increase sense of belonging, provide unique city experiences). Another issue is that Airbnb should keep on improving their ways of winning trust among citizens, for them to open up their homes. Above changes can be supported by adding 2) a physical channel. The advantages of a physical channel with a sales, service and brand experience purpose is that host and travellers can physically interact with each other and with the brand. Expected is that more potential hosts will open up their home, when they can meet travellers in person. Also the physical channel facilitates in displaying new products, that people can try out before buying. In addition, the space can become a meeting place which strengthens the community feeling even more since this is one of the most important aspects of the brand.

Then, the visual identity is meant to capture the core message 'Belong Anywhere'. The overall tone of voice (e.g. welcoming, informal) is supporting this message and aims to bring people from all over the world together. Therefore the typeface, logo and color scheme are selected according their global accessibility. The typeface is rounded, and the colors are bright, attract attention and therefore characterised as warm, friendly, cheerful and playful. The color Rausch is used as recognition color. To create hierarchy in the design, tints at intervals of 10% can be used. This information provides the following brand personality dimensions; 'Friendly', 'Welcoming', 'Informal', 'Playful' and 'Cheerful'.

Since this thesis is about architecture, the next chapter provides an analysis of existing office buildings, accommodations and event spaces designed by Airbnb.



6 ARCHITECTURAL IDENTITY

6.1 The architectural portfolio

Since, this thesis is about using architecture as communication channel, a number of Airbnb spaces will be briefly presented, in order to gain more knowledge about how Airbnb is strategically using architectural design for various purposes. These types of use are subdivided into: (1) office, (2) accommodation and (3) event space.

The current architectural portfolio of Airbnb is bigger than you might think in the first place. Not only do they have offices (see Appendix 6.1 A), Airbnb is also using architectural design for marketing purposes. Special accommodations as some examples are shown in Appendix 6.1.B, were initiated and listed on the Airbnb platform and only available for brand users that won a prize. In addition, Airbnb is presenting itself on several design events (see Appendix 6.1 C) to tell their story and present new developments to the world. The next sections give a brief description of previous mentioned architectural types.

First, this chapter will illustrate the current architectural portfolio of Airbnb and analysis of perceived personality with the use of the personality framework which is developed in Chapter 3. Second, problem statements are drawn up subsequent to a critical review of the architectural appearance. This chapter ends with a proposal of an architectural branding strategy.

6.1.1 Office

Nowadays, Airbnb counts eight offices spread around the world. Appendix 6.1 A, gives an overview of the existing offices, namely; San Francisco, Dublin, Portland, Sao Paolo, Sydney, London, Singapore and Tokyo. The first and the latter will be compared with each other, according their architectural characteristics and personality impressions.

San Francisco⁶ - Figure 13

The office is housed in a former five-story historic industrial building from 1917. The transformation for the Airbnb headquarters is done by architecture firm Gensler and local studio interior design fair in 2013.

The main organizational set-up can be characterized as centred. There is a central atrium, with a three-story living green wall, which can accommodate nearly 200 employees in a collaborative lounge area. The atrium is surrounded by four-stories of office spaces. The central space is really open and light. The architectural structure is white and additional materials used are mainly un-modified (e.g. concrete, wood, metal, glass, plants) supplemented with orange and grey textiles to create sitting areas. However, the main composition is symmetrical, a more playful character is supported by dynamic compositions of wooden office blocks and window frames. All shapes in the plan are rectangular.

As a result, the overall personality impression of the 'green atrium' can be described as 'Friendly' in the basis of architectural structure and material use. 'Playful' due to the use of a dynamic composition, orange

⁶ Information and images perceived from: http://www.designboom.com/architecture/airbnbs-170000-sq-ft-headquarters-in-san-francisco-12-11-2013/

color accents, living green, and stepped shaped sitting square. A more 'Modern' and 'Professional' feel is achieved with the use of rectangular shapes. Although the composition is dynamic, there is little arousal, because all elements are rather big proportioned.

Throughout the office, some actual home listing replicas from Airbnb are providing individual office spaces. Also boardrooms are designed as cozy and colourful. The cafeterias are homey like kitchens. This feel is created, to work in a space as if it were home. In comparison with the 'Green atrium' more color accents and patterns are used. As a result the offices will be perceived as more playful and active. The perception of 'Friendly' and 'Professional' will decrease.

The overall concept of the building can be described as a metaphoric city feel, walls look like facades, and the atrium look like a big city square. Also, little blocks are building-like meeting rooms.

To summarize; the materials support a 'friendly' personality, the composition serves a more 'playful' personality and the rectangular shapes a 'modern' and 'professional' feel. Table 4 presents the personalities that are perceived from the design attributes used in the San Francisco office, so a comparison can be made more easily in the end of this section.

Tokyo 7 – Figure 14

The office design is made in collaboration with Japanese suppose design office in 2016.

The main design goal was to recreate the feeling and vibe of a Tokyo neighbourhood. Therefore, instead of using simple interior walls, distinctive exterior cladding, textures and patterns are used to create 'building' like volumes and articulate the diversity in Tokyo. These volumes are used as office spaces and meeting rooms. The interiors are based on existing Airbnb listings. To strengthen this concept, a mix of outdoor-inspired furniture and lighting, trees and planters, and elements inspired to the Japanese culture are added.

A central point in the design is the atrium of two-stories. This space is used as a meeting place and lounge area. From this space, a wooden path leads to the office spaces.

Some traditional Japanese elements are included in the design. One of them is the 'engawa', an elevated platform covered with tatami mats, for people to sit and work on. Besides, the phone booths are made from local white oak and rice paper film, evoking the soft glow of a typical Japanese tea house.

The building has a low ceiling height, which is typical of architecture in Tokyo. In order to make the space feel bigger and brighter, a black ceiling was applied with additional dropped lightings so that the ceiling disappears and give a perception of a larger volume.

The main materials used in the design are; concrete, wood, black metal and organic green accents. In addition, no bright color accents are used, only black and greyish. The personality impression according these materials is therefore evaluated as highly 'Friendly-Natural'.

⁷ Information and images perceived from: http://www.designboom.com/architecture/airbnb-tokyo-office-interiors-japan-suppose-design-office-08-15-2016/

The design is dominated by rectangular shapes, which triggers a 'Professional' and 'Modern' feel.

The composition is characterized as rather vertical, low and harmonious, which again will trigger a 'Friendly' personality perception. The perceived personalities are shown in Table 4.

Office comparison

Both offices share a common design concept, namely: 'City like'. Volumes are generally designed as if they are traditional buildings. This results in interior walls look like building facades, with the use of exterior cladding, and integrated window frames. Also individual office interiors are based on existing Airbnb listings.

Another aspect both offices share, is a central atrium. Both atriums function as central meeting place and is higher than the surrounded office spaces.

Besides some similarities (e.g. un-modified materials, wood, concrete, metal, glass, and rectangular shapes), the overall appearance is rather different as shown in Table 4. The office in San Francisco is really bright, spatial and uses bright colorfull accents, which is in contrast with the Tokyo office, were no color accents are used. In this case more black and greyish tones are used, supplemented with un-modified materials. Also the office in San Francisco is perceived as 'Playful', supported with both composition and material attributes. On the contrary, Tokyo has no attributes that express a 'Playful' personality. To conclude, San Francisco is more perceived as 'Playful' and 'Friendly' and Tokyo more as 'Friendly', 'Traditional' and 'Natural'.

Office - Personality comparison					
	San Francisco Attribute - Personality		Tokyo Attribute - Personality		
Composition	Centred, Open, Dynamic	'Friendly' 'Playful' 'Discover'	Closed, Low, Harmonious,	'Friendly' 'Introvert' 'Caring' 'Traditional'	
Material	Bright, White Natural, Concrete, Glass, Wood, Metal, Colored,	'Friendly' 'Playful'	Dark, Natural, Local,Wood, Concrete, Black metal, Glass	'Friendly' 'Natural' 'Traditional'	
Shape	Rectangular, Geometric, Big, Integrated	'Professional' 'Modern' 'Discover'	Rectangular	'Professional' 'Modern' 'Traditional'	

Table 4: Office personality comparison









Figure 13: Office - San Francisco









Figure 14: Office - Tokyo

6.1.2 Accommodation

Airbnb initiated several listings for marketing purposes, as illustrated in Appendix 6.1 B. This section will evaluate: The Floating House in London and The community centre in Yoshino.

The floating house, London⁸ - Figure 15

Airbnb created a floating property, with two bedrooms, a living room, a kitchen with steering wheel, a bathroom and a garden. The house will host community events and overnight stays, providing new perspectives on the city.

For five days and night, 18-23may, 2015, the house sailed serenely up and down the River Thames. Airbnb users were able to win the unique opportunity to spend a night aboard. The floating house was market as; 'Relaxed' and 'Comfortable'. The experience when winning a night aboard, included a personal tour in London, a massage of London's best massage therapists, and a dinner made by Michelin-starred chef Robert Ortiz.

The overall appearance as presented in Table 5. The house can be described as 'traditional'. However, the personality 'traditional' is not occurring in the design framework. This personality relies on specific cultural building characteristics. The Airbnb identity is mainly communicated with the use of bright colors that are part of the brand color scheme: 'Babu' for the exterior, 'Beach' for the interior and the recognition color 'Rausch' for accents like the entrance door and the logo. The dominant use of these bright colors, will trigger a 'Playful' and 'Cheerful' personality impression. This 'Playful' feel is supported by the garden, with grass and trees.

The exterior include some rectangular and arch shaped windows, which will make it 'Friendly'. The interior also consist of a mix of rectangular and round shapes, which can be seen in the furniture elements. Materials used in this space is mainly wood (e.g. wooden floor, furniture, cladding, kitchen) and colored walls.

The community centre, Yoshino⁹ - Figure 16

The first project of Airbnb's' multi-disciplinary design studio Samara, is the Yoshino sugi cedar house, 2016, which is designed for the second edition of the house vision exhibition in Tokyo. To present ideas on the future of the home, Airbnb collaborated with Tokyo based architect Go Hasegawa.

The aim was to use architecture as mediator to engender a deeper relationship between hosts and guests. Therefore, the first floor is an open space, where people can interact with each other, while the upper-level loft is more closed for guest to stay overnight. Yoshino cedar wood is chosen to be the main material throughout the exterior and interior of the house, which makes the house 'Friendly' and 'Natural' as presented in Table 5.

⁸Information and images perceived from: http://www.designboom.com/design/airbnb-floating-house-river-thames-london-05-18-2015/

⁹Information and images perceivedfrom: http://www.designboom.com/architecture/airbnb-go-hasegawa-house-vision-tokyo-samara-yoshino-cedar-house-08-02-2016/

Rectangular and triangular elements are used to shape the building. The roof shape is designed in such a way that the Airbnb logo can be distinguished. These shapes form a harmonious composition and a modern look. The cedar wood is empathizing the length direction of the house, and particular wood detailing can be found in the suspended staircase. The staircase element is really open, which invites people to explore the upper-level. The upper rooms are closed in general, together with the natural material the environment can be perceived as 'Caring', 'Friendly' and 'Natural'.

After the exhibition, the cedar house will be relocated in Yoshino and listed on the Airbnb platform. The house will be maintained by the village community and earnings will be used to strengthen the cultural legacy and future of the area.

A suspended staircase leads up to the lofted rooms. The whole interior is clad in yoshino cedar. The house realizes how architectural features can engender a deeper relationship between hosts and guests.

Accommodation comparison

The Floating house and the Yoshino house differ a lot in their appearance as presented in Table 5. Whereas the floating house is dominated by bright colores to communicate the Airbnb brand, the Yoshino house is dominated by the use of cedar wood. In a branding point of view the Floating house will be more easily recognized as being part of the Airbnb brand because of the consistent color scheme. Though, the roof shape of the Yoshino house integrates an abstracted articulation of the Airbnb logo, which can increase the brand recognition among visitors. Although, both accommodations are really different in their appearance, they share a concept of representing a traditional way of 'home' within their particular context.

The Floating house can be described as 'Playful' and 'Cheerful' in general and 'Friendly' as submissive personality. The personality impression of the Yoshino cedar house is assumed to be perceived as; 'Natural', 'Friendly' and 'Caring'.

Accommodation - Personality comparison					
	The Floating house Attribute - Personality		Yoshino cedar house Attribute - Personality		
Composition	Inviting, Harmonious	'Friendly' 'Traditional'	Open, Closed, Inviting, Harmonious, Serene	'Friendly' 'Caring'	
Material	Bright, White Wood, Colored, Glass, Grass, Trees	'Playful' 'Cheerful' 'Friendly' 'Natural'	Natural, Cedar wood	'Natural' 'Friendly' 'Traditional'	
Shape	Rectangular, Round	'Friendly' 'Traditional'	Rectangular, Triangular	'Modern'	

Table 5: Accommodation personality comparison



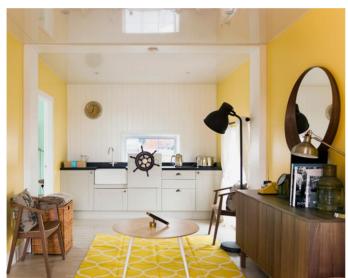






Figure 15: Accommodation - The Floating House, London



Figure 16: Accommodation: Community Centre, Yoshino

6.1.2 Event space

Airbnb is represented on several events, in order to tell their story and present innovations to the world. An overview of some events are given in Appendix 6.1 C. We can distinguish three different events; the first is the Airbnb Open, an event organised by Airbnb. The second is a temporary space initiated by Airbnb, to physically share their brand vision with hosts and guests, a first example is the London house. The last group are external exhibitions, like the design week in Miami and Milan. One example of each group will be discussed in the following sections. (e.g. Airbnb Open 2015, London House 2016, Miami design week 2015)

Airbnb Open 2015¹⁰ - Figure 17, p 65

For this event top quests of Airbnb are invited via email, to join a yearly celebration of Airbnb. It is a festival of travel and hospitality. The first 250 guests that accept the exclusive invitation will receive an invitation to a VIP event, and an invitation to an exclusive dinner. At the Airbnb Open gests and hosts from around the world can hang out and inspiring speakers will share their story. In the evening activities are organised featuring the best of art, music and food the city has to offer.

The building that was used for this event is a spacious industrial building. It has an open character which gives a glimpse of what is happening inside. The inviting front façade is branded with the Logo of Airbnb. Inside a dynamic composition gives stage to different areas and levels. Raised floors are connected by stairs. These floors and stairs are made of wood.

Airbnb colors are used in different additional elements. The ceiling for example is covered with a semi-transparent textile in the color 'Babu'. The big Logo at the central stage is made of a metal structure and 'Rausch' colored textile which is stretched in between. We can also see some additional colors that are not particular part of the Airbnb color scheme. For example, light pink textiles covering eating spots and pink vertical flags providing information. Plants are also used to create a more lively environment. In one of the theatres, people can sit on white cube elements or white chairs. The wall behind them is colored with green, blue, orange and yellow tones.

The overall appearance of the environment, as summarized in Table 6, is 'Playful' and 'Cheerful', due to a lively and dynamic composition in an open space. This atmosphere fits the celebrating character of the event. Also the additional bright colors are supporting this personality. The main structural shapes are rectangular, even though rectangular shapes in general support a more professional and formal feeling, in this case the materialisation and dynamic composition overrule the geometric shapes towards an informal environment. The existing building has an inviting personality, due to the transparent façade. This will result in a 'Friendly' impression.

¹⁰ Information and images perceived from: http://www.incrediblemanagement.com/clients/airbnb/









Figure 17: Event space - Aribnb Open 2015

The London live there House¹¹ - Figure 18, p 67

Airbnb gives an example that explains there vision 'Belong anywhere' and 'Live like a local, even if it is just for a night'. They initiated the Londen live there house, to push the campaign into a physical space, bringing the giving experiential insight into the 'authentic' London life. The design was made in collaboration with design company: AKQA.

The house was open 16th - 19th of June 2016. Visiting the house gave you the opportunity to have a cup of tea, hang out with the locals or experience London in a unique way. Therefore, Airbnb arranged a four day programme including; food tastings, music nights with Local DJ's, tie-dye workshop with local artist, cocktail making class, Running morning with a coach of Nike+ Run club, photography lesson for perfect Instagram shots, and for example poetry reading in the living room. All with the aim, to serve the Airbnb community, and for them to understand the Airbnb brand.

The five-stories open house, is authentic and represents a 'traditional' house in London. The interior of the house is kept traditional and decorated with small elements that represents the Airbnb brand. Though, the exterior is strongly branded. The front façade of the house is highly recognizable for Airbnb, due to the 'Raush' color and 'Beach' colored oversized doorbell. These colors attract a lot of attention and invites people to ring the door. The personality impression can therefore be described as 'Playful' and 'Friendly'. This conclusion is processed in Table 6.

Miami, Belong here now, Design week¹² - Figure 19, p 68

During the Miami design week in 2015, Airbnb presented an interactive installation called 'Belong. Here. Now.' The design of the exhibition stand was made by architects; Stewart Hicks and Allison Newmeyer of Design with company. Their job was to communicate the experience that Airbnb offers. The concept had to consist of; inviting someone into your home, showing them around the city and making your guests feel welcome.

The design was made to be an active environment, were people could interact with each other and with the installation. The plan is composed of different shapes (e.g. rectangular, triangular, curved) that mark areas where people can engage. The shapes are placed in a dynamic setting as presented in Table 6, to convey a playful atmosphere. The dynamic composition also stimulates guest to discover and explore the 5000 square foot open space. The elements are dominated by different pastel colors and the arch and round pillars are integrated in all areas.

The overall personality impression can be summarized as: 'Playful' and 'Cheerful'. The pastel colors can be more perceived as 'Friendly', and the arch shapes and round pillars can trigger 'Classic' and 'Friendly' associations.

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¹¹ Information and images perceived from: http://blog.airbnb.com/ding-dong/

¹² Information and images perceived from: http://blog.airbnb.com/the-inspiration-of-belonging-at-designmiami/









Figure 18: Event space - London live there house





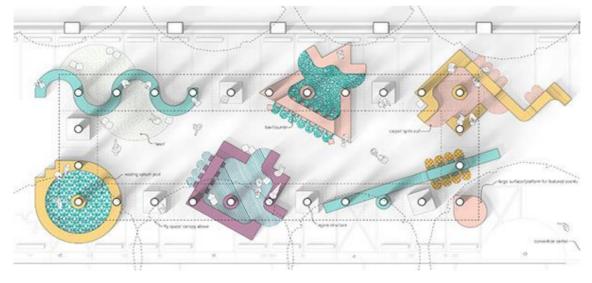


Figure 19: Event space: Miami, Belong Here Now, Design Week

Event space comparison

Both Airbnb Open and the Miami stand, are very similar in their composition as shown in Table 6. The dynamic character and therefore a 'Playful' personality is dominating the plans. Guests are stimulated to explore and discover the space. Therefore also 'Discover' can be added as a personality to both stands.

The Airbnb Open and the London House, share the recognition color 'Rausch', something that is not present in the Miami, Belong. Here. Now. Installation. The colors used here are more pastel. Although, they are inline with the visual recognition colors, because they are soft tones of 'Babu' and 'Beach'.

All designs have a mix of different shapes. Round, rectangular and triangular. The mix of these shapes, will increase the 'Playful' and 'Cheerful' personality impressions.

In the end, the Miami stand scores higher on the 'Friendly' followed by the London House. The Airbnb Open scores highest on 'Playful' as shown below.

Event space - Personality comparison						
	Airbnb Open Attribute - Personality		London, live there house? Attribute - Personality		Miami, Belong. Here. Now. Attribute - Personality	
Composition	Dynamic Lively Open Integrated Layered	'Playful' 'Cheerful' 'Discover' 'Friendly'	Introvert Inviting Harmonious	'Friendly' 'Cheerful'	Open Dynamic Lively Provocative	'Playful' 'Cheerful' 'Discover' 'Friendly'
Material	Wood Metal, Colored Green Textile	'Playful' 'Friendly'	Bricks, Wood, Colored Glass	'Natural' 'Friendly' 'Cheerful'	Colored Outdoor (Green + Concrete groundcovering)	'Friendly' 'Cheerful'
Shape	Rectangular Triangular Round	'Playful'	Rectangular, Round	'Friendly' 'Cheerful'	Solic, Rectangular, Triangular, Round	'Friendly' 'Classic' 'Playful'

Table 6: Event space personality comparison

6.2 Assessment of the architectural identity

In the previous sections a comparison description is made between seven different architectural designs initiated by Airbnb. All other designs which are presented in Appendix 6.1 A/B/C are also taken into account for a general evaluation which is made in this section.

Airbnb has three types of architectural purposes: Office, Accommodation and Event space as presented in Figure 20. This figure provides an overview of Airbnb's physical channels with additional characteristics that are extracted from the analysis. It summarizes essential characteristics like; time, if a building is supposed to function permanently or temporarily; The concept, what the overall design concept is or how the building is market; and attributes that are used to either express a dominant personality or functions as recognition sign. In the next paragraphs all characteristics will be further explained.

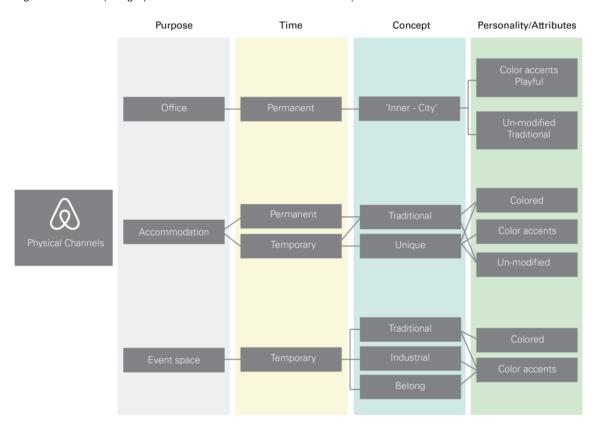


Figure 20: Overview of Airbnb's physical channels with additional characteristics; Purpose, Time, Concept, Personality and Attributes

Airbnb in general tries to communicate some different personalities. The main personalities perceived from almost all the projects are; 'Friendly' and 'Playful'. However, some particular projects are dominated by personalities that are not common in the architectural portfolio. These personalities are for example 'Unmodified' also referred to as 'Natural' and 'Caring' perceived from the Yoshino cedar house and the Tokyo office.

In the whole architectural portfolio four groups regarding similar appearance can be distinguished.

1. 'Un-modified' buildings

Yoshino cedar house, Great barrier reef, Penthouse

2. 'Colored' buildings

Cable car, Floating house, Shark Suite, Gaystay, Olympic Gymnastic, Singapore stand, London House

3. Bright, 'buildings

San Fransisco office, Dublin office, Sydney office, Soa Paolo, office Portland office, London office, Miami stand, Airbnb Open, Milan stand, Sundance stand

4. Dark 'buildings

Singapore office, Tokyo office

The 'Un-modified' group has difficulties to be recognizable as being part of the Airbnb brand, because no recognition colors or strongly recognizable shapes are used. The Yoshino cedar house however, uses shape as abstract articulation of the Airbnb logo, yet this might not be enough for people to link the design with the Airbnb brand.

The 'colored' buildings are highly recognizable as most of them using colors of the Airbnb color scheme. The cable car, Gaystay house and the London house all are using 'Rausch' to attract attention and as recognition sign. The floating house and the shark suite are expressed with the 'Babu' color, and remaining buildings are using 'Beach'. Although, colors can be really strengthen the brand recognition, in this case the use of three different dominating colors, will not make it easier for people to categorize all stand-alone colors representing the Airbnb brand. It might be wise to always stick with the 'Rausch' color and use the other colors as submissive accents.

At last, a difference is made between the more open, bright buildings, and the more dark, introvert buildings. All buildings of both groups differ in their brightness but share colored accents in the design, except the Tokyo office. This office is also not in-line with the dynamic composition of all other offices. This might be the case, due to the Japanese style preferences (e.g. 'Traditional' personality), also the Yoshino house is sharing similarities with the Tokyo office.

To summarize, Airbnb uses three different types of material attributes in their architectural designs: 1) Colored, 2) Color accents, or 3) Un-modified. As shown in Figure 20, currently office designs can either choose Color accents or Un-modified, to support the shared 'Inner-City' concept. Accommodation, is the only purpose that contains designs of all three categories. Most of the time it is either colored or un-modified. Marketing reasons, can increase the use of color in those designs. Permanent accommodations

however only exist with a traditional personality. The last, event spaces initiated by Airbnb provide a temporary function. It can be Traditional, Industrial or a translation of the brand's core message 'Belong Anywhere'. Because event spaces have a marketing value, color is always present.

To conclude, the differences in appearance of the 'Un-modified' and 'Colored' group are too contrasted, and can cause difficulties for brand users to recognize them both as part of Airbnb. So, Airbnb has an architectural consistency problem, mainly regarding shape and material use, which include additional colors. Although, the overall personality impression after a brief analysis is rather similar (e.g. 'Friendly', 'Playful'), some personalities are only represented in particular projects ('un-modified', 'Caring'). To strengthen the recognition of the brand, the un-modified group is in need for a recognizable element, and the use of different colors (e.g. Rausch, Babu, Beach) dominating a design needs to be reconsidered. Suggested is that the un-modified group can rely on a small Rausch color accent, or a material modification needs to be developed that is especially designed for the Airbnb brand. Then, only the Rausch color needs to be used as dominating color, and additional colors from the color scheme can be only used as submissive accents. This will increase recognition and coherence between all the designs.

The next section provides an overview of the essential aspects to develop a design concept (e.g. brand unique associations, brand personality, story, attributes, programme, choice of location) and ends with qualities to achieve for the design project.

6.3 Proposal of a new architectural branding strategy

The future of Airbnb is predicted as full of new innovations. With the introduction of the design division Samara, Airbnb took a big step towards new experiences, products, architectural projects and more. This is why Airbnb should also take the next step to go offline and use a physical channel for service, sales and brand experience purposes. Figure 20, shows 3 opportunities for such channels in the future, that are not there yet; 1) A permanent sales/service store, 2) A temporary (e.g. Pop-up) sales/service store and 3) a permanent Event space. To build this channel Airbnb can consider spaces of three different scales: 1) large scale building, 2) small scale building, or 3) a corner concept. The first two options can either be newly build or an existing building can be used. A corner concept will always be part of an existing building. Later in this chapter some building qualities are described according those options.

With this change, Airbnb will be able to integrate an interesting programme that can exist off, product sales point, host and guests services, providing workshops, organize events but most of all create a place where people can interact with each other and share experiences. By, adding those value propositions Airbnb can create new revenue streams and maintain their success. The next paragraphs summarizes the essential aspects that are extracted from previous chapters, and will provide suggestions that can be used in the development of the design concept.

Brand unique associations – The main unique associations that are part of the Airbnb brand are: 'Community feeling', 'Unique variety of places', 'Interaction between hosts and guests', 'Live like a local', 'Unique city experience', 'Building trust', 'Hosting', 'Travelling', 'Explore', Home' and 'Belong'

Brand personality - The main personalities Airbnb expresses are: 'Traditional', 'Friendly' and 'Cheerful'

Story – As described in Chapter 4, a story is formed by brand unique associations, and should provide a focus. Some examples: 'Inner-City, feel as if you were in a city centre', 'The City Lounge, hang out with locals and travellers to empower their engagement, 'Travel guidance, meet your local travel guide', 'Welcome Home, live like a local', 'Become a super host', 'Match making, Let us introduce you to..', 'Trustful strangers, Identifying Airbnb users to build trust'

Attributes – All attribute qualities regarding the above-mentioned personalities can be found in the personality framework, and will be used to steer design decisions. Some examples:

'Traditional'	Specific cultural building qualities
'Friendly'	Balanced, Centred, Harmonious, Color accents, Light, Un-modified, Soft, Warm
'Discover'	Contrasted, Dynamic, Layered, Semi-transparent, Smart, Geometric, Curved
'Cheerful'	Dynamic, Lively, Perforated, Colored, Ductile, Modified, Curved, Stepped

Programme – Proposed building programmes are supporting four main purposes: 1) Office, 2) Accommodation, 3) Event space or 4) Sales/Service store. A next step is to see what the activities are that needs to be facilitated. Some examples:

OfficeMeeting rooms, cafeteria, kitchen, private work spaceAccommodationLiving room, outdoor space, Kitchen, Bedroom, BathroomEvent spaceAuditorium, Workshop space, Coffee corner, Lounge area

Sales/Service Product display, Payment, Service point

The next step is to clarify the activities and describe; specific actions, size of space and special facilities that are required to perform those activities. Such as;

Workshop Cocktail workshop for 15 people, provided by local bartender. Bar, fridge, relax

sitting area, standing table, min 50 m2

Product sales Display to present products, Employee to provide additional information,

Portable Payment system or Counter desk, m2 depending on the product size.

Choice of location – When the purpose, and activities of the physical channel are clear, you can select a proper location that support the purpose. For example, an accommodation can be unique and therefore the location can be isolated, which increases the experience of traveling to it. However for sales/service and events it is recommended to be situated at a high traffic location. This can be a city square, shopping street or public transportation points (e.g. train station, airport). Then two more choices have to be made. First, will it be newly build or re-use of an existing building. Second, is the building Large scale, small scale or a corner concept. To summarize:

Office Location - World well divided, Countries or Cities with many Airbnb users, Office area

Building - Large scale, Small scale, New or Existing

Concept - Inner-city, Playful or Traditional, Color accents or Un-modified

Accommodation Location – Unique places, Isolated or City centre

Building - Small scale, Room, New or Existing

Concept - Unique, Traditional, Colored, Color accents, Un-modified

Event Location – High traffic, City centre, Unique isolated only if event is big and temporary

Building - Large scale, Small scale, Corner concept, Newly build or Existing Concept – Inner-city, Playful or Traditional, Colored, Color accents or Un-modified

Sales/Service Location – High traffic, City with many (potential) Airbnb users

Building - Large scale, Small scale, Corner concept, New or Existing

Concept - Inner-city, Unique of Traditional, Colored, Color accents or Un-modified

Development of a consistent physical appearance

It is also time to think of a consistent visual language for all physical elements. Including both architecture and future products. As shown in previous sections, there is a problem regarding architectural consistency, the un-modified group is too contrasted with the colored group. In order to increase the recognition of physical manifestations of the Airbnb brand, a list of qualities to achieve is constructed. These qualities are subdivided by Exterior and Interior. This will help to communicate desired brand personalities and maintain a more consistent physical design language.

Exterior

- Overall perception traditional vs unique
- Respect to traditional building qualities or unique character
- Variety among architectural portfolio
- **Material** use: Un-modified, Color accents, Colored. When an un-modified material is used, a recognizable shape or rausch color accent needs to be added (shape to be determined). When color is demanded, the Rausch color is dominant, other colors can only be used as submissive colors to maintain coherence and recognition.
- The Airbnb logo needs to be integrated in the façade. Preferred is to place the logo inside the perceived surface. Also preferred is a 3D logo with the use of a material that stands out, but is inline with material use of the façade. A color accent can be added, or the designer can play with open/closed faces.

Interior

- Layout: a central meeting space and dynamic zones situated around it. In a large building the central meeting space is an atrium and city square atmosphere. In a small scale building this is a centred zone or dominant room. This space facilitates interaction between locals, travellers and employees, and consists of a lounge area.
- **Layout**: Space with clear zones. Zones can be created with lines on floor, raised floor elements (small stages), or volumes that are closed, half-open or open.
- **Layout**: The overall perception of a space is balanced. Depending on the purpose and building scale a more dynamic/harmonious composition can be used to express the personalities 'Friendly', 'Cheerful' and 'Playful'.
- **Functional**: Multi-purpose of spaces, which for example can be used for different events (e.g. conferences, parties) They may also have a range of multi-functional decorative parts such as the following: Portable furniture pieces and adjustable visual displays.
- Material use: Overall use of un-modified materials like; wood, concrete, metal, glass. Use of color depends on purpose. For marketing reasons, colors are preferred. Dominating color is rausch and other colors of the scheme are used as submissive. To increase recognition a type of material finishing and/or use of specific shape/pattern/color accent can be claimed by Airbnb. To be

determined. Suggested is a textile texture which is added to concrete to give the concrete a warm character. This modification can be used in cladding or furniture pieces and increases recognition.

- **Walls**: Inner-city feeling. This can be executed by using exterior cladding or façade like compositions.
- Graphic: Use of visuals on walls that represent the brands core message, or a unique concept.
- Furniture: Furniture pieces are important to increase world wide recognition, as building structures very in the architectural concept. Therefore a consistent visual language needs to be developed that expresses a 'friendly' and 'cheerful' personality. Mix between rectangular and rounded shapes, and bright color accents.

6.4 Conclusion

This chapter illustrated the current architectural portfolio of Airbnb that exists of office buildings, accommodation and event stands. Analysis of different designs revealed insights in the overall personality perception Airbnb is expressing, namely 'Traditional', 'Friendly' and 'Cheerful'. It also revealed the differences in approach comparing the three basic building purposes (Office, Accommodation, Event stand). These differences are; 1) being permanent or temporary and new or use of existing building, 2) different concept, whereas offices rely on an 'inner-city' concept, accommodations vary in traditional or unique overall appearance, and event spaces are either traditional, industrial or represents the core message 'Belong Anywhere', and 3) different use of attributes: un-modified, color accents or colored.

In addition, the appearance of all buildings are distinguished in four groups: 'Un-modified', 'Colored', 'Bright' and 'Dark' and argued is a consistency and recognition problem. The un-modified group is not recognizable as being part of the Airbnb brand, because they lack in a recurring element as a shape or color accent. Also this group is the opposite of the colored group. Suggested is to bring both groups closer, by adding a recognizable element to the un-modified group.

Also, a new architectural branding strategy provides stepping stones to develop a design concept. This section summarizes brand unique associations, brand personality, story, attributes, programme and criteria for selecting a location.

In the end a list of qualities is constructed, to strengthen the visual coherence between all physical channels. This is done by providing guidelines related to exterior and interior. In which the main architectural concept relies on a consistent interior in which the furniture pieces are used as world wide recognition elements and the exterior creates variety in the architectural portfolio. This concept is chosen to strengthen the unique or traditional building qualities of Airbnb listings all over the world. All qualities shall be used as guidelines to the design part, but may change during the process.

The final part of this thesis will explain the design assignment, that derived from all previous chapters. It defines choices that had to be made regarding unique associations, personality, story, the purpose of the physical channel and the location.

PART IV

FINDINGS AND CONTRIBUTION TO DESIGN

7 CONCLUSION & CONTRIBUTION

'How to design architectural-brand-fit, driven by brand identity?' This question was the starting point of this thesis. The question brought two sub questions with it. At first, 'What personality impressions and associations are triggered by architectural design elements?', and 'What is the relationship between the associations and the specific elements?'. Second, 'How are design elements integrated into a design concept to communicate a given brand identity?'. The next section provides all theoretical conclusions, followed by how this knowledge and the analysis of the brand Airbnb supports the architectural design that has to be developed in the next part of this graduation project.

7.1 Theoretical

In this thesis we saw that people use personality characteristics when evaluating architectural design. That is why researchers try to find the personality meaning of specific design attributes, in order to help designers in achieve desired brand communication. However, this topic is explored in the field of product design, but not well elaborated for architecture. That is why the biggest challenge of this thesis was to find personality meanings of attributes and develop a comprehensive design framework.

Study 1 and Study 2 both contribute to the development of this framework, and resulted in 14 main personalities that could be linked with specific design attributes. Most attributes are found for the personalities: 'Friendly', 'Cheerful' and 'Discover', since both studies focused on these personalities. A soft and friendly personality is best represented by curved shapes, natural materials and harmonious compositions. Playful personalities rely more on a mix of shapes, modified materials and dynamic compositions. Another result that contributes to theoretical knowledge is that some personalities rely on a dominant attribute characteristic. For example introvert vs extrovert. Those personalities are perceived from an open/closed composition and changes made in shape or material use will not change this personality perception. When you know what the dominant attribute is, you can play with the subordinate attributes to create aesthetical value and maintain desired personality impressions.

Then, the second sub question is answered by study 3. A first observation was that participants of the creative session did not use the brand personality at first to develop a design goal. Instead, they translated brand unique associations into a particular story. However, they did use personality characteristics when explaining why they chose specific design elements in their drawings. So a conclusion is made that the use of personality based attributes will only be helpful after a main 'brand story or concept' is developed. This resulted in different steps to take in order to develop a design concept, driven by brand identity. The steps are: 1) Analysis of the brand identity, 2) selection of brand unique associations and selection of desired brand personality impressions, 3) create a story or concept steered by the selected brand unique associations and select attributes according their personality meaning from the personality framework, 4) select a purpose and programme of the physical channel, and select a location that supports this purpose, last 5) develop a design concept by creating a list of qualities to achieve. Now we know how you can make a design driven by brand identity. However, to make sure that there is a fit between the desired brand communication and how people perceive it, more evidence have to be found about how different attributes influence each other. Or, we can bring the people we serve into the design process and measure their perception. Measurements needs to continue, and communication-errors needs to be reduced by changing element, until an acceptable level of 'fit' is achieved.

7.2 Architectural design

Analysis of the Airbnb brand identity forms a base for the development of a design assignment. Still people think that Airbnb is about renting houses, but they became a brand that managed to change the way we think about 'Home', 'Traveling' and 'Trusting strangers'. In the future they will focus on how to strengthen the community feeling, and provide ways to increase a sense of 'Belonging'. They take their mission, on community-building to a whole new level by expanding Airbnb's range of products and create new services and revenue streams that will serve hosts and travellers in the future. For this mission they already make use of physical spaces like accommodations and event stands. They provide examples of unique overstay experiences or gather Airbnb users together and show them what the Airbnb brand stands for and how you can live like a local.

Airbnb is successful, but the business model provides opportunities for the future, in order to reduce risks like changing regulations regarding home rental and the challenge of convincing citizens to open-up their homes. An important aspect of Airbnb is about the interaction between locals and travellers. However, numbers show that most listings are private spaces which decreases the interaction, comparing it with a room that is situated in the home of the host. This fact, and the opportunity to add a service and sales point has steered the choices I made to develop a design assignment. The next section describes the selected brand unique associations, brand personality impressions, story, selected attributes, channel purpose, channel programme and location.

Unique associations: 'Community feeling', 'Interaction between locals and travellers',

'Unique city experience', 'Building trust', 'Hosting', 'Travelling',

'Explore'

Brand personality: Main = 'Friendly', Submissive = 'Traditional' and 'Cheerful'

Story: Main = 'Enhance the engagement of locals and travellers'

Submissive = 'Become a super host' and 'Travel guidance'

Attributes: 'Friendly' Central lounge, Color accents, Un-modified, Warm

'Traditional' Choice of existing building (Groothandelsgebouw)

'Cheerful' Dynamic layout, color accents

Purpose Event space, Sales/Service, Temporary, Existing + New, Small scale

Programme Multifunctional auditorium, Lounge area, Product display, Drinks bar,

small workshop for host training, interactive map for city exploration

Location City Rotterdam = Cultural Capital NL

Station square = High traffic and starting point for travellers

Building = Groothandelsgebouw = Representation of reconstruction

Maaskant as famous architect in NL and Rotterdam in particular

Building part = Kriterion cinema unique of its situation on the roof

Unique of its window which gives an overview on the city

Main design concept 'The City Lounge'

Description design assignment:

The design assignment is a redesign of the 'Kriterion' cinema on top of 'Het Groothandelsgebouw', which is located at the city centre of Rotterdam, next to the train station. The goal for the design is to re-activate the roof of the monumental building, by adding a new passage which provides possibilities for additional space attachment. The added value which is an investment for 'Het Groothandelsgebouw' creates the opportunity for Airbnb to rent a temporary spot at the roof terrace and situate their first pilot 'City Lounge'.

The attachable 'box' needs to be flexible in a way that the façade can partly be branded. The interior however, is free for Airbnb to fill in. Therefore a design language needs to be developed, consisting of: Raised floor elements, Ceiling panels, Wall panels and furniture pieces. The interior is used for world wide brand recognition.

In order to attract people to the 'City Lounge', a physical element needs to be designed and situated in the central station or at the station square. Digital notifications and directions to brand users can support this attraction issue.

7.3 Discussion & Limitations

The results of this thesis have created a method, to design a high architectural-brand-fit and ways to improve architectural brand communication. The stepping stones to develop an architectural concept can be used in any brand related project. Important to note is that the content of the stepping stones will change if the brand identity innovates and new communication goals are required.

Also an important remark is that it takes time and effort for people to recognize elements as being a representation of a brand (development of brand image). It also takes multiple buildings and situations for people to see a coherence in the architectural language. As my project is a first example of a new architectural identity for Airbnb, the power of the language can only be seen when the design concept is applied to other buildings. In addition, the suggestions that are made in the list of qualities to achieve are based on first thoughts. However, these qualities might change during the design process when difficultiesor opportunities occur. Designing a new architectural identity takes time, evaluations, try-outs and many adjustments.

Then, the personality framework will be used as an inspiration tool. It provides a good base as starting point, but as a designer I should always consider different options, because sometimes this results in more aesthetic or functional value.

Limitations

In addition to the limitations that I described in Chapter 3 and 4, I found that the stepping stones only provide a method of the first part of the design process. It doesn't include how to continue in actually designing a physical language. Also it was hard to find all physical channels that Airbnb has, and only analysis is done on those that were found and the most striking objects according my own interpretation. As the analysis was focused on the overall perception of interior spaces, it didn't particular reviewed furniture pieces. As, this is part of the design assignment some insights about furniture are missing.

Suggestions for future research

Assumed was that people use personality characteristics to evaluate design, because it was argued by multiple researchers. However, my studies showed that the interviewees did not use those characteristics in their first impressions. And students also did not use personality characteristics to base their attribute selection on in the design process. Further research needs to be done, to give evidence on the use of personality characteristics when evaluating architectural space, or if there are other aspects that we can use to reflect upon.

Second, study 1 showed that people base their personality perception on the combination of multiple attributes. More research is necessary to study the influence of different attributes on each other.

Third, I was aware that cultural differences influence the perception of different attribute characteristics. Especially regarding the use of material and colors. For Airbnb this is an important factor, as they are a world wide brand and focussing on global accessibility. Further research needs to be done to find which attributes are perceived similar by all cultures

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APPENDIX 2.3 A

Personality dimensions – Aaker

Sincerity	Sophistication	Excitement	Competence	Ruggedness
Down-to-earth	Upper class	Daring	Reliability	Outdoorsy
Family-oriented	Upper-class	Trendy	Reliable	Outdoorsy
Small-town	Glamorous	Daring	Hard-working	Masculine
Down-to-earth	Good-looking	Exciting	Secure	Western
Honest Sincere Honest Real	Charming Charming Feminine Smooth	Spirited Cool Spirited Young	Intelligent Intelligent Technical Corporate	Tough Tough Rugged
Wholesome Original Wholesome		Imaginative Unique Imaginative	Successful Successful Leader Confident	
Cheerful Cheerful Sentimental Friendly		Up-to-date Up-to-date Independent Contemporary		

APPENDIX 2.3 B

Personality dimensions – Cramer & Koene

Basic	Attraction	Self-	Vitality	Ambition
		development		
Idealism	Sexy	Relaxed	Health	Capable
Better world	Arroused	Carefree	Nutrition	Talent
Loyal	Beauty	Play	Fit	Achievement
Moral	Aesthetics	Fun	Sportive	Innovation
Connected		Unbound		Challenge
Together		Independent		Winning
Warm		Creative		Pride
Caring		Fantasy		Self-assured
Order		Individual		Appreciation
Structure		Unique		Recognition
Safe		Discover		Standing
Secure		Curious		Prestige
				Posses
				Collect
				Influence
				Leadership

APPENDIX 2.4 C

Personality dimensions – Raffelt

Naturalness	Attractiveness	Temperament	Competence
Naturalness	Attractiveness	Temperament	Reliable
Close to nature	Glamorous	Smart	Intelligent
Natural	Elegant	Progressive	Successful
	Captivating	Revolutionary	
Reliability/Genuineness	Chic	Unconventional	Reliability
Honest	Irresistible	Imaginative	Competent
Sincere	Aesthetic	Lively	Precise
	Sensual	Dynamic	Responsible
Stability	Stylish	Thriving	Reliable
Authentic	,	Contemporary	Professional
	Sophistication	, ,	Secure
	Elegant	Enthusiasm	Solid
	Chic	Lively	Discreet
	High Class	Dynamic	
	Stylish	Enthusiastic	Genuineness
	,		Reliable
	Reliability	Attractiveness	Solid
	High Class	Extravagant	
	_	Charismatic	Solidity
	Stability	Classy	Reputable
	Successful		Solid
	Known	Solidity	
		Hardy -	Stability
		Thriving	Timeless
		Stability	
		Memorable	
		Unbeatable	

APPENDIX 3.1 A

Stimuli - Model A













APPENDIX 3.1 B

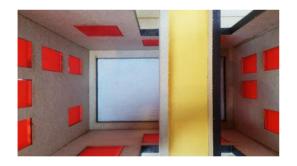
Stimuli - Model B













APPENDIX 3.1 C

Interview guide

Topic:

Perception of personality traits regarding architectural models

Perceptie van persoonlijkheidseigenschappen betreffende architectonische modellen

Start-up: (10 min)

1. Short introduction about myself, Liza, graduate student at Explorelab faculty architecture, topic Architectural Branding. (If they like to know more about Architectural branding, this can be discussed after the interview) This interview is part of my research and will be used for analysis.

2. Opening question: Can you tell me in short what your field of expertise is?

Kunt u me kort iets vertellen over uw vakgebied en expertise?

3. Show them model A/B

Architect (Stellingwerf, A/B) + (Breen, B/A) Product developer (Karana, A/B) + (Mooij, B/A)

Question 1 (2x 5min)

What are your first associations regarding this model?

Wat zijn de eerste associaties die bij je opkomen betreffende dit model?

Question 2a (2x 5min)

If you think specifically in terms of personality traits, what kind of traits would you assign to this model? Als je persoonlijke eigenschappen zou moeten geven aan dit model, welke zouden dat dan zijn?

Question 2b (2x 5min)

Can you specify why you assign these personality traits?

Zou je kunnen omschrijven waarom je deze persoonlijke eigenschappen hebt gekozen?

*Guide them if necessary towards: Shape, Composition and Material

Give them the other model – Same questions (1, 2a + 2b)

Question 3 (5 min)

What advice would you give met to make model A: More friendly/Trustworthy?

And for model B: What advice would you give to make it more playful/Adventurous?

APPENDIX 3.1 D1

Model A - Number of mentioned dimensions by each interviewee

Model A					
Personality	Dimensions	Male 1	Male 2	Fem. 1	Fem. 2
Balanced	Balance	1			
	Balenced	li i			
Calm	Calm	1			
	Not pushed	li			
Caring	Caring				1
Classic	Classical	ı			
	Stylish	1			
	Luxurious	1			
	museological	1			
	Not old fashioned	1			
	Traditional				1
Contrasted	schizophrenic	1			
	Two sided	1	1		
	Counterparts	1			
	Counterweight	1	1	1	
	Bipolar		1		
	Indecisive				1
	Hybrid				1
Curious	Curious				
	Suprising		1	1	
Down-to-earth	Down-to-earth			1	
	Earthly				
Elegant	Elegant				1
Experienced	Further in career	1			
	Retired	1			
	Experienced in life	1			
Fragile	Fragile				1
Friendly	Friendly	1			
	Quite accesible	1			
	Inviting		1		
Iconic	Iconic				ļ
High-tech	Uplifting	1			
	Future	1			
	Science fiction	1			
	New	1			
later	Defiant – Provocative			1	
Introvert	Introvert			1	
Madam	Closed Modernism				1.
Modern		1			I
Natural Not cheerful (outside)	Natural Not cheerful				1
Hot cheerful (outside)					
	Distant – Reserved		1		
Playful (inside – top)	Playful				
	Cheerful		1	1	
Soft	Soft	1.		<u> </u>	1
Solid	Solid Stable	!		I	1
	Heavy – heavyness	1		1.	
	Compact		1		
	Robust				
	Firm			I	
	Massive		1,		
	74103514.0		1		_i

APPENDIX 3.1 D2

Model B - Number of mentioned dimensions by each interviewee

Model B					
Personality	Dimensions	Male 1	Male 2	Fem. 1	Fem. 2
Balanced	Balanced	ı			
Daring	Gedurfd - daring	1		ı	
	Spektakel - spectacular	1			
Daring	Edgy				ı
Forcy	Forcy		ı		ı
	Pushy		1		1
High-tech	High-tech			ı	
	Innovative			1	
	Progressive			1	
Intellectual	Intelectual - intellectueel	ı			
	Mathematical - Wiskundig	1	1		
	Systematic - systematisch	1			
	Poetic - Poëzie	1	1		
	Rational - Rationeel	1	1		
	Searching		1		
	Symbolic value		1		
Intriguing	Intriguing - intregerend			1	
Modern	Modern		1		
Modest	modest		ı		
Open	Open			ı	
	Extrovert			1	
Playful	Playful - speels			1	ı
Professional	Professional -zakelijk			1	
	Serious	1			
	Efficient			1	
Protective	Protective				ı
Rather Masculine	Rather Masculine			1	
Warm	Warm colored				

APPENDIX 3.1 E

Ranking personality dimensions

Model A	Amount	Interviewees
_		
Contrasted	10	4
Solid	9	4
Classic	7	3
Innovative	4	1
Experienced	3	1
Friendly	3	2
Balanced	2	1
Curious	2	2
Introvert	2	1
Modern	2	2
Not cheerful	2	1
Playful	2	2
Calm	1	1
Caring	1	1
Down-to-earth	1	1
Elegant	1	1
Fragile	1	1
Iconic	1	1
Natural	1	1
Soft	1	1

Model B	Amount	Interviewees
Intellectual	8	2
Forcy	4	2
Daring	4	3
High-tech	3	1
Professional	3	2
Open	2	1
Playful	2	2
Symbolic	2	2
Balanced	1	1
Edgy	1	1
Intriguing	1	1
Modern	1	1
Modest	1	1
Protective	1	1
Rather masculine	1	1
Searching	1	1
Warm	1	1

APPENDIX 3.1 F

Meaning of materials

Personality	Materials	Perceived from
Elegant	Concrete (poured)	Structure
High-tech	Perspex, glass	Perspex volume
Modern	Copper	Mdf volume - structure
	Perspex, glass	Perspex volume
Natural	Green moss/algue	Interior – create atmosphere
Playful	Green grass	Roof covering
Professional	Modified material	Perspex + Mdf volumes
Solid	Concrete (poured)	Structure

Personality	Materials	Perceived from
Adventurous	Refinement	(advice)
Cheerful	Steel	(advice)
Feminine	Colored	Warm colors, Green, Yellow, Red
High-tech	Colored glass	Red windows in mdf facade
Honest	Honest materials	Wood & grass & Glass
Irritating	Semi-transparent	Red windows in mdf facade
Modern	Colored	Warm colors, Green, Yellow, Red
Playful	Steel Green tree	- (advice) - (advice)
Protective	Glass	Perspex cube
Warm	Colored	Warm colors, Green, Yellow, Red

APPENDIX 3.1 G

Model A - Meaning of shapes

Personality	Shape	Perceived from
Balanced	Horizontal	Concrete structure (arch)
Caring	Solid	Concrete structure
Direction	Proportioned	Perspex
Down-to-earth	Horizontal	Concrete structure (arch)
xperienced	Horizontal	Concrete structure (arch)
riendly	Arch	Concrete structure + mdf frames
	Round	Arch in concrete and mdf
nformal	Round	Arch in concrete and mdf
nviting	Arch	Concrete structure + mdf frames
	Round	Arch in concrete and mdf
/lodern	Vertical	Mdf + perspex volumes
	Vertical	Mdf + perspex volumes
Vatural	Arch	Concrete structure + mdf frames
Oppressive	Low	Concrete structure (section)
Playful	Round	Arch in concrete and mdf
rotective	Solid	Concrete structure
olid	Horizontal	Concrete structure (arch)
table	Horizontal	Concrete structure (arch)
Traditional Traditional	Arch	Concrete structure + mdf frames

Model B – Shapes		
-		
Personality	Shape	Perceived from
Cheerful	Curved	(Advice)
Forcy	rectangle	Openings, cube, volumes
Intellectual	Geometric	All elements
Mathematical	Cube	Perspex cube, walking bridge
	Geometric	All elements
Modern	rectangle	Openings, cube, volumes
	Geometric	All elements
Modern	Perforated	Mdf volume
Plauful	Small	Stairs, floor
	Stepped	Stairs, floor
	Curved	(Advice)
Professional	rectangle	Openings, cube, volumes
Pushy	rectangle	Openings, cube, volumes
Rather Masculine	rectangle	Openings, cube, volumes
	Harsh	All elements, except green
Rational	Geometric	All elements
Serious	rectangle	Openings, cube, volumes
	Strong	volumes and material thickness
Symbolic	Integrated	Walking bridge, building block, glass cube

APPENDIX 3.1 H

Meaning of compositions

Model A – Compositions				
Personality	Composition	Perceived from		
Balanced	Balanced	Contrast in vertical/horizontal, open/closed		
	Proportioned	Overall perception + arches		
Caring	Closed	Concrete		
Classic	Harmonious	Arches		
Closed	Closed	Concrete		
Curious	Perforated, integrated,	Volumes concrete + Mfd /Perspex		
Direction	Clear direction	Perspex		
Distant	Closed	Concrete		
Friendly	Open	Perspex + Mdf		
	Open	Perspex + Mdf		
High-tech	Perforated, integrated,	Volumes concrete + Mfd /Perspex		
Introvert	Closed	Concrete		
	Open vs closed	Closed exterior, open interior		
Protective	Closed	Concrete		

Model B – Compositions				
Personality	Personality Composition Perceived from			
Cheerful	Dynamic	Red windows, floor plan, integration of elements		
Daring	Perforated	Perforated mdf walls		
Discover	Openings	openings in facades		
Exciting	Perforated	Perforated mdf walls		
	Openings	openings in facades		
Extrovert	Open vs closed	Glass cube with closed volume inside		
Intellectual	Orthogonally	Shapes perpendicular in relation to each other		
Modern	A-symmetrical	Volumes and shapes are placed out of the centre		
Playful	Open vs closed Dynamic	Glass cube, inside closed volume Red windows, floor plan, integration of elements		

APPENDIX 3.1 I

Personalities framework 1

Meanings of attribu		
Personality	Attribute	Characteristics
Balanced	Composition	Balanced,
		proportioned
	Shape	Horizontal
Caring	Composition	Closed
Carring	Material	Glass
	Shape	Solid
Classic	Composition	Harmonious
Oldoolo	Shape	Arch
Curious	Composition	Perforated,
Canoas	Composition	integrated
Daring	Composition	Perforated
Down-to-earth	Shape	Horizontal
Elegant	Material	Concrete (poured)
Experienced	Shape	Horizontal
Extrovert	Composition	Open vs closed
Forcy	Shape	continuous
	Shape	rectangle
Friendly	Composition	Open
	Material	Colored, natural
	Shape	Arch
	Shape	Round
High-tech	Composition	Perforated,
· ·	,	integrated
	Material	Colored glass
	Material	Perspex, glass
Intellectual	Composition	Orthogonally
Intolloctual	Shape	Cube
	Shape	Geometric
	Shape	Integrated
Introvert	Composition	Closed
IIIIIOVEIL	Shape	Low
Modern	Composition	A-symmetrical
Modelli	Material	Colored
	Material	Copper
	Material	Perspex, glass
	Shape	Geometric
	Shape	Perforated
	Shape	rectangle
	Shape	Vertical
Natural	Shape	Arch
Playful	Composition	Dynamic
	Composition	Open vs closed
	Composition	Perforated
	Material	Green tree
	Material	Refinement
	Material	Steel
	Shape	Curved
	Shape	Round
	Shape	Small
	Shape	Stepped
Professional	Material	Modified material
	Shape	rectangle
		_
Rather Masculine	Shape	Strong Harsh
nather iviasculine	Shape	
C - 1' - 1	Shape	rectangle
Solid	Material	Concrete (poured)
	Shape	Horizontal

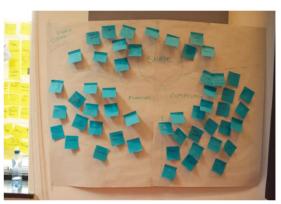
APPENDIX 3.1 J

Photos generative session









APPENDIX 3.1 K

Personality and associated attributes

Friendly - Personal		
Attribute	Туре	
Shape	Curved Eyes	
	familiar	
	Feminine	
	Flag	
	Heart	
	Rainbow regocnizable	
	Round	
	Smile	
	Window pane	
Material	Autenthic	
1	Blankets	
	ceramics	
	Hospitality	
	Light	
	local	
	Natural	
	Pastel	
	Pillows	
	Soft	
	Sweet	
	Tea	
	Textile	
	Transparant	
	Warm	
	Wood	
	Wool	
Composition	Balance	
	Centred	
	corners	
	Cosy	
	harmonious	
	Inviting	
	joints	
	low ceiling	
	Open raised floors	
	raised floors Surrounded	
	serene	
	Small	
	J. Hall	

Discover - Ex Attribute	Туре
Shape	Angular
эпаре	Big
	Irregular
	Freely curved route
	Labirinth
	Mix rectangular and
	round Pillars
	Stairs
Material	Ancient
	Bright colors
	Dark
	Glass
	Innovative
	Lava
	light
	Mix
	Moon stone
	Recognizable
	Trooogriizabio
	Semi-transparant
	Smart
	Stimulating
	Stimulating different
Composition	senses Active
	Changing
	Chinks
	Contrasts
	corners
	Details
	Door
	Hidden
	Integrated
	Layers
	multiple spaces
	Mysterious
	Off centre
	Overlapping
	Random
	Small components
	Sneak peek
	Surprising
	Wander

Cheerful - Pl	
Attribute	Туре
Shape	Balloons
	Blob Circle
	Ductle
	Loopings
	Organic
	Slide
	Spiral
	Virbrant
	Wrinkled
Material	Candyfloss
	Chalk
	Colors
	Dirty
	Ductile
	Elastic
	Gelly
	Glow in the
	dark Grass
	Hard
	Mirror
	Modified
	Paint
	Plastic
	Rubber
	Soft
	Tiles
	Water
Composition	Alterable
	A-symmetrical
	Cartograph
	Dynamic
	Integrated
	Labirinth
	Lively
	Contrasted
	Overlapping
	Pattern
	Pell-mell
	Provocative
	Wander
	1

APPENDIX 3.1 L

Personalities framework 2

Meanings of attributes			
Personality	Attribute	Characteristics	
Balanced	Composition	Balanced, proportioned	
	Chana	Harizantal	
Caring	Shape Composition	Horizontal Closed	
Caring	Material	Glass	
	Shape	Solid	
Classic	Composition	Harmonious	
	Shape	Arch	
Discover - Explore	Composition	Contrasted	
		Dynamic Detailed	
		Integrated	
		Layered	
		Off centre	
		Overlapping	
		Orthogonally	
		Perforated	
		Small components	
	Material	Light vs Dark	
		Glass	
		Innovative Mixed	
		Moon stone	
		Recognizable	
		Semi-transparent	
		Smart	
		Stimulating	
	Shape	Angular	
		Big	
		Cube	
		Geometric	
		Freely curved Integrated	
		Irregular	
		Mixed	
Elegant	Material	Concrete (poured)	
Experienced			
Extrovert	Shape	Horizontal	
Fanns.	Composition	Open vs closed	
Forcy	·	Open vs closed continuous	
	Composition Shape	Open vs closed continuous rectangle	
Friendly - Personal	Composition	Open vs closed continuous rectangle Balanced	
	Composition Shape	Open vs closed continuous rectangle Balanced Centred	
	Composition Shape	Open vs closed continuous rectangle Balanced Centred Harmonious	
	Composition Shape	Open vs closed continuous rectangle Balanced Centred	
	Composition Shape	Open vs closed continuous rectangle Balanced Centred Harmonious Inviting	
	Composition Shape	Open vs closed continuous rectangle Balanced Centred Harmonious Inviting Low Open Raised floors	
	Composition Shape	Open vs closed continuous rectangle Balanced Centred Harmonious Inviting Low Open Raised floors Rurrounded	
	Composition Shape	Open vs closed continuous rectangle Balanced Centred Harmonious Inviting Low Open Raised floors Rurrounded Serene	
	Composition Shape Composition	Open vs closed continuous rectangle Balanced Centred Harmonious Inviting Low Open Raised floors Rurrounded Serene Small	
	Composition Shape	Open vs closed continuous rectangle Balanced Centred Harmonious Inviting Low Open Raised floors Rurrounded Serene Small Ceramics	
	Composition Shape Composition	Open vs closed continuous rectangle Balanced Centred Harmonious Inviting Low Open Raised floors Rurrounded Serene Small Ceramics Colored	
	Composition Shape Composition	Open vs closed continuous rectangle Balanced Centred Harmonious Inviting Low Open Raised floors Rurrounded Serene Small Ceramics	

	•	•
		Pastel
		Soft
		Textile
		Transparent
		Warm
		Wood
		Wool
	Chara	
	Shape	Curved
High-tech	Composition	Perforated, integrated
	Material	Colored glass
		Perspex, glass
Introvert	Composition	Closed
	Shape	Low
Modern	Composition	A-symmetrical
	Material	Colored
		Copper
	Chano	Perspex, glass Geometric
	Shape	
		Perforated
		rectangle
		Vertical
Natural	Material	Natural
	Shape	Organic
Playful - Cheerful	Composition	Alterable
		A-symmetrical
		Contrasted
		Dynamic
		Integrated
		Lively
		Overlapping
		Perforated
		Provocative
	Material	Chalk
		Colored
		Dirty
		Dirty
		Ductile
		'
		Ductile
		Ductile Elastic Green
		Ductile Elastic Green Hard
		Ductile Elastic Green Hard Modified
		Ductile Elastic Green Hard Modified Plastic
		Ductile Elastic Green Hard Modified Plastic Refinement
		Ductile Elastic Green Hard Modified Plastic Refinement Reflective
		Ductile Elastic Green Hard Modified Plastic Refinement Reflective Rubber
		Ductile Elastic Green Hard Modified Plastic Refinement Reflective Rubber Soft
		Ductile Elastic Green Hard Modified Plastic Refinement Reflective Rubber Soft Steel
	Shape	Ductile Elastic Green Hard Modified Plastic Refinement Reflective Rubber Soft Steel Curved
	Shape	Ductile Elastic Green Hard Modified Plastic Refinement Reflective Rubber Soft Steel Curved Ductile
	Shape	Ductile Elastic Green Hard Modified Plastic Refinement Reflective Rubber Soft Steel Curved
	Shape	Ductile Elastic Green Hard Modified Plastic Refinement Reflective Rubber Soft Steel Curved Ductile
	Shape	Ductile Elastic Green Hard Modified Plastic Refinement Reflective Rubber Soft Steel Curved Ductile Small
Professional		Ductile Elastic Green Hard Modified Plastic Refinement Reflective Rubber Soft Steel Curved Ductile Small Stepped Wrinkled
Professional	Material	Ductile Elastic Green Hard Modified Plastic Refinement Reflective Rubber Soft Steel Curved Ductile Small Stepped Wrinkled Modified material
Professional		Ductile Elastic Green Hard Modified Plastic Refinement Reflective Rubber Soft Steel Curved Ductile Small Stepped Wrinkled Modified material rectangle
	Material Shape	Ductile Elastic Green Hard Modified Plastic Refinement Reflective Rubber Soft Steel Curved Ductile Small Stepped Wrinkled Modified material rectangle Strong
Professional Rather Masculine	Material	Ductile Elastic Green Hard Modified Plastic Refinement Reflective Rubber Soft Steel Curved Ductile Small Stepped Wrinkled Modified material rectangle Strong Harsh
Rather Masculine	Material Shape Shape	Ductile Elastic Green Hard Modified Plastic Refinement Reflective Rubber Soft Steel Curved Ductile Small Stepped Wrinkled Modified material rectangle Strong Harsh rectangle
	Material Shape	Ductile Elastic Green Hard Modified Plastic Refinement Reflective Rubber Soft Steel Curved Ductile Small Stepped Wrinkled Modified material rectangle Strong Harsh

APPENDIX 4.1 A

Briefing Airbnb

airbnb

How to communicate airbnb's brand identity in architectural design, using: shape composition and material as variables?

airbnb has a new service: you can book experiences like: Cooking, sailing or a guided tour with local people, besides the sleeping accomodation

Brand identity

airbnb's mission: Airbnb is more than an affordable travelling accommodation option. Through facilitating access to distinctive spaces and local culture, Airbnb aims to enable travelers to "feel at home anywhere you go in the world" by building connections with local hosts. Airbnb operates as a transaction facilitation between hosts and travelers. Hosts might not just be people who make their apartments available for rent. They could also be amateur chefs, city tour guides or sail instructors.

airbnb's core values:

Simplicity

Playful - Cheerful

Explore - Discover

Friendly - Personal

airbnb's story to communicate:

- (Share your home open access, symbolic) Sharing your home and let strangers feel at home)
- (Netwerk, Community) All people using airbnb are part of a bigger community they are building the brand together
- (Explore & Discover unique places) Curious people that want to explore/discover new places and meet inspiring people
- (Emotional) Online brand that wants to be human and personal, by adding playful elements

Explore, connect and belong!

Assignment - Location

Assignment: Design a pavillion that is a fysical reflection of the airbnb brand identity. Make a design language that communicates what the brand means, according above information. Use shape, composition and material as variables to translate the story in real architecture.

What kind of shapes communicate airbnb? (Sharp, geometrical, round...)?

What kind of composition communice airbnb? (Dynamic, harmonious, symmetrical...)?

What kind of materials communice airbnb? (Wood, concrete, copper...)?

How do all the variables (shape, composition and material) work together to tell the story?

Focus on the design, not neccesarily on the use or function of the building. You are free to design anything in your own interpretation that will reflect the brand best. Think creative, is it one building, or are more little buildings working together as a whole? Can you think of a metaphor that will tell the story? Example: Explore, unique places= route through air as a walking air-bridge to discover new things)

Location: Rotterdam, Hofplein, Station Hofplein (Hofbogen), Park pompenburg, Old Shell building. You are able to use existing buildings, rooftops or you can add new things. Whatever is communicating the brand!





APPENDIX 4.1 B

Briefing Google

Google

How to communicate Google's brand identity in architectural design, using: shape composition and material as variables?

Google has many services and products, this case will focus on: Google search

Brand identity

Google's mission: Making information accessible for anyone, anywhere and at anytime

Google's branding: Their branding is depending on emotional experiences. Google changes its logo during the holidays and celebrates birthdays of artists & inventors. By celebrating holidays, adding fun elements to the web site, making jokes on april fools day and keeping a blog, Google tries to humanise their online brand appearance and tries to create a friendly company image.

Google's core values:

Simplicity Playful - Cheerful Explore - Discover Friendly - Personal

Google's story to communicate:

- (Share data, open access, functional) Sharing knowledge with all people in the world
- (Netwerk, Community) World wide web is like a network that is linking knowledge and the people using it are like a big community
- (Explore & Discover data) Curious people that want to explore/discover new knowledge
- (Emotional) Online brand that wants to be human and personal, by adding playful elements

Let the search begin!

Assignment - Location

Assignment: Design a pavillion that is a fysical reflection of the Google brand identity. Make a design language that communicates what the brand means, according above information. Use shape, composition and material as variables to translate the story in real architecture.

What kind of shapes communicate Google? (Sharp, geometrical, round...)?

What kind of composition communice Google? (Dynamic, harmonious, symmetrical...)?

What kind of materials communice Google? (Wood, concrete, copper...)?

How do all the variables (shape, composition and material) work together to tell the story?

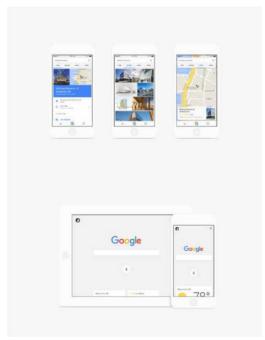
Focus on the design, not neccesarily on the use or function of the building. You are free to design anything in your own interpretation that will reflect the brand best. Think creative, is it one building, or are more liitle buildings working together as a whole? Can you think of a metaphor that will tell the story? Example: Explore, internet = route through air as a walking air-bridge to discover new things)

Location: Rotterdam, Hofplein, Station Hofplein (Hofbogen), Park pompenburg, Old Shell building. You are able to use existing buildings, rooftops or you can add new things. Whatever is communicating the brand!









APPENDIX 4.1 C

Briefing Location Rotterdam, Hofbogen, Luchtsingel









APPENDIX 4.1 D

Photos generative session













APPENDIX 4.1 E

4W2H brainstorm, Airbnb versus Google

	Airbnb	Google			
Who	Toeristen Locals Studenten Avontuurlijke mensen Flexibele mensen	ledereen Zakenlui Studenten	Where	Stadscentrum Platteland Dynamisch House Nieuwe plekken Kamer	Overal Studie Werk
	Sociale mensen Open-minded Reizigers		How	Internet Onderling Toegankelijk App	Altijd Easy Bekend Concreet
What	Booking Hobby Kasteel Profile Couch surfing Events Experience Cultuur uitwisseling Sport Locals	Show Data Technologie Uniek Google in Roffa Alles Helpen Producten Photos Google heeft		Persoonlijk Makkelijk boeken Reviews	Duidelijk Gecompliceerd Snel Onbekend Kennis - antwoorden Goed Gebruikers gericht
	Gedeeld Private Verblijf Social Flat Uniek Bezoek Film	altijd gelijk Innoveren Reviews Echte producten Zoeken Netwerk Shopping Delen Betalen Animaties	How much	Groei Beperkt Vrienden Verschillend Ruimtes Mensen Aanbod vs Vraag	Veel flopt Apps Veel gebruikers Precies
When	Gezinsverandering Vakantie Out of the box Tijdelijk Korts/lange tijd Zaken reis All year round Niet genoeg geld In-between Airbnb	Als ze iets niet weten Nu Google			

APPENDIX 4.1 F

Airbnb concept ideas (words)

How to communicate: 'Discover new things guided by locals', in architectural design?

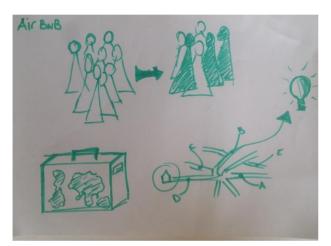
Herkennigspunten	Veranderingen	Vervoersmiddel
Verrekijker	VR – bril	Trein
Berg	Bacterie	Grijptangen
Stapelen	Activerend	Klimmen
Weerspiegeling van Rotterdam	Automatische deur	De wind
Interactive message board	Mensen voegen dingen toe	Draaimolen
Brug	Doors	Mechanische trillers
Kleur contrast	Interactive sitting places	Beweging van mensen
Guideline	Dak-vloer multipurpose	Propellors
Verzamel plek; samen zijn	Aanpassen aan milieu	Loopband op brug
Lagen	Gevel = tafel = stoel	Onder duiken
Hoge trap waar je op kan zitten met uitkijk op Rotterdam	Simulator	Dieren als vervoer
Overview	Building	Bootje over water
Hoogte verschil	Room is turning around person	Op rug van vogel
Kleine paviljoens verspreiden		Touw
Ruimtes in vorm van een landmark	Verassing	Glijbaan
Leidende route	4D experience, panda droom	
Unique shapes, volumes	Openingen in gevel, verschillende uitzichten	Guidance
	stiekem	Verlichting met kleur op de grond
Innovatie		Signs & symbols
Oceaan overzwemmen	Contrast	Senses
Info digitaal uitwisselen	Contrasting environment	Schaduw
Gebouw naar jou komen	Open accessible	Interactive infographics
Chips in hoofd Smart materials		Dak hofbogen, cultureel rotterdam/NL/World information
onderzoeker		Buddy - Personal Interactive Globe
		interactive Giobe
Implementatie herinneringen		

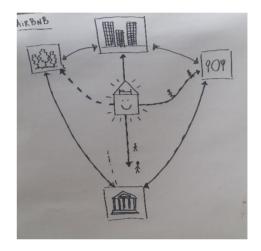
APPENDIX 4.1 G

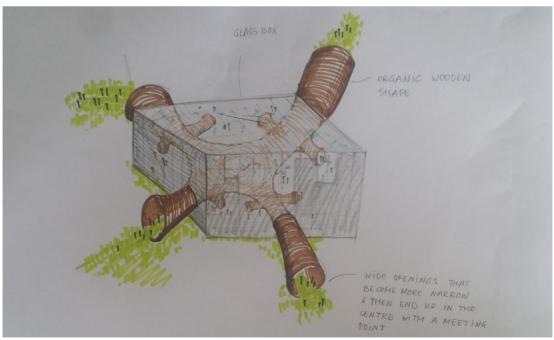
Airbnb concept ideas (images)











APPENDIX 4.1 H

Google concept ideas (words)

How to communicate; 'innovation and interest people in a building', in architectural design?

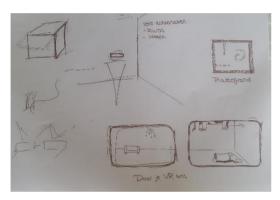
Explore	Personaliseren	Middelen	Open vs Closed
Ontmoeting	Boeken legger, pagina's opslaan	They get a price	Onduidelijke scheidingslijn
Beweegbare ruimtes	Identiteit	Uitgaan	Beweegbare ruimtes
Puzzel deur	Beauty	Prikkels	Modulair gebouw
lets lijkt op iets anders	Uitzicht	Feest dagen spedials	Bank
Paas eieren zoeken	Stand beeld	Kleur vs Blanco	Relaxed
Elke pagina is iets nieuws	Aantekeningen maken	Kleur baksteen	Contrast
Boek		Bijzonder materiaal	Binnen = buiten
Onbewuste ervaring	Digitaal	Kaft, buiten vs binnen	Herinnering
Stemmen in hoofd	Sensores	Speciaal font	Beleven
Verhaal, verschillende verhalen	Google search	Textuur	Lego House
Zoeken	Technologie	Tekeningen	
Gebouw zoeken	Digitaal/Analoog	Explore by touch	Doolhof/Lagen
Imagination	Website	Feest	Lagen
Beweegbare gevel		Video	Verschillende delen
	Vooruit bewegen	Filmpjes	Gangen systeem
Info verkrijgen	Schommel		Deur post doolhof
Audio tour	Trein	Shopping	Onder de grond
Instructies speaker of mobiel	Tillen	Pop-up	Klein gebouw
Samenvatting	Mono rail	Winkel	PAddestoelen
Pagina nummer – kamer nummer	Rolband	Online	Inception
	Zweven - uitsteken		Verschillende bruggen
Fun	Rollen van helling	Innovatief	Gaten gangen
Kussens	play	Self cleaning material	
Selfie maken	Villa volta	Zonnepanelen deuren	
Steden ontdekken	Klimmen	See through building	
Afleiding		0 energy	
Van de zon genieten		Events	
Laat mensen testen		Windmolen in tuin	
Stiekem doen		Inklapbaar huis	

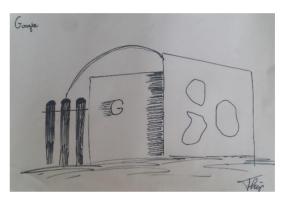
APPENDIX 4.1 I

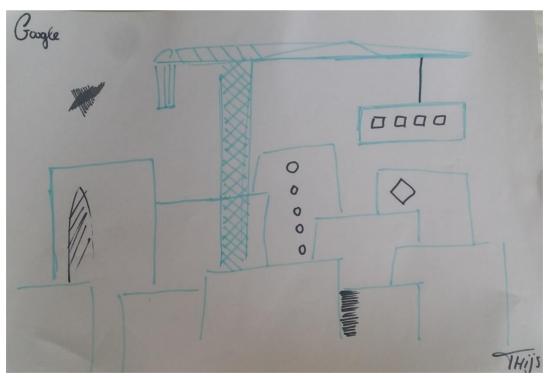
Google concept ideas (images)







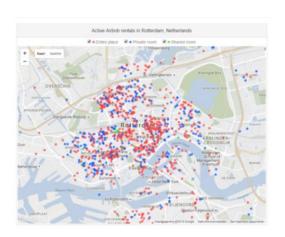




APPENDIX 5.4 A

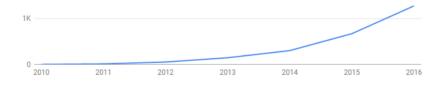
Airbnb architectural portfolio: Event stands

https://www.airdna.co/city/nl/rotterdam



Cumulative Listed Properties

Of currently active listings



Year - #listings

2010 - 1

2011 - 12

2012 - 52

2013 - 145

2014 - 301

2015 - 670

2016 - 1269

2017 - 2500?

Airbnb Host information – Rotterdam

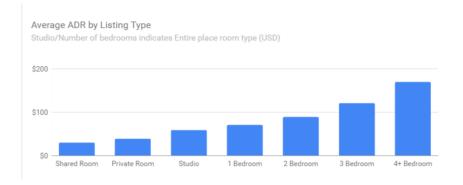
1007 Active hosts (Hosts active in the last 30 days with one listing)

134 Multiple listing hosts (Hosts with multiple listings available on the Airbnb platform)

77 Superhosts (Hosts recognized by Airbnb for providing exceptional service

1269 active Airbnb rentals





Total rooms = 1269

Average of 670 listings that are rented for 2 months a year Average of 126 listings that are rented for 5 months a year Average of 58 listings that are rented for 8 months a year Average of 10 listings that are rented for 11 months a year

#listings	% of total	Room type	\$/night	Airbnb price
22 383 55 427 282 68 32	1.7 % 30.2 % 4.3% 33.6% 22.2% 5.3 % 2.5%	Shared room Private room Studio 1 Bedroom 2 Bedroom 3 Bedroom 4+ Bedroom	= \$40 *0.302 = \$60 *0.043 = \$71 *0.336	

Total rooms = 1269 Average Airbnb price a night = \$69.78

670 listings	*60 nights	*\$69.78	=\$2.805.156
126 listings	*150 nights	*\$69.78	=\$1.318.842
58 listings	*240 nights	*\$69.78	=\$971.338
10 listings	*330 nights	*\$69.78	=\$230.274

Total prices of Airbnb listings a year = \$5.325.610

The commission Airbnb takes from hosts is 3% and for guests varies between 6-12%. This gives an average commission of 3%+9%=12%.

Revenue streams out of commissions = 0.12* \$5.325.610 = \$639.073

Airbnb makes an average of \$639.073 in 2016 in Rotterdam and this can be doubled (\$1.278.146) in 2017 when the current growth of listed properties continues.

However, my prediction is that in the future this growth will decrease, because it becomes harder every year to win trust of citizens to open up their homes. Thereby limitations are imposed by the government concerning home rental.

APPENDIX 6.1 A

Airbnb architectural portfolio: Offices



1. San Fransisco, 2013



2. Dublin, 2014



5. Sydney, 2016



6. Sao Paolo, 2016



3. Portland, 2014



4. London, 2015



7. Singapore, ?



8. Tokyo, 2016

References:

nererences:

1. http://www.designboom.com/architecture/airbnbs-170000-sq-ft-headquarters-in-san-francisco-12-11-2013/; 2. http://www.designboom.com/architecture/heneghan-peng-airbnb-dublin-office-03-19-2014/; 3. http://www.designboom.com/architecture/airbnb-portland-office-customer-experience-12-21-2014/; 4. http://weare.guru/village-greens-to-reading-nooks-airbnb-have-new-offices-in-london-sao-paulo-and-singapore; 5. http://www.designboom.com/design/airbnb-sydney-office-interiors-the-bold-collective-03-10-2016/; 6. http://www.designboom.com/architecture/airbnb-mm18-arquitectura-office-sao-paulo-04-11-2016/; 7. http://www.designboom.com/architecture/airbnb-tokyo-office-interiors-japan-suppose-design-office-08-15-2016/

APPENDIX 6.1 B

Airbnb architectural portfolio: Accommodation



1. Cable car, 2015



2. Floating house London, 2015



5. Great barrier reef, 2016



6. Shark Suite Paris, 2016



3. Penthouse, 2015



4. Gaystay, 2015



7. Olympic gymnastic, 2016



8. Community centre Japan, 2016

References:

1. http://blog.airbnb.com/night-at-courchevel/; 2. http://blog.airbnb.com/floating-house-brings-a-little-magic-to-londons-waterways/; 3. http://blog.airbnb.com/night-at-holmenkollen/; 4. http://www.starobserver.com.au/artsentertainment/festival-guide/mardi-gras/airbnb-launches-big-gay-stay-for-mardi-gras/133272; 5. http://thepointsguy.com/2016/06/airbnb-and-pixar-spend-the-night-on-the-great-barrier-reef-finding-dory/; 6. http://www.designboom.com/design/shark-suite-airbnb-underwater-ubi-bene-paris-aquarium-03-29-2016/; 7. https://www.airbnb.nl/night-at/olympictrials; 8. http://www.dezeen.com/2016/08/05/airbnb-launches-internal-design-studio-samara-future-house-prototype-yoshino-cedar-house/

APPENDIX 6.1 C

Airbnb architectural portfolio: Event stands



Miami, 2015



Singapore, 2015



London, 2016?



Airbnb open, 2015



Milan, 2016



Sundance, 2016

References:

^{1.} http://www.designboom.com/architecture/airbnbs-miami -12-08-2015/; 2. http://www.designboom.com/architecture/singapore-airbnb03-19-2015/; 3. http://www.designboom.com/architecture/airbnb-open06-08-2015/; ; 5. http://www.designboom.com/architecture/airbnb-open06-08-2015/; ; 5. http://www.designboom.com/architecture/airbnb-sundance-04-11-2016/