# WHO IS YOUR BRAND?

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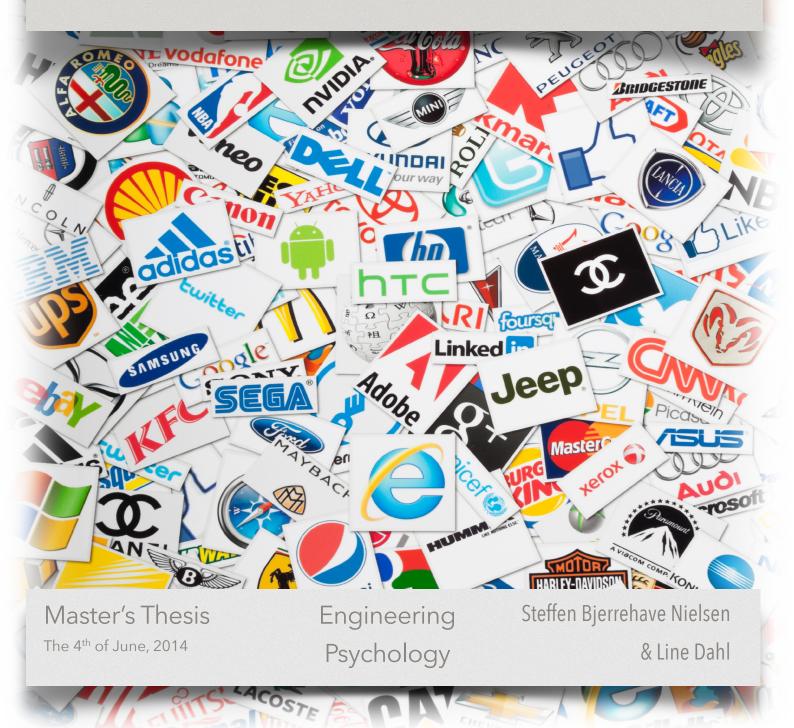
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A study of brand identity expressed through visual design

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# AALBORG UNIVERSITY

# DENMARK

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Synopsis:

This project focuses on the perception of brands and looks into aspects of branding identity and visual expression that consumers come in contact with. The mission statement is whether identity can be communicated and perceived through visual design aspects such as color, typeface, etc.

Due to the complexity of branding as a concept, perception of it and measurement of it, scope of this project was limited to unfamiliar products from relatable product categories. The authors created, using structured processes, brand identities and visual expressions for four fictitious brand case. Through two questionnaires (n=176 for both), the four brands' identity and visual expression were measured on 12 items from Geuens et al. (2009). Additionally for the visual expression one, five attributes, the designs were based on, were also evaluated.

Using equivalence tests, it is found that for all cases, equivalence is significant for a majority when comparing identity and image. Within category testing shows that for some brand personality traits, the category may in itself dominate and make it difficult to differentiate based on this specific model.

Given the exploratory aspects of this study and the limitations in both selected scope, design and resources, it is found that visual aspect have an influence on perception of brand and to some extent are capable of expressing a brand's identity.

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# Preface

This report serves as documentation for a Master's Thesis in Engineering Psychology of group 1085, Steffen Bjerrehave Nielsen and Line Dahl. In conjunction with conducting research for this thesis, this report

Who is your brand? A study of brand identity expressed through visual design

was written in the period 1st of February to the 4th of June 2014.

# Acknowledgements

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# Color representation

The brand, case designs constructed as part of the following documentation, are developed to be viewed on digital screens. This means that in a printed version of this thesis, the authors can not guarantee that the designs have the same shades and tones on paper as when presented digitally.

# Remarks

Citations in this report are done in the Chicago style; the author(s) and the year of publication is used as reference for the work. Appendix A lists sources for all chapter illustrations and front page illustration. For a terminology list of the terms used throughout the project, see page 230. Each term is also defined when used in the project.

# Additional media

A CD is attached this project at the back of the binder and an overview of its content can be seen on page 232.



In modern civilized society, products are an ever present part of our lives. Today we are often faced with multiple versions of essentially the same products. Mobile phones, toothpastes, and beverages can come from a number of different manufacturers, but often share the same basic functionalities within each product category. Individual products from the same category may differ from each other in different ways. One brand of toothpaste may have the preferred amount of mint for your taste, where another might be excessively minty for you. In this case you are aware of your needs and wants, and have an idea of the intensity of mint flavor in both toothpastes. You may find yourself in a situation where you don't have any familiarity with the specifics of a product. There is no way of telling what makes a particular product special, whether it meets your needs or fits your personality. In this case, it can become difficult to distinguish products from each other. The same could happen if the functionalities of several products are equal.

One way to overcome this kind occluded diversity is through branding. A brand is defined, by the American Marketing Association, as elements, in the creation and marketing of a product, which are used to identify or separate it from it's competitors (Keller, 2008; Kotler and Keller, 2008). Branding is, by this definition, a wide variety of elements which do not directly have an effect on the functionalities of a product. Branding is the more intangible side of products, such as an understanding of the underlying company, the packaging of a product, the expression that you may encounter in a store, etc.

Branding has the potential to affect the perception of a product. Jacoby et al. (1971) has shown that perceived quality of beer is influenced by the presentation of a brand name along with the beverage. Identical beers also received different ratings if presented as various brands. Perception of a product is not an objective assessment. Klink (2000) has shown that certain vowels in a brand name also have an influence on which values a brand was perceived to have.

Besides having an effect on our perception, the brand is a big part of what can make a company successful today. Figure 1.1 shows the 10 most valuable brands as of November 2013. Each have a brand value that is measured in several billion dollars. Most of the companies listed in figure 1.1 will probably be familiar.

Rank	Brand	Brand Value (\$bil)	Company Advertising (\$mil)	Industry	
1	Ć	104.3 1,100		Technology	
2	Microsoft	56.7 2,600		Technology	
3	(oca Cola	54.9 3,342		Beverages	
4	IBM.	50.7	1,339	Technology	
5	Google	47.3	772	Technology	
6	M.	39.4	788	Restaurants	
7	38)	34.2	-	Diversified	
8	(intel)	30.9 2,000		Technology	
9	SAMSUNG	29.5	29.5 4,398 Technol		
10		28.4	4,211	Luxury	

Figure 1.1: Top 10 most valuable brands as of November 2013. Illustration adapted from Forbes (2013).

Chapter 1. Introduction

This recognizability is facilitated by the companies efforts in creating design aspects that are largely unique for them. For the listed companies (figure 1.1), this uniqueness is consistently present in all aspects of the companies. By it product fabrication, adverts, support, endorsements, etc. If a company has found their unique brand image and it is carried over to advertisements, products, and etc., then a brand is able to stand out. This makes a brand identifiable, even if only some elements of the brand are present. Lindstrom (2005) describes this with an example:

"Even blindfolded, you'd know you're holding a classic Coke bottle. And if that bottle were dropped and smashed, someone else could would be able to tell at first glance what it was." Lindstrom (2005, p. 63).

Take a look at the many Coca-Cola adverts. Even though the adverts have different story plots, concepts, etc., as seen with Coca-Cola Light (Coca-Cola, 2014a) and Coca-Cola Zero (Coca-Cola, 2014c), there is still a common thread that makes it recognizable. This is seen in figures 1.2 through 1.5, showing stills from the television adverts.





Figure 1.2: Still of character biking down a peer at sunset from a Zero advert (Coca-Cola, 2014c).

Figure 1.3: Still of characters running on beach from a Light advert (Coca-Cola, 2014a).



Figure 1.4: Still of character being plunging into water from a Zero advert (Coca-Cola, 2014c).



Figure 1.5: Still of character being plunging into water from a Light advert (Coca-Cola, 2014a).

Within the brand of Coca-Cola, these two products have similar adverts. Figures 1.2 and 1.3 show movement near a body of water and in both videos there is a feel of relaxation and letting go. Prior to the stills in figures 1.4 and 1.5, each character have jumped into the water of their own accord and the action of entering the water is slowed down in both cases. Here, two products from the same company have a sense of belonging to said company through a common branding connection. If one was to look at just one of the adverts, the branding present still enable a connection to the company.

In order to achieve these types of connections, a lot of resources and research is dedicated to enhance the strength of a brand and the underlying aspects of what a brand is and what effects it. In the case of advertisement, the column marked *Company Advertising* in figure 1.1 shows the budgets spent on advertising by these 10 companies.

Given the importance of branding in modern commerce, it is a field which is interesting to investigate from an angel of perception. What is branding? What is our relationship to brands? Is it possible to enforce and communicate brand values without directly stating these values outright?



# What is branding?



"... the word **brand** is derived from the Old Norse word [at] **brandr**, which means "to burn" as brands was and still are the means by which owners of livestock mark their animals to identify them." Keller (2008, p. 2).

As illustrated by the quote, the word **brand** itself stems from the act of marking livestock. The act of uniquely marking ones property is no longer solely present with farmers. The term brand has evolved over the years to describe elements in many different categories, where there is a need for standing out. In essence, the act of branding ones products is done to have a way of identifying a certain product, manufacturer or seller. The term **brand** in connection to sellers of goods has a long story behind it. This understanding of a brand and branding has been around for a long time. Moore and Reid (2008) take a look at the historical aspects of it, from 2250 BC to 300 BC. They categorize these historical examples as proto-brands. This is defined by Moore and Reid (2008) as the earliest indications of the existence of a concept which can be called **brand**.

## 2.1 History of branding

In the early bronze age, the brand concept manifested as seals attached to goods and had the function of indicating where and from whom a product came, how to store it, etc. These seals were most commonly pictorial indentations in stone or clay, attached to containers of goods, such as jars, baskets, etc. The information communicated with these seals was intended for resellers and government authorities and acted as a illiterate-friendly product declaration (Moore and Reid, 2008).

The approach of using proto-brands in an authoritarian way was also found in Chinese crests in the middle bronze age. Crests were used in royal records to represent occupational groups within town settlements. Images were also used in this era, along with descriptive names to indicate the groups origin, crafts, and the quality of their workmanship. Moore and Reid (2008) noticed a shift in the late bronze age within the way brands were represented. Branding was formerly done by adding an additional element, such as a seal or crest. These were made up of some form of illustration or additional informations. After the shift, information regarding origin, quality or value was in some cases inherent in the actual products. The shift, Moore and Reid (2008) remarks on is that brands could at this point also be ingrained in products. Some brands still added seals to jars, but in addition to this type of brand, products started to become brands in their own right without the need for additional clarification. To show this shift, Moore and Reid (2008) used Cyprian copper and Greek pottery as examples. Both products had, for their time, characteristics which were unique to them.

Figure 2.1 shows the different stage of proto-brands and what they were able to communicate as Moore and Reid (2008) presented them. It can be seen that there is both an elimination and addition of information as the proto-brands evolve.

	Brand characteristics					
Period	Information: logistics	Information: origin	Information: quality	Image: power	Image: value	
Early Bronze IV 2250–2000 BCE The Indus Valley	x	x	x	x		
The Middle Bronze Age 2000–1500	A		A	Α		
BCE Shang China The Late Bronze Age 1500–1000 BCE		х	х			
Cyprus The Iron Age Revolution 1000–		х	х	х	Х	
500 BCE Tyre The Iron Age 825–		х	х	х	х	
336 BCE Greece Modern		X X	X X	X X	x x	

Figure 2.1: Information given by brands through different eras. Table is from p. 430 in (Moore and Reid, 2008).

As seen in figure 2.1, Moore and Reid (2008) focused only on brands concepts in the BC timeframe. The evolution of the brand concept continued long after that. Keller (2008, p. 43 - 45) indicates that branding took another leap with the medieval version of branding. Here branding of products started to take the consumer into consideration as opposed to the earlier authoritarian and reseller heavy approach. By this time illustrations of brands were included on paper watermarks, bread, craft guilds, etc. These were used as an indicator of the quality of a given product or service, that the buyers could relate to.

Keller (2008) describes a growing interest from the manufacturers, at the start of the  $19^{th}$  century, in how products were labelled, named and packaged in order to capture the consumers attention and thereby trying to increase sales. This was a noteworthy shift from the earlier approach where products like tobacco were sold in bales to grocers, who then sold it on in smaller batches. This new approach to branding, spurred on by an evolution in skill and technology, allowed for a finished product to be shipped in individual packaging instead of bulk to sellers. The growth and evolution of the concept **brand** has, as shown, undergone many stages and continues to adapt to the circumstances and changes which time brings.

As shown by Moore and Reid (2008) and Keller (2008), the concept of branding has had a large number of meanings and implications over time. In this project, focus lies solely on the current understanding and excludes the historical aspects. The brief historical description prior to this, is included to show that branding is a shifting concept that adapts to the time of which it exists in. Within this project, we have therefore selected to focus on the following understanding of the concept **brand**.

### 2.2 Brand as a concept

Due to the ever-changing understanding of brand, there has been speculations about whether a collective understanding of what is meant by brand and branding exists today (de Chernatony and Riley, 1998; Keller, 2008; Kotler and Keller, 2008). The American Marketing Association (AMA) presented a definition which is widely accepted to be the most telling of what a brand is and what elements can be consider to be parts of a brand. The following quote is an excerpt from Kotler and Keller (2008) containing the definition itself and their understanding of the definition.

"The American Marketing Association defines a brand as "a name, term, sign, symbol, or design, or a combination of them, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors." A brand is thus a product or service whose dimensions differentiate it in some way from other products or services designed to satisfy the same need. These differences may be functional, rational, or tangible related to product performance of the brand. The may also be symbolic, emotional or intangible - related to what the brand represents." Kotler and Keller (2008, p. 276).

As seen by this quote, the current understanding of the concept of brand embraces both functional and intangible elements and aspects. However, the understanding of the definition by Kotler and Keller (2008) shows that brands also tend to include intangible elements that can be more about an atmosphere of a brand.

#### 2.3 Brand architecture

Many brands today tend to expand to include many different products. As seen with the Coca-Cola company, which was founded around the namesake beverage invented in 1886 (Coca-Cola, 2014b). Through the years, Coca Cola grew and with it, the company expanded to include several products in the brand's product line. In figure 2.2, products of the Coca-Cola brand are presented and properly include more than you would think of as being part of the Coca-Cola brand. This shows that in some cases a brand can encompass many different products and some may be more known as a part of the brand than others. Products under a brand may share values within the bigger brand, like the Coca-Cola Zero and Light from the introduction.

These are both sugar free and both distinguishable as Coca-Cola beverages. However, all products under some of todays bigger brands may not share same values. The figure 2.2 shows a selection of products and the brands behind them, where it may not be widely known that the given brand is behind that list of products.



Figure 2.2: Nine parent brands and their different groups of products (imgur, 2014).

Figure 2.3 shows both the logo of the collective brand Virgin and several logos of products and services that are included in the global Virgin brand. Notice how similar these are to each other in comparison to the majority of the brands and their products in figure 2.2.



Figure 2.3: Logos for the Virgin brand and some of its products and services (TeluguMail, 2013).

The difference between Coca-Cola and Virgin as brands is the way they have chosen to build their brand. This kind of structure is known as brand architecture. Aaker and Joachimsthaler (2000) describe brand architecture in the following quote.

"Brand architecture is an organizing structure of the brand portfolio that specifies brand roles and the nature of relationships between brands." Aaker and Joachimsthaler (2000, p. 8).

By building a brand with a coherent brand architecture, it allows for a stronger and more competitive brand (Douglas et al., 2001). Aaker and Joachimsthaler (2000) present a spectrum to cover the main potential versions of brand architecture: *House of brands, Endorsed brands, Sub Brands*, and *Branded house*. These each fork into subgroups. Douglas et al. (2001) presented other frameworks as to brand architecture than Aaker and Joachimsthaler (2000). The frameworks presented by Douglas et al. (2001), all include three types of architecture:

- A dominant brand saturating all sub brands.
- Endorsement, where brands collaborated.
- A corporate and supportive brand.

With an elaboration of endorsement, these share the same basic structure as presented by Aaker and Joachimsthaler (2000). Therefore, the following will look into the different kinds of brand architecture presented by Aaker and Joachimsthaler (2000). In order to get an understanding of each type of brand architecture, Douglas et al. (2001) suggest using brand name and/or visual elements of the brands to get a general insight into a brands architecture.

House of brands is where most of the products are independent under the main brand, as illustrated in figure 2.2. The two middle versions, *Endorsed* and *Sub Brands*, are both based in collaboration between brands. *Endorsed brands* lean on and work together with similar brands, a common language, and links to other brands. By adopting this approach, brands are able to utilize each others characteristics. *Sub Brands* are based on a dominating brand bringing the frame of reference and the sub-brand add a new dimension to the bigger brand. With a *Branded house*, there is a dominant brand that permeate the underlying sub brands with its characteristics (Aaker and Joachimsthaler, 2000), as illustrated by Virgins logos in figure 2.3.

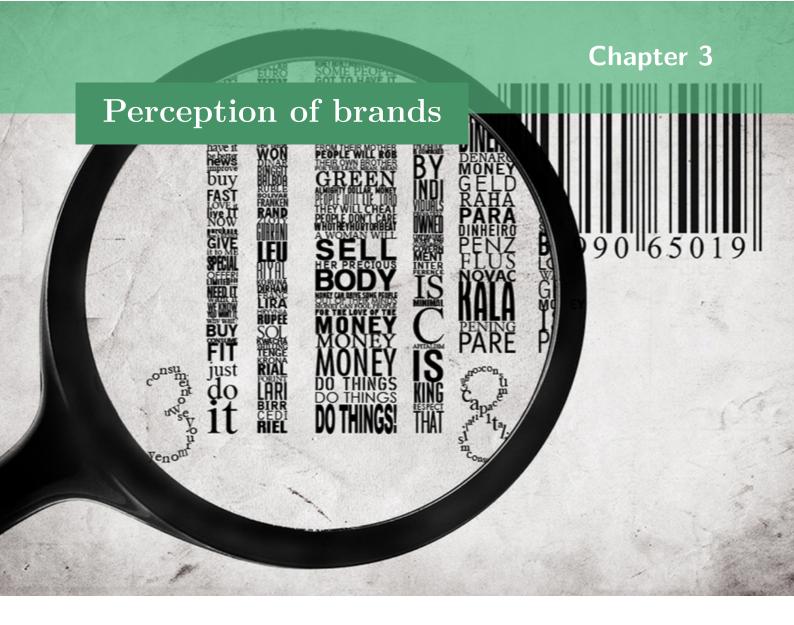
These are the main variations of the architecture of bigger brands. Aaker and Joachimsthaler (2000) points out that these are main categories and in most cases brands use a mixture of them to adapt to any context. They also emphasizes the importance of considering which architecture to use in accordance to one?s goal of a brand. If a company succeeds or fails in creating a brand architecture that suits their situation, it can have consequences as shown by following quote.

"A coherent brand architecture can lead to impact, clarity, synergy, and leverage rather than market weakness, confusion, waste, and missed opportunities." Aaker and Joachimsthaler (2000, p. 8).

When a company succeeds in having a coherent brand architecture, a strengthening of the overall brand can take place. This kind of brand structure is a more needed element when dealing with big brands as Virgin and the brands presented in figure 2.2. For smaller brands, which may have a less extensive product line, it is a smaller part and contributor to the brand.

Sometimes the reasoning behind the architecture of a brand can lie in the perception of the consumers (Kervyn et al., 2012). As an example take how the car brand Lexus came to exist. Lexus is a sub brand of Toyota, but when Toyota wanted to make luxury cars, their brand image of being affordable and dependable played against them. So in order to embrace two contradictory perceptions, a new brand, Lexus, was created to convey a perception of luxury (Kervyn et al., 2012).

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A brand is constructed by a company, and serves as a way to indicate to consumers that a product belongs to a given group or category, i.e. dog food from Pedigree. Therefore, one could argue that the brand only is truly effective when it's being perceived by a potential consumer. Keller (2008) takes it a step further with the following quote:

"A brand is something that resides in the mind of the consumers. A brand is a perceptual entity rooted in reality, but is more than that." Keller (2008, p. 10).

This dynamic between what the companies create to present and the perception by consumers are one of the main elements in why brand and branding is as complex as it is. In order to get a better grasp of what goes in to this perception of brands, the following focuses on what kind of connection there is between brands and the consumers perception of them.

## 3.1 Identity and image

As mentioned, a brand has little purpose in its existence if there is no consumers to perceive it. There is consensus between the investigated literature that a brand can be seen to have an internal; what the company is in charge of, and external part; what the consumers are presented with and how they perceive it (Burmann et al., 2009; de Chernatony and Riley, 1998; de Chernatony et al., 2004; Keller, 2008; Kotler and Keller, 2008). The internal and company driven element is known as a **brand identity**. Here, it is a question of how the the people behind the brand see it and a reflection of what they wish to portray. The external part is driven by the consumers and buyers perception of a brand is call a **brand image** (Burmann et al., 2009). This is essentially how the consumers see the brand identity. Kotler and Keller (2008) have a separation between the two in the following quote.

"Let's distinguish between brand identity and image. Identity is the way a company aims to identify or position itself or its product. Image is the way the public actually perceives them. For the right image to be established in the minds of the consumers, the marketer must convey brand identity through every available communication vehicle and brand contact." Kotler and Keller (2008, p. 288).

By this way of looking at the two elements to a brand, it is clear that they are interlocked. Kotler and Keller (2008) mentions in the quote, that a brand image is depended on how the brand identity is portrayed in every way available. However, understanding and conveying ones brand identity can be tasky business (de Chernatony et al., 2004). In worst case, some of a brand's identity may not be reflected as intended in its brand image. On the other hand, there can be some parts of the brand image that are based on individual differences of the consumers. Consumers can have existing knowledge that contribute to a brand image (Esch et al., 2012; Sullivan, 1990). Based on this, figure 3.1 shows our understanding of how brand identity and image relate to each other. The overlap of the two circles is to illustration the interaction by the design expression and should not be interpreted as the exact amount of overlap. If a brand is good at conveying their identity, then the two circles would theoretical overlap a greater part and if a brand is not capable of conveying their identity, no overlap would be present.

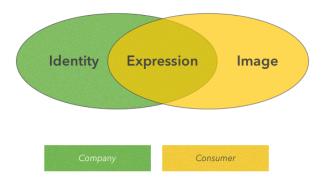


Figure 3.1: How the brand elements *identity* and *image* are related through expression.

As can be seen from figure 3.1, there is a overlap of what is presented by the brand and what is perceived by the consumers. There is not a complete overlap given that according to de Chernatony (1999), parts of a brand identity is company tied only. This could be aspects such as working environment, staff and etc. However, there is no way getting around the fact that brand identity and image are bond together, due to them being part of the same company (de Chernatony et al., 2004). In figure 3.1, the bond between the two is called **Expression** and have been mentioned earlier in this segment. Expression is what Kotler and Keller (2008) hinted at with the mention of "conveying identity through every available communication vehicle and brand contract" in the beforehand quote. The expression of a brand is everything representative that a consumer comes in contact with, be it products, services, advertisements, word-of-mouth, employees, etc, as exemplified by the following quote by Keller (2008).

"They [customers] see the public face of an organization or brand - its expressions - projected through multiple identity elements with various aesthetic styles and themes" Keller (2008, p. 142).

## 3.2 Consequences of perception

Due to the fact that consumers and their perception is a pivotal part of a brand's success, there is also an influence or one could say consequences of the human perception being part of brand perception. In the following, we look at how consumer types and existing knowledge are parts of what makes brand malleable.

#### 3.2.1 Brand effected by consumer type

Many brands today include more than one product and in most cases the brand's product line grows as a brand evolves. In an article by Klink and Athaide (2010), the question of whether it is wisest to extend what a brand includes or to create a new separate brand for new products is addressed. They show that new brands are perceived more favorably by consumers, that tend to be more focused on being on the beat. Klink and Athaide (2010) call this kind of consumer for innovative consumer. Even though new brands sometimes can be a risk, it can also be the way forward due to the favorable reception of the innovation consumers. If the innovative first-to-buy consumers is not attracted, then there is a risk that a brand is never introduced to mainstream even if it is an extension of an existing brand. In contrast to creating a new brand, there is also benefits of extended a brand. In the case of an established brand, consumers associate the new product with the values of the known ones under the same brand (Klink and Athaide, 2010). This can include perception of quality, effectiveness, suitability, etc. Klink and Athaide (2010) conclude that whether it is a fitting to create a new brand or extend depend on the situation, hopes and intentions. This shows that consumer types are capable of influencing the general perception of a brand, and that catering to the right demographic may be beneficial in the long run.

#### 3.2.2 Image spillover

Given that many brands today have multiple products, it is most likely that consumers have an existing perception of a new product based on the brand it comes from. When another Audi model is available, it's quite likely that one would expect a sporty and luxurious car, based on ones existing view on Audi. This is what Sullivan (1990) calls *Image Spillover*. Sullivan (1990) describes image spillover as the influence, otherwise independent products of a brand have, on other products included in the brand itself. As mentioned early the concept brand is not a rigid structure, neither are brands themself. Sullivan (1990) focuses on the effect of image spillover on *Umbrella brands*. Umbrella brands are described as a brand with more than one products with the same brand name (Sullivan, 1990). Many car manufacturers are umbrella brands, because each car model is always labeled with the brand name and an additional sub brand being the model and it's own expression.

When dealing with anything as complex as umbrella brands, Sullivan (1990) states that products are linked unintentionally together. This link carries with it the power of influencing an otherwise independent product due to opinions, inherent values, or events that are connected to another product within the brand. This is according to Sullivan (1990), an unavoidable action of extending a brand to include more products. Consumers may not be capable of excluding pre-existing perception of a similar product from how the new brand identity is perceived. The following quote shows how an existing perception of McDonald's food is capable of influencing how consumers perceive McDonald's attempt to include photo processing to their brand.

"Another extension, McDonald's film processing, gave the impression that the pictures would be developed quickly but that they would be greasy.", Sullivan (1990, p. 311). The quote and the linkage between products, presented by Sullivan (1990), shows how vulnerable the perception of a product or brand can be. In the case of image spillover, the influence, that are at the base of an altered perception, lies with another products. This shows that brands are malleable due how the consumers perceive brands.

### 3.3 Brand and consumer relationship

As previously covered, branding as a usable concept relies on the existence of a potential consumer to perceive a specific brand. This perception however goes beyond consumers simply registering certain elements and drawing a conclusion based on what is perceived. Consumers can become a part of the perception beyond simply perceiving, as is illustrated by the following quote:

"The pursuit of uniqueness through consumption corresponds to the renewal of the individual's self-conception and his or her social image. Consequently, buyers prefer brands which reflect and support their own uniqueness." Burmann et al. (2009, p. 394).

The quote illustrates that consumers not only perceive brands, but compare them to how they see themselves. It can be said that they make a rudimentary comparison between the traits of a brand and the traits that they possess.

Branding is not a matter of one-way communication. Consumers also have the ability to influence the general perception of a brand. If a particular subset of a population adopts a brand, the values and perception of this group will reflect back and influence the general perception of the brand. This is illustrated clearly by the trouble which the fashion house Burberry found themselves in.

"The revitalization of Burberry deviated from a pure success story, when the company became a victim of its own success. The problems rooted in the brand's particular popularity among "chavs", young people characterized by brash, loutish and antisocial behavior. Burberry turned into the brand of choice for British football hooligans. There was even a group of hooligans who called themselves the Burberry Boys and adopted a Burberry-checked cap as their symbol of recognition. These developments had a major negative impact on Burberry." Phan et al. (2011, p. 216).

The phenomenon of using a brand as a signifier for specific values and opinions extends further than the football<sup>1</sup> environment. Since the emergence of a smart phone market, there has been a tendency to see the market as almost binary; iPhone vs Android. The choice of phone should arguably not be influenced by anything other than personal preference, but a dichotomy has arisen. This is more humorously illustrated in the comic which can be seen in figure 3.2 on the following page, where self-image and perception of smartphone users of competing products are pictured. While a cartoon by its very nature is a caricature, the trends need to exist in order to be amplified to the point of recognizable comedy.

<sup>&</sup>lt;sup>1</sup>European understanding of football.



Figure 3.2: iPhone vs. Android vs. BlackBerry (Schneider, 2010).

This and the previous quotes show that people reflect themself in brand values and consumer groups that are connected to brands.

### **3.4** Brands and their personalities

There are clear indications that connections between brands and personality types exist, but consumers also tend to evaluate brands on an alignment between their own personality traits and those of a brand. This indicates that consumers look at brands as being able the express somewhat human elements as well as company based and functional elements. This is also visible in a shift in brand perception.

The shift in the perception of brands appeared when it was proposed that brands could be seen as having personalities. Aaker (1997) makes great strides in order to define what a brand personality is, as is seen in the following quote. As visual aid, the two products mentioned in the quote can be seen in figure 3.3 and 3.4.

"Brand personality is defined formally here as "the set of human characteristics associated with a brand." To illustrate, Absolut vodka personified tends to be described as a cool, hip, contemporary 25-year old, whereas Stoli's personified tends to be described as an intellectual, conservative, older man." Aaker (1997, p. 347).

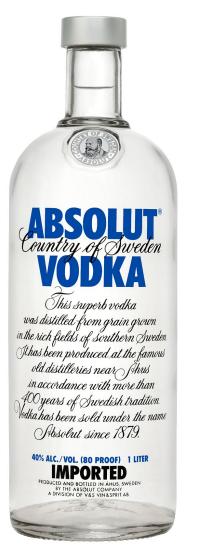


Figure 3.3: Absolut vodka.



Figure 3.4: Stolichnaya (Stoli) vodka.

Besides Aaker (1997) several others have also noted that brands are able to express traits that are closely related to personality traits (Caprara et al., 2001; Sung and Tinkham, 2005; Schmitt, 2012). However, there is an ongoing discussion on whether personality traits that some see as being strongly bound to what it is to be human, can be used in a non-human context; in this case brands. We are aware that there is a discussion within the brand community of whether or not brands are able to have personalities, where some argues for brands not having (Avis, 2012; de Chernatony, 1999). Meanwhile, the discussion is still ongoing and strong arguments for brands being able to be perceived as having personalities exist. This is the position we will work from in this project.

In order to get a grasp of what kind of personality traits a brand may be perceived as having, there is a need for a way of measuring personality. There is a wide variety of personality constructs, but one has been used, expanded and simplified many times over and continues to draw interest: the Big Five personality model. It has a long history, since Tupes and Christal (1961) arrived at a five factor solution as a way to describe human personalities. McCrae and John (1992) look into the historical aspects of this model, how it has been reduced and expanded over years, but in the end come to the conclusion that five main factors with sub-items is most suitable in order to get as complete a view of human personality as possible. The items and the factors are frequently challenged to see which are most telling, but McCrae and John (1992) find that five factors could be the most suitable to include.

Growing tired of brand personality being measured either by new scales created for each and every study or human personality measurement method, Aaker (1997) developed a measuring model for perception of brand personalities. The approach focuses on traits related to brands and being usable across product categories. Thus, Aaker (1997) proposes a measuring method for brand personality. The framework will be presented in the next chapter about how to measure brand perception.

# Chapter 4

# Measuring brand perception



There are many ways to measure a brand. These measures can relate to the value of the brand, the size of the brand, the customer loyalty towards a brand etc. These are all relatively objective and quantifiable measures. A number of more subjective measures exist as well as showed in the previous chapter. These reflect how a customer perceives and thinks about a brand e.g. give an insight into the perception of brands.

For the purpose of this project, the subjective measures of brand perception are more interesting. While there is value in objective metrics, we find more potential in the measuring of perception of brands that relies on a subjective component. Optimally we look for a way to measure perception of brand that enables subsequent comparison.

Further more our interest lies in measuring brand personality given that we see potential in this form for brand perception. It can be used for a varity of different views of brands. Therefore, this chapter is dedicated to explore that kind of method and the criticism that have been at the basis for the method to develop further.

## 4.1 Measuring brand personality

With a goal to move away from measuring brand personalities ad hoc and in different ways, Aaker (1997) looks into a wide variety of traits connected both to human and brand/company personalities in attempt to construct a general, cross brand categories, measuring framework.

As a way of understanding and categorization personality traits, the studies conducted by Aaker (1997) relies on the well established Big Five model, which proposes a five factor composition of human personalities. By including traits from a number of sources which rely on the Big Five model as well as traits from a number of different personality scales used in connection with brand studies and input from practitioners in advertisement and marketing, a large number of descriptors are found. After reducing the number of descriptors through various means, 114 personality traits are found to be suitable in relation to brand personality and common enough to describe a wide range of product categories.

The 37 brands included in the study were selected based on presenting a wide range of personality types in order to utilize as much of the scales as possible as well as representing different product types to enhance how general the scales would be.

A study with a large number of participants (n = 631) was then conducted where the 37 brands were evaluated for each of the 114 personality traits. Before the evaluation participants were asked to think of the brands as if they were persons in order to ease the understanding and grasp of an otherwise abstract concept that is brand personality. The evaluation was done by presenting an item along with a 5 point Likert scale, where 1 was labeled as "not at all descriptive" and 5 was labeled as "extremely descriptive".

The collected data made it possible to carry out factor analysis which resulted in a five factor solution. By discarding traits with low loadings, 42 personality items emerged. These 42 items are grouped in 15 facets which in turn make up 5 factors. These facets and factors can be seen in figure 4.1. An excerpt from Aaker (1997) showing the 42 items, 15 facets and 5 factors can be seen in appendix B.

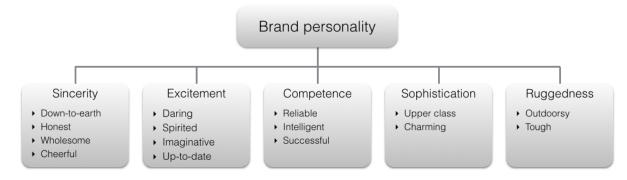


Figure 4.1: Brand personality framework proposed by Aaker (1997). Illustration adapted from page 352 in Aaker (1997).

Aaker (1997) tests these 15 facet and 5 factors against represented subgroups in the study and the same facets and factors were shown to exist among female, male, younger and older subgroups. Additionally, they represented close to similar amounts of variance. A second study with new brands selected based on the same criteria was conducted and resulted in only three traits not showing strengths the second time, as well as showing that the 5 factors were reliable as a measure.

The findings and results, it could indicate that Aaker (1997) as one of the first have constructed a brand personality method that is usable across different product categories, reliable in retest, have the potential to yield comparable results and to be a general tool for brand personality measurement.

#### 4.2 A need for further development

To our knowledge, Aaker (1997) was among the first to make a connection between Big Five and brand personalities and in the wake of her framework came some critic, suggestions and expansions (Azoulay and Kapferer, 2003; Caprara et al., 2001; Sung and Tinkham, 2005).

Azoulay and Kapferer (2003) are critical of the definition of personality used by Aaker (1997) and the method for selected personality traits thereby questioning the foundation that the framework is built on. Azoulay and Kapferer (2003) interpret the brand personality definition in Aaker (1997) to include all elements that are non-functional. This being also elements of a brand's typical users, such as social class and gender. Azoulay and Kapferer (2003) call for a clean-up of the traits in order to only have personality traits applicable to and relevant for brands and provide a new definition of brand personality, in order to counteract some of the problems that stem from the broader definition.

Caprara et al. (2001) look into whether the Big Five model and its traits are suitable for brands. In a study based on over 1500 responses, they find that it is not the case in this study. This leads the authors to conclude that Big Five may not be the best fit when trying to determine brand personality, and that further study is needed, both in terms of which words describe brands and regarding the domain relevance and meaning of certain words. One of the bigger problems Caprara et al. (2001) encounters with the fit of Big Five to brands is as soon as the full five dimensions come into play, the correlations aren't as clear. The study by Caprara et al. (2001) indicates that two meta factors may provide a better fit.

The fact that only US citizens were part of the study by Aaker (1997) raises the question, whether the framework would be usable other in other cultures and countries. Davies et al. (2001) found that some of the facets were not understood the same and did perhaps therefore not receive the same level of loading in a study conducted in the United Kingdom. Davies et al. (2001) found a need for more culturally neutral expressions, due to descriptors such as *small town*, *western* and *feminine* having a cultural loading.

The cultural diversity in understanding brand personalities were also in focus of Sung and Tinkham (2005). Here a study including the United States and Korea finds that there is both a common perception and elements of brand personality that deviate when a cultural diverse population is introduced. Sung and Tinkham (2005) find six brand personality dimensions where brands are perceive similar in the US and in Korea and two dimensions that are informative only in the US part of the population and two only for the Korean part of the population.

These critiques and expansions shows that there is a need for development of the framework presented by Aaker (1997) in order to get a measuring tool for brand personality which in a higher degree is independent of culture and more specific in terms of the nature of the included traits.

#### 4.3 A response to criticism

The intentions of Geuens et al. (2009) is to further develop a measuring method for brand personalities, which isn't dependent on the specific brand domain, time or culture. Geuens et al. (2009) based their five studies on the ideas from and critic of Aaker (1997), general discussion of whether brands can have personalities and the Big Five model (Goldberg, 1992). To compose a list of personality traits, Geuens et al. (2009) took several steps, including focus groups and evaluations with marketing researchers and existing items from existing articles, see the following quote.

"We included item from Aaker (1997) that reflect personality as well as items from personality scales assumed to measure human personality by means of the Big Five (Costa & McCrae's 1992 revised NEO-PI scale<sup>1</sup>, Mervielde's 1992 Dutch Big Five version<sup>2</sup>, and Saucier's 1994 brief version of Goldberg's Big Five markers<sup>3</sup>.) Geuens et al. (2009, p. 100).

All this gave a pool of 40 items, that is the starting point for the studies conducted. Each item were part of one of five included factors: Conscientiousness/Responsibility, Extraversion/Activity, Emotional Stability/Emotionality, Agreeableness/Aggressiveness and Openness/ Simplicity. In order to create a measuring tool, Geuens et al. (2009) conducts five studies in order to cut down on the amount of items under each factor, to check for cultural influences and whether it is reliable in accordance to time and different brands. Through all of the studies, 318 brands were studied and 21.129 responses were deem useful. The first two studies focuses on which personality items are suitable for brands and include 20 brands and had 1.235 responses in the first and 193 brands and had 12.789 responses in the second. The results from the first study showed that 22 items did not have a high loading on the personality factors. Geners et al. (2009) took this to mean that the 22 items did not reflect personality traits in relation to brands. Study 2 only included the remaining 18 items remaining from study 1 for the brands to be evaluated on. In the same critical way of looking at the 193 items, 6 items were also excluded in the second study. This gave a remaining 12 items, that Geuens et al. (2009) found to have a high loading on the five personality factors. Figure 4.2 shows the five personality factors and the 12 items that Geuens et al. (2009) found to be able to reflect the personality of brands.

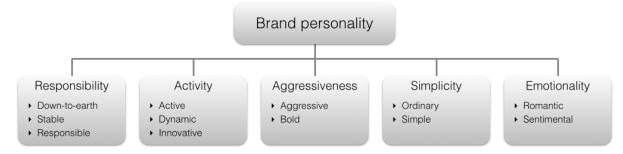


Figure 4.2: Brand personality framework by Geuens et al. (2009). Illustration adapted from page 103 in Geuens et al. (2009).

Through studies 3 to 5, Geuens et al. (2009) shows that the remaining 12 items are reliable over time and with culture included as an aspect in the studies and has good test-retest reliability. The two last studies looked into if culture had an effect on the measurements of the personality tool. Here 10 additional countries were included. The first studies were conducted only in Belgium, and the additional countries included were France, Germany, Italy, The Netherlands, Poland, Romania, Spain, Switzerland, Turkey and the United States.

<sup>&</sup>lt;sup>1</sup>Source from Geuens et al. (2009): Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI): Professional manual.* Odessa: Psychological Assessment Resources.

<sup>&</sup>lt;sup>2</sup>Source from Geuens et al. (2009): Mervielde, I. (1992). The B5BBS-25: A Flemish set of bipolar markers for the big-five personality factors. *Psychologica Belgica*, 32(2), p. 195-210.

<sup>&</sup>lt;sup>3</sup>Source from Geuens et al. (2009): Saucier, G. (1994, December). Mini-markers: A brief version of Goldberg's unipolar big-five markers. *Journal of Personality Assessment*, 63, p. 506-516.

Geuens et al. (2009) mentions limitations such as the tool had its point of origin in Belgium and later only includes Western countries. There are some limitations to the tool, but one of its strong points is that the brands included in the studies are quite diverse in terms of product category. This could indicate if the limitations are to be taken into account, the 12 items are a measuring tool for personality of brands in a wide range of brands and within the Western world.



As the past chapters have shown, branding is not a simple concept. A wide array of factors have an influence on a consumer's perception of a brand. It is not merely a direct expression of a company. It is more a complex and diverse understanding of a company as a whole. It can be influenced by elements such as culture, context, and the time in which it exists. Over time, perception of a brand may change, become an ingrained part of ones personality and habits. Some will suddenly switch to a different brand, merely out of an interest in trying something new and different (Knox and Walker, 2001).

Given the magnitude of the concept of brands and our interest in this field, there is a need for selecting a scope to focus on. The scope of this project will be presented in the following. However, the scope is based on our mission statements for this project, which are:

- 1. We want to investigate if it is possible to communicate the intended identity of a brand exclusively through visual design expressions.
- 2. If brands can be seen as having personalities, then measuring methods for brand personalities could be a way of investigating the first mission statement.

The intention of these mission statements are to get an insight into the alignment of the personality perceived through the design elements and the one from the underlying intended brand identity.

## 5.1 Investigation of mission statements

Based on our mission statements, the following approach has been developed as a road map. It is shown in figure 5.1. In the figure, *Identity* consists of the core values of the underlying company. The visual identity, which is created from identity, is the brand *Image*. Here the brand image is reflected in the visual design expressions of a product. The investigation of the mission statements will be done by a brand personality measuring method. This type of measuring method was selected due to it being able of measuring both identity and image on scales that are comparable and quite simple.

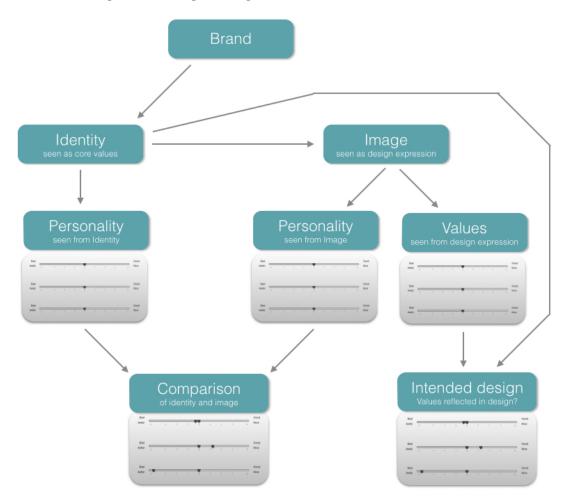


Figure 5.1: Our roadmap for investigating the mission statements.

In the bottom row of figure 5.1, two blocks can be seen, marked respectively *Comparison* and *Intended design*. They are included to give us an insight into whether the perceived personalities of identity and image are equal and whether we have succeed in expressing the intended brand identity through design. The latter will focus on whether people view the visual design to contain the intended values in a desirable degree. This enable us to draw conclusions on whether a particular design expression is successful in communicating the intended identity values.

In the case of whether identity and image express the same personalities traits, there is a need for similar measure methods on both the core value set and the design expression. Thereby there will be a basis for comparison of the two, as responses are given on similar scales. This will enable us to conclude whether the image design have been able to express the same personality traits as the identity have.

#### 5.1.1 Brand identity and value set

The first step in the envisioned method would be to identify and specify the brand identity of a particular brand, company or product. It is known, aided by the previous chapters, that a brand is capable of expressing an identity and a personality, and in most cases the identity originates from a company's core values. An example of a brand identity can be seen in Harley Davidson that is known for being rugged, free, powerful, etc. (Aaker, 1997; Kervyn et al., 2012; Stompff, 2003). We strive to include brand identities that similarly consists of short and concrete value sets in order to include simplicity and relatable identities.

#### 5.1.2 Visual aspects

A brand consists of many elements, but in this project the scope for brands is limited to the visual aspects of today's understanding of brands. AMA's definition of a brand is an aid in identifying aspects of interest for us:

"...a brand is a name, term, sign, symbol, or design, or a combination of them, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors." Kotler and Keller (2008, p. 276).

The definition focuses most on elements that aid in differentiation from other brands through design elements. The visual aspects scope for this project will be name, typeface, color and logo. Later chapters will give an insight into how and what kind of effect these visual aspects have in general and with branding of a product or brand.

#### 5.2 Excluded brand elements

As demonstrated several times over at this point, brands are big business and is quite extensive and complex to build and maintain. We have therefore chosen to limit our focus to some select elements of a brand and exclude others.

#### 5.2.1 Familiarity and loyalty

Esch et al. (2012) argue that evaluations of a brand will over time become more dependant on past experiences and be less influenced by the aspects that a person is actually presented with at the given time. They talk about three escalating stages of this; unfamiliar, weak and strong brands. Likewise, Sullivan (1990) shows that experience with one product under a specific brand has the potential to influence the evaluation of other not necessarily known products under the same brand (described as image spillover previously). Romani et al. (2012) presents that negative emotions and experiences can create powerful links to known brands, that are difficult to overcome. Amine (1998) as well as Knox and Walker (2001) show that any degree of familiarity can give rise to brand loyalty. Additionally, any present of brand loyalty, even in a lesser degree, will influence the perception of a brand. Loyalty can be viewed in many different ways, as in repurchase, brand commitment, etc. Amine (1998) propose that cognitive and affective elements have both a direct as well as indirect affect on what he describes true brand loyalty.

Based on this, it is decided to focus on brands which participants in the study do not have any prior experience with. We also have selected to exclude any form of marketing and advertising. This is done due to findings from Erevelles (1998) that shows the complexity, need for a context, emotional connections, etc. in marketing and advertising. In order to ensure that participants evaluates the actual visual expression, it is virtually impossible to rely on existing brands. Brands without the familiar connotations, i.e. unknown brands, are needed.

#### 5.2.2 Product categories

We would like to target a group of products where there already exists a wide selection, which makes the differentiation aspect more important. We also want to select categories where the products are affordable, as more attention and research would most likely go into buying a new car than a bag of sweets. People may be more inclined to take a chance with products where the consequences of not making an optimum decision are limited. If you buy a candy bar which you do not fancy the taste of, the monetary loss is limited, whereas buying a laptop which you don't like is a much larger financial decision, for most people. This desirable type of product category is what Kohli et al. (2002) calls *low-involvement* and *frequently purchased* products. We estimate that design expressions of brand have a greater opportunity for having the theorised effect with this kind of product.

Moreover, Avis (2012) finds during a critical look into brand personality measuring methods, that some products categories may have inherent traits within themself before branding enters the picture. Avis (2012) calls this effect for *Category confusion effect*. An example of this, given by Avis (2012), is that even no-brand whiskey can seen as upper-class and sophisticated. Therefore, when measuring brand personality, we must be careful not to mistake a category trait for brand trait.

#### 5.2.3 Culture

It has been shown when dealing with brands and how they are perceived, a cultural difference is present (Henderson et al., 2003; O'Reilly, 2005; Sung and Tinkham, 2005; Van der Lans et al., 2009). O'Reilly (2005) comes to the conclusion, that when dealing with brands and including many different cultures, one can not be certain that all the consumers perceive a brand in the same way. O'Reilly (2005) also argues for culture being part of, close to all, aspects included in brands, be it visual elements or values. Sung and Tinkham (2005) also found that the perception of brand personalities can be affected by culture difference. Their study included the United States and Korea, where the perception of the same brand personality varied based on the cultures. Van der Lans et al. (2009) shows clustering of cultures when dealing with 10 different countries from all around the world. There was found no significant difference in the results from countries that can be seen to be a part of the Western world<sup>1</sup>. This shows that culture have an effect on perception of brands, but that within the Western world, participants tend to respond to brand elements in a common way. Due to these findings, we intend to only include participants from the Western world in our study. This enable us to include a bigger population and participants are prone to perceive visual brand elements in a similar fashion.

<sup>&</sup>lt;sup>1</sup>In this study, the countries that are marked to part of the Western world were Australia, Great Britain, Germany, The Netherlands, and the United States. Partly included was Argentina, that also shared similar result with an Asian grouping.

## 5.3 Measurement of brand personality

Chapter 4 gave insight into how measuring the perception of brand personalities can be done. By using the personality measurements discussed, it is possible to evaluate if the personality which is expressed via identity is similar to the personality expressed through the image. To be clear, the purpose of this project is not understanding the brand personalities of each of the expressions of a brand. The brand personality measurement method is only used as a tool to gain insight in whether an alignment is present between brand identity and brand image.

Given that the method presented by Aaker (1997) has been subject of criticism and reworked, in some aspects, by Geuens et al. (2009) who took the criticism into account, we chose to use the method presented by Geuens et al. (2009) in order to measure brand personality for both identity and image.

In connection with the ideas behind figure 5.1 on page 27, using the same measurement for both elements makes a subsequent comparison of identity and image more simple. This comparison would serve as a way to evaluate if our first mission statements is successful. If there is a satisfactory alignment between the two measurements, one would be able to conclude that it is possible to communicate identity through design elements. Misalignment would suggest the opposite, warranting further investigation and potential visual redesign. Another explanation for misalignment could be that the cases created in this paper were not satisfactory.

#### 5.4 Brand cases

So far in this chapter, we have focused on what our mission states are, how to achieve them and what to include and excluded in order to get an as clear a view of focus of this project. This section will encompass what we intend to use for the investigation of our mission statements.

We have chosen to include two product categories in the investigation. This enables the opportunity for concluding more generally about the equivalence between identity and image personality. Furthermore, in an attempt to see if one of the products categories selected have *category confusion effect*, more than one product under each category will be included. Thereby, a crosscheck is possible to see if any personality traits of the visual expressions are perceived the same and thereby properly is a reflection of product category more than the presented, brand.

In order for all this to be examined there is a need for visual expression of brands. As mentioned in section 5.2.1, unknown brands are needed. This can be accomplished by constructing new brands, which would ensure that no previous experience with the specific brands could possibly exist. These can be constructed based on the identity of a brand and the theory about the effects of visual elements. This however entails an additional block in our roadmap from figure 5.1. The block and it's position is seen in figure 5.2. By creating our own visual expression of brands, we hope to minimize familiarity and possibly have a greater control over which effects are caused by which design elements.

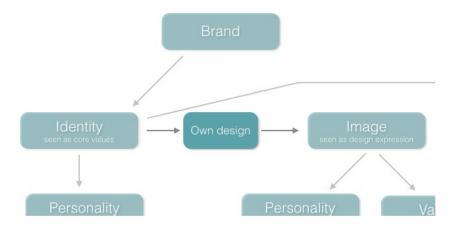


Figure 5.2: An excerpt from roadmap in figure 5.1 with the addition of the creation of our own brand designs.

# Chapter 6

# Influence of visual aspects



We have come across several articles which investigate the idea that each of the visual aspect evoke a certain feeling and influence perception on their own, but it is an interaction between several elements that make up the general perception of an underlying brand (Hynes, 2008; Kohli et al., 2002; Manning and Amare, 2009; Spence, 2012).

This kind of interaction is not only present when dealing with brands. In an article by Spence (2012), focus lies on the perception of food and how it is presented, with both shape and name included in the analysis. Here, it is found that evaluation can be influenced by different aspects. The elements exist in relation to each other, and as such are perceived as a whole. Be it by the product's taste, sound, shape of packaging, they all contribute to the general perception of it (Spence, 2012).

However, due to this connectivity between the visual elements, there is a possibility over a dysfunctional interaction. One element could overshadow the remaining (Hynes, 2008; Manning and Amare, 2009). Thereby, the potential values of one aspect could disappear or be minimized. This possibility is present in the findings by Manning and Amare (2009), where form and color are studied together. The following quote shows the dynamic between them and gives a possible explanation to why this is the outcome that they found.

"The more pronounced emotional response to form is consistent with the logical relationship between form and color, i.e., there can be form without color, but no color without form. Even a solid color field is a form with low contrast and low variety parameters." Manning and Amare (2009, p. 7).

This quote and the mentioned connectivity shows that each element in a design is part of an interaction, where a slight alteration anywhere have the opportunity to effect the entirety. Due to this interaction, Kohli et al. (2002) finds a need for a consistency through all the elements in order to create a stronger brand image. Besides the consistency among the elements, the following quote also indicate one more thing to take into consideration, when selecting ones visual elements.

"...each element should support the others." Kohli et al. (2002, p. 62).

This show the necessity of having elements that contribute to the whole and aid each other in being able to convey the brand as intended. Each of the following chapters should be seen as general guidelines to the creation of the visual identities.



In order to be successful, a brand must be able to stand out between others. One way of doing this, is in the selection of a distinct brand name. A name is a necessary part of having a brand as it gives consumers the ability to reference the brand, its characteristics and quality of the products belonging to the brand (Danesi, 2006). While linguistics may not be a main focus of this study, brands have names, and this must be considered. The name is intrinsically linked to the font (see chapter 8 for more on typefaces) it is written with, in terms of visual presentation. We therefore decide to consider the nature of names, so that we do not unknowingly decide on a name which may express something in opposition to the identity of a brand. The name in itself can also enable the brand owner to convey information through the linguistic meaning (Danesi, 2006).

A brand name can be constructed with different foci and through this difference convey various information and meanings. Besides evoking an understanding of a brand, brand names are also a way of creating a connection between brand and consumer. A brand name provides the ability for consumers to see a brand as an identity and thereby opens up for the possibility for consumers to identify similarities between their own identity and the brand (Danesi, 2006; Wu et al., 2013). This leads us to conclude that a need for considering the name is one of the main aspects when creating a brand.

#### 7.1 Meaningful versus non-meaningful names

One way of differentiating types of brand names is by separating them into two categories; meaningful or non-meaningful. The first of the two enables an insight into what a brand is, which attributes it has and what it promises in terms of the product's utility. When creating a meaningful brand name, one should be aware of the connection between the name and the items that the company produces.

A meaningful brand name contains information which enables a consumer to deduce which attributes a specific product can be expected to have. Results from Kohli et al. (2005) show that a fictitious all-purpose cleaner named *Clean All* was perceived to have a better all round ability in terms of cleaning, compared to a similar product named *Alcon*. While this seems like an argument for picking a meaningful name, such a choice does come at a price. Due to the inherent attributes connected to the name *Clean All*, the brand only makes sense when it comes to cleaning products, and does therefore not makes sense for other product categories from the same company.

If the wish is to have a brand with products of different categories, a non-meaningful name will be more appropriate. Such a name is more adaptive and flexible, but does not make the same inherent connection between product and characteristics. If the all-purpose cleaner is taken in as an example, *Alcon* could be any kind of product, but over time attributes belonging to the brand would become linked to the name. It can be seen as a blank slate, that over time is much more flexible and can include any selection attributes. This flexibility does come at the price of a consumer not being able to easily deduce the attributes directly from the name. A larger effort is needed to communicate what one can expect from a brand.

When choosing between selecting a meaningful or non-meaningful brand name, there is a need for reflection over what intentions ones brand have. As shown in the following quote.

"If recognition, recall, and positive affect are most important early in the product's life, a meaningful name is likely to be favored. If flexibility and adaptability are given higher priority, then a non-meaningful name is attractive" Kohli et al. (2005, p. 1507).

# 7.2 Effects of letters on perception of a brand

As mentioned, a brand name is essential for having a way to reference a brand. Klink (2000), Klink and Athaide (2010) and Spence (2012) show that the construction of a brand name, in terms of letters in the name, can have an effect on the perception of a brand. This extends to which type of consumer is attracted. Klink (2000) and Wu et al. (2013) both show that this effect is present when a name is given to participants of a study in written form. Consonants and vowels have different perceptual influences (Klink, 2000). A name has the potential to create an expectation of both tangible and intangible values of the brand and its products. Klink (2000) shows that the constellation of letters could influence perception of size and speed of products among other things. The following shows how the perception of a brand changes based on a switch in the main consonant or vowel.

#### 7.2.1 Consonants

A main way of classifying categories of consonants is by whether a consonant is a stop or a fricative (Klink, 2000). The difference between the two is dependent on the manner of pronunciation, as seen in the following quote:

"Stops have complete closure of articulators so that the airstream cannot escape the mouth. The letters **p**, **t**, **b**, **g**, **d**, **and k** (or hard c) are considered stops. Fricatives, on the other hand, have less closure of the articulars than stops. The letters **f**, **s**, **v**, **and z** are commonly considered fricatives." Klink (2000, p. 10).

Results found by Klink (2000) indicate that brands with names constructed with a fricative consonant at the start of a name in place of a stop consonant were perceived to be:

- smaller
- faster
- lighter (relative to heavier)
- more feminine

Taking these finding into account and using letters from the beforehand quote, a brand named Zet based on the fricative consonant Z could be perceived as a faster and more feminine brand. Whereas a brand named Ket based on the stop consonant K would be perceived as a bigger and more masculine brand.

#### 7.2.2 Vowels

One way of classifying vowel sounds is known as the front-back distinction. The following quote illustrates the difference of front and back vowels.

"The front-back distinction refers to the location of the highest point of the tongue during pronunciation. Consider the vowel sounds in the words **bee**, **bin**, **bay**, **bet**, **ban**, **cot**, **home**, **put** and **boot**. As one pronounces the list from left to right, the highest position of the tongue shifts from the front to the back." Klink (2000, p. 8).

By this, front vowel sounds are present in words where the tongue's highest point is at the front of the mouth when pronounced. Likewise with back vowels, the tongues highest point is in the back of the mouth. Klink (2000) categories the vowel sounds in the English alphabet in the two types of vowel sounds. These are shown in figure 7.1.

Vowel Sound <sup>B</sup>	Example	Classification
ē	bee	front
i	hit	front
ā	hate	front
e	test	front
a	ban	back
ü	food	back
ů	put	back
ō	home	back
ò	caught	back
ə	dusk	back
ä	cot	back

Table 1. Front-back vowel classification<sup>A</sup>

 <sup>A</sup> Based on MacKay (1978), Introducing Practical Phonetics, Boston: Little, Brown and Company, Inc.
 <sup>B</sup> According to Webster's New International Dictionary, 3<sup>rd</sup> Ed. (1961), Springfield: G. & C. Merriam.

Figure 7.1: Vowel sounds, example of use and tongue placement during pronouncement. The table is from page 9 in Klink (2000).

In a study done by Klink (2000), results show that brand names consisting of front vowels, in contrast to back vowels, were considered to be:

- smaller
- lighter (relative to darker)
- milder
- thinner
- softer
- faster
- colder
- more bitter
- more feminine
- friendlier
- weaker
- lighter (relative to heavier)
- prettier

If this is taken into account and the words of figure 7.1 are used, it could mean, based solely on the vowel sounds, that a brand name *Bee* could represent a small and fast brand. In contrast, a brand named *Dusk* would be perceive as a masculine and strong brand. This approach, of course, disregards any associations that a person might have with a meaningful name.

# 7.3 Recap

In order to get a firmer grasp on what was presented about the elements in names and what values are connected to them, table 7.1 is constructed to included all of them.

Element	Response(s) Sour		
Meaningful name	Inherent values	Kohli et al. $(2005)$	
Non meaningful name	Versatile, but takes time	Kohli et al. $(2005)$	
Fricative consonants	Smaller	Klink (2000)	
p, t, b, g, d, k, hard c	Faster	Klink $(2000)$	
	Ligther	Klink $(2000)$	
	More feminine	Klink $(2000)$	
Stop consonants	Bigger	Klink (2000)	
$f,\ s,\ v,\ z$	Slower	Klink $(2000)$	
	Heavier	Klink $(2000)$	
	More masculine	Klink $(2000)$	
Front vowels <sup>1</sup>	Smaller	Klink (2000)	
$\bar{\mathrm{e}},\mathrm{i},\bar{\mathrm{a}},\mathrm{e}$	Lighter (as opposed to darker and heavier)	Klink $(2000)$	
	Milder	Klink $(2000)$	
	Thinner	Klink $(2000)$	
	Softer	Klink $(2000)$	
	Faster	Klink $(2000)$	
	Colder	Klink $(2000)$	
	More bitter	Klink $(2000)$	
	More feminine	Klink $(2000)$	
	Friendlier	Klink $(2000)$	
	Weaker	Klink $(2000)$	
	Prettier	Klink (2000)	

Table 7.1: A collective view of the presented aspects within a name and the responses connected to them.

Based on the presented articles and their findings, it is presumed that a brand's name is capable of adding to the perception of said brand. It is therefore paramount that thoughts go into what ones name should be and by this chapter, we have gained understanding of what the different aspects of a name contribute to the perception of a brand.

<sup>&</sup>lt;sup>1</sup>The opposite of front vowels are back vowels and values connected to back vowels corresponds to the antonyms. Back vowels are a,  $\ddot{u}$ ,  $\dot{u}$ ,  $\bar{o}$ ,  $\dot{o}$ , a,  $\ddot{a}$ .



A large part of branding is to convey the brand and product name, which is typically done through text. Beyond names, the medium through which these are presented, typeface, is an important factor as well, when it comes to communicating a certain feeling or atmosphere, as illustrated by the following quote:

"Our findings suggest that typeface is a medium with its own message. This makes it critical that the font's message and impression be chosen carefully and held consistent across the variety of communications in which a corporation engages." Henderson et al. (2004, p. 70).

There is consensus about the ability of typefaces to convey more than the written words (Amare and Manning, 2012; Brumberger, 2003; Gump, 2001; Henderson et al., 2004; Li and Suen, 2010; Tannenbaum et al., 1964). In the branding realm, this concept is also present in the typeface of a brand's name. Childers and Jass (2002) show that a selected typeface can reflect attributes of a brand. Further more a typeface is capable over time of adopting attributes that started being solely connected to the brand as characteristics of the typeface itself. Childers and Jass (2002) show that there is an interaction between a brand and it's font, and the importance of selection a typeface that is capable of reflecting the desired attributes.

### 8.1 The complexity of shape

In order to aid companies in selection of a typeface for a brand, Henderson et al. (2004) conduct a study with 210 typefaces. Design classification help was given by professional graphic designers and advertisers. A number of relevant impressions of the typefaces were identified and subsequently used as a basis for measuring responses from consumers. Through this process, nine design profiles for the 210 typefaces were created, each containing up to 54 different fonts that shared similarities in their design expression. Through analysis, Henderson et al. (2004) found that responses given to the different fonts can be expressed on four dimensions:

- Pleasing
- Engaging
- Reassuring
- Prominent

The presence of one dimension is not equal the exclusion of the remaining. Each dimension can be present in a font and be perceived in a low, average or high amount. These four dimensions are based on the level of six different design characteristics; *elaborate, natural, harmony, flourish, compressed* and *weight*. To find the levels of these in each design profile, a study was conducted with 82 professional graphic designers. The study shows that the characteristics can be present in low, below average, average, above average and high amount. How each design profile is perceived and the underlying design characteristics can be seen in figure 8.1.

By this, Henderson et al. (2004) show that the design characteristics within a font is not dominated by one aspects but can be constructed of a high level of one and low of other in order to communicate a given response. If we take a closer look at figure 8.1, one can see that in order for a font to be grouped with Canon (design profile 4), a font must be perceived mainly as *Prominent*. This is done by having average levels of the following design characteristics: *natural, harmony, flourish* and *compressed*. Add to that above average level of *elaborate* and high levels of *weight* and you would encounter a font that would according to Henderson et al. (2004) be perceived as *Prominent* alongside Canon.

The findings by Henderson et al. (2004) indicate that the construction of typeface is a relatively complex task. However, they also show that typefaces which share similar shapes, weighting and curves are perceived in a similar fashion.

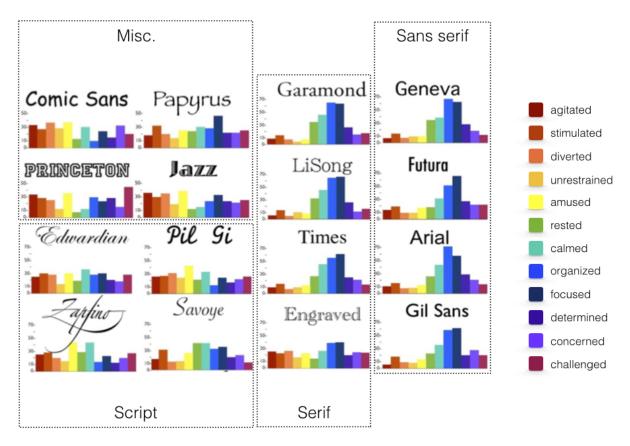
Design Profile	Number of Fonts	Responses	Level	Design	Level	Fonts	Examples
1	37	Pleasing Engaging Reassuring Prominent	High High Average Low	Elaborate Natural Harmony Flourish Compressed Weight	Average High Average High Average Low	Scheharande Informål Roman AncientScript Enviro Pepita MT	Angelwizard
2	37	Pleasing Engaging Reassuring Prominent	Average High Low Average	Elaborate Natural Harmony Flourish Compressed Weight	Above average High Low Average High Average	Baphomet Heidia Chiller Stonehenge Paintbrush	TERRWEAR.com
3	21	Pleasing Engaging Reassuring Prominent	Low Low Average Average	Elaborate Natural Harmony Flourish Compressed Weight	Above average Low Average Below Average Low Above average	Playbill Logan Onyx Industria Inline StencilSet	cleopatra
4	41	Pleasing Engaging Reassuring Prominent	Average Average Average High	Elaborate Natural Harmony Flourish Compressed Weight	Above average Average Average Average Average High	NewYorkDeco Bandstand Sun:SpLash Middle Ages Fisherman	Canon
5	19	Pleasing Engaging Reassuring Prominent	Low High Low Average	Elaborate Natural Harmony Flourish Compressed Weight	Above average Below average Low Below average Average Average	AluminumShred BigVaddy Integrity Ransom Arrazen	ABOMINABLE Records
6	54	Pleasing Engaging Reassuring Prominent	Average Low High Average	Elaborate Natural Harmony Flourish Compressed Weight	Low Average High Average Average Average	Georgia Verdana Janson Text Century Gothic Times New Roman Century Schoolbook	MARK RUSHING &ASSOCIATES
7	_	Pleasing Engaging Reassuring Prominent	High High Average High	Elaborate Natural Harmony Flourish Compressed Weight	Average High Average High Average High	Maiden Word Authos Viner Hand ITC	<b>Disnep</b> Hallmark
В	_	Pleasing Engaging Reassuring Prominent	High Average High High	Elaborate Natural Harmony Flourish Compressed Weight	Low High High Average Average High	Hamburger	Hallmark
9	_	Pleasing Engaging Reassuring Prominent	High Average High Low	Elaborate Natural Harmony Flourish Compressed Weight	Low High High Average Average Low	None in data set	Imagination

Figure 8.1: The correlations between design elements and perception based on fonts from different design profiles. Table is from page 68 and 69 in Henderson et al. (2004).

### 8.2 Shapes that express attributes

A number of studies have shown a correlation between the elements of a font and perceived emotional expression (Amare and Manning, 2012; Gump, 2001; Li and Suen, 2010). Given that several authors have shown this, we see the choice of selecting a typeface in a branding context to be more than just a trivial task. It is a contributing part of the visual expression that has an influence, and doesn't simply serve as a vehicle for presenting a textual element.

Amare and Manning (2012) analyses a number of typefaces in relation to emotions. They find that the choice of typeface doesn't influence the content of a message, but it does have potential to influence the tone of the message. Their model is made independent of culture by removing labels which were considered culture-driven, such as purity and death. The emotions and fonts used for the analysis and colors that evoke these feelings can be seen in right side of figure 8.2. The study by Amare and Manning (2012) also included how colors are connected to emotions. However, this is not included in the description in the this chapter (see chapter 9 for more about that topic). Based on the selected emotions, a number of fonts have been tested to



see which characteristics influence the emotional response. A graphical representation of this can be seen in figure 8.2.

Figure 8.2: Emotional expressions for a number of fonts. Adapted from Amare and Manning (2012).

Typically typefaces are separated into three different types of fonts being serif, sans serif and script. Amare and Manning (2012) find that both serif and sans serif rank highly on emotions such as *organized* and *focused*. Serif forms also rank higher on *calmed*, compared to their sans serif counterparts. Serif and sans serif types are also generally found to be more clear-cut in terms of the emotional responses. Script types are shown to generally communicate *calmed* and *amused*. This is indicated by the peaks for the fonts in figure 8.2. Amare and Manning (2012) thereby show that if a brand name written in a sans serif or serif font is likely to evoke an emotion of *organized, calmed* or *focused*, whereas a script font is likely to evoke the emotion *amused*. The miscellaneous group of fonts shows small amount of spikes and there is no clear conclusion of which emotions, these fonts evoke (Amare and Manning, 2012).

Alongside Amare and Manning (2012), Gump (2001) argues that the shape of the typefaces have an influence on the perception of what it evokes. Gump (2001) lists design aspects of fonts and how they can be perceived.

- Rounded edges, such as is often seen in script types, can be perceived as friendlier.
- A serif font often gives a more traditional feel.
- If a font is strongly condensed, it can be perceived as trendy.

Through an analyzis, Gump (2001) shows that the emotion or mood connected to a font is not necessarily the same among all. Gump (2001) states that the type of emotion were perceived, echoes the design aspects in the earlier list.

Tannenbaum et al. (1964) come to similar conclusions about how the shape of typefaces can indicate attributes. The analysis includes two serif and two sans serif fonts presented in both regular and italic forms. Additions for the before mentioned connection, Tannenbaum et al. (1964) also finds that italic inclinations tend to be perceived as more active (versus passive), quicker (as opposed to slow) and younger (versus older) than regular lettering. A study by Morrison (1986) seconded the finding of Tannenbaum et al. (1964) about italic lettering being perceived as more active. Morrison (1986) also finds that bold and sans serif are more:

- Rugged over delicate
- Masculine over feminine
- Strong over weak
- Heavy over light
- Hard over soft
- Graceful over awkward

# 8.3 Personality traits of typefaces

Li and Suen (2010) focus on whether there is a connection between design characteristics in typefaces and personality traits that these are perceived to have. Here 24 fonts with considerable different visual characteristics were rated on 10 different personality traits commonly connected to typefaces. Out of all the fonts, Li and Suen (2010) find that 15 different typefaces have a correlation with four of the personality traits in the study. Figure 8.3 shows what kind of personality traits each of the fonts were associated with.

Personality trait	Typeface
Directness	Garamond, Centaur, Times New Roman, Arial, Helvetica, Rockwell, Footlight MT Light
Gentleness	Belwe Lt BT, Bauhaus 93, Kabel
Cheerfulness	Jokerman, Snap IVC, Harrington
Fearfulness	Harry Potter, Chiller

Figure 8.3: Personality traits and the typefaces perceived to have. Table is adapted from Li and Suen (2010), here presented with the names written in the corresponding typeface.

Li and Suen (2010) go on to look at the common physical elements of the fonts within each personality. Among other findings, they discover that the fonts commonly associated with *Cheerfulness* or *Fearfulness* tend to consists of extremes and thereby have a great visual impact. The fonts associated with *Directness* tend to be the more legible, perhaps as an effect of being more direct. Fonts associated with *Gentleness* are found to be more geometric and along with fonts associated with *Cheerfulness* and *Fearfulness*. These two groups would benefit from being presented in adverts and short sentences. This was argued by Li and Suen (2010) due to the ornaments in the typefaces and the intensity of the associated personality traits. Fonts of the *Directness* group are seen as more of all purposes fonts, for example they would be fitting for documents. Brumberger (2003) saw a similar interest to investigate the relationship between typefaces and what type of personality trait, they're are associated with. Figure 8.4 shows results from Brumberger (2003).

Group 1 ("Elegance")		Group 2 ("Directness")	Group 3 ("Friendliness")		
Typeface	Corr.	Typeface	Corr.	Typeface	Corr.
CounselorScript	.985	Arial	.994	Bauhaus Md BT	.978
BlackChancery	.962	Garamond	.937	Comic Sans MS	.972
CasablancaAntiqueItalic	.900	Times New Roman	.928	VanDijk	.922
Harrington	.848	Square721 BT	.903	Lucida Sans Italic	.742
Adler	943	Courier New	.856		
		Lydian BT	.795		

Figure 8.4: Grouping of typefaces and a descriptive personality trait for the grouping. Segment of table from page 214 in Brumberger (2003).

Similar to Li and Suen (2010), Brumberger (2003) shows that the same personality traits often are present in several typefaces, that shared physical attributes in their design. The fonts with high positive correlation in group 1 (*Elegance*) tend to be elaborate script fonts. The font *Adler* is the odd font out with a negative correlation to the other in the group. This indicates that *Adler* can be seen as the opposite of elegance. The fonts of group 2 (*Directness*) and group 3 (*Friendliness*) is in varying degrees connection to their respective personality traits.

# 8.4 Recap

In order to get a firmer grasp on what findings were presented about typefaces and what values are connected to them, table 8.1 is constructed to included it all.

Element	Response(s)	Source(s)
Serif	Organized	Amare and Manning (2012)
	Focused	Amare and Manning $(2012)$
	Calm	Amare and Manning $(2012)$
	Traditional	Gump (2001)
	Rugged	Morrison $(1986)$
	Masculine	Morrison $(1986)$
	Strong	Morrison $(1986)$
	Heavy	Morrison $(1986)$
	Hard	Morrison $(1986)$
	Graceful	Morrison $(1986)$
	Directness	Li and Suen $(2010)$
Sans serif	Organized	Amare and Manning (2012)
	Focused	Amare and Manning $(2012)$
	Directness	Li and Suen $(2010)$
Script	Amused	Amare and Manning (2012)
	Elegance	Brumberger $(2003)$
Round edges	Friendlier	Gump (2001) and Brumberger (2003)
Condensed	Trendy	Gump (2001)
Geometric fonts	Gentleness	Li and Suen (2010)
Ornamented fonts	Fearfulness	Li and Suen (2010)
	Cheerfulness	Li and Suen $(2010)$
Italics	Active	Tannenbaum et al. (1964) and Morrison (1986)
	Quicker	Tannenbaum et al. $(1964)$
	Younger	Tannenbaum et al. $(1964)$
Bold	Rugged	Morrison (1986)
	Masculine	Morrison (1986)
	Strong	Morrison (1986)
	Heavy	Morrison (1986)
	Hard	Morrison (1986)
	Graceful	Morrison $(1986)$

Table 8.1: A collective view of the presented aspects in a typeface and the responses connected to them.

As can be seen in table 8.1, there are many different ways to vary elements in typefaces and it seems that each alteration entails an altered perception.

With this chapter, we have given an insight into how typefaces can be perceived. There is consensus about the fact that typeface have the ability to trigger a perception of personality traits and that there is a connection between typeface and brand. The trigger elements in the typefaces have, through several of the before mentioned articles, been shown to be the physical design of the typefaces. Thereby, it has be made clear that the typeface that a brand includes in their visual expression is capable of adding to the greater perception of the brand.

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# **Chapter 9**



There are very few brands that do not have any color as part of their visual expression. Color can be used as a way to stand out, to identify oneself, indicate values, etc. Valdez and Mehrabian (1994) show that color can influence our perception and emotional responses. The human way of perceiving color can be unreliable. The colors that we perceive is commonly not precisely the colors that we actually see. Colors can change in relation to the surroundings: Light, reference, shade, etc. Pett and Wilson (1996) exemplify this phenomenon with the ability to recognize a color, when the colored object is located in shadow. Given that the all colors, we aim to use, will be present in the same fashion, there is not a need to take this phenomenon into additional consideration.

Through our literature search, a general focus on cultural perception of color was found. Since culture is not part of our scope, the focus and demographic of the subsequent study will be limited in such a way as to minimize culture as a factor, i.e. a focus on populations which share interpretation of the meaning of color and preferably based on results from the Western world, given our limited cultural scope. The following have focus in articles with a main interest to make a connection between colors and an emotion, a value, etc.

# 9.1 Color and perception

A study by Adams and Osgood (1973) had the purpose of investigating responses to seven colors. Included were black, gray, red, yellow, blue, green, and white. The colors were scored

on a 7 point scale with the intend to get an insight into their semantic differences. Participants were asked to asses each color's *evaluation* (whether it was **good** or **bad**), *potency* (whether it was **strong** or **weak**), and *activity* (whether it was **active** or **passive**). Adams and Osgood (1973) conclude the following about the colors included in their study.

- White is seen as good and less potent.
- Black is evaluated towards bad. It is also seen as a strong og passive color.
- Gray is seen as passive, strong and toward bad.
- Red is seen as potent and active.
- Yellow is seen as less potent and toward bad.
- Green and blue were both seen as good.

Pett and Wilson (1996) second that red is seen as an active color, describing it as arousing and exciting. Yet another study is done by Crowley (1993). Here the effect of four colors (red, yellow, green and blue) on responses regarding the perception of a store are in focus. Interestingly analysis from this study shows, that red is seen as a stronger and more active color than the rest. Also that blue and green are perceived as more positive. Other conclusions included that blue is seen as a more relaxed and comfortable color than the rest included in the study.

In a study about color selection for websites, Cyr et al. (2010) look into three colors (gray, blue and yellow) and their effect on appeal, trust and satisfaction. Cyr et al. (2010) finds that yellow is perceived as the most negative of the three colors and that the participants associate blue with trust, wealth and security.

Valdez and Mehrabian (1994) focus on the effect of hue, saturation and brightness, as well as the colors effect on their own, on evaluations of the levels *pleasure*, *arousal*, and *dominance* presence. Five colors were part of the studies: red, yellow, green, blue and purple. Through three separate studies Valdez and Mehrabian (1994) find the following.

- Blue and green tend to be perceived as arousing, whereas purple is the least arousing out of the tested colors.
- Brighter colors were seen as more pleasant, less arousing and less dominance inducing.
- Whereas darker colors were the opposite; seen as less pleasant, more arousing and more dominance inducing. Also darker colors has a tendency to be associated with emotions such as aggression, anger, and hostility.

Through this, Valdez and Mehrabian (1994) have come with the addition that the perception of a color can be altered by adjusting the brightness.

In chapter 8, an article by Amare and Manning (2012) were presented and discussed in relation to it's findings about typeface. However, the article builds on the assumption that beyond a connection between typeface and values, there is a connection between emotions and colors. This statement is derived from findings by Manning and Amare (2009), where 12 colors were connected to 12 values, as is seen in figure 9.1.

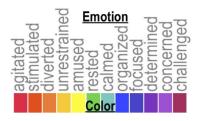


Figure 9.1: Colors and what emotions they evoke according to Amare and Manning (2012).

Figure 9.1 shows that Manning and Amare (2009) did not only focus on the categories of colors as the others did. Their results are more finely divided into shades of the main colors; red, orange, yellow, green, blue and purple.

#### 9.2 Recap

In order to get a firmer grasp on what was presented about colors and what values are connected to them, table 9.1 is constructed to included all of them.

Color	$\mathbf{Response}(\mathbf{s})$	Source(s)
Black	Bad	Adams and Osgood (1973)
	Strong	Adams and Osgood (1973) and Crowley (1993)
	Passive	Adams and Osgood $(1973)$
White	Positive	Adams and Osgood (1973)
	Weak	Adams and Osgood $(1973)$
Gray	Passive	Adams and Osgood (1973)
	Strong	Adams and Osgood $(1973)$
	Towards bad	Adams and Osgood $(1973)$
Red	Strong	Adams and Osgood (1973) and Crowley (1993)
	Active	Adams and Osgood (1973), Crowley (1993)
		and Pett and Wilson $(1996)$
	Exciting	Pett and Wilson $(1996)$
	Agitated	Manning and Amare $(2009)$
Yellow	Weak	Adams and Osgood (1973)
	Bad	Adams and Osgood (1973) and Crowley (1993)
	Amused	Manning and Amare $(2009)$
Green	Good	Adams and Osgood (1973) and Crowley (1993)
	Arousing	Valdez and Mehrabian $(1994)$
	Rested	Manning and Amare $(2009)$
Blue	Good	Adams and Osgood (1973) and Crowley (1993)
	Arousing	Valdez and Mehrabian $(1994)$
	Trust	Cyr et al. (2010)
	Wealth	Cyr et al. (2010)
	Secure	Cyr et al. $(2010)$
	Relaxing	Crowley $(1993)$
	Comfortable	Crowley $(1993)$
	Organized	Manning and Amare $(2009)$
	Focused	Manning and Amare (2009)
Purple	Least arousing	Valdez and Mehrabian (1994)
	Determinded	Manning and Amare $(2009)$
	Concerned	Manning and Amare (2009)

Table 9.1: A collective view of the presented colors and the responses connected to them.

Adding to these connections, is the understanding of how brightness has an effect on the relation between colors and their perceived values (Valdez and Mehrabian, 1994). A brighter version of a color would be perceived as a more pleasant, less arousing and less dominating version of said color. The contrary can be said if a color is darker: then it would be perceived as less pleasant, more arousing and more dominating than the original color. As an example of this effect, take the colors in figure 9.2. The colors are based on the same hue-saturation-intensity color scheme, HSI. This enables us to vary the brightness (here called intensity). The darker, original and lighter color of red only varies in the level of brightness. However, the perception of the darker one should be one of higher dominance than the original and lighter. Likewise, the lighter one should be perceived as more pleasing (Valdez and Mehrabian, 1994).



Figure 9.2: Three levels of brightness within a color to exemplify findings from Valdez and Mehrabian (1994).

The fact that each of the articles presented in this chapter have found a connection between colors and a perceived value or characteristic indicate that color has the ability to influence perception in a number of ways. The findings from the different articles also somewhat arrive at a consensus about what the colors are perceived as. This is present even though none of the sources focus on the same area of interest, be it colors on their own right or in a context such as for websites, stores, etc. However, there does seem to be a scattering within the values of some of the colors, e.g. blue, where some contradictions of perceived value might exist.



As a short break, take a second and try to name each of the companies in the illustration above. If you did well and were able to name them, then you have just shown that logos are quite effective and a quick way to display ones brand<sup>1</sup>. Logos are an integral part of brands today, and are described by Hynes (2008) as:

"...one of the most powerful elements in establishing a [corporate visual identity<sup>2</sup>]" Hynes (2008, p. 547).

Logos can be powerful due to their ability to be a representative symbol and enable a unique recognition of a given brand. A logo has the potential to convey a sense of the underlying brand at first impression (Green and Loveluck, 1994; Henderson and Cote, 1998; Henderson et al., 2003; Hynes, 2008; Kohli et al., 2002).

Creating a meaningful and successful logo for a company is however quite resource demanding (Henderson and Cote, 1998) and complex task (Kohli et al., 2002). Before getting deeper into the complexity of logos and how they're perceived, a definition of what is meant by *logo* is necessary. In this project *logo* refers to a graphical design with or without name, that is solely

<sup>&</sup>lt;sup>1</sup>The brands are from the top left: Apple, Audi, AT&T, Toyota. John Deere, AOL, Wikipedia, General Mills, BP, Android, Nike, Twitter, Mozilla Firefox, VLC, Starbucks and Shell.

<sup>&</sup>lt;sup>2</sup>Corporate visual identity includes all visual aspects that a corporation have: buildings, products, uniforms, logo, etc. (Hynes, 2008).

connected to one brand and through this connection enables consumers to identify the brand and it's products (Henderson and Cote, 1998; Kohli et al., 2002). Since chapters 7, 8 and 9 already have covered what expressions name, type and color respectively is capable of evoking, this chapter will focus on the graphical part of a logo. This means that focus lies solely on what the logo itself expresses.

### 10.1 Perception of logos

Logos have the ability to evoke meaning or impact perception (Hynes, 2008; Green and Loveluck, 1994; Kohli et al., 2002). In an attempt to study the connection between logos and what kind of values they evoke, Hynes (2008) asked 330 participants to select values which described the underlying fictive company each represented by a black and white logo. The participants were not given any other information about the company at this point. Logos and the selected values can be seen in the two top rows of figure 10.1.



Figure 10.1: Eight logos, values selected by participants, the intended ones. Illustration is adapted from page 53 in Hynes (2008).

After selecting values only based on the logo, participants were presented with a mission statement with values for the fictive company. The bottom row of values in figure 10.1 is the ones from each mission statement. The third logo from the right (headphones and a square) was meant to reflect a radio station. The values selected by the participants were in full alignment with the intended. However, with the remaining seven logos, a misalignment is present between the selected and the intended values. In one case, none of the intended values are the same as the ones selected by participants (the pair of shoes, second from right).

Looking aside from the priority of the intended values and the frequency of the selected, there are four cases where two values are the same between the intended and the selected (the globe, the bunny, the heart and the abstract at the far right). The remaining two cases had only one alignment between the intended and the most frequently selected values (the house and the kite).

These findings from Hynes (2008) show that there may not be the same clear and common meaning derived from complex shapes such as logos, but there is most definitely meaning in them. If no meaning could be drawn from the logos, then one could assume that the responses from the participants would vary in some degree. Figure 10.2 shows what the participants selected in relation to the house logo.

Homely Dependable	272 133
Warm	144
Trustworthy	112
Reliable	89
Thoughtful	46
Imaginative	43
Healthy	34
Dynamic	25
Refreshing	19

Figure 10.2: Selected values from respondents for the house logo: the far left in figure 10.1. Image is from page 548 in Hynes (2008).

As can be seen in the figure, values such as *Homely, Dependable, Warm* and *Trustworthy* were selected substantially more times than some of the others. This all indicates that the values selected by the participants were chosen based on form, but the selected were in many cases not the expected ones. Through our literature search, a consensus about what kind of logo evokes what kind of emotion was not found. In the greater part of the articles, the value perception of logo was context dependent, as supported by Kohli et al. (2002) and Green and Loveluck (1994).

#### 10.2 Logos depended on context

As establish, logos are capable of expressing values, however Green and Loveluck (1994) show that logos may also be very sensitive to context in which they are used. In a study where participants were asked to select values that represented the brand based on a logo, participants were told that said brand was either a health care and an automobile company. The presented logo is shown in figure 10.3.



Figure 10.3: The shown logo was given two different contexts: Health care or automobile company. Image is adapted from page 39 in Green and Loveluck (1994).

Even though the same list of values were presented for the participants to select from, the responses varied. Green and Loveluck (1994) linked this variation to which of the contexts were given for the underlying brands. Thereby the perception of these companies differed based solely on the context. The some of the difference in perception is illustrated in the following quote.

"The outstretched arms were considered to be 'welcoming' (in the context of a healthcare company) but to signify a 'wide-product range' in the context of an automobile company" Green and Loveluck (1994, p. 45 - 46).

This, in conjunction with the findings by Hynes (2008), shows that logos are very capable of evoking a perception of a underlying brand, but there does not seem to be an exact way of ensuring, what the shape or imagery of a given logo will be perceived as.

# 10.3 Creating logos

Even though there is no consensus regarding the perception connected to logos, Henderson and Cote (1998) have found that there are some design guidelines that can be used when creating a logo in order to reach some goals. They developed guidelines to assist managers in selecting or modifying logos to achieve goals for a corporate visual image. An empirical analysis was conducted with 195 unknown, black and white logos, that contained no words and any other text stimuli. Henderson and Cote (1998) looked into four dependent variables of these logos; whether they were liked, had familiar meaning and was correctly or falsely recognize. They found that the 14 independent design variables<sup>3</sup> could be grouped in six design dimensions. What is meant by each of the 14 design elements is shown in appendix C.

Henderson and Cote (1998) created guidelines for four types of logos. These four were *High-recognition*, *Low-investments*, *High-image* and *Poorly designed*. The four types, their perceptual goals and their design guidelines are shown in figure 10.4.

				Summary o	TABLE 9 of Design Guid	elines				
		Goals	5				Design G	uidelines		
	Correct Recognition	False Recognition	Affect	Familiar Meaning	Natural	Harmony	Elaborate	Parallel	Proportion	Repetition
High- Recognition Logos	Highly Desirable	Undesirable	Desirable	Desirable	High	Moderately High	Moderately High			Include Some
Low- Investment Logos	Not Applicable	Highly Desirable	Highly Desirable	Useful but not Necessary	Moderate	High	Moderately High	Moderately High	Close to Golden Section	
High- Image Logos	Irrelevant	Irrelevant	Highly Desirable	Useful but not Necessary	Moderately High	High	High			
Poorly Designed Logos	Fails to Achieve	Fails to Achieve	Fails to Achieve	Fails to Achieve	Very Low	Low	Overly Low or Overly High			

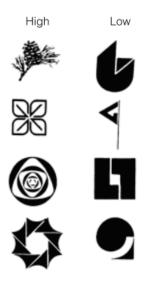
Figure 10.4: Findings about the correlation between design elements, goals and reaction to the logos. Table is from page 25 in Henderson and Cote (1998).

The first three types in figure 10.4 have strengths depending on what a company's goals and resources are. For instance if a company is starting up and there are maybe not enough resources for the ideal logo, one could create a logo that is falsely recognized in order to pull on values from established logos.

From this figure, it can be seen according to Henderson and Cote (1998), having a high level of *Natural*, moderately high levels of *Harmony* and *Elaborate* and by maybe including some level of *Repetition* would give you a logo that is uniquely recognized as yours. Figure 10.5 shows the four design elements included in creating this type of logo.

<sup>&</sup>lt;sup>3</sup>The 14 design variables were natural, representative, organic, harmony, balance, symmetric, elaborate, complexity, active, depth, parallel, repetition, proportion and round.

#### Chapter 10. Logo



Natural reflects the degree to which the design depicts commonly experienced objects. It is comprised of representative and organic.

Harmony is a congruent pattern or arrangement of parts that combines symmetry and balance and captures good design from a Gestalt perspective.

*Elaborate* is not simply intricacy, but appears to capture the concept of design richness and the ability to use simple lines to capture the essence of something. It is comprised of complexity, activeness, and depth.

Repetition of elements occurs when the parts of the design are similar or identical to one another. Conversely, identical elements that are simply part of a larger whole (e.g., needles on a pine tree) would be classified as one element (a pine). No literature directly addresses this characteristic.

Figure 10.5: What to included in a design when hoping for a true recognition. Figure is adapted from pages 16 and 17 in Henderson and Cote (1998).

The design guidelines in figure 10.4 also give an indication of what levels of which design elements to avoid when creating a logo. The bottom row presents the variables that were found to have a connection to being disliked and marked as poor design, by professionals.

#### 10.4 Recap

It has become clear what logos are perceived as and creating them is in general a big task and a challenge to get right. All the articles included in this chapter agree on graphical logos have a great impact and they also all agree on creating, choosing or modifying a logo is a big task with no guarantees for the effect in the end. However, the struggles are worth the positive effect a logo can have for a brand. Kohli et al. (2002) showed that a logo heighten the connection between a brand and a product. This is also shown in the following quote:

"Choose the image carefully, because it has a profound impact." Kohli et al. (2002, p. 62).

All these insights into logos have been based on logos such as those in the illustration at the start of this chapter; complex graphical shapes. However, a study presented by Kohli et al. (2002) showed that one of the most positive effects of a logo, recognition, was not affected by what kind of logo was presented.

"The study also found that although having a logo had a strong effect on recognition speed, the type of logo – graphics or text-dominated – did not." Kohli et al. (2002, p. 60).

Based on this, it is now clear that text-dominated logos are perceived to be equal to some extend to complex graphical logos.

Chapter 8 has already given us an insight into how typeface is perceived, and while logos are an interesting element, the fact that we are not designers, as well as the consideration that image based logos are not independent of context (Green and Loveluck, 1994), leads us to focus solely on text-based logos from this point on.

In order to get a firmer grasp on the beforehand presented findings about logos, table 10.1 is constructed to included all of them. No values nor design elements are included due to the lack of one clear connection to perception.

Statements	$\mathbf{Source}(\mathbf{s})$
Graphical logos have great impact	Hynes (2008)
	Kohli et al. $(2002)$
	Green and Loveluck $(1994)$
	Henderson and Cote $(1998)$
Meaning behind logos is context depend	Kohli et al. $(2002)$
	Green and Loveluck $(1994)$
Perception of logos is not specific	Hynes (2008)
Construction of logos is complex	Kohli et al. $(2002)$
	Henderson et al. $(2003)$
	Henderson and Cote $(1998)$
Text and graphic logos have the same effect	Kohli et al. $(2002)$

Table 10.1: A collective view of the statements regarding perception and creating of logos.

# Chapter 11 Categories and identities

Given the intangible nature of brand as a concept, there is a need to bring the theoretical considerations into a more tangible form. This is done by creating a number of brand cases which can serve as practical representative branding efforts. It is chosen to use the presented theory of design elements to guide, shape and choose visual elements.

The process of finding suitable cases involves a number of steps. First, we wish to determine product categories that may be fitting for the purpose of this study. Secondly, we want to establish a number of brand identities which can then be used to subsequently guide the visual design choices.

# 11.1 Finding product categories

In order to select which product categories to focus on in this project, we guided ourselves through phases of idea generation, card sorting and selection. Images from the entire process and all of the product categories included can be seen in appendix D.

#### 11.1.1 Initial idea generation

The first step in finding categories consisted of individual idea generation, where each new idea was written down on a piece of paper. The generation process was individual in order to prevent influence from the other person. This process resulted in 25 unique ideas, after duplicates had

been removed. Some of the written categories were seen to be too general and were explored and unfolded. As an example, this was the case for the category *Make-up* which became *Mascara*, *Powder*, and *Lip products*. These ideas were then used in an open card sorting, intended to identify product categories. The results of this process can be seen in table 11.1

Grouping	Product category			
Apparel	Shoes			
Breakfast	Cornflakes, muesli, oatmeal, skyr <sup>1</sup> , yogurt			
Candy	Chocolate			
Cleaning	Laundry detergent			
Drinks	Beer, cider, chocolate milk, coffee, iced tea, juice, milk, orange soda, soda, tea			
Food	Butter, cheese, cream cheese, catsup, pasta			
Personal care	Deodorant, lip products, lotion, mascara, powder, shampoo, tooth paste			
Utility	Battery			

Table 11.1: The initial card sort of the first idea generation in connection to products categories.

#### 11.1.2 Second idea generation

Based on these groupings a second round of idea generation was conducted. Here focus was to concentrate on product categories that would fit under the common denominator of a group thereby expanding each group to contain more categories. This was done for each group and an additional 91 product categories were identified. Figure D.5 shows the 13 additional categories found for the *Personal care* group. Table 11.2 shows all of additional categories under their respective group. Note that the grouping *Apparel* is not included in table 11.2. It was decided to exclude the group and the one underlying product category based on were more a case of the brand being an essential part of the product. Also the group *Candy* was renamed to *Snacks*.

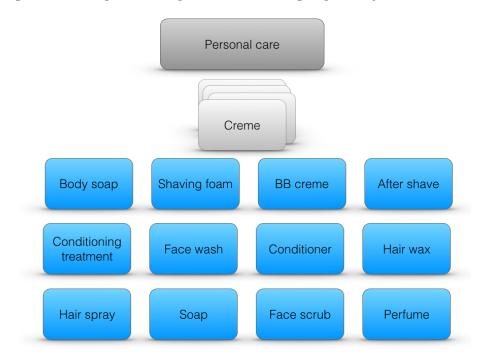


Figure 11.1: Category additions for the group Personal care.

<sup>&</sup>lt;sup>1</sup>A cultured milk product from Iceland.

Grouping	Product category
Breakfast	Bacon, baked beans, cereal, crisp bread, eggs, honey, jam, nutella <sup><math>2</math></sup>
Cleaning	Anti-fat spray, chemicals, dishwashing liquid, dishwashing tabs,
	fabric softener, floor cleaner, lime scale remover, soap,
	spectacle lens cleaner, toilet cleaner, universal cleaner, window cleaner
Drinks	Energy drinks, hot cocoa, iced coffee, milkshakes, premixed drinks,
	protein shakes, smoothies, vodka, water, whisky, wine, yoghurt
Food	Baguette, bread, frozen vegetables, mayonnaise, mustard, noodles,
	preserved food, ready meal, remoulade, sauces, spices, tapas
Personal care	After shave, BB cream, body wash, conditioner, face scrub, face wash,
	hair spray, hair treatment, mouthwash, perfume,
	shampoo and body wash $(2 \text{ in } 1)$ , shaving cream, soap, wax
Snacks	Chewing gum, chips, chocolate bars, confectionery, corn kernels, dip,
	fruit gum, hard candy, liquorice, marzipan, milk-slice, mints,
	mixed candy, nougat, nuts, pastille, pieces of chocolate,
	plate of chocolate, popcorn, pretzels, pretzel sticks, toffee, wasabi snacks
Utility	Light bulbs, napkins, paper plates, rubber bands, tea lights

Table 11.2: Additional product categories from the second idea generation.

#### 11.1.3 Category limitation and selection

After the second idea generation, 116 product categories were found. We deemed this amount of categories to be adequate for our purpose, so the next step was to select one representative product category for each group. Looking at each group individual and we separated out the product categories that did not fulfil our needs in accordance with the selected scope. Some products appeared to be culturally dependant, some primarily appealed to one gender, some were judged to be unsuitable because multiple different identities couldn't be defined, i.e. the identity was given by the category itself. This left three to five categories for discussion to represent a group. Ranking of the remaining categories was performed in order to spark a discussion about which to chose. The selected product categories for each group can be seen in table 11.3.

Grouping	Selected product category
Breakfast	Muesli
Cleaning	Laundry detergent
Drinks	Coffee
Food	Sauces
Personal care	Shampoo
Snacks	Chocolate bar
Ulitity	Battery

Table 11.3: Selected product categories to represent each group.

Based on the selected categories, we started a discussion about which two were most suitable for our needs, scope, roadmap and visual design abilities. Some of them were excluded based on inferiority and too close similarity to others. In the end we selected *Chocolate bar* and *Shampoo*.

<sup>&</sup>lt;sup>2</sup>Nuts/chocolate based spread.

# 11.2 Finding identity attributes

Given that we hope to construct two widely different identities under each product category (four cases in total), we had a need for insight into which attributes are perceived to be different and which are seen as the same. The attributes in question here are the attributes perceived to be connected to name, typeface and color (see chapters 7, 8 and 9). To find possible attributes and their interaction, we selected to include external participants to conduct a closed card sorting and categorization on a spectrum. Images from the process and all of the attributes included in the selection can be seen in appendix E.

#### 11.2.1 Sorting

We chose to conduct a closed card sort with three participants. The 51 attributes were individual written on notes and any duplicates were taken out before sorting. The remaining can be seen in table 11.4.

Trendy	Friendelier	Faster	Softer	Thinner	Quicker
Gentleness	More bitter	Milder	Younger	Rugged	Secure
More feminine	Lighter	Smaller	Relaxing	Arousing	Cheerfullness
Good	Amused	Strong	Prettier	Slower	Heavy
Passive	Calm	Bad	Concered	Comfortable	Exciting
Least arousing	Focused	Active	Weaker	Towards bad	Elegance
Hard	Colder	Traditional	Trust	Fearfulness	Bigger
Determined	Gracefull	Wealth	Masculine	Organized	Rested
Positive	Directness	Agitated			

Table 11.4: The 51 design attributes included in the closed card sorting.

We have chosen to use the five factors from Geuens et al. (2009) as the closed group names: *Activity, Aggressiveness, Emotionality, Responsibility* and *Simplicity*. By doing this, the process will produce a framework where the attributes are placed in relation to their loading of the factor, they're sorted into. The participants were asked to only place an attribute in a group if the name of the group reflected said attribute and not if another attribute already placed in said group was the reason for the placement.

The result of the first round of sorting can be seen in table 11.5. During this sorting the participants came to a consensus about not being able find a suitable group for the attribute *Prettier* and the attribute was excluded in the following process and thus not available as an attribute in any subsequent work from this point on.

Grouping	Attributes
Activity	Active, arousing, calm, determined, faster, focused,
	least arousing, passive, quicker, relaxing, rested, slower
Aggressiveness	Agitated, gentleness, masculine, milder, more bitter, rugged,
	softer, towards bad, weaker
Emotionality	Amused, cheerfulness, colder, comfortable, exciting,
	fearfulness, friendlier, good, graceful, lighter,
	more feminine, passive, strong
Responsibility	Bad, concerned, organized, secure, trust, wealth, younger
Simplicity	Bigger, directness, elegance, hard, heavy,
	smaller, thinner, traditional, trendy

Table 11.5: The result of the first card sorting in connection with identities and attributes.

We asked the participants if they wanted to move any attributes, while the attributes were still places under the groups shown in table 11.5. None were moved. At this point we gathered all the groups in individual piles and once again presented to the participants to conduct a second closed card sort with the remaining 52 attributes. The second card sort was done due to the participants now had a better grasp of the groups and their meaning. Also to minimize the possibility of any attributes being misplaced due to a limited understanding of the groups at the start of the first card sorting. During the second card sorting, seven attributes changed groups. The changes can be seen in table 11.6.

Attribute	First sorting	Second sorting
Bigger	Simplicity	Responsibility
Good	Emotionality	Responsibility
Friendlier	Emotionality	Aggressiveness
Strong	Emotionality	Responsibility
Lighter	Emotionality	Simplicity
Weaker	Aggressiveness	Responsibility
Bad	Responsibility	Aggressiveness

Table 11.6: Changes in attribute's placement in the predetermined groups between card sorting sessions.

The second card sort also revealed that the participants did not share the same understanding of the attributes **Lighter**. Two of the three participants viewed it as lighter in relation to dark and 1 viewed in relation to heavy. They came to a consensus about it being viewed in relation to heavy and common understanding entailed its shift to *Simplicity*.

#### 11.2.2 Ranking within groups

In order to create differences in brand identities, the participants were asked to place the attributes in each group according whether the attributes possessed a low, medium or high loadings within the respective groups. Their rankings can be seen in tables 11.7 to 11.10.

Low	Medium	$\mathbf{High}$
Calm	Active	Arousing
Least arousing		Determined
Passive		Faster
Relaxing		Focused
Rested		Quicker
Slower		

Table 11.7: The perceived loadings of attributes in the group Acitivity.

Low	Medium	$\operatorname{High}$
Friendlier	More bitter	Agitated
Gentleness	Rugged	Bad
Milder	Towards bad	Masculine
Softer		

Table 11.8: The perceived loadings of attributes in the group Aggressiveness.

Low	Medium	$\mathbf{High}$
Colder	Amused	Cheerfulness
	Comfortable	Exciting
	More feminine	Fearfulness
	Positive	Graceful

Table 11.9: The perceived loadings of attributes in the group *Emotionality*.

Low	Medium	$\mathbf{High}$
Younger	Good	Bigger
Weaker	Secure	Concerned
	Trust	Organized
		Strong
		Wealth

Table 11.10: The perceived loadings of attributes in the group Responsibility.

Low	Medium	$\mathbf{High}$
Hard	Thinner	Directness
Heavy	Traditional	Elegance
	Trendy	Lighter
		Smaller

Table 11.11: The perceived loadings of attributes in the group Simplicity.

# 11.3 Framework

These rankings provided us with the desired framework and thereby aiding in the construction of two different identities for each of our previously selected product categories. The framework in general can be seen in table 11.12. Here, each attribute is displayed with at least one symbol. The symbols have been added to represent the three included design parameters (color, typeface and name) to give insights into which guidelines are connected to a given attribute. The symbol  $\dagger$  represents name,  $\blacklozenge$  represents typeface and  $\divideontimes$  represents color. Some of the attributes have two symbols due to some of the attributes being present in several design element analysis.

Loading			Factors		
	Activity	Aggressiveness	Emotionality	Responsibility	Simplicity
High	Arousing <b>*</b>	Agitated $*$	Cheerfulness $\blacklozenge$	Bigger <b>†</b>	Directness $\blacklozenge$
	Determined $*$	Bad 🗱	Exciting $*$	Concerned $*$	Elegance $\blacklozenge$
	Faster <b>†</b>	Masculine $\dagger \blacklozenge$	Fearfulness $\blacklozenge$	Organized $\blacklozenge lpha$	Lighter <b>†</b>
	Focused $\blacklozenge lpha$		Gracefulness $\blacklozenge$	Strong $\blacklozenge lpha$	Smaller <b>†</b>
	Quicker $\blacklozenge$			Wealth $*$	
Medium	Active $\blacklozenge *$	More bitter <b>†</b>	Amused $\blacklozenge lpha$	Good <b>*</b>	Thinner <b>†</b>
		Rugged $\blacklozenge$	Comfortable $lpha$	Secure *	Traditional $\blacklozenge$
		Towards bad $*$	More feminine † Positive <b>*</b>	Trust <b>*</b>	Trendy $\blacklozenge$
Low	$\operatorname{Calm} \bigstar$	Friendlier $\dagger \blacklozenge$	Colder <b>†</b>	Younger $\blacklozenge$	Hard $\blacklozenge$
	Least arousing $*$	Gentleness $\blacklozenge$		Weaker <b>†</b> *	Heavy <b>†</b> ♦
	Passive *	Milder <b>†</b>			-
	Relaxing 🛠	Softer <b>†</b>			
	Rested $*$				
	Slower $\blacklozenge$				

Table 11.12: The constructed framework based on the attribute sorting, categorization and loading. The symbols at each attribute indicate a connection to design elements:  $\dagger$  indicates a connection to name,  $\blacklozenge$  indicates typeface and i indicates color.

# 11.4 Constructing brand identities

The framework of the attributes and their loading in table 11.12 makes it possible to construct four specific and different brand cases. From these identities, visual designs can be constructed and used in subsequent testing and analysis.

In constructing each identity case, a rough personality type was discussed. For each of the five factors, one attribute is selected on the basis of it being most representative for the envisioned personality of the identity case. An effort was made to ensure that two identity cases from the same category did not have attributes with the same rough loading from a factor, e.g. if one chocolate identity case in a category is loaded as having a high attribute on *Simplicity*, the other chocolate case should have either medium or low loading. In addition to this, an effort was made to ensure that two identity cases from different categories didn't have the exact same profile in terms of selected attributes. In order get a larger effect of the designs, it is attempted to minimize the occurrences of attributes with medium loadings, as it is assumed that either extreme of the factors will provide a clearer and more diverse communication between the cases in the same category. Given that the attributes were compiled from a number of different design fields, the first selected constellation of attributes might result in an identity case not containing any guidelines for a specific design aspect, i.e. color. In order to prevent this from happening, after the initial selection of attributes, the identity case was investigated to check if all design fields were present. If that was not the case, an attribute could be swapped with a similar one which would ensure the presence of all the types of design guidelines.

Descriptions of the intended personality of the product and the selected attributes of the four identity cases can be seen in sections 11.4.1 through 11.4.4.

#### 11.4.1 Chocolate identity case no. 1

The first chocolate personality discussed was one which would fit in with an older wealthy male of culture and gravitas. One could picture the person enjoying the chocolate sitting in a comfortable leather chair in front of the fire in a dimly lit room. The selected attributes can be seen in table 11.13.

Attribute	Factor	Loading	Knowledge
Rested	Activity	Low	Color
Masculine	Aggressiveness	High	Name, Typeface
Comfortable	Emotionality	Medium	Color
Wealth	Responsibility	High	Color
Heavy	Simplicity	Low	Name, Typeface

Table 11.13: Attributes, factors, loadings and design knowledge for *Chocolate identity case no.* 1.

#### 11.4.2 Chocolate identity case no. 2

Envisioned with this product is a chocolate which would appeal to a child or adolescent and serve as a snack in the middle of activities. There should be an emphasis on excitement and playfulness. The selected attributes can be seen in table 11.14.

Attribute	Factor	Loading	Knowledge
Active	Activity	Medium	Color, Typeface
Friendlier	Aggressiveness	Low	Name, Typeface
Exciting	Emotionality	High	Color
Younger	Responsibility	Low	Typeface
Lighter	Simplicity	High	Name

Table 11.14: Attributes, factors, loadings and design knowledge for *Chocolate identity case no.* 2.

#### 11.4.3 Shampoo identity case no. 1

For the first shampoo identity case, we decided to construct a personality which would correlate with someone leading a life in high gear with a lot of sports and physical activity. The selected attributes can be seen in table 11.15.

Attribute	Factor	Loading	Knowledge
Determined	Activity	High	Color
Masculine	Aggressiveness	High	Name, Typeface
Exciting	Emotionality	High	Color
Strong	Responsibility	High	Color, Typeface
Traditional	Simplicity	Medium	Typeface

Table 11.15: Attributes, factors, loadings and design knowledge for *Shampoo identity case no.* 1.

#### 11.4.4 Shampoo identity case no. 2

For the second shampoo identity case, we wanted to create a personality which was in contrast to the one from the first identity case. The case should have a focus which emphasized relaxation, elegance and a generally feminine expression. The selected attributes can be seen in table 11.16.

Attribute	Factor	Loading	Knowledge
Relaxing	Activity	Low	Color
Friendlier	Aggressiveness	Low	Name, Typeface
More feminine	Emotionality	Medium	Name
Weaker	Responsibility	Low	Color, Name
Elegance	Simplicity	High	Typeface

Table 11.16: Attributes, factors, loadings and design knowledge for *Shampoo identity case no.* 2.

Given the now constructed identities and their appertaining design elements, the next step is to create four brand cases that reflect these identities.

# Chapter 12

# Creating designs



In the process of designing the visual representation of brand cases, the identities and the design guidelines inferred from these serve as a basis. The design can however not be strictly based on these guidelines, e.g. the type of font may be defined by the guidelines, but the specific font is not. We therefore attempt to honor these guidelines as best as possible, but ultimately, some aspects may be ignored if it is deemed impossible to create a harmonious and realistically attractive design by including all aspects. In the same vein, some design elements which appear to be warranted by the field study may be ignored, because of the complexity that they would introduce.

## 12.1 Base forms for designs

The focus of this project is to determine if it is possible to communicate identity of a brand through visual design. It is therefore decided to construct neutral base layouts and forms for each of the product categories in order to focus solely on the effect of the presented design elements. The basic layout and shape is selected to be held the same for each of the product groups. To gain insight into what would be appropriate and realistic in layout and shape of chocolate bars and shampoo bottles, two exploratory investigations<sup>1</sup> were carried out. Here existing products on the shelves of a Danish supermarket were documented through pictures

 $<sup>^1\</sup>mathrm{Both}$  were conducted on the 6th of May, 2014.

and studied to see whether tendencies in shape and layout were present. Full descriptions of the studies can be found in appendix F for the chocolate bars and appendix G for the shampoos.

## 12.2 Layout for chocolate

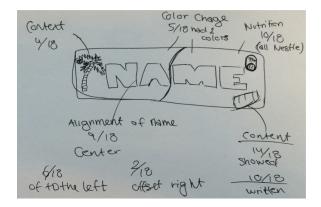
A number of tendencies, in relation to the design of a chocolate bar wrapper were found, and can be seen in full in appendix F. 18 chocolate bars were included in the investigation. They are illustrated in figure 12.2. In half of the bars included the name is centered in the middle of the bar and takes up most of the space. Other options for the placement of name is offset to the left (six), offset to the right (two) and splitting the name up and having parts of it on each side and nothing in the middle (one). Graphical elements such as contextual imagery, e.g. beach and palm trees on a Bounty (see figure 12.1), visually illustrated or written content and nutritional information were also found on a number of the chocolate bars. However, due to our focus of only included graphical elements that we are capable of constructing both illustrated context and content will be excluded and not part of our layouts.



Figure 12.1: A Bounty Dark chocolate bar with coconut and palm tree as context.

In most of the chocolate bars the name was placed on one solid color of the wrapper. However, five out of the 18 had more than one color. The basis are open for the possibility of splitting the background into more than one color, enabling more colors to be including in a brand design without conflict.

It is also decided to exclude written content to minimize influence based on taste preference and commonalities with existing chocolate bars. Nutritional information are included on 10 out of 18 chocolate bars, but will not be part of the designs due to both abilities and not wanting to influence the perception of the chocolate bars in any degree other than the selected design elements. This give a simple design with the name centered on the bar and taking up the majority of available place, as seen in figure 12.3.



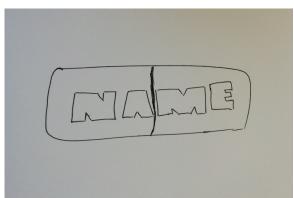


Figure 12.2: Sketch of tendencies in layout of chocolate bars.

Figure 12.3: Sketch of selected layout for chocolate bars.

## 12.3 Layout for shampoo

Some tendencies about the layout of shampoo bottles were also found. They are illustrated in figure 12.5. The investigation in appendix G shows that all 16 included shampoos displayed their name at the top of the bottle and this trend will be carried on the basis layout for our shampoo brand designs. Each bottle also includes an indication of the content being shampoo. This indication is placed just under the name at eight out of 16 instances, in the middle of the bottle in three instances and at the bottom in five instances. For our basis layout, we have decided to place the shampoo indication under the name and leaving it up to the given design case if it should be centered or nudged to one of the sides.

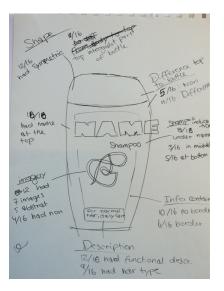
Continuing on written elements on the shampoo bottles, it is found that the majority include a written description of what the shampoo can do and what kind of hair type it is primarily for, at the bottom of the bottles. We have selected to included an as generic version of this as possible: "For normal hair. Daily use." towards the bottom of our basic design for shampoo. Again it is up to the individual case design whether the text is centered or off to one of the sides. Given our previous findings of typeface being able to add context, we have decided that both the shampoo indication and functional description will be written in a similar and not attention grabbing font, for instance Helvetica, Avenir Next or Arial. For examples of these fonts, see figure 12.4.

# Helvetica Avenir Next Arial

Figure 12.4: Examples of non attention grabbing fonts. Font names are presented in their respective fonts.

The investigation shows that in 11 out of 16 shampoo bottles there is a different in either color or shade from the main body of the bottle and the top. In the remaining five instances, no separation was identified. For our basis layout we have decided to let it be up to the individual designs in enable the present of several colors.

Some elements found in the investigation have been excluded from the basis layout due to the added complexity of constructing them even though they were prominently represented. This included imagery such as abstract forms. The investigation also shows that 10 out of 16 shampoo bottles had a sticker with visible borders around the information. It is our understanding that this is due to manufacturing restrictions and therefore we do not include a border around the information presented. This will also enable us to be more creative with the layout designs and utilize space and colors to a greater degree. All the included and excluded elements gives a base design with the name at the top with shampoo indication just below and a functional description at the bottom. This gives the freedom to design differences between the top and bottom of a bottle. This is illustrated in figure 12.6.



Functional description

Figure 12.5: Sketch of tendencies in layout of shampoo bottles.

Figure 12.6: Sketch of selected layout for shampoos.

# 12.4 Generic shapes

The shape of the products are chosen to be held the same within each product category due to no shared view was found on how the shape of a product influence the perception. We do however acknowledge that shapes could have perceived values connected to them. Therefore, we have selected to minimize potential perception influences connected to shape by only choosing to maintain the same shape for each case in the product categories. The shape for each product category should be neutral, so it is suitable for both identities. This was done by the same investigations as layout is based on. By measuring each of the included products and finding ratio between length and width, insight were gained into how such products are dimensioned.

# 12.5 Shape of chocolate bars

For the chocolate bars a ratio of 3.4 is found to be suitable and a 3D model of chocolate bar was rendered in SolidWorks<sup>2</sup> v. PhotoView 360. Along with the length and width ratio, a suitable height was selected. The rendering was done in order to make it appear as if the presented image were a sketch of a product to be. To add to the perception of the rendering being able to represent a believable chocolate bar, a shine was added in the rendering process to represent the shine of a plastic wrapper. The 3D rendering will be used for the two chocolate bar designs can be seen in figure 12.7.



Figure 12.7: The shape and reflections for the chocolate bar brand designs.

<sup>&</sup>lt;sup>2</sup>SolidWorks is a 3D mechanical Computer-aided design program, for more see http://www.solidworks.com, accessed on the 11th of May, 2014.

The shape of the shampoo bottle is a bit more complex. The investigation of shampoo bottles showed that quite a difference in their shape, but again we have selected a generic and believable by looking at tendencies and what would suit this study. Dimensions for our bottle is found to be 2.8 and this is used in the rendering of a shampoo bottle. The investigation showed us that it is most common for bottles to be symmetric around the horizontal axis and for the top part of the bottle to be an integrated part of the bottle. In order to have the shape and form of the shampoo bottle be realistic, a lid at the top and a separation line between top and the main body of the bottle is added in the 3D rendering. The rendering will be used for the two shampoo brand designs can be seen in figure 12.8



Figure 12.8: The shape and reflections for the shampoo brand designs.

The renderings may not constitute picture perfect representations of the two product categories, but for the purpose of providing context for a brand, they are deemed to be adequate.

#### 12.6 Meaningful or non-meaningful names

One of the primary parts of a name is whether it is meaningful or non-meaningful, as discussed in chapter 7. In this study, the choice is to focus on non-meaningful names. There are a number of reasons for this decision.

This project focuses on what can be conveyed about a brand without directly stating it. In that light, it would be counter-productive to inject functional promises about a brand by choosing a name such as "EnergyMax" for batteries. Klink (2000) argues for the ability to convey certain attributes through the sound profile of a name, which further indicates that a name doesn't have to be meaningful in order to carry information.

Finally, there is also a matter of complexity to consider. Constructing a non-meaningful name with a certain sound profile is easier than constructing a meaningful name with the same profile, which also has to carry meaning for the specific context.

Based on these considerations, the names for the brand cases are based loosely on the names used in the study by Klink (2000). The primary focus is on constructing names which follow the guidelines defined in chapter 11. The names must of course be non-meaningful, which is investigated by running them through a search engine and a dictionary for slang terms<sup>3</sup>. Also all names is of the same length, five letters, to minimize any possible effect the length of the names may have on the perception of the brand cases.

### 12.7 Process of selecting case elements

By using the attributes connected to identities in chapter 11, it is now possible to construct visual designs for the four brand identities. The process of selecting name, typeface and color layout were the same for all four brand cases. Firstly all four names were selected, than typeface for the four names and lastly the color design. The process for finding the names have already been described in the previous section. For typeface, each case have directions for which kind of typeface would be suitable for the given case. We investigated a number typefaces that were in agreement with these guidelines and tried them out with the selected names, in an effort to find one that suited the guidelines and the identity of the case. For the color design, we sketched different ideas for each of the four brand cases on how to incorporate the design elements. All sketches can be seen in appendix H.

For each brand case, the appropriate design choices for each attribute (color, name and typeface) are provided as tables. Here a count is also presented if the same choice appears multiple times, e.g. *red* is the appropriate color based on multiple attributes. Afterwards the selected name, typeface, colors, a sketch and the final design is presented.

As a part of the sketching phase, the level of brightness of colors was also included as a possible element. This was taken into account due to the findings of Valdez and Mehrabian (1994) showing that the level brightness of a color are capable of influencing the evaluation of a color.

## 12.8 Coloring the shapes

In order to retain the full effect of the 3D renderings, each of the following cases were made by importing the given render into Adobe Photoshop<sup>4</sup> v. 12.1 x64 and creating overlays of color. In the cases were more than one color is used, several overlays have been created and part of each layer have been erased, allowing all of the colors to be visible. In the following, the colors in the overlays will be represented by RGB-code<sup>5</sup>. Given that the colors is laid on top of the renderings, the color codes does not necessarily reflect the colors shown in the final design. This is because of the inlaid shadows and reflections in the renderings that makes them look 3D.

<sup>&</sup>lt;sup>3</sup>http://www.urbandictionary.com/, accessed on 9th of May, 2014

<sup>&</sup>lt;sup>4</sup>Adobe Photoshop is a graphics editing program. For more information, see http://www.photoshop.com, accessed on the 11th of May, 2014.

<sup>&</sup>lt;sup>5</sup>RGB is a color model, where values for the amount Red, Green and Blue are presented as a way of representing a color.

# 12.9 Design of chocolate case no. 1

The attributes for chocolate case no 1 gave the following design guidelines for name, typeface and color.

Name	No.	Typeface	No.	Color	No.
Back vowels	2	Bold	2	Blue	2
Stop consonants	2	Serif	2	Green	1

Table 12.1: Cumulative appropriate design elements for chocolate case no. 1.

The name selected to represent this chocolate bar is **Konup** and the typeface found for the brand case is  $K22 \ Didoni$ . The name is written in the selected typeface in figure 12.9.



Figure 12.9: The selected name presented in the selected typeface for chocolate case no. 1.

Based on the layout and shape selected in the previous section, sketches were made to incorporate blue and green, where blue is present in a more dominant way in accordance with the design elements can be seen in table 12.1. Out of the sketched versions, one was selected. The sketch can be seen in figure 12.10 and the final version is shown in figure 12.11.



Figure 12.10: Sketch of chocolate case no. 1: Konup.

The blue color used in the digital design is RGB code  $\sim 2,0,102$  and for the green part has the RGB code  $\sim 22,74,7$ .



Figure 12.11: The final visual expression of chocolate case no. 1: Konup.

## 12.10 Design of chocolate case no. 2

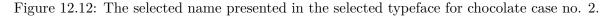
The attributes for chocolate case no 2 gave the following design guidelines for name, typeface and color.

Name	No.	Typeface	No.	Color	No.
Fricative consonants	1	Italics	2	Red	2
Front vowels	2	Round edges	1		

Table 12.2: Cumulative appropriate design elements for chocolate case no. 2.

The name selected to represent this chocolate bar is **Zeffi** and the typeface found for the brand case is *Comic White Rabbit*. The design guidelines for this case indicates that italics would be appropriate. The name is written in italic in the selected typeface in figure 12.12 and the italic version is used in the design.





Based on the layout and shape selected in the previous section, sketches were made to incorporate red in accordance with the design elements can be seen in table 12.2. Out of the sketched versions, one was selected. The sketch can be seen in figure 12.13 and the final version is shown in figure 12.14.



Figure 12.13: Sketch of chocolate case no. 2: Zeffi.

The red used in the digital design had the RGB code  $\sim 236,0,7$ .



Figure 12.14: The final visual expression of chocolate case no. 2: Zeffi.

# 12.11 Design of shampoo case no. 1

The attributes for shampoo case no 1 gave the following design guidelines for name, typeface and color.

Name	No.	Typeface	No.	Color	No.
Back vowels	1	Bold	2	Black	1
Stop consonants	1	Serif	3	Gray	1
				Gray Purple	1
				Red	2

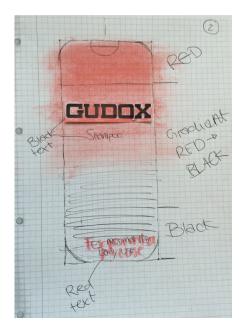
Table 12.3: Cumulative appropriate design elements for shampoo case no. 1.

The name selected to represent this shampoo is **Gudox** and the typeface found for the brand case is *Canarsie Slab JL*. The name is written in the selected typeface in figure 12.15.



Figure 12.15: The selected name presented in the selected typeface for shampoo case no. 1.

Based on the layout and shape selected in the previous section, sketches were made to incorporate black, gray, purple and red, where red is present in a more dominant way in accordance with the design elements can be seen in table 12.3. Out of the sketched versions, one was selected. The sketch can be seen in figure 12.16 and the final version is shown in figure 12.17. For the *"For normal hair. Daily care"* text the font Avenir Next was used and for the *"Shampoo"* indication, the font Avenir was used in a light version. The Gudox design consist of a 3-point gradient, meaning that the bottom have one shade of black (RGB  $\sim$ 39,38,38), the middle different black (RBG  $\sim$ 28,20,20) and the very top was red (RGB  $\sim$ 196,20,32).



**GUIDOX** Shampoo

Figure 12.16: Sketch of shampoo case no. 1: Godux.

Figure 12.17: The final visual expression of shampoo case no. 1: Godux.

## 12.12 Design of shampoo case no. 2

The attributes for shampoo case no 2 gave the following design guidelines for name, typeface and color.

Name	No.	Typeface	No.	Color	No.
Fricative consonants	1	Round edges	1	Blue	1
Front vowels	3	Script	1	Yellow	1
				White	1

Table 12.4: Cumulative appropriate design elements for shampoo case no. 2

The name selected to represent this shampoo is **Fevir** and the typeface found for the brand case is *Housegrind*. The name is written in the selected typeface in figure 12.18.



Figure 12.18: The selected name presented in the selected typeface for shampoo case no. 2.

Based on the layout and shape selected in the previous section, sketches were made to incorporate blue, yellow and white in accordance with the design elements can be seen in table 12.4. Out of the sketched versions, one was selected. The sketch can be seen in figure 12.19 and the final version is shown in figure 12.20. Here the font Avenir Next was also used for the "For normal hair. Daily care" text. The font Avenir in a light version for the "Shampoo" indication.

The Fevir design consist of a 2-point gradient, meaning that the bottom is blue ( $\sim$ RGB code 40,127,255) and the very top is yellow in the RGB code  $\sim$ 252,233,10. The middle was made a little lighter than the rendering by added some light gray in the RGB code  $\sim$ 231,228,225.





Figure 12.19: Skretch of shampoo case no. 2: Fevir.

Figure 12.20: The final visual expression of shampoo case no. 2: Fevir.

# 12.13 Final visual expressions

After developing the visual expressions of the brand identities, we are now able to use these expressions as stimulus in our study. The final designs can be seen in figures 12.21 and 12.22 for the chocolate bars, and figures 12.23 and 12.24 for the shampoos.







Figure 12.22: Final design of Zeffi chocolate bar.





Figure 12.23: Final design of Gudox shampoo. Figure 12.24: Final design of Fevir shampoo.



The focus of this study is to investigate if it is possible to perceive the identity of a brand exclusively via design expressions. This is done via an experiment which relies on the constructed identities (section 11.4) and developed designs (section 12.13).

# 13.1 Method

In order to be able to carry out a meaningful analysis later on, a large amount of data is required and therefore a digital questionnaire is used. Given that such a questionnaire can be distributed over the internet, the potential for collecting a larger number of respondents is greater, compared to a manually distributed version.

As a solution for creating and distributing questionnaires, Google  $Docs^1$  is used. This platform is free and allows for extensive surveys which can include pictures, which makes it suitable for our purpose. Google Docs stores data directly in a spreadsheet, which allows for easier subsequent analysis.

In order to utilize the time allotted for the project and the magnitude of presenting all identities and visual expression together, we have decided to distribute two separate questionnaires. One with a textual description of the four brands identities and one with four visual expressions based on these identities. From this point on, any mention of *textual*, in relation

<sup>&</sup>lt;sup>1</sup>http://docs.google.com/, accessed on 27th of March, 2014.

to the questionnaire, will refer to the measuring of the concept *identity* and *visual* will refer to the measuring of the concept of *image*. By distributing two questionnaires, this experiment is a between-subject design. This was based on pragmatic concerns, as it may be more difficult to get complete responses for a single very long questionnaire.

First, the textual version was distributed<sup>2</sup> and during the response period for this, the visual expressions were developed and the visual version of the questionnaire was subsequently distributed<sup>3</sup>.

The two questionnaires are based on the same principles, but do differ in a few aspects. The dependent variables, scales and distribution method are the same for both, however there are some small variations in demographics, flow, some statements and the layout.

## 13.2 Scale

As a tool for the data collection, 7-point Likert scales are used, as is done in Geuens et al. (2009). As defined by Field and Hole (2010), a Likert scale in this paper is seen as:

"... in its classic form it consists of a statement to which you can express varying degrees of agreement." Field and Hole (2010, p. 45).

This type of scale has the benefit of allowing participants a wider scope to express their opinion, as opposed to a binary choice, and are generally easy for participants to understand (Field and Hole, 2010, p. 46). The statements provided to these scales were the 12 personality items from Geuens et al. (2009).

#### Brand no. X is....

- Down-to-earth
- Stable
- Responsible
- Active
- Dynamic
- Innovative
- Aggressiveness
- Bold
- Ordinary
- Simple
- Romantic
- Sentimental

For each of these personality items, participants were asked "Brand no. X is ....", where 1 on the 7 point Likert scale corresponds to "Not at all" and 7 to "Very much". By encoding our Likert scale with the numbers from 1 to 7, we open up for the possibility of looking at the data as interval data due to the number sequence having an existing understanding of rank along with equal visual spacing between the numbers. An example of the scales used and an appurtenant personality item can be seen in figure 13.1.

<sup>&</sup>lt;sup>2</sup>This was done on the 2nd of May, 2014, and was concluded on the 9th of May, 2014.

<sup>&</sup>lt;sup>3</sup>This was done on the 12th of May, 2014, and was concluded on the 16th of May, 2014.

Chapter 13. Ex	periment design	ו —					
Brand #1 is* 1 being "Not at all"							
	1 (Not at all)	2	3	4	5	6	7 (Very much)
Down-to-earth	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	$\bigcirc$

Figure 13.1: Example of 7-point Likert scale and the appurtenant personality item.

With the visual version of the questionnaires, each of the attributes that contributed to the identities is added as statement in the same fashion as the personality items. This is done for later analysis of whether we have succeeded in constructing visual identities that express the selected identities. This adds five additional statements for evaluation on Likert scales for the visual questionnaire.

# 13.3 Distribution

As a means of distribution, social media have been deployed, more specifically Facebook<sup>4</sup>,  $LinkedIn^5$  and  $Twitter^6$ . This allows for a potential wide reach and will hopefully result in a larger sample size than could be accumulated by a more direct distribution of the questionnaire. The questionnaire is also distributed via email throughout Aalborg University via a mailing list service provided by the university. Given time restrictions on this project, the textual questionnaire is distributed continually for a week and the second made available for a similar amount of time at a later date.

# 13.4 Demographics

Brand perception is different across cultures as illustrated in section 5.2.3 on page 29, which leads to the decision to limit this study to Western nationalities. By doing this, it is assumed that any tendencies will be clearer and that stronger conclusions may be drawn. This will of course limit the ability to extrapolate the results to other demographics, but similar studies could be carried out in other regions. In the questionnaire, this was executed by telling participants only to start if they are from Europe, North America or Australia, or have lived in any of the mentioned areas for at least five years. During collection of general information, each participant was also asked to report their nationality. A difference in demographics between the two questionnaires is a screening of participants added in the visual version. Given focus here lies on colors, there is a need to exclude people who may be color blind.

# 13.5 Questionnaires

Two instances of questionnaires are used in this experiment; one of a textual description of the four brand identities (shown in section 11.4), and one of the visual expression based on the designs created on the basis of the identities (shown in chapter 12.13). Screenshots of the two questionnaires can be seen in appendix I.

Given a minimum of 12 and up to 17 statements for four cases, we have chosen to split the statements up in blocks to enable a better overview. For the textual questionnaire, the statements are split up in two blocks of six personality related statements each and for the visual expression questionnaire an additional block of the five identity attributes are added.

<sup>&</sup>lt;sup>4</sup>http://www.facebook.com/

<sup>&</sup>lt;sup>5</sup>http://www.linkedin.com/

<sup>&</sup>lt;sup>6</sup>http://www.twitter.com/

Thereby the textual version had block 1 and 2, whereas the visual version of the questionnaire had block 1, 2 and 3.

#### Block 1

- 1. Down to earth
- 2. Stable
- 3. Responsible
- 4. Active
- 5. Dynamic
- 6. Innovative

#### Block 2

- 1. Aggressive
- 2. Bold
- 3. Ordinary
- 4. Simple
- 5. Romantic
- 6. Sentimental

#### Block 3

- 1. Attribute no. 1
- 2. Attribute no. 2
- 3. Attribute no. 3
- 4. Attribute no. 4
- 5. Attribute no. 5

#### 13.5.1 Presentation of brands

Among the differences between the two questionnaires is how the stimuli is presented. With the textual version, we selected to present the identities as direct as possible in order to hopeful minimize any interpretations. We are well aware that it may be difficult to evaluate the statements based on brand identity. We did not wish to add any confounding variables by providing participants with more than the minimum amount of information. Based on this, we chose to present the attributes of each identity as seen in figure 13.2. In an attempt to express that all of the five attributes should be taken into consideration when answering, the part "as a whole" is added.

#### Brand #1 - Chocolate bar

Imagine a chocolate bar belonging to a brand, which is expressed by the following five attributes as a whole: Rested, Masculine, Comfortable, Wealth, Heavy

Figure 13.2: The presentation of a brand identity in textual form.

With the visual questionnaire, an picture of the visual expression is placed in the same location as the textual description. The name of the presented case is added in the headline. This is done in order to present the names clearly, since some of the typefaces may have limited legibility, if the name is not known. This is presented in figure 13.3.



Figure 13.3: The presentation of a brand in the visual questionnaire.

## 13.5.2 Do you know this brand?

Given the existence of many different brands in general and the cultural diversity in this study, we may unknowingly have constructed case identities that are similar to those of existing products or brands. In order to check if that is the cases, we have decided to add the option to report whether the presented visual expression resemble an existing brand to the visual questionnaire on. This question is formed as open as possible to not guide participants to force an answer. It is placed alone on the final page to eliminate any influence on the evaluations, i.e. not prompting the participants to think about potential existing products, while still evaluating the fictional ones. The page included all four brand cases, numbered for better commentary. It can be seen in figure 13.4.

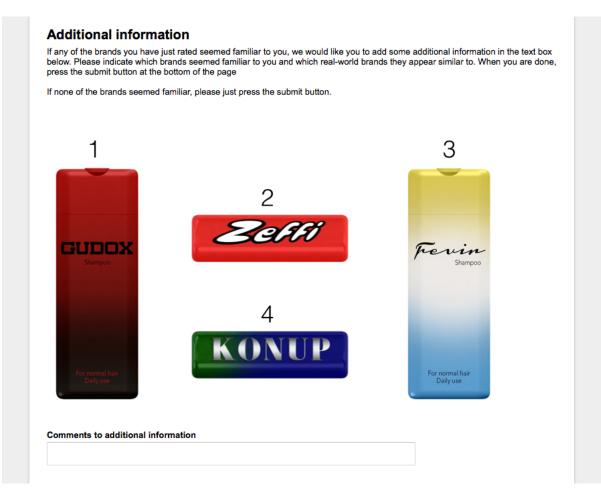


Figure 13.4: This page from the visual questionnaire is to gain insight on whether the visual expression of our brand cases seem familiar to the participants.

In the textual version, we did not include this question. Given that only identity descriptions were provided, participants may have put excessive effort into finding a brand which could line up with our fictional ones. This would not benefit the study, as this question mainly serves as a way to check if we inadvertently have copied an existing brand visually.

## 13.6 Questionnaire flow

The flow of the questionnaires was generally as follows.

- 1. Welcome, information and instructions
- 2. Demographics data
- 3. Brand 1
- 4. Brand 2
- 5. Brand 3
- 6. Brand 4
- 7. Thanks for participating

There are small differences between the two questionnaires. With the text based questionnaire, the last page included a call for help to the next questionnaire besides a thanks for participating. This page can be seen in figure 13.5.

Brand percept	ion	
	rticipating sending out another questionnaire in the ase write your email below. Your detail	-
Remember to push the butt	on below to submit your answer.	
Email address		
« Back Submit		
Never submit passwords the	ough Google Forms.	100%: You made it.
Powered by	This content is neither created nor e Report Abuse - Terms of Service	

Figure 13.5: Screenshot of page where participants are thanked and a call for help with the second questionnaire.

Given that participants with color blindness was not part of the demographics for the visual questionnaire, a question about color blindness was added to *Demographics data* in the visual questionnaire and conditioned, so that if participants answered "Yes" to being colorblind, they are redirected away from the questionnaire itself and shown the page in figure 13.6.

Thank you for your interest
You have indicated that you are color blind to some degree. Sadly, this means that we can not use the data you are able to provide, because of an emphasis perception of color in this study. We thank you for your interest.
Line and Steffen

Figure 13.6: Screenshot of page for the participants that were excluded from the questionnaire due to indicating being color blind.

#### 13.6.1 Presentation order

Google Drive questionnaires does not support randomization of the stimuli. Therefore, we needed to select a fixated order for the brand cases to be presented in. Firstly to hopefully minimize comparison between the two brand cases of the same product categories, a chocolate bar will not be present just after the other chocolate bar, and the same applies to shampoo. There are minor overlaps in the attributes in the four identities, therefore the order of how they are present should also focus on not presenting two too similar identities just after one another. This gave the following order for the textual version of the questionnaires.

- 1. Brand no. 1 Chocolate bar (Konup)
- 2. Brand no. 2 Shampoo (Fevir)
- 3. Brand no. 3 Chocolate bar (Zeffi)
- 4. Brand no. 4 Shampoo (Gudox)

Since the questionnaires were distributed within roughly a week and participants from the first round are feasible respondents in the second questionnaire, we have selected to change the presentation order in the visual questionnaire. The criteria of not presenting two from the same product category in a row still holds. Therefore, it is decided to flip the brand cases resulting in the following order for the visual based questionnaire:

- 1. Brand no. 4 Shampoo (Gudox)
- 2. Brand no. 3 Chocolate bar (Zeffi)
- 3. Brand no. 2 Shampoo (Fevir)
- 4. Brand no. 1 Chocolate bar (Konup)

# Chapter 14

# Results



Through the first questionnaire, 176 data entries were recorded. For the second questionnaire, 176 data entries were also recorded. This chapter focuses on the initial screening of data, presentation of the participating demographics and the presentation of the given responses.

## 14.1 Screening of data

Due to the nature of the data collection through social media and mailing lists, some responses have been discarded. This has happened for a number of different reasons.

Some responses came from individuals in regions which lay outside the scope of the study. As described in section 5.2.3 on page 29, the nationality scope included only Europe, North America and Australia. These were identified through the nationality data provided as a mandatory part of the questionnaire. If this information was not provided, the data for the participant was discarded.

A second reason for discarding responses were due to malicious behavior from some respondents. These were identified in two ways. Fields where the respondent had a chance to fill in data manually were filled with data which either didn't make sense or was obviously misleading. Secondly, some answers were provided in a way where all answers were set to high or low, or fixed geometrical patterns were selected for the statements. We are confident that responses of this type are not provided in a serious effort to answer the given statements, and we therefore feel justified in discarding them. The third reason for discarding data is down to participants indicating that they had problems with viewing the questionnaire, for example by using a smartphone, leading to problems with seeing the scales in full.

In the dataset for the second and visual questionnaire, participants that indicated being colorblind were registered even though no data for the statements were given. Therefore, these are also discarded.

Reason for removal	First questionnaire	Second questionnaire
Lacking info	1	0
Outside scope	3	0
Malicious behavior	6	2
Reported problems	0	2
Colorblind	N/A	7
Total	10	11
Remaining data points	166	165

Table 14.1: Number of respondents removed and the reason for removal.

## 14.2 Demographics

Given the two questionnaires in the study, two different samples were collected. The following sections will display the demographics in relation to age, gender and nationality, for the two questionniare.

#### 14.2.1 Age

The age distribution for the textual questionnaire is shown in figure 14.1 and for the visual questionnaire in figure 14.2.

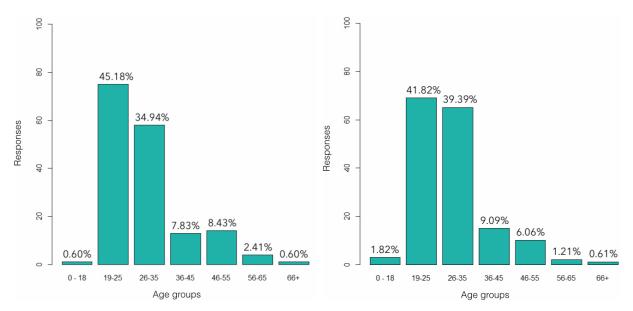


Figure 14.1: Age distribution in the textual questionnaire.

Figure 14.2: Age distribution in the visual questionnaire.

### 14.2.2 Gender

The two populations had close to equal representation of male and female participants<sup>1</sup>. The percentile distribution for the textual questionnaire can be seen in figure 14.3 and for the visual version in figure 14.4.

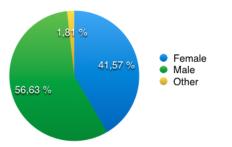


Figure 14.3: Gender distribution in the textual questionnaire.

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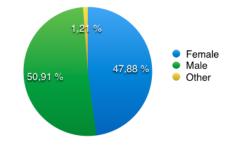


Figure 14.4: Gender distribution in the visual questionnaire.

#### 14.2.3 Nationality

Participants in the questionnaires came from many different countries. However, Denmark was heavily represented. The nationalities are shown in tables 14.2 and 14.3.

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Nationality	Count	% of responses
Denmark	99	59.64
United Kingdom	13	7.84
United States	12	7.23
Cananda	8	4.82
Bulgaria	5	3.01
Australia	3	1.81
Spain	3	1.81
Hungary	2	1.20
Iceland	2	1.20
Italy	2	1.20
Lithuania	2	1.20
Poland	2	1.20
Romania	2	1.20
The Netherlands	2	1.20
Faroe Islands	1	0.60
France	1	0.60
Germany	1	0.60
Greece	1	0.60
Ireland	1	0.60
Latvia	1	0.60
Norway	1	0.60
Portugal	1	0.60
Sweden	1	0.60

Table 14.2: Overview of nationalities that were part of the textual questionnaire.

<sup>&</sup>lt;sup>1</sup>The analysis will not consider gender as an explanatory element, so in order to ensure that people with a different gender identity could participate, the choice *Other* was included.

Nationality	Count	% of responses
Denmark	130	78.79
United Kingdom	4	2.42
United States	4	2.42
Greece	3	1.82
Italy	3	1.82
Norway	3	1.82
Bulgaria	2	1.21
Cananda	2	1.21
Iceland	2	1.21
Poland	2	1.21
Spain	2	1.21
Sweden	2	1.21
Australia	1	0.61
Germany	1	0.61
Hungary	1	0.61
Serbia	1	0.61
The Netherlands	1	0.61
Ukraine	1	0.61

Table 14.3: Overview of nationalities that were part of the visual questionnaire.

## 14.3 Presenting responses

To gain the greatest understanding of what responses have been given, the following sections will present all responses. This means data for the 12 brand personality measurements to each of the two versions of the four brand cases and the five attributes that the case designs were constructed from. This gives data subsets that can be grouped into three general categories:

- Measure of design attributes for a given design.
- Brand personality measurements for the textual questionnaire.
- Brand personality measurements for the visual questionnaire.

One design case at a time, a plot of responses for the five design attributes are presented first, followed by a plot of responses for the 12 brand personality items for the textual questionnaire and last a plot of how participants scored the visual expression on the 12 brand personality items.

Given that two questionnaires have been conducted and the order of the brand cases were different in the two, there is a need for a fixed order in the following result presentation and analysis. This will aid in the comprehension of which brand is in focus. From this point on, the order and terms for the cases are:

- Brand no. 1 is Konup.
- Brand no. 2 is Fevir.
- Brand no. 3 is Zeffi.
- Brand no. 4 is Gudox.

Each of the following plots are color coded to correspond to values on the Likert-scales. The color coding can be seen in figure 14.5.

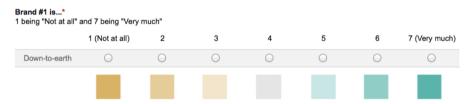


Figure 14.5: The used Likert-scale with their color coding.

As it can be seen in figure 14.5, there are three different colors; yellow, gray and green. The different shades of yellow and green correspond to different values on the Likert-scale. Each of the seven different shades of colors represent a relative amount of responses.

In this project, there is an interest in investigating if it is possible to communicate identity through design. We view 4, on the scale, as a neutral point in this regard, as it is assumed that a participant will select this value if no decision can be made regarding the statement, i.e. a meaningful evaluation of the statement can not be made in relation to the provided stimuli. The gray color represents the actual center of the scale, the score 4, and is always given an individual percentage indication.

The darkest of the yellow colors indicates that the attribute or personality item in question is not something that is reflected in the presented brand. As the remaining two shades of yellow get lighter, it indicates a growing, but still minute, degree of disagreement of a statement. The shades of green indicates a stronger to a full agreement with a statement. A collective percentage is given for responses to 1, 2 and 3 and is seen in the left side of a plot. In the same way, a collective percentage for the 5, 6 and 7 responses is placed to the right in a plot.

The colors and the percentages enable an understanding of how the data is distributed. The size of a, for instance, dark yellow colored part of a bar corresponds to the percentage of the responses. All of the bars, in their entirety, are of equal lengths (they all represents 100%), but are located in the plots accordingly to where most percentage of responses lies. As an example take the first and the last bar in figure 14.6. In the first, there is a majority of responses that strongly agree with the statement of brand no. 1 being heavy and therefore the bar is placed toward the right of the plot. Whereas, the majority of the last bar disagree with the statement of the same brand being connected to wealth and thereby is place more to the left of the plot.

# 14.4 Brand no. 1: Konup

Figure 14.6 shows results to the question "Brand no. 1 is X" where each of the design attributes is listed on the y-axis can be placed instead of X and the responses are shown by colors in percentage.

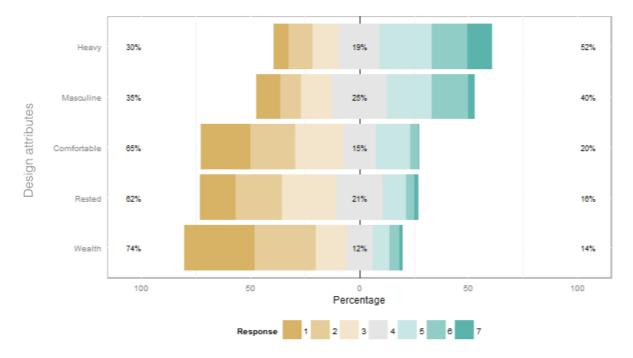


Figure 14.6: Responses to identity attributes for the design of Konup.

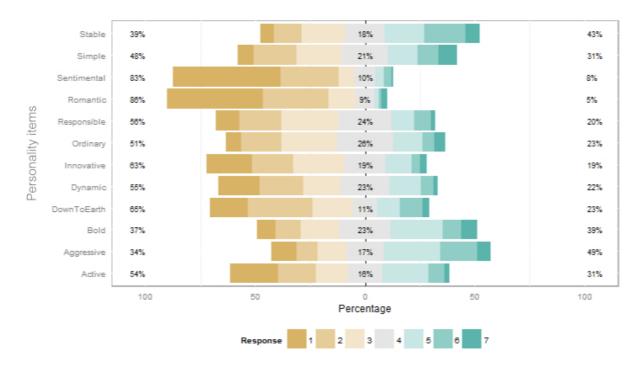
Mean, median and standard deviation for the responses given in connection to five design attributes of Konup can be seen in table 14.4.

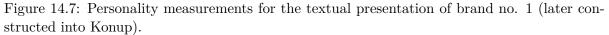
$\mathbf{Item}$	Mean	Median	Standard Deviation
Heavy	4.369697	5	1.722251
Masculine	3.963636	4	1.630094
Comfortable	2.945455	3	1.523213
Rested	3.072727	3	1.463222
Wealth	2.557576	2	1.578636

Table 14.4: Mean, median and standard deviation for responses given in connection to the design of Konup.

#### Chapter 14. Results

Figure 14.7 shows responses for the 12 brand personality items for the first and textual questionnaire for brand no. 1.





Mean, median and standard deviation for the responses given in connection to the 12 personality items for Konup of the textual questionnaire can be seen in table 14.5.

Item	Mean	Median	Standard Deviation
Stable	4.120482	4	1.665315
Simple	3.759036	4	1.699129
Sentimental	2.060241	2	1.417205
Romantic	2.090361	2	1.369903
Responsible	3.343373	3	1.471811
Ordinary	3.554217	3	1.491414
Innovative	3.060241	3	1.579025
Dynamic	3.186747	3	1.593948
Down To Earth	3.10241	3	1.711386
Bold	3.963855	4	1.621416
Aggressive	4.108434	4	1.74086
Active	3.283133	3	1.736756

Table 14.5: Mean, median and standard deviation for responses given in connection to the textual presentation of brand no. 1.

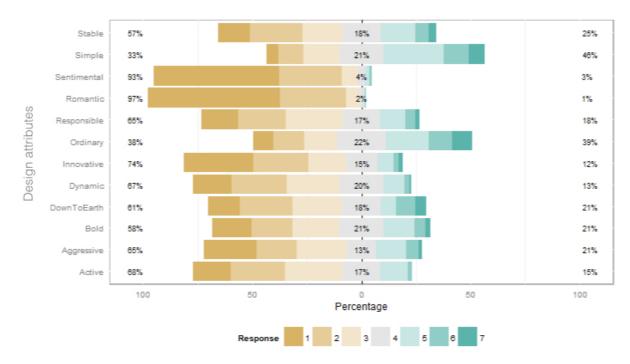


Figure 14.8 shows responses for the 12 brand personality items for the second and visual questionnaire for brand no. 1, Konup.

Figure 14.8: Personality measurements for the visual presentation of brand no. 1, Konup.

Mean, median and standard deviation for the responses given in connection to the 12 personality items for Konup of the visual questionnaire can be seen in table 14.6.

Item	Mean	Median	Standard Deviation
Stable	3.284848	3	1.640962
Simple	4.163636	4	1.578402
Sentimental	1.672727	1	1.025074
Romantic	1.533333	1	0.8229434
Responsible	3.060606	3	1.504858
Ordinary	3.981818	4	1.730194
Innovative	2.551515	2	1.507728
Dynamic	2.884848	3	1.363309
Down To Earth	3.248485	3	1.679888
Bold	3.175758	3	1.57709
Aggressive	2.981818	3	1.62478
Active	2.890909	3	1.329855
Bold Aggressive	3.175758 2.981818	3 3	$\begin{array}{c} 1.57709 \\ 1.62478 \end{array}$

Table 14.6: Mean, median and standard deviation for responses given in connection to the visual expression of brand no. 1, Konup.

# 14.5 Brand no. 2: Fevir

Figure 14.9 shows results to the question "Brand no. 2 is X" where each of the design attributes is listed on the y-axis can be placed instead of X and the responses are shown by colors in percentage.

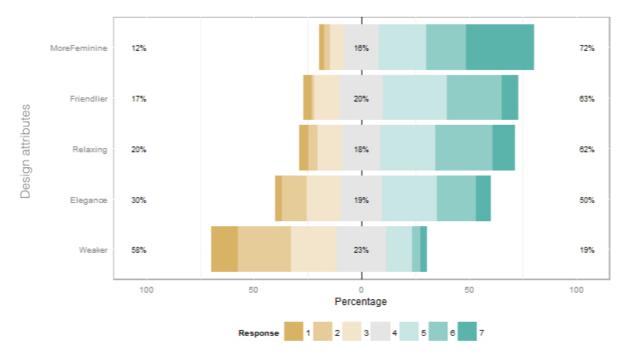


Figure 14.9: Responses to identity attributes for the design of Fevir.

Mean, median and standard deviation for the responses given in connection to five design attributes of Fevir can be seen in table 14.7.

$\mathbf{Item}$	Mean	Median	Standard Deviation
More feminine	5.351515	6	1.541325
Friendlier	4.787879	5	1.382768
Relaxing	4.769697	5	1.528686
Elegance	4.339394	5	1.540102
Weaker	3.212121	3	1.493024

Table 14.7: Mean, median and standard deviation for responses given in connection to the design of Fevir.

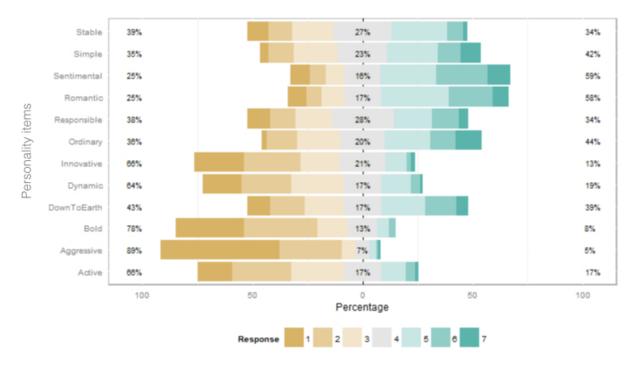
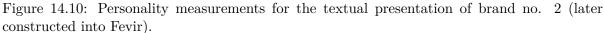


Figure 14.10 shows responses for the 12 brand personality items for the first and textual questionnaire for brand no. 2.



Mean, median and standard deviation for the responses given in connection to the 12 personality items for Fevir of the textual questionnaire can be seen in table 14.8.

Item	Mean	Median	Standard Deviation
Stable	3.759036	4	1.465485
Simple	4.168675	4	1.55559
Sentimental	4.53012	5	1.743124
Romantic	4.433735	5	1.64551
Responsible	3.843373	4	1.602891
Ordinary	4.253012	4	1.63183
Innovative	2.825301	3	1.476962
Dynamic	3.036145	3	1.488915
Down To Earth	3.843373	4	1.719633
Bold	2.373494	2	1.350294
Aggressive	1.825301	1	1.230752
Active	2.993976	3	1.45017

Table 14.8: Mean, median and standard deviation for responses given in connection to the textual presentation of brand no. 2.

#### Chapter 14. Results

Figure 14.11 shows responses for the 12 brand personality items for the second and visual questionnaire for brand no. 2, Fevir.

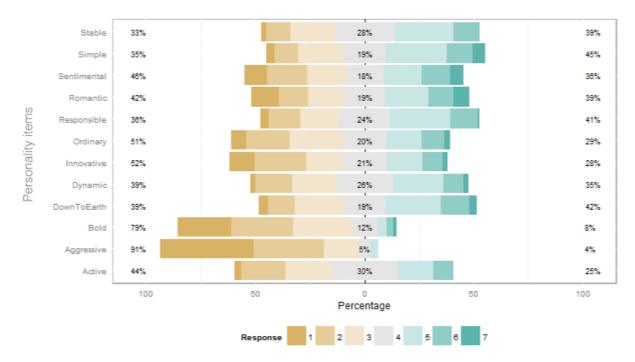


Figure 14.11: Personality measurements for the visual presentation of brand no. 2, Fevir.

Mean, median and standard deviation for the responses given in connection to the 12 personality items for Fevir of the visual questionnaire can be seen in table 14.9.

Item	Mean	Median	Standard Deviation
Stable	4.024242	4	1.282868
Simple	4.151515	4	1.48819
Sentimental	3.763636	4	1.738695
Romantic	3.836364	4	1.774793
Responsible	3.969697	4	1.389965
Ordinary	3.6	3	1.513355
Innovative	3.436364	3	1.60901
Dynamic	3.872727	4	1.380013
Down To Earth	4.024242	4	1.481395
Bold	2.575758	2	1.357686
Aggressive	1.945455	2	1.06642
Active	3.642424	4	1.301741

Table 14.9: Mean, median and standard deviation for responses given in connection to the visual expression of brand no. 2, Fevir.

## 14.6 Brand no. 3: Zeffi

Figure 14.12 shows results to the question "Brand no. 3 is X" where each of the design attributes is listed on the y-axis can be placed instead of X and the responses are shown by colors in percentage.

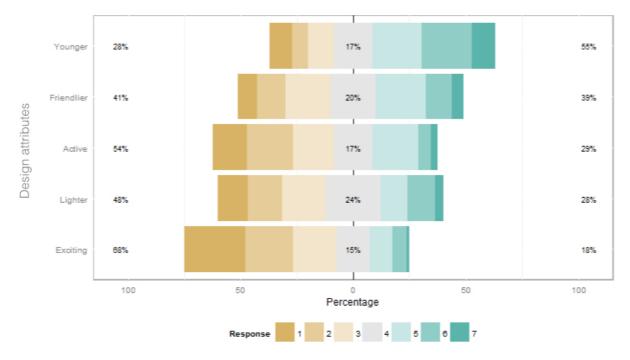
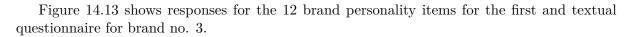


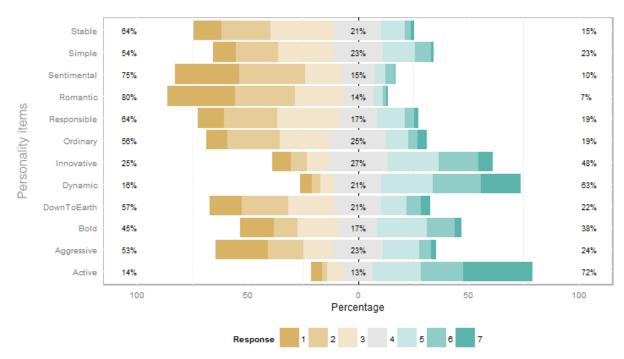
Figure 14.12: Responses to identity attributes for the design of Zeffi.

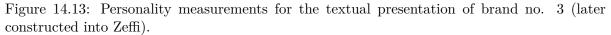
Mean, median and standard deviation for the responses given in connection to five design attributes of Zeffi can be seen in table 14.10.

$\mathbf{Item}$	Mean	Median	Standard Deviation
Younger	4.424242	5	1.777747
Friendlier	3.890909	4	1.611764
Active	3.357576	3	1.634056
Lighter	3.575758	4	1.664374
Exciting	2.824242	3	1.607723

Table 14.10: Mean, median and standard deviation for responses given in connection to the design of Zeffi.







Mean, median and standard deviation for the responses given in connection to the 12 personality items for Zeffi of the textual questionnaire can be seen in table 14.11.

Item	Mean	Median	Standard Deviation
Stable	3.096386	3	1.371701
Simple	3.385542	3	1.455034
Sentimental	2.518072	2	1.434311
Romantic	2.415663	2	1.317296
Responsible	3.144578	3	1.4366
Ordinary	3.325301	3	1.49835
Innovative	4.295181	4	1.619083
Dynamic	4.909639	5	1.617414
Down To Earth	3.307229	3	1.628033
Bold	3.710843	4	1.70582
Aggressive	3.180723	3	1.685191
Active	5.277108	6	1.671967

Table 14.11: Mean, median and standard deviation for responses given in connection to the textual presentation of brand no. 3.

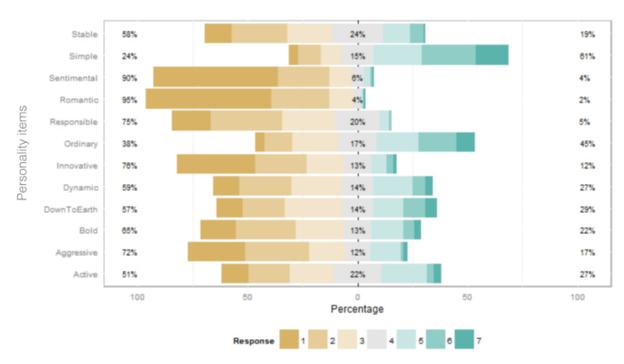


Figure 14.14 shows responses for the 12 brand personality items for the second and visual questionnaire for brand no. 3, Zeffi.

Figure 14.14: Personality measurements for the visual presentation of brand no. 3, Zeffi.

Mean, median and standard deviation for the responses given in connection to the 12 personality items for Zeffi of the visual questionnaire can be seen in table 14.12.

Item	Mean	Median	Standard Deviation
Stable	3.187879	3	1.442338
Simple	4.733333	5	1.707706
Sentimental	1.8	1	1.18012
Romantic	1.684848	1	1.016966
Responsible	2.642424	2	1.178835
Ordinary	4.193939	4	1.648713
Innovative	2.478788	2	1.536499
Dynamic	3.333333	3	1.601574
Down To Earth	3.50303	3	1.691529
Bold	3.09697	3	1.593524
Aggressive	2.690909	2	1.524668
Active	3.436364	3	1.547188

Table 14.12: Mean, median and standard deviation for responses given in connection to the visual expression of brand no. 3, Zeffi.

# 14.7 Brand no. 4: Gudox

Figure 14.15 shows results to the question "Brand no. 4 is X" where each of the design attributes is listed on the y-axis can be placed instead of X and the responses are shown by colors in percentage.

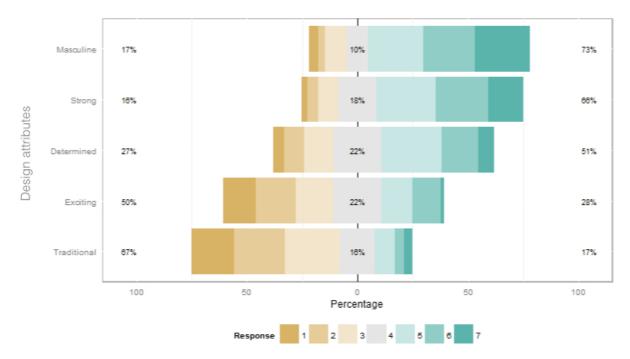


Figure 14.15: Responses to identity attributes for the design of Gudox.

Mean, median and standard deviation for the responses given in connection to five design attributes of Gudox can be seen in table 14.13.

Item	Mean	Median	Standard Deviation
Masculine	5.181818	5	1.62778
Strong	4.951515	5	1.497176
Determined	4.357576	5	1.54979
Exciting	3.478788	4	1.662308
Traditional	2.993939	3	1.583054

Table 14.13: Mean, median and standard deviation for responses given in connection to the design of Gudox.

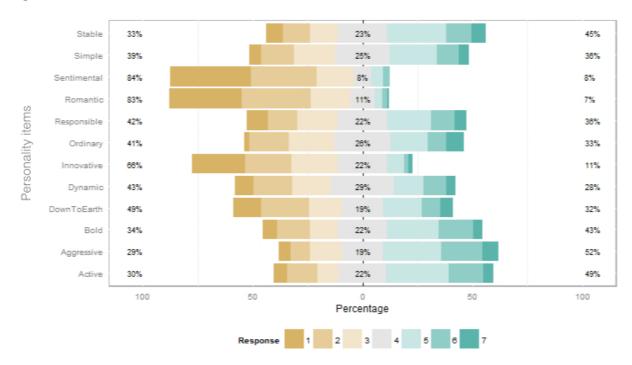


Figure 14.16 shows responses for the 12 brand personality items for the first and textual questionnaire for brand no. 4.

Figure 14.16: Personality measurements for the textual presentation of brand no. 4 (later constructed into Gudox).

Mean, median and standard deviation for the responses given in connection to the 12 personality items for Gudox of the textual questionnaire can be seen in table 14.14.

Item	Mean	Median	Standard Deviation
Stable	4.090361	4	1.624891
Simple	3.903614	4	1.522474
Sentimental	2.240964	2	1.331123
Romantic	2.301205	2	1.314119
Responsible	3.837349	4	1.641523
Ordinary	3.933735	4	1.537946
Innovative	2.813253	3	1.463103
Dynamic	3.686747	4	1.571933
Down To Earth	3.560241	4	1.742338
Bold	4.048193	4	1.606076
Aggressive	4.36747	5	1.592757
Active	4.186747	4	1.586326

Table 14.14: Mean, median and standard deviation for responses given in connection to the textual presentation of brand no. 4.

#### Chapter 14. Results

Figure 14.17 shows responses for the 12 brand personality items for the second and visual questionnaire for brand no. 4, Gudox.

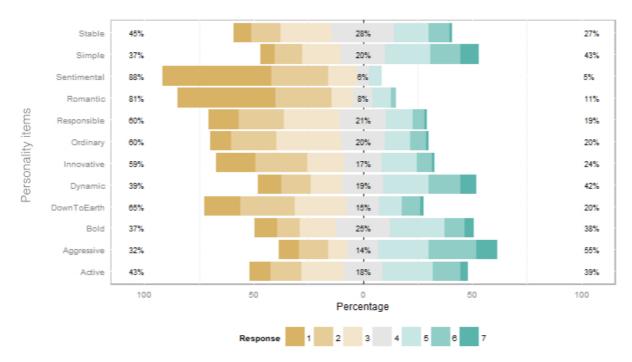


Figure 14.17: Personality measurements for the visual presentation of brand no. 4, Gudox.

Mean, median and standard deviation for the responses given in connection to the 12 personality items for Gudox of the visual questionnaire can be seen in table 14.15.

Item	Mean	Median	Standard Deviation
Stable	3.648485	4	1.421979
Simple	4.109091	4	1.67848
Sentimental	1.915152	2	1.165594
Romantic	2.175758	2	1.422603
Responsible	3.181818	3	1.457833
Ordinary	3.29697	3	1.423771
Innovative	3.145455	3	1.605078
Dynamic	3.975758	4	1.766737
Down To Earth	3.084848	3	1.559417
Bold	3.878788	4	1.580321
Aggressive	4.327273	5	1.825175
Active	3.830303	4	1.636565

Table 14.15: Mean, median and standard deviation for responses given in connection to the visual expression of brand no. 4, Gudox.

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This chapter dives into the analysis of the data presented in chapter 14. The analysis is carried out in a number of stages. The processing of the data was done using R project v. 3.0.2 (Frisbee Sailing).

Firstly, the data is checked for normality, as this is a requirement for some of the analyses which we intend to carry out afterwards. Afterwards, an evaluation of the extent to which the visual designs have communicated the values which served as stimulus in the first questionnaire. The main analysis consists of two parts. The first concerns itself with the equivalence between responses to the identity of a brand and the responses to the image of brands presented visually. The second part investigates a comparison between two brands from the same category in order to check for *Category confusion effect*.

Finally, potential influences from the knowledge of existing brands are investigated. This is based on the comments from the participants of the second questionnaire.

# 15.1 Normally distributed data

The collected data is plotted as QQ-plots to look at whether the subsets each are normally distributed. 20 QQ plots for the design attributes and 96 QQ-plots for all 12 brand personality items for both textual and visual versions of the four cases, can be seen in appendix J. Whether a data subsets is judged to be normally distributed is an evaluation done by the authors. The reason for looking for normality is due to requirements of this in the statistically tests to come.

A "+" symbol indicate that data is viewed as normally distributed and a "-" symbol indicates that data is not viewed as normally distributed. An overview for the design attributes of the four brand designs can be seen in tables 15.1 to 15.4. An overview of normality in the evaluation given in connection with personality items for each of the four brand cases can be seen in table 15.5.

# MasculineComfortableRested+++ Wealth

Table 15.1: Overview of whether data for attributes of Konup design is normally distributed.

#### More feminine Friendlier Relaxing Elegance Weaker

+ + + +

Table 15.2: Overview of whether data for attributes of Fevir design is normally distributed.

YoungerFriendlierActiveLighterExciting+++++

+

Table 15.3: Overview of whether data for attributes of Zeffi design is normally distributed.

#### Strong Determined Exciting Traditional Masculine

+

Table 15.4: Overview of whether data for attributes of Gudox design is normally distributed.

	Case	1: Konup	Case	2: Fevir	Case	3: Zeffi	Case	4: Gudox
Item	Text	Visual	Text	Visual	Text	Visual	Text	Visual
Down to earth	—	—	+	+	+	+	+	+
Stable	+	+	+	+	+	+	+	+
Responsible	+	+	+	+	+	_	+	+
Active	+	+	+	+	+	+	+	+
Dymanic	+	+	+	+	+	+	+	+
Innovative	+	+	+	+	—	—	+	+
Aggressive	+	+	_	_	+	+	+	+
Bold	+	+	+	_	+	+	+	+
Ordinary	—	+	+	+	+	+	+	+
Simple	+	+	+	+	+	_	+	+
Romantic	_	_	+	+	+	_	+	_
Sentimental	_	_	_	+	—	_	+	-

Table 15.5: Overview of whether data is normally distributed. A "+" symbol indicate that data is viewed as normally distributed and a "-" symbol indicates that data is not viewed as normally distributed.

As it can be seen from "-" symbols in the tables 15.1 to 15.5, there were found 23 cases of non-normality out of the 116 data subsets. However, given the amount of data points, either 166 or 165 in each subset, it can be argued, that the data can be considered as normally distributed. This can be done due to assumption of the Central Limit Theorem.

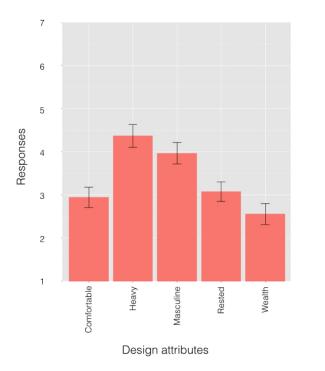
"Given random and independent samples of N observations each, the distribution of sample means approaches normality as the size of N increases, regardless of the shape of the population distribution." Mordkoff (2011, p. 2).

Mordkoff (2011) goes on to state, that normality can as a rule of thumb be assumed when sample size are bigger than 30. Given the much larger sample size and merely 23 out of 116 subset were found to have non-normal distribution, it is decided to include all of the data in the following analysis. However, a need for caution is appropriate when drawing conclusions based on the findings from data subsets for which normality is not fully justified.

# 15.2 Evaluation of designs

The first step in this analysis is to look at whether the created designs, have been perceived as intended. As part of the visual questionnaire, participants was asked to evaluate the visual expression of each brand on the attributes which were the basis for the individual designs.

In order to get a more detailed view into the attribute data, means and 95% confidence intervals for each design and their appurtenant attributes is shown in figures 15.1 to 15.4.



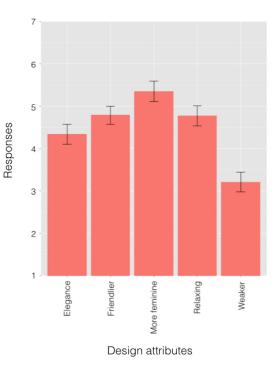


Figure 15.1: Mean and confidence interval of 95% for the Konup design.

Figure 15.2: Mean and confidence interval of 95% for the Fevir design.

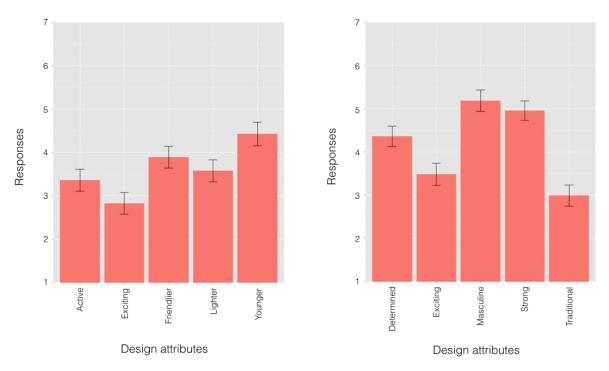


Figure 15.3: Mean and confidence interval of 95% for the Zeffi design.

Figure 15.4: Mean and confidence interval of 95% for the Gudox design.

A one-tailed unpaired t-test could give insight into which attributes have been reflected in the designs in an appropriate degree. Therefore, there is a need for us to select value on the scale where anything above it, the responses indicate that a attribute is reflected satisfactory in the designs. Based on the previously description of what the different scale-values are seen as, we have selected 4 as the mean value to compare against in the t-tests.

Based on this,  $H_0$  for each test is that mean is below 4. By using t-tests, it is possible to reject  $H_0$  and argue for means being significantly above 4, indicating an attribute is reflected in a design, which is in our interest. The  $\alpha$  level is set at 0.05, meaning that any p-values under this indicates a significant difference.

#### 15.2.1 Konup design

Table 15.6 shows results of t-tests conducted on Konup.

Attribute	t-value	$\mathbf{d}\mathbf{f}$	p-value	$\mathbf{Result}$
Comfortable	-8.893	164	1	Not significant
Heavy	2.7573	164	0.003244	Significant
Masculine	-0.2865	164	0.6126	Not significant
Rested	-8.1403	164	1	Not significant
Wealth	-11.7369	164	1	Not significant

Table 15.6: Results from a one-sided t-test testing to see whether means for each attribute of Konup are above 4, at an  $\alpha$ -level of 0.05.

For Konup, mean for one attribute, *Heavy* is significant, thereby considered reflected in the design, and four (*Masculine*, *Comfortable*, *Rested* and *Wealth*) are not.

#### 15.2.2 Fevir design

Attribute	t-value	$\mathbf{d}\mathbf{f}$	p-value	Result
Elegance	2.8307	164	0.002613	Significant
Friendlier	7.319	164	5.296e-12	Significant
More feminine	11.2634	164	2.2e-16	Significant
Relaxing	6.4676	164	5.478e-10	Significant
Weaker	-6.7785	164	1	Not significant

Table 15.7 shows results of t-tests conducted on Fevir.

Table 15.7: Results from a one-sided t-test testing to see whether means for each attribute of Fevir are above 4, at an  $\alpha$ -level of 0.05.

Fevir is the design that successfully reflects most attributes; four out of five means are significantly higher than 4. Attributes *More feminine, Friendlier, Relaxing* and *Elegance* are reflected in the design in the desired amount, whereas attribute *Weaker* falls short.

#### 15.2.3 Zeffi design

Table 15.8 shows results of t-tests conducted on Zeffi.

Attribute	t-value	$\mathbf{d}\mathbf{f}$	p-value	$\mathbf{Result}$
Active	-5.0501	164	1	Not significant
Exciting	-6.7785	164	1	Not significant
Friendlier	-0.8694	164	0.8071	Not significant
Lighter	-3.2742	164	0.9994	Not significant
Younger	3.0654	164	0.001271	Significant

Table 15.8: Results from a one-sided t-test testing to see whether means for each attribute of Zeffi are above 4, at an  $\alpha$ -level of 0.05.

Where Fevir succeeded in reflecting the intended attributes, Zeffi does as poorly as Konup with only the mean of one attribute (*Younger*) being significantly higher than 4. The remaining four (*Friendlier, Active, Lighter* and *Exciting*) did not succeed in gaining means significantly higher than 4.

#### 15.2.4 Gudox design

Table 15.9 shows results of t-tests conducted on Gudox.

Attribute	t-value	$\mathbf{d}\mathbf{f}$	p-value	$\mathbf{Result}$
Determined	2.9637	164	0.001746	Significant
Exciting	-4.0276	164	1	Not significant
Masculine	9.326	164	2.2e-16	Significant
Strong	8.1637	164	4.092e-14	Significant
Traditional	-8.1634	164	1	Not significant

Table 15.9: Results from a one-sided t-test testing to see whether means for each attribute of Gudox are above 4, at an  $\alpha$ -level of 0.05.

For Gudox, three attributes (*Masculine, Strong* and *Determined*) are viewed as being reflected in the design and the remaining two attributes *Exciting* and *Traditional* does not have significantly higher means than 4. From the t-tests of the four designs and each their appurtenant attributes, it is found that for Konup 1 of 5 (20%), for Fevir 4 of 5 (80%), for Zeffi 1 of 5 (20%) and for Gudox 3 of 5 (60%) of the attributes were found to be reflected in the designs.

# 15.3 Comparison of identity and image measurements

The goal of this study is to investigate whether the values of a brand can be expressed through visual aspects. The measurements of identity, the intended values, and the image, the perceived values through visual expression, are compared to uncover this. The goal is to be able to determine that these two values are equivalent, i.e. the response to the imagined branded product is the same as the response to a visual representation of the branded product.

In order to argue for the equivalence of two samples,  $H_0$  is to consider two samples to be dissimilar and then reject it. This is in effect the opposite of traditional testing where  $H_0$  is that two samples are similar. Failing to reject something as similar is however not in itself an argument for it actually being similar. This method is often used in medical research, where it there may be a need to argue for the noninferiority of a new drug compared to an established one (Streiner, 2003), i.e. difference within a certain margin is considered negligible. For this purpose a Two One-Sided T-test (TOST) is used. If the 90% confidence interval, corresponding to an  $\alpha$ -level of .05, of a t-test is contained within a predefined interval ( $-\epsilon$  to  $\epsilon$ ),  $H_0$  is rejected and the two samples are deemed to be equivalent. This is illustrated in the following quote:

"First, rather than saying that the 2 means (or proportions, or whatever parameter we're interested in) have to be absolutely identical, we establish an equivalence interval within which we would say that the groups are "close enough." " Streiner (2003, p. 757).

The margins of what is considered equivalent depends on past experience, the circumstance of the experiment, the scales used and the discretion of the person analysing the data. Given that no past experience, to our knowledge, regarding a suitable  $\epsilon$  interval exists, the decision is based on considerations related to the way the data was collected. Based on the Likert-scales used, it was decided to define  $\epsilon$  as 1, leading to an equivalence interval of -1 to 1. Given the absence of a more robust basis for choosing the interval, a shift in 1 on a 7-point scale appears as a choice which will allow for some variation between the responses while not allowing for sizeable shifts along the scale.

For the following tables, p-values below 0.05 indicate that the responses for identity and visual expression can be seen as equivalent. The confidence intervals presented give a similar indication if it does not extend beyond the selected  $\epsilon$  interval of -1 to 1. A p-value above 0.05 means that H<sub>0</sub> can not be rejected and it is not justified to consider the responses to be equivalent.

# 15.3.1 Brand no 1: Konup

The means and confidence interval of 95% of the responses for brand identity and the visual expression of brand no. 1 (Konup) can be seen in figure 15.5. Whether participants evaluated identity and visual expression of brand no. 1 significantly equivalent on the 12 items from Geuens et al. (2009) can be seen in table 15.10.

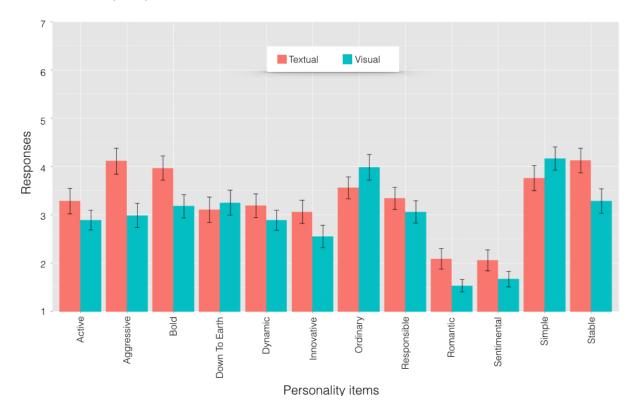


Figure 15.5: Mean and confidence interval of 95% for textual responses for brand 1 and responses for the visually presented Konup chocolate bar.

Item	Conf. interval	P-value	$\mathbf{Result}$
Down-to-earth	$-0.4535500 \ 0.1613996$	3.288017e-06	Equivalent
Stable	$0.5358681 \ 1.1353987$	0.1832096	Not equivalent
Responsible	$0.01286131 \ 0.55267355$	7.875146e-06	Equivalent
Active	$0.1118113 \ 0.6726356$	0.0002025059	Equivalent
Dynamic	$0.03301059 \ 0.57078641$	1.219794e-05	Equivalent
Innovative	$0.2288088 \ 0.7886428$	0.002022697	Equivalent
Aggressive	$0.8213165 \ 1.4319146$	0.7528016	Not equivalent
Bold	$0.4980891 \ 1.0781066$	0.1144869	Not equivalent
Ordinary	-0.7205744 $-0.1346283$	0.0006994809	Equivalent
Simple	-0.7019300 -0.1072705	0.0005308822	Equivalent
Romantic	$0.3521431 \ 0.7619132$	0.000212308	Equivalent
Sentimental	$0.1632947 \ 0.6117327$	4.713738e-06	Equivalent

Table 15.10: Results of a TOST comparing the textual responses for brand 1 and responses for the visually presented Konup chocolate bar.

# 15.3.2 Brand no. 2: Fevir

The means and confidence interval of the responses for brand identity and the visual expression of brand no. 2 (Fevir) can be seen in figure 15.6. Whether participants evaluated identity and visual expression of brand no. 2 significantly equivalent on the 12 items from Geuens et al. (2009) can be seen in table 15.11.

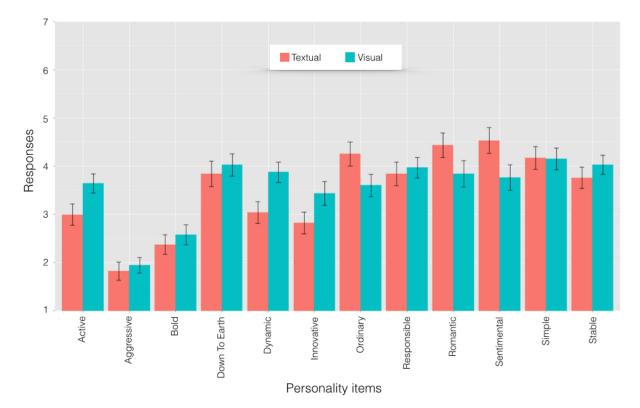


Figure 15.6: Mean and confidence interval of 95% for textual responses for brand 2 and responses for the visually presented Fevir shampoo.

Item	Conf. interval	P-value	$\mathbf{Result}$
Down-to-earth	$-0.4718444 \ 0.1101066$	2.493435e-06	Equivalent
Stable	-0.51489657 $-0.01551599$	9.40791e-07	Equivalent
Responsible	$-0.3983127 \ 0.1456657$	1.081466e-07	Equivalent
Active	-0.8982798 - 0.3986168	0.0104474	Equivalent
Dynamic	-1.0968552 $-0.5763102$	0.1505568	Not equivalent
Innovative	-0.8911510 $-0.3309739$	0.01131239	Equivalent
Aggressive	$-0.32892476 \ 0.08861808$	1.000242e-11	Equivalent
Bold	$-0.44778572 \ 0.04325852$	7.868013e-08	Equivalent
Ordinary	$0.3676800 \ 0.9383441$	0.02284153	Equivalent
Simple	$-0.2588552 \ 0.2931743$	5.224538e-09	Equivalent
Romantic	$0.2870068 \ 0.9077359$	0.01655165	Equivalent
Sentimental	$0.4508058 \ 1.0821624$	0.1116354	Not equivalent

Table 15.11: Results of a TOST comparing the textual responses for brand 2 and responses for the visually presented Fevir shampoo.

# 15.3.3 Brand no. 3: Zeffi

The means and confidence interval of 95% the responses for brand identity and the visual expression of brand no. 3 (Zeffi) can be seen in figure 15.7. Whether participants evaluated identity and visual expression of brand no. 3 significantly equivalent on the 12 items from Geuens et al. (2009) can be seen in table 15.12.

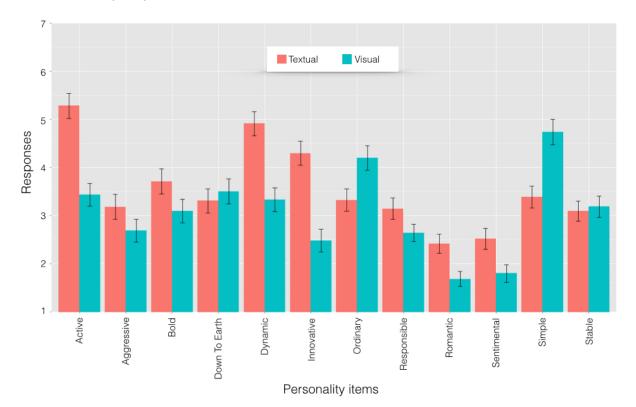


Figure 15.7: Mean and confidence interval of 95% for textual responses for brand 3 and responses for the visually presented Zeffi chocolate bar.

Item	Conf. interval	P-value	Result
Down-to-earth	$-0.4968438 \ 0.1052410$	7.122979e-06	Equivalent
Stable	$-0.3467302 \ 0.1637437$	5.295725e-09	Equivalent
Responsible	$0.2639229 \ 0.7403853$	0.0003211256	Equivalent
Active	$1.548691 \ 2.132799$	0.9999985	Not equivalent
Dynamic	$1.284456 \ 1.868154$	0.9993788	Not equivalent
Innovative	$1.530215 \ 2.102571$	0.9999981	Not equivalent
Aggressive	$0.1984648 \ 0.7811628$	0.002064603	Equivalent
Bold	$0.3145928 \ 0.9131546$	0.01703424	Equivalent
Ordinary	-1.1543417 $-0.5829346$	0.2243698	Not equivalent
Simple	-1.635546 - 1.060037	0.9764892	Not equivalent
Romantic	$0.5174785 \ 0.9441498$	0.01909553	Equivalent
Sentimental	$0.4799630 \ 0.9561816$	0.02583394	Equivalent

Table 15.12: Results of a TOST comparing the textual responses for brand 3 and responses for the visually presented Zeffi chocolate bar.

# 15.3.4 Brand no. 4: Gudox

The means and confidence interval of 95% of the responses for brand identity and the visual expression of brand no. 4 (Gudox) can be seen in figure 15.8. Whether participants evaluated identity and visual expression of brand no. 4 significantly equivalent on the 12 items from Geuens et al. (2009) can be seen in table 15.13.

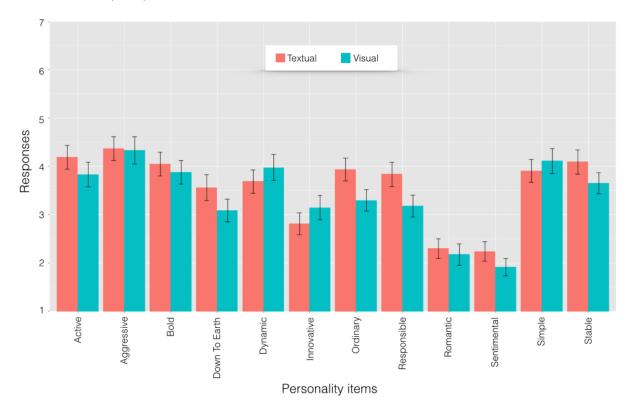


Figure 15.8: Mean and confidence interval of 95% for textual responses for brand 1 and responses for the visually presented Gudox shampoo.

Item	Conf. interval	P-value	Result
Down-to-earth	$0.1756205 \ 0.7751645$	0.002076362	Equivalent
Stable	$0.1650630 \ 0.7186902$	0.0004912151	Equivalent
Responsible	$0.3740752 \ 0.9369873$	0.02216131	Equivalent
Active	$0.06419006 \ 0.64869786$	0.0001629059	Equivalent
Dynamic	$-0.59229219 \ 0.01427101$	6.654776e-05	Equivalent
Innovative	-0.61072243 $-0.05368064$	4.695936e-05	Equivalent
Aggressive	$-0.2704865 \ 0.3508808$	2.957932e-07	Equivalent
Bold	$-0.1194924 \ 0.4583022$	1.57577e-06	Equivalent
Ordinary	$0.3680690 \ 0.9054615$	0.01321621	Equivalent
Simple	$-0.49608695 \ 0.08513404$	4.533903e-06	Equivalent
Romantic	$-0.1229074 \ 0.3738019$	7.4728e-09	Equivalent
Sentimental	$0.09898551 \ 0.55263917$	7.480292e-07	Equivalent

Table 15.13: Results of a TOST comparing the textual responses for brand 4 and responses for the visually presented Gudox shampoo.

# 15.3.5 Overview

Item	Brand no. 1: Konup	Brand no. 2: Fevir	Brand no. 3: Zeffi	Brand no. 4: Gudox
Down-to-earth	Equivalent	Equivalent	Equivalent	Equivalent
Stable	Not equivalent	Equivalent	Equivalent	Equivalent
Responsible	Equivalent	Equivalent	Equivalent	Equivalent
Active	Equivalent	Equivalent	Not equivalent	Equivalent
Dynamic	Equivalent	Not equivalent	Not equivalent	Equivalent
Innovative	Equivalent	Equivalent	Not equivalent	Equivalent
Aggressive	Not equivalent	Equivalent	Equivalent	Equivalent
Bold	Not equivalent	Equivalent	Equivalent	Equivalent
Ordinary	Equivalent	Equivalent	Not equivalent	Equivalent
Simple	Equivalent	Equivalent	Not equivalent	Equivalent
Romantic	Equivalent	Equivalent	Equivalent	Equivalent
Sentimental	Equivalent	Not equivalent	Equivalent	Equivalent

An overview of the results for all 12 items for the four brands can be seen in table 15.14.

Table 15.14: Combined view of the results of TOST for all four brands on all 12 items.

As can be seen in table 15.14, for the four brands, the majority of the comparisons results in verdict of equivalence between responses for identity and perception of visual expression. For brand no. 1, Konup, 9 of 12 (75%), for brand no. 2, Fevir, 10 of 12 ( $\sim$ 83.33%), for brand no. 3, Zeffi, 7 of 12 ( $\sim$ 53.33%) and for brand no. 4 Gudox, 12 of 12 (100%) were found to be equivalent.

# 15.4 Comparison of within category measurements

As part of the analysis of the collected data, there's an interest in uncovering if there is a significant difference between the evaluations of two products within the same category, e.g. do the evaluations of the two shampoos differ from each other. Based on this,  $H_0$  for each test is that two samples are similar. By using t-tests, it is possible to reject  $H_0$  and argue for a significant difference between two samples, which is in our interest. The t-test run are unpaired. The  $\alpha$  level is set at 0.05, meaning that any p-values under this indicates a significant difference.

# 15.4.1 Comparison of responses to text based evaluation

The responses to the first questionnaire are based on the brands which users were able to envision based on the five words which they were provided with, as well as a product category. These are here analysed in order to asses if these imagined brands can be said to be significantly different from each other. By doing this we look into whether the identities of the brands, people were asked to envision, did influence the evaluations enough to determine that they are significantly different. The comparisons are carried out within each category. Means and confidence intervals for the textual responses given in connection to chocolate brands can be seen in figure 15.9. A Welch t-test have been used to analysis the differences. Results from this is shown in table 15.15.

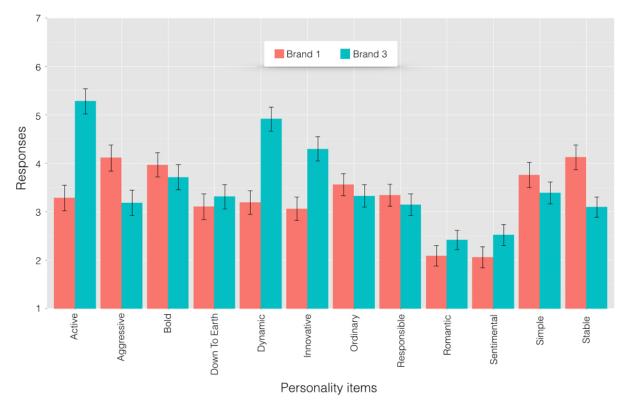


Figure 15.9: Mean and confidence interval of 95% for comparing responses to each item for the two text representations of the **chocolate** brands.

Item	t-value	$\mathbf{d}\mathbf{f}$	p-value	$\mathbf{Result}$
Down-to-earth	-1.1172	329.181	0.2647	Not significant
Stable	6.1156	318.318	2.816e-09	Significant
Responsible	1.2453	329.807	0.2139	Not significant
Active	-10.6566	329.524	$<\!\!2.2e-16$	Significant
Dynamic	-9.7752	329.93	$<\!\!2.2e-16$	Significant
Innovative	-7.0354	329.793	1.154e-11	Significant
Aggressive	4.9332	329.652	1.285e-06	Significant
Bold	1.3851	329.154	0.167	Not significant
Ordinary	1.3951	329.993	0.1639	Not significant
Simple	2.1512	322.369	0.03221	Significant
Romantic	-2.2053	329.495	0.02812	Significant
Sentimental	-2.9254	329.953	0.003678	Significant

Table 15.15: Results from a Welch's t-test comparing responses to each item for the two text representations of the **chocolate** brands, at an  $\alpha$ -level of 0.05.

Means and confidence intervals for the textual responses given in connection to shampoo brands can be seen in figure 15.10. A Welch t-test have been used to analysis the differences. Results from this is shown in table 15.16.

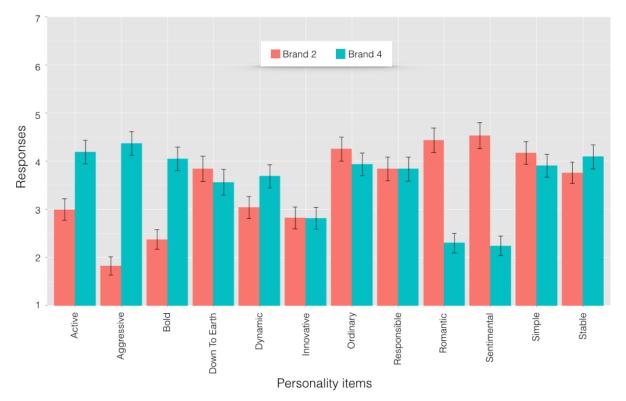


Figure 15.10: Mean and confidence interval of 95% for comparing responses to each item for the two text representations of the **shampoo** brands.

Item	t-value	$\mathbf{d}\mathbf{f}$	p-value	$\mathbf{Result}$
Down-to-earth	1.4901	329.943	0.1371	Not significant
Stable	-1.9509	326.543	0.05192	Not significant
Responsible	0.0338	329.813	0.973	Not significant
Active	-7.1502	327.378	5.689e-12	Significant
Dynamic	-3.8715	329.033	0.0001305	Significant
Innovative	0.0747	329.971	0.9405	Not significant
Aggressive	-16.2721	310.255	$<\!\!2.2e-16$	Significant
Bold	-10.2832	320.544	$<\!\!2.2e-16$	Significant
Ordinary	1.8345	328.848	0.06748	Not significant
Simple	1.569	329.847	0.1176	Not significant
Romantic	13.0473	314.611	$<\!\!2.2e-16$	Significant
Sentimental	13.4475	308.605	$<\!\!2.2e-16$	Significant

Table 15.16: Results from a Welch's t-test comparing responses to each item for the two text representations of the **shampoo** brands, at an  $\alpha$ -level of 0.05.

As can be seen in table 15.15 regarding the two chocolate brands, there is a significant difference in the responses for 8 of 12 items ( $\sim 66.67$  %) between the two brand identities in the chocolate category. For the shampoo category, table 15.16, the difference is significant in 6 of 12 cases (50%).

#### 15.4.2 Comparison of responses to visual based evaluation

A similar within category comparison is carried out on the responses to the questionnaire where a visual expression of the branded products were provided. The reason for this comparison is to asses if there is a significant difference between the products within each category.

Means and confidence intervals for the visual responses given in connection to chocolate brands can be seen in figure 15.11. A Welch t-test have been used to analysis the differences. Results from this is shown in table 15.17.

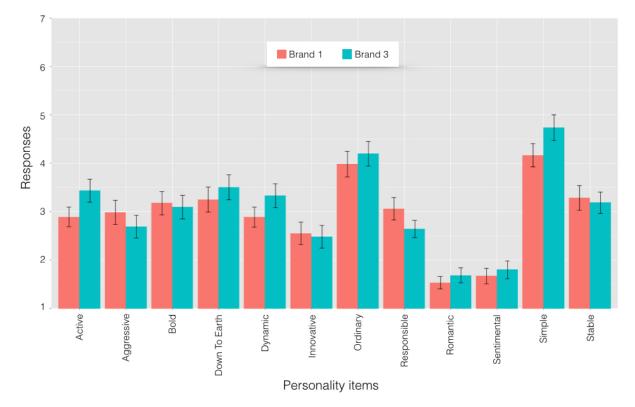


Figure 15.11: Mean and confidence interval of 95% for comparing responses to each item for the two visual representations of the **chocolate** brands.

Item	t-value	$\mathbf{d}\mathbf{f}$	p-value	$\mathbf{Result}$
Down-to-earth	-1.3715	327.984	0.1711	Not significant
Stable	0.5701	322.688	0.569	Not significant
Responsible	2.81	310.216	0.005269	Significant
Active	-3.4343	320.761	0.0006722	Significant
Dynamic	-2.739	319.843	0.006507	Significant
Innovative	0.434	327.883	0.6646	Not significant
Aggressive	1.6771	326.682	0.09448	Not significant
Bold	0.4514	327.965	0.652	Not significant
Ordinary	-1.1401	327.24	0.2551	Not significant
Simple	-3.1469	325.987	0.001802	Significant
Romantic	-1.4877	314.324	0.1378	Not significant
Sentimental	-1.0459	321.701	0.2964	Not significant

Table 15.17: Results from a Welch's t-test comparing responses to each item for the two visual representations of the **chocolate** brands, at an  $\alpha$ -level of 0.05.

Means and confidence intervals for the visual responses given in connection to shampoo brands can be seen in figure 15.12. A Welch t-test have been used to analysis the differences. Results from this is shown in table 15.18.

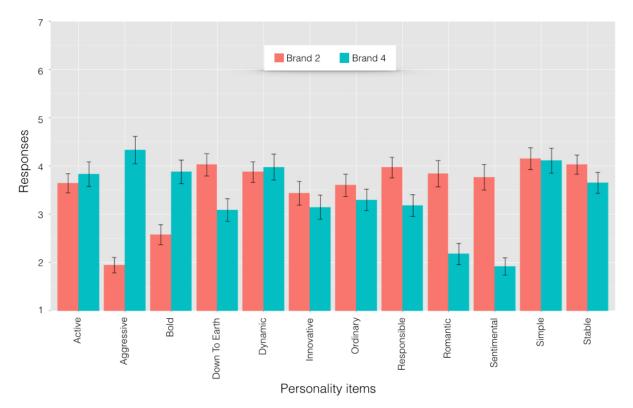


Figure 15.12: Mean and confidence interval of 95% for comparing responses to each item for the two visual representations of the **shampoo** brands.

Item	t-value	$\mathbf{d}\mathbf{f}$	p-value	$\mathbf{Result}$
Down-to-earth	5.6101	327.14	4.31e-08	Significant
Stable	2.5203	324.584	0.01221	Significant
Responsible	5.0244	327.257	8.324e-07	Significant
Active	-1.1541	312.198	0.2493	Not significant
Dynamic	-0.5903	309.834	0.5554	Not significant
Innovative	1.6442	327.998	0.1011	Not significant
Aggressive	-14.4733	264.287	$<\!\!2.2e-16$	Significant
Bold	-8.0337	320.717	1.823e-14	Significant
Ordinary	1.8733	326.786	0.06191	Not significant
Simple	0.2429	323.363	0.8082	Not significant
Romantic	9.378	313.164	$<\!\!2.2e-16$	Significant
Sentimental	11.3433	286.638	$<\!\!2.2e-16$	Significant

Table 15.18: Results from a Welch's t-test comparing responses to each item for the two visual representations of the **shampoo** brands, at an  $\alpha$ -level of 0.05.

As can be seen in table 15.17, for 4 of 12 items ( $\sim 33.33$  %), there is a significant difference in the responses between the two brand identities in the chocolate category. For the shampoo category, table 15.18, there is a significant difference in 7 of 12 cases ( $\sim 58.33\%$ ).

# 15.5 Considerations regarding familiarity

At the end of the visual questionnaire, participants were asked whether any of the presented brands seemed familiar. The reasoning behind this question can be found in section 13.5.2. After analysing the answers regarding familiarity, three brands or products were mentioned in connection to Konup, seven in connection to Fevir, five in connection to Zeffi and 11 brands or products were mentioned in connection to Gudox. Some of the participants mentioned more than one brand or product in relation to a brand case. In some cases participants, commented that the brand cases seemed familiar, but were unable to specify which real world brand or product might be the cause of this. All the brands mentioned in relation to familiarity to the created brand cases can be seen in appendix K.

To gain insight into whether the constructed brand cases reflected other brands, the most commonly mentioned brands or products for each brand case will now be presented. For Konup, two participants mentioned After Eight (pictured in figure 15.13) and two different participants made a connection between Konup and Stimorol (pictured in figure 15.14).



Figure 15.13: A box of After Eight was mentioned as familiar in relation to Konup (After Eight, 2014).



Figure 15.14: A pack of Stimorol Gum was mentioned as familiar in relation to Konup (Stimorol, 2014).

Three participants made a connection between Fevir and Head & Shoulders, some of them specified the Citrus Breeze edition of this brand, see figure 15.15.



Figure 15.15: Head and shoulders citrus breeze shampoo was mentioned as familiar in relation to Fevir (Head and Shoulders, 2014)

Four participants made a connection between Zeffi and Kit Kat, see figure F.14.



Figure 15.16: Kit Kat was mentioned as familiar in relation to Zeffi.

Six participants made a connection between the brand Hugo Boss and Gudox. Five others found Gudox to share similarity with the brand Axe. Since both of mentioned brands have a variety of products, figures 15.17 and 15.18 are included as product examples due to their resemblance to the Gudox design.





Figure 15.17: Hugo Boss Deep Red perfume for women mentioned as familiar in relation to Gudox (Hugo Boss Deep Red, 2014).

Figure 15.18: Axe deodorant was mentioned as familiar in relation to Gudox (Axe, 2014).

All in all, a low number of existing brands and products were mentioned as being similar to the brands constructed in this study. This is seen as an indication that the designed brand cases did not inadvertently focus on the same visual aspects as existing products. Therefore, the responses given are not predominantly influenced by something beyond our control.

However, due to mentions of the brand cases seeming familiar without being able to give a name of a specific brand, may indicate that the constructed brand cases and the unnamed brands share more of an brand image connection than a similarity in design. With these two observations, we view our design as being close to what already exists, but not copies of any known brands. This can be seen as an indication that the constructed brands are not unrealistic representations. Among the comments given to whether the brand cases seemed familiar, some participants mentioned the visual presentations reminded them of alternative product categories. All of these are listed in table 15.19.

Konup	No.	Fevir	No.	Zeffi	No.	Gudox	No.
Gum	3	Deodorant	1	Gum	5	Deodorant	12
Battery	2	and perfume		Battery	2	and perfume	
Cleaning products	1			Children's toy	2		
Beverages	1						

Table 15.19: A list of product categories other than the intended that the participants mentioned in connection to the brand cases.

Given these alternative product categories, we can extract different observations for each of the brand cases and general ones for the product categories. With the two chocolate cases, Konup and Zeffi, it seems as if the rectangular shape for some have lead thoughts over to gum packs and batteries. Additionally, for Konup something in the design lead two participants thoughts on to cleaning products and beverages, perceptively. Two other participants mentioned that Zeffi reminded them of children's toy, which we deem as positive given the intended identity behind Zeffi was meant as a children chocolate bar along with a minimal design that easily could be a range of different product categories.

The clearest consensus in alternative product categories is found with Gudox, where 12 participants stated that it looked like a perfume or deodorant. Only one made the same connection with Fevir. However, given that these product categories are quite close to the selected of shampoo and some brands produces series including shampoo, perfume, deodorant, lotion and etc. in similar design, we see this alternative product category for the shampoo brand cases as an extension of what was intended.

# Chapter 16



The two previous chapters focused on presenting and analyzing the responses given in connection to the two distributed questionnaires. In the following sections topics such as results, reliability of the results, whether the constructed designs succeed, whether the methods and procedure were suitable, where to go from here, etc. will be discussed. All this is held up against the two mission statements for this project. They are:

- 1. We want to investigate if it is possible to communicate the intended identity of a brand exclusively via visual design expressions.
- 2. If brands can be seen as having personalities, then measuring methods for brand personalities could be a way of investigating the first mission statement.

# 16.1 Comparison of identity and image

The main focus of this study is an investigation into the possibility of communicating a brand identity through various design means, and have this identity be perceived by a potential consumer. This is considered done if the perceived personality of a brand, the image, corresponds with the intended personality, the identity. Based on the personality measures proposed by Geuens et al. (2009), equivalence was found between an imagined brand, based on a certain number of attributes and a visual representation designed based on the same attributes.

For the two chocolate brands, equivalence between the identity and the visual representation of the brand measures were found for 9 of 12 items (75%) for *Konup* and for 7 of 12 items (~53.33%) for *Zeffi*. For the two shampoo brands, equivalence between the two measures were found for 10 of 12 items (~83.33%) for *Fevir* and for 12 of 12 items (100%) for Gudox. This is a clear indication, a greater success rate for expressing identity through visual design exists for the shampoo brands compared to the chocolate brands.

#### 16.1.1 Rendering and shape

A reason for this could be that the renderings and visual designs of the constructed brands simply appear less realistic for the chocolate brands, compared to the shampoo. Shampoo bottles are typically constructed of a rigid plastic, which has also been the basis for the attempted design. Additionally, during the rendering process, a matte plastic was selected as a rendering material for the shampoos. Chocolate wrappers, on the other hand, are mainly shaped by the content inside them. Furthermore wrappers are commonly made of a plastic foil that is constructed to be torn adapt. In the rendering process, a glossy solid plastic was used. This material has a more robust look, and thereby does not share the feel of "ready-to-tear-into", that one could argue that common chocolate wrappers have.

The shape of the constructed brand and an image of a chocolate could be another reason for the lesser equivalence. The constructed brands are done as if they were a uniform rectangle in a solid mass, whereas normal chocolate bar have varying shape and a texture to the top. This could have entail that a misalignment between what people image a chocolate bar to look like (in the identity based part) and the actual visual presentation, thereby potentially contributing to different responses. On the same train of thought, it is also plausible that the lack of "flaps" at each end along with the previously mentioned difference may have resulted in the constructed brands are simply not perceived as realistic. This may in turn have resulted in evaluations which do not correspond with those envisioned when the evaluations were given in the first questionnaire.

#### 16.1.2 Semantic understanding

Another potential explanation relates to the semantic meaning of words. One example of this is with case no. 2, Fevir. One of the words used to describe the shampoo is *weaker*. This can be understood as "fragile", "not strong", "not potent", "gentle" etc. The understanding of *weaker* which has served as a guiding line for the design may differ from the understanding which that participants of the experiment may have had. Furthermore, a different semantic understanding could be at the root of not finding equivalence for personality items within a factor. For instance with brand 1, Konup, two of the three non-equivalence findings are the two item (*Aggressive* and *Bold*) that are contained within the factor *Aggressiveness*. Similar patterns are seen with all of the non-equivalence finding connected with Zeffi. Here, no equivalence was found on the personality items for the factors *Active* and *Simplicity*. These differences may also have been due to a misalignment between what type of chocolate bar came to mind during the textual part and the visually presented one.

#### 16.1.3 Hedonism and recap

The lesser success rate of the chocolate cases could perhaps have been rooted in an inferior ability to convey brand personality. Perhaps a more individual understanding and preference of chocolates led to a higher degree of personal bias in the comprehension of textually identities than is presented with the shampoos. A difference between chocolate and shampoo in this aspects, may be due to more known stereotypes being a part of the shampoo marked whereas chocolates is possible more hedonic approach. Yet another option is whether it is possible in general to reliably communicate a personality solely through these design parameters. It is also a possibility that the skill which we possess may simply not have been adequate in doing so. Given that all of the brand cases have a percentage of equivalence above 50% and Gudox managed equivalence 100% of the time, we argue that there is elements such as semantic meaning, construction of designs, etc. that have a need for rigorous approach, but still that there is generally support for mission statements of the project.

# 16.2 Comparison within categories

While the comparisons between identity and image appear to support the notion that brand identity can be communicated through the applied design elements, caution should be taken. As part of the study, two products for each product category were created, and to an extend constructed so that they might serve has opposites in relation to the five factors proposed by Geuens et al. (2009). This enables us to further analyse if the satisfactory alignments between image and identity may in fact merely be traits which are inherent in the product categories. It is plausible that certain product categories in themselves carry an identity which will dominate any other attempt to sway the expression in a certain direction.

The possibility exists that while the constructed products may in fact have different identities, but that the difference between them are not extreme enough, or that the amount of data is not substantial enough to reveal a significant difference. It is conceivable that some aspects can simply not be expressed through the parameters which have been investigated in this study.

When constructing the identities, attention was given to choose attributes which were at either extreme of the factors (see table 11.12 on page 64). In some cases, this was not possible, as it would result in a lack of design guidelines or attributes from an opposite end of a factor would not contribute to a meaningful identity. Instead, attributes in the middle of the constructed spectrum were chosen. This may have resulted in brand identities which placed two cases in the same category close to each other and as such made it harder to detect any significant difference. For example, no significant different between the visual representations of chocolates were found for the measures *Romantic* and *Sentimental*. These measures belong to the *Emotionality* factor in the model proposed by Geuens et al. (2009). For this factor, an attribute which loaded as high was selected for Zeffi and an attribute which loaded as medium was selected for Konup.

While the method proposed by Geuens et al. (2009) has been shown to be robust for multiple categories, however only one brand from each category were included in these studies. Therefore, the method proposed by Geuens et al. (2009) may not have been delicate enough to pick up on more subtle difference between two brands within the same category. While a general model for brands is beneficial, when it comes to the finer details within a category, a more specific model may be advised.

# 16.3 Design of visual brands

Part of the first mission statement is whether it is possible to communicate identity of a brand through visual aspects. To evaluate whether it has been done in this project, the results of section 15.2 regarding if the intended attributes have been reflected in the constructed designs is looked at. The section showed that with varying success the designs had an acceptable presence of the indented attributes. Fevir being the most successful design with four out of five intended attributes, and Konup and Zeffi were least successful with only one intended attribute each. There can be many reasons for these findings. Among the primary are that we are not trained designers and with that comes a lack in design skills and idea processes, even though outside help has been provided by an industrial design engineer.

# 16.3.1 Amount of attributes

Another potential reason could be the intentional choice to include an attribute from each of the five factors presented by Geuens et al. (2009). Based on results, maybe five factors are too many to be clearly perceived through visual representation alone. In order to non-verbally communicate something consisting of five attributes, there is a need for a unity of them. This was striven towards in the construction of the brand cases. However, the findings from section 15.2 could suggest that this may not have been done to a satisfactory degree. We feel that these findings are mainly based on the choices made during the construction of the cases as well as the selected scope. Given that some amount of brand identity has been communicated through visual design alone, we view the designs as having been successful at communicating the desired identities. There is perhaps a need for simplifying and limiting the amount of attributes that are sought to be reflected in visual design in order to establish a clearer communication.

#### 16.3.2 Values connected to attributes

An alternative explanation for the cases of the attribute not being adequately reflected in the designs, is how the attributes are understood. We gathered the attributes from design related articles and have created our own understanding of them and later constructed brand identities based on these understandings, which in turn were made into the visual designs. However, it is not certain how the participants perceive the words and whether or not they endowed the same values into the attributes. An example of this can be given to the attribute *Weaker* from Fevir. In constructing the identity, we understood weaker as referring to the shampoo not being potent, i.e. that it was mild, but weaker does also have a negative accentuation in that not being able to do what it is suppose to, e.g. it may reflect a product of low quality.

In our investigation of color, there was not necessarily a clear meaning connected to each specific color. It would be beneficial to look further into this, as there may be category specific meanings to colors. A color which is suited for making a bank appear innovative, might not convey the same value for a clothing company or a brand of snacks for bodybuilders. Color is a powerful visual element, but it is plausible that it can only be used to express a general trend within a category, and may not be a robust signifier in general.

#### 16.3.3 Lacking abilities

The differing degrees of which the two product categories succeeded may be rooted in our design ability. In general in the evaluation of whether the intended attributes were reflected in the designs, the shampoo cases did better than the chocolate ones. Here, our lacking design abilities may have surfaced again. It could appear as if the chocolate shape design was not realistic enough, both as render and the coloring part. This can be seen in the comments given by participants in correlation with familiarity. Other product categories such as batteries and gum came into play in relation to the chocolate cases. This may be due to the choice of not including flaps and context or content illustrations, but we did not possess abilities to make a realistic version of this and the assisting industrial design engineer did not have the resources to construct something to that level of complexity. The shampoo designs did quite good with both amount of successfully attributes reflected and there seem to be a link between the intended product category and the mentioned familiar brands. When questioned about familiarity, all brands or products mentioned were in the personal care category; perfume, deodorant, hair wax, other shampoos etc.

# 16.3.4 Elements other than visual

Furthermore, the reason that some of the attributes were not reflected in the visual expression and a lesser degree of equivalence between image and identity was found, could be that some of the attributes and personality traits are better communicated by different means. In this project, the focus was limited to design, but it could be by including advertisements and beforehand knowledge of the brand, more information would be present to form a perception of the identity. This could maybe make the task of creating a meaningful connection between brand and personality items easier. The findings does not disregard the idea of visual expression being able of communicating brand personality. For further research, the brand concept as a whole could be included to see if it could provide a more nuanced view.

# 16.4 Wording of attributes

One element of this project that could be discussed is how the attributes for the designs found and presented. In some of the articles regarding brand personality, the authors comment on the fact that some personality traits or values are not suitable for brands. There is however no clear cut definition of which are or which are not. In most cases, the authors simply make a list of traits that he or she finds suitable for brands. This unclear differentiation made it difficult to base further work on, therefore it was decided to include all attributes presented throughout the design elements presentations as possible options to include in the constructing of brand identities. These were taken as they were presented in their original work. This means that some are presented in their root form of the word (e.g. light) and some had suffix (e.g. lighter). This made a difference in the words presented to the participants, that may have influence them to make comparisons between the brand cases. Could precautions have been taken to avoid this as a potential? Should the attributes have been unified to all consists of the root form of the word to not potential encourage comparison? In the end no unification was conducted on the words. This choice was made given the origins of the words. If a unification of the words had been introduced then we could not be sure whether the perception connected to a given design element would be the same as stated in the articles.

# 16.5 Process for finding categories and identities

There may have been more fitting methods for finding and constructing categories and attributes for the this study. More iterations with different participants could have been include in the identity process, so that the categorization and perceived loadings of the attributes were not based on three peoples understanding and perception of the words. It was selected not to include other people in the process of finding potential product categories, maybe some participants could have been included into the process in order to take a secondary view on the level of appropriateness of the categories? In the case of finding identities, given that the process took hours, we did not have time to repeat it multiple times. With the category process, we viewed that there were too many restrictions such as being without cultural limitations, something that would be understood by both genders, suited our graphical abilities, etc. to explain to participants other than us. For both process, we view the structured approaches as a outweighing strength and then some precautions may have to be taken before generalizing the findings to a broader conclusion. With it flaws, this have been the way that we have overcome creating unfamiliar brands so that they are still relatable to a general consumer.

# 16.6 Appropriate measuring method

A central part of the conducted study is the brand personality measuring method. Several articles were shown to have documented a connection between brands and being able to measure brand personalities in this way. However, we have not encountered any literature which made a connection between brand personality and the visual expression of a brand. In the referenced articles the included brands are commonly known brands that are only presented with a name. Participants had the chance to recall and evaluate the statement regarding the existence of a personality item. Given that it seems to be the first time brand personality measurements have been used for the purpose of looking into the communication ability of visual elements belonging to a brand, there is a need for discussing whether this was an appropriate choice.

#### 16.6.1 Measuring stick

Due to the findings from identity and image comparison, it seems that the 12 personality items as scales in some degree are capable of measuring the underlying personality. However, the scales are constructed to measure whole brands and not just parts of brands as is done in this project. So maybe some of the shortcomings in the equivalence and category comparison findings may be rooted in the scales not being as sensitive as needed for this measuring purpose. To overcome this in further studies, the Likert scale could be expanded to include more points or maybe even substituted with Visual Analog scales for a more detailed look into in which degree a personality item is present in a visual expression. The previous has focused on the scales for measuring brand personality, however for the visual questionnaire similar scales were used to gain insight into whether the design attributes of the identities had successfully been expressed through visual design. The same type of scale was selected based on the assumption that participants would gain an understanding of how to use that type of scale, making for a more consistent task. This may have entailed responses that only indicate a degree of presence. It could have been interesting to see if a scale that enable participants to give a negative response would have given different results in design success.

One aspects of the measuring method which can be questioned is whether the specific scales were understood as intended and whether the presentation of them were suitable for the situation. In the study conducted by Aaker (1997), participants were directly asked to imagine a brand as having a personality. Given that we did not state that the scales had any relation to personality items, it may be that the participants had a different understanding of them. However, given that the findings show remarkable results regarding similarly personality measures for brand identity and visual expression, we argue if there is any presence of such a misunderstanding, then it is insignificant enough to be canceled out by the amount of participants. Furthermore, the alternative understanding may have been the same in both questionnaire, thereby not having conflicting influences.

#### 16.6.2 Problems with wide distribution

There are many advantages to distributing a questionnaire as it was done in this study. A large of mount of data can be gathered without requiring laboratory settings, and a wider population can be reached. However, some problems arise from this choice as well. As mentioned earlier, there was a problem with some individuals inputting answers which were not given with a good intent. It is not possible to screen and ensure the validity of the data beyond what the participants themselves have reported. Secondly, the visual case designs were viewed on screens of different sizes, and it has not been possible to control the color calibration or the light levels of the environment in which the questionnaires were answered. Ideally, a study such as this would be carried out in a more tightly controlled environment, but given the time and resource constraints, the price paid for the large amount of data is considered worth it.

#### 16.6.3 Alternative approaches

In trying to avoid *Category confusion effect*, some precautions could have been taken in relation to the measuring method. It have been shown previously that responses for some of the personality items are the same for both products within a category. One way to overcome this in further investigations could be to measure brand personality solely on the product group in question. This could be done by asked participants to image what kind of personality the product category possessed. Thereby, there would be a baseline that potentially could be subtracted from a specific products measurements.

The study was conducted with quantitative data in mind, but it is plausible that more detail about the constructed cases and brand identities in general could be uncovered by repeating the study with a more qualitative approach. This could be done by collecting data through focus group interviews, where the intention is to establish what the perceived qualities of different design elements are, in relation to existing brands. With the same intention in mind, it could be by switching the two questionnaire out with workshops, focus groups or card sorting of brands, in accordance with values from the previously suggested focus group. There are of course others options as well, these are but a few.

# 16.7 Between subject design

Theoretical findings about the perception of brands revealed that there are personal and cultural differences. However, there are also arguments for a close to similar perception if opinions are given by different people within a uniform population. Based on this, along with it being more practical, it was decided that the questionnaires were distributed to different people in each round, a between subject design. However, in asking for mailing addresses at the end of the first questionnaire along with utilized both of ours social networks and platforms for both questionnaire, it is likely that some participants were part of both. Thereby, the study does potentially have two not clearly separate populations. This indicates that we may not be able to classify this experimental setup as a truly between subject design.

There is a possibility that people who have participated in both studies, may have remembered the brand identities from the first questionnaire and then have been able to constructed conceptual internal versions of the brands and were met by something other than expected. Though, even if there were only four brand cases and the questionnaires were distributed within a short amount of time of each other, there were 48 and 68 statements, perspectively for the first and second questionnaire, to evaluate on a 7 point Likert-scale. There is a possibility of remembered constructs, but we argue for the amount of combinations made it quite difficult to hold it all in mind.

If resources for two separate groups are present, two fully separate populations would have been preferred. The investigation of the participants (see section 14.2), does however reveal that to some extend, the groups can not be completely similar. For example, there is almost a 20% point difference in the amount of Danish participants of the two questionnaires. If the same experimental setup was to be used with two separate population, one could with greater certainty draw conclusions based on the findings due to a imagined lesser degree of personal differences such as semantic understanding and preferences.

With more resources, more realistic brands could be constructed, a large population could be found, and further studies could look into whether the idea of participants constructing understandings of a brand based on identity have an influence on a later perception of a visual expression of said identity.

# 16.8 Brands in vacuum

Throughout this project there have been focus on trying to take limited elements of a brand into the investigations. From the previously sections, it have been theorized that maybe there is a need for involving a greater amount of a brand, but is there a need for including other brands in ones reservations in drawing conclusions? This question have been brought on by another: Do brands exist in a vacuum? Will they not always be influenced and/or compared to other brands in similar categories? The presentation of what brands is in chapter 2 showed that they are in themselves quite complex concepts. Therefore, one could imagine that in order to understand a new brand, a easy way could be to compare it with existing ones. This could be a clever way for consumers to hold perception of numerous brands. In the context of this project, this could be seen as a disadvantage. Even though, we have tried to create brands to be individual, we have no way of knowing whether participants have made comparisons and been biased based on perceptions of other brands.

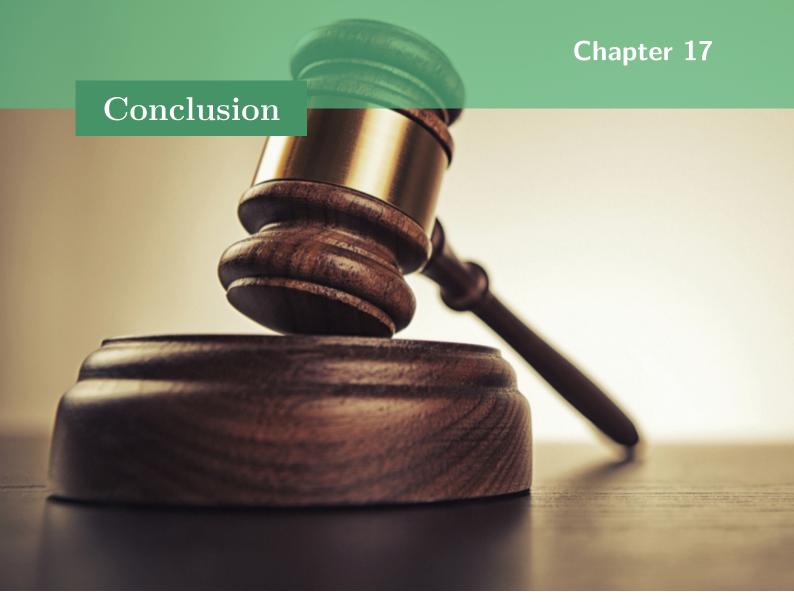
If this is an influence that is present in the collected data, we do not see a way of verifying it other than the already taken precautions of the question of familiarity. Furthermore, there is no way of knowing whether participants were unconsciously influenced by other brands. Therefore, we would argue that there is a possibility of interaction between perceptions of brands, but there is little to do in order to overcome, it given that it most likely is rooted in personal experience.

One way to maybe try to overcome it could be to look at similar study population in that aspects such as culture, profession, area of interest were close to the same. By doing this one could argue that it is likely that they have encounter similar brands and thereby can be seen as being biased in the same direction. Thereby, the influence could be minimizing due to the differences being insignificant.

# 16.9 Academia and the real world

This research conducted as a part of this project has been based on fictitious brands and identities in hope of being able to see connections more clearly. The last element to discuss is whether this have been a suitable choice. As can be seen from previous sections in this chapter, we have found that there is perhaps a need for including more elements in relation to a brand in order to gain enough information for consumers to construct a personality identity. Think of it as meeting new people. The first time you meet, you get a basic understanding of a person and as time goes by more is added and corrections are made. All in all, giving you a comprehensive understanding of who the person is. A similar experience could be had with a brand over time and through adverts, word of mouth, experience, etc.

Given the amount of effort and the discussion of the processes of construction the brand cases, creating brands that encompass more seems like an monumental task. Another way could have been to analysis existing brands and their visual expressions to find some that align with the found design theories. If this method is used in further studies, there is however other elements such as brand loyalty that should be taken into consideration. Some of the constructed designs were not as successful as hoped and some of the equivalence findings were iffy, maybe due to lacking insight into the brand, but all in all, we view our choice to construct our own brands suitable. This is based in the fact that by doing this we have had control over what kind of identities were created instead of having to guess attributes and identities of existing brands. This would in our eyes be a more questionable approach.



This study has included theoretical considerations from a number of fields with their own relation to the visual aspects and branding. Attempting to make meaning of the diverse knowledge and marry it in a coherent way has not been an easy task.

Given the sizable amount of knowledge which has been gained about the meaning of color, the expressions evoked by the dynamics of typefaces etc., it seems highly unlikely that these aspects would not have any influence in a branding context.

Personality, and brand specific measures of it, has been used as the main measuring stick. It would be beneficial to investigate if a specific identifiable personality of a brand requires that a consumer has a more in depth experience over time with a product belonging to the brand.

Our results show that it is possible to construct brands with personalities and that people are able to recognize them in a number of cases. This supports both of our mission statements. Firstly, in whether it is possible that brand identity could be expressed through visual design and secondly in that brand personality measurements can be used to investigate this.

The clear separation, which we were hoping for within product categories, was not reached as well as intended. However, we feel that we have arrived at a theoretical foundation and structured process which could serve as a good framework for those who are more experienced with the visual design of products and the branding concept as a whole. We consider this thesis to be the first step towards a new way of designing brands. While the study is limited, a number of new paths lie open for further investigation and research. We have chosen to only concern ourselves with unknown brands, but a large and more complex study might be able to uncover more subtle trends about the perception of new as well as existing brands and their personalities. Furthermore, gaining an understanding of how humans perceive and interact with brands, and the knowledge of how these behaviors can be considered, is an avenue of research which is both interesting and promising.

# **Illustration references**

In this appendix, web soruces for the image material used in the frontpage and each of the chapter illustration is listed.

# Frontpage

Image from http://www.cutlergrp.com/wp-content/uploads/2014/04/iStock\_000020203950Large.jpg, accessed on the 19th of May, 2014.

# **Chapter 1: Introduction**

First image on http://www.indiciadesign.com/thoughts/take-a-taste-of-safeways-snack-brand/, accessed on the 24th of March, 2014.

# Chapter 2: What is branding?

The 13th image in the carousel at the top of http://www.startribune.com/local/230296131. html, accessed on the 24th of March, 2014.

# Chapter 3: Perception of brands

Wallpaper from http://wallbase.cc/wallpaper/433702, accessed on the 24th of March, 2014.

# Chapter 4: Measuring brand perception

Wallpaper from http://wallbase.cc/wallpaper/2838361, accessed on the 25th of March, 2014.

# Chapter 5: Scope

Photo found on http://www.picturescollections.com/eyes-photos/eye-photos/, accessed on the 24th of March, 2014.

# Chapter 6: Influence of visual aspects

Photo found on http://badfaeriecg.deviantart.com/art/Steampunk-Cogs-and-Gears-3-DAZ-and-Poser-273242690, accessed on the 22th of May, 2014.

# Chapter 7: Name

Several 'my name is': Image from http://daskull.deviantart.com/art/Hello-my-nameis-54624760, accessed on the 7th of April, 2014.

# Chapter 8: Typeface

Third image found on http://carnivalofsorts.wordpress.com/tag/letterpress-printing/, accessed on the 24th of March, 2014.

# Chapter 9: Color

Wallpaper from http://wallbase.cc/wallpaper/1787329, accessed on the 24th of March, 2014.

# Chapter 10: Logo

The illustration for this chapter is created by us, but each logo have been found from the following webpages. All were accessed on the 24th of March, 2014.

- Android http://www.talkandroid.com/179183-designer-explains-how-the-android-logowas-conceived/
- AOL http://www.logodesignlove.com/images/simple-logos/aol-running-man-logo.jpg
- Apple http://archiveteam.org/index.php?title=File:Apple-logo.jpg
- AT&T http://www.iphonehacks.com/2012/11/att-investing-14-billion-in-new-technologyas-long-as-its-not-copper.html/att-logo-3
- Audi http://blog.caranddriver.com/audi-says-car-prices-will-rise-with-efficiency/ audilogo-3/
- BP http://gcaptain.com/john-minge-takes-president-america/

General Mills http://stockguru.com/2013/02/18/soul-and-vibe/

John Deere http://www.famouslogos.us/john-deere-logo/

Mozilla Firefox https://wiki.videolan.org/File:Firefox-logo.png/

Nike http://alllogos7.blogspot.dk/2013/02/nike-logo.html

Shell http://uncyclopedia.wikia.com/wiki/File:Shell\_Logo.png

Starbucks http://www.brandinsightblog.com/wp-content/uploads/2008/04/starbuckslogo.png

Toyota http://autocarsconcept.blogspot.dk/2012/12/toyota-logo.html

Twitter https://about.twitter.com/press/brand-assets

VLC http://images.videolan.org/images/largeVLC.png

Wikipedia http://commons.wikimedia.org/wiki/File:Wikipedia\_logo\_silver.png

#### Chapter 11: Categories and identities

Image found on http://blog.ziggytek.com/2012/10/31/11-reveals-colorful-cases-for-the-iphone-5/, saturation and brightness have been altered, accessed on the 24th of March, 2014.

# Chapter 12: Creating designs

Image found on http://www.bmw.com/com/en/insights/bmw\_design/process.html, accessed on the 26th of March, 2014.

# Chapter 13: Experimental design

Image found on http://cdni.wired.co.uk/1240x826/d\_f/experiment.jpg, accessed on the 26th of March, 2014.

# Chapter 14: Results

Wallpaper from http://www.superbwallpapers.com/3d/numbers-19194/, accessed on the 24th of March, 2014.

# Chapter 15: Analysis

Second image under the video on http://www.onufszak.com/184950/1194011/commercial/loewe, assecced on the 22th of May, 2014.

# Chapter 16: Discussion

Image from http://pixelprosemedia.com/blog/, accessed on the 25th of March, 2014.

# Chapter 17: Conclusion

Image found on http://www.huffingtonpost.com/2013/12/28/washington-state-minimum-wage\_n\_4512049.html, accessed on the 26th of March, 2014.

# Aaker's Big Five

Shown in figure B.1 are the 42 personality traits, 15 facet constructed based on these and five general factors that was found by Aaker (1997).

Traits	Mean	Standard Deviation	Facet	Facet Name	Factor Name	Mean	Standard Deviation
down-to-earth	2.92	1.35	(la)	Down-to-earth	Sincerity	2.72	.99
family-oriented	3.07	1.44	(1a)		-		
small-town	2.26	1.31	(la)				
honest	3.02	1.35	(1b)	Honest			
sincere	2.82	1.34	(1b)				
real	3.28	1.33	(1b)				
wholesome	2.81	1.36	(lc)	Wholesome			
original	3.19	1.36	(lc)				
cheerful	2.66	1.33	(1d)	Cheerful			
sentimental	2.23	1.26	(1d)				
friendly	2.95	1.37	(1d)				
daring	2.54	1.36	(2a)	Daring	Excitement	2.79	1.05
trendy	2.95	1.39	(2a)	5			
exciting	2.79	1.38	(2a)				
spirited	2.81	1.38	(2b)	Spirited			
cool	2.75	1.39	(2b)	opinico			
young	2.73	1.40	(2b)				
imaginative	2.81	1.35	(2c)	Imaginative			
unique	2.89	1.36	(2c)	inaginative			
unque up-to-date	3.60	1.30	(2d)	Up-to-date			
independent	2.99	1.36	(2d)	opto date			
	3.00	1.30	(2d)				
contemporary reliable	3.63	1.28	(3a)	Reliable	Competence	3.17	1.02
hard working	3.17	1.43	(3a)	Renable	competence	5.17	1.02
•	3.05	1.37	(3a)				
secure	2.96	1.39	(3b)	Intelligent			
intelligent	2.96	1.39	(3b)	Interrigent			
technical							
corporate	2.79	1.45	(3b)	Successful			
successful	3.69	1.32	(3c)	Successful			
leader	3.34	1.39	(3c)				
confident	3.33	1.36	(3c)	Upper class	Sochistisstics	2.66	1.02
upper class	2.85	1.42	(4a)	Upper class	Sophistication	2.00	1.02
glamorous	2.50	1.39	(4a)				
good looking	2.97	1.42	(4a)	Chamin			
charming	2.43	1.30	(4b)	Charming			
feminine	2.43	1.43	(4b)				
smooth	2.74	1.34	(4b)	Outlease	Durandan	2.49	1.08
outdoorsy	2.41	1.40	(5a)	Outdoorsy	Ruggedness	2.49	1.08
masculine	2.45	1.42	(5a)				
Western	2.05	1.33	(5a)	Truch			
tough	2.88	1.43	(5b)	Tough			
rugged	2.62	1.43	(5b)				

Appendix A A BRAND PERSONALITY SCALE (Means and Standard Deviations)\*

Figure B.1: The 42 traits, the 15 facet and the 5 factors that Aaker found to be reliable in relation to measuring brand personality (Aaker, 1997, p. 354).

## **Design** elements

This appendix shows all the 14 design elements that were part of a study conducted by Henderson and Cote (1998). Each design element is accompanied with describtion and an illustration of logos with high and low levels of the given element.

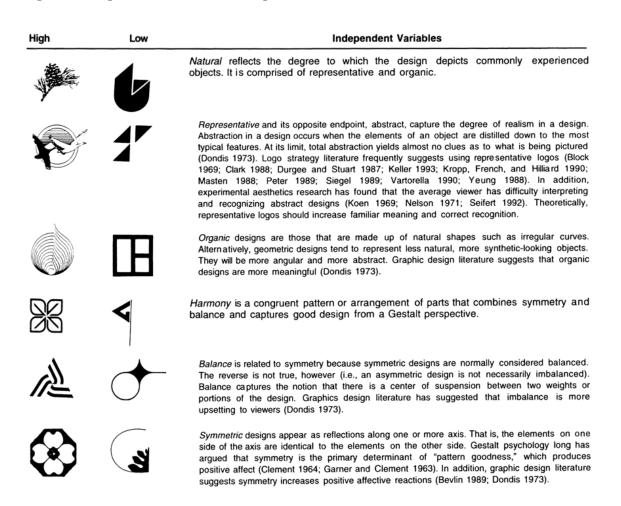


Figure C.1: Six of the 14 design elements used as indendent variables. Table is from page 16 in Henderson and Cote (1998).

High	Low	Independent Variables
	Ļ	Elaborate is not simply intricacy, but appears to capture the concept of design richness and the ability to use simple lines to capture the essence of something. It is comprised of complexity, activeness, and depth.
		Complexity can arise from many different design features such as irregularity in the arrangement of elements, increases in the number of elements, heterogeneity in the nature of elements, and how ornate the design is (Berlyne 1971; Schmitt, Simonson, and Marcus 1995). Optimal arousal theory suggests that complexity will have a $\cap$ shaped relationship with affect (Berlyne and Lawrence 1964; Day 1967; Dorfman 1965; Eisenman 1966, 1967; Munsinger and Kessen 1964). Alternatively, logo strategy literature recommends simple logos because they are easier to remember (Robertson 1989).
	Г	Active designs are those that give the impression of motion or flow. This flow is the basis for the design notion of rhythm (Bevlin 1989). Experimental aesthetics suggests that active designs are more interesting and will be related to other characteristics like symmetry, balance, and complexity (Berlyne 1971).
		Depth gives the appearance of perspective or a three-dimensional design (e.g., this design appears to have a raised triangular section that goes off into the distance). Depth is related to both complexity and representative, so it might affect recognition (Nemett 1992).
IIII	θ	<i>Parallel</i> designs contain multiple lines or elements that appear adjacent to each other. No literature links this characteristic to the response variables.
		Repetition of elements occurs when the parts of the design are similar or identical to one another. Conversely, identical elements that are simply part of a larger whole (e.g., needles on a pine tree) would be classified as one element (a pine). No literature directly addresses this characteristic.
Â	$\sim$	Proportion is the relationship between the horizontal and vertical dimensions. One of the best known examples of proportion is the golden section. Gestalt psychology, graphics design literature, and empirical research suggest that certain proportions are more appealing than others (Bevlin 1989; Crowley 1990; Veryzer 1993). Note that <b>Constant</b> is a good example of the golden section.
0	ΔΔ	<i>Round</i> designs are made of primarily curved lines and circular elements. No known theory links this characteristic to the response variables.

Figure C.2: Eight of the 14 design elements used as indendent variables. Table is from page 17 in Henderson and Cote (1998).

## Appendix D

# Selecting product categories

This appendix is a pictorial walk through of the process described in section 11.1. All images taken during the process is presented here, along with a full list of all the categories discussed.



Figure D.1: Intial product category ideas.

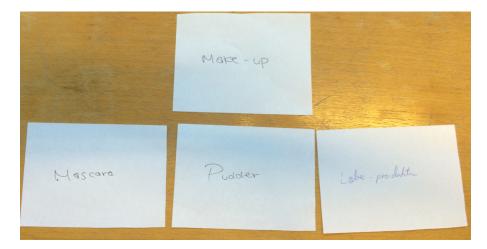


Figure D.2: Exploring and adding to the category *Make-up*.

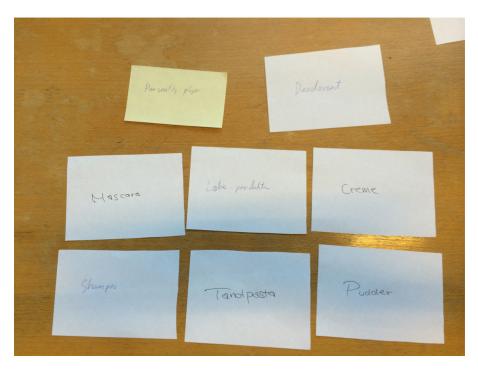


Figure D.3: Grouping categories into one common denominator.



Figure D.4: Groupings of inital product categories.



Figure D.5: Additions for the group *Personal care*.

Grouping	Product categories	
Apparel	Shoes	
Breakfast	Cornflakes, muesli, oatmeal, skyr <sup>1</sup> , yogurt Bacon, baked beans, cereal, crisp bread, eggs, honey, jam, nutella	
Candy/snacks	Chocolate Chewing gum, chips, chocolate bars, confectionery, corn kernels, dip, fruit gum, hard candy, liquorice, marcipan, milk-slice, mints, mixed candy, nougat, nuts, pastille, pieces of chocolate, plate of chocolate, popcorn, pretzels, pretzel sticks, toffee, wasabi snacks	
Cleaning	Laundry detergent Anti-fat spray, chemicals, dishwashing liquid, dishwashing tabs, fabric softener, floor cleaner, lime scale remover, soap, spectacle lens cleaner, toilet cleaner, universal cleaner, window cleaner	
Drinks	Beer, cider, chocolate milk, coffee, iced tea, juice, milk, soda, squash, tea Energy drinks, hot cocoa, iced coffee, milkshakes, premixed drinks, protein shakes, smoothies, vodka, water, whisky, wine, yoghurt	
Food	Butter, cheese, creme cheese, katsup, pasta, Baguette, bread, frozen vegetables, mayonnaise, mustard, noodles, preserved food, ready meal, remoulade, sauces, spices, tapas	
Personal care	The Deodorant, lip products, lotion, mascara, powder, shampoo, tooth para After shave, BB cream, body wash, conditioner, face scrub, face was hair spray, hair treatment, mouth wash, perfume, shampoo and body wash (2 in 1), shaving cream, soap, wax	
Ulitity	Battery Light bulbs, napkins, paper plates, rubber bands, tea lights	
Т	able D.1: A complete list of all product categories discussed.	

<sup>1</sup>A cultured milk product from Iceland.

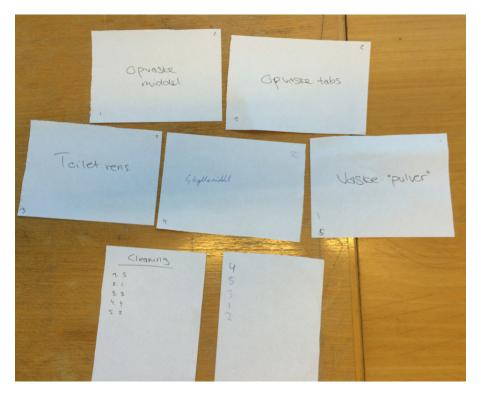


Figure D.6: Voting for the representatives for the *Cleaning* group.

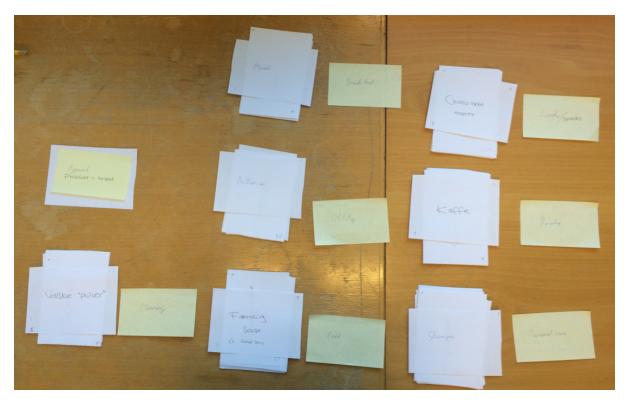


Figure D.7: The eight groupings of product categories and the representive category for each group.

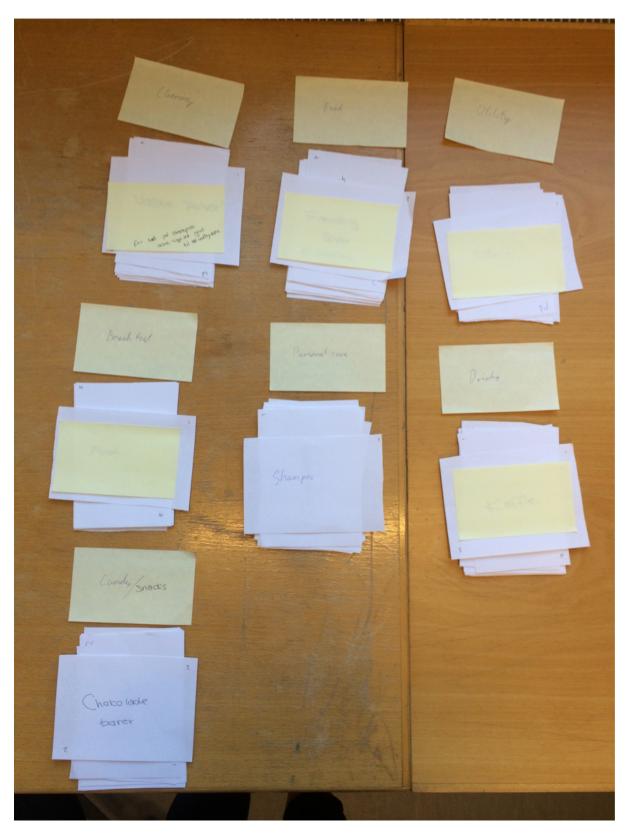


Figure D.8: The selected product categories: Shampoo and chocolate.

# Appendix E

# Selecting brand identities

This appendix is a pictorial walk through of the process described in section 11.2. All images taken during the process are presented here.

		Younger	Ligiter	More Masculume	Slaver	~	Dermin	Elegance
	Quere	Rugged	Service	Bigger	Hany	Concord	Land many	
Trendy	shallt	Secure	Lolans	4	Organized	Controlate	Focuses	Directions
Friedler		and	hours	Amuged	here	Feat-s	Active	Graceful
Faster	Gentleves	Fearfulness	Cheerfulness	Strong	han	Parket		Haid
Safter	More	More Feminine	Friendluer	Prettier	Calm.		Winaber	Corder
Things	Läter				11/1	Masculine	Torrest last	Tracktional
	Milder							

Figure E.1: All the attributes connected to color, name or typeface perception were included for the sorting.



Figure E.2: How the participants placed the attributes in their first card sort.



Figure E.3: The first grouping of Activety.

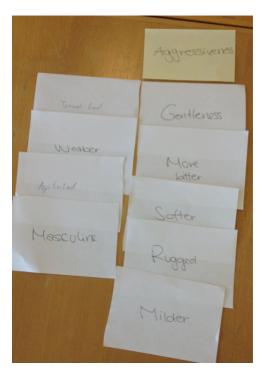


Figure E.4: The first grouping of Aggressiveness.

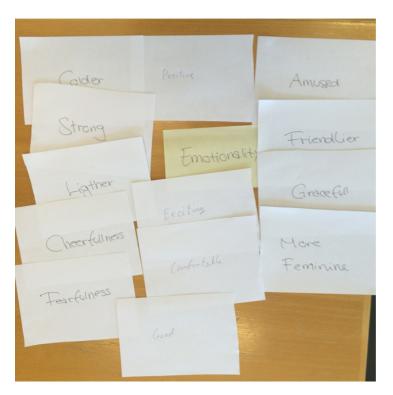


Figure E.5: The first grouping of Emotionality.

Responsibility Younger Secus rogenizeo

Figure E.6: The first grouping of Responisibility.



Figure E.7: The first grouping of Simplicity.



Figure E.8: The second grouping of Activety.

	Aggressivenes
Friendlier	Masculine
Bad	Agitated
More Latter	Tonuel bad
Gentleness	Milder
Safter	Ruggeol

Figure E.9: The second grouping of Aggressiveness.



Figure E.10: The second grouping of Emotionality.



Figure E.11: The second grouping of Responsibility.

	Simplicity
Elegance	Trendy
CrQ	Thinner
Directness	Smaller
Liather	Heavy
Ligther	
	Hard
	Traditional

Figure E.12: The second grouping of Simplicity.



Figure E.13: Loadings of the group Activety.

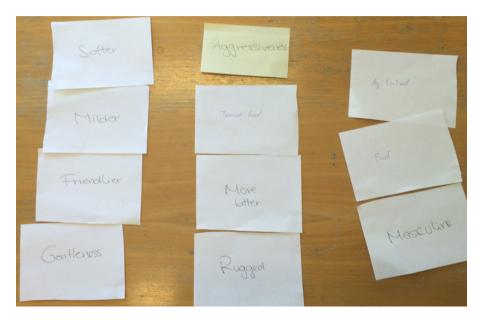


Figure E.14: Loadings of the group Aggressiveness.



Figure E.15: Loadings of the group Emotionality.

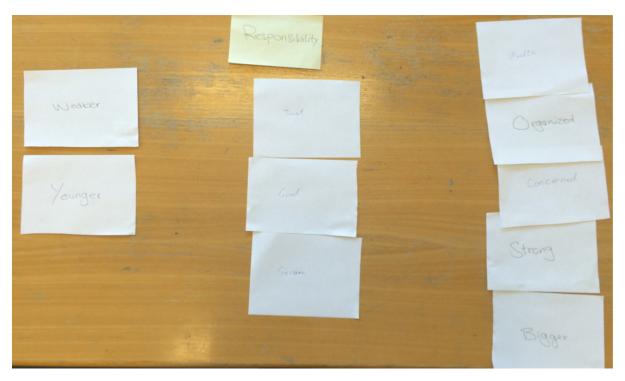


Figure E.16: Loadings of the group Responsibility.



Figure E.17: Loadings of the group Simplicity.



Figure E.18: Image of the constructed framework.



Figure E.19: Color coded version of the constructed framework from figure E.18.

# Chocolate investigation

As part of creating cases for this project, it was deemed necessary to explore existing branding aspects of the packaging for chocolate bars. This is a step towards ensuring a more realistic feel for the artificial cases which are constructed.

### F.1 Chocolate samples

A number of different examples of Danish chocolate bars were picked out as samples for further inspection. The selection was carried out with the intend to have as much variety as possible, in order to provide as much data as possible. A list of the selected chocolate bars can be seen in table F.1. The individual chocolate bars can be seen in figures F.1 through F.18.

Product	Producer	Figure reference
Rittersport with marzipan	Alfred Ritter GmbH & Co.	F.1
Dark Chocolate Stick with Liquorice Marzipan Bar	Anthon Berg	F.2 F.3
Mountain Superior	Dansk Supermarked A/S	F.4
Kinder Maxi	Ferrero SpA	F.5
Mjölkchoklad	Marabou	F.6
Bounty Dark Mars Milky Way Snickers Twix	Mars, Incorporated	F.7 F.8 F.9 F.10 F.11
Daim	Mondelēz International	F.12
Crunch White Kit Kat Lion Bar	Nestlé S.A.	F.13 F.14 F.15
Guld Barre Crunch Skildpadde Bar <sup>1</sup> Yankie Bar Original	Toms Confectionery Group	F.16 F.17 F.18

Table F.1: Names of a product and their producer of various chocolate bars.

<sup>1</sup>A "Skildpadde" bar is a Danish chocolate piece with rum creme and karamel filling.



Figure F.1: Rittersport with marzipan.



Figure F.2: Dark chocolate stick with liquorice, Anthon Berg.



Figure F.3: Marzipan bar, Anthon Berg.



Figure F.5: Kinder Maxi (Kinder, 2014).



Figure F.4: Mountain Superior.



Figure F.6: Milk chocolate, Marabou.



Figure F.7: Bounty Dark.



Figure F.8: Mars.



Figure F.9: Milky way.



Figure F.10: Snickers.

#### Appendix F. Chocolate investigation





Figure F.11: Twix, also known as Raiders.

Figure F.12: Daim.



Figure F.13: Crunck White.



Figure F.14: Kit Kat.



Figure F.15: Lion bar.



Figure F.16: Guld barre crunch.



Figure F.17: Skildpadde bar.



Figure F.18: Yankie bar.

### F.2 Layout trends

For the samples, a number of layout trends were identified and investigated. It's important to note, that the layout in this study is only concerned with the main part of the visual design, in this case the *front* of a chocolate bar, i.e. the side of the Snickers bar (figure F.10) which is dominated by the "Snickers" name.

#### F.2.1 Size ratio

In order to get some insight into the dimensions of chocolate bars, the ratio of length to width was estimated. The estimates are used to get an indication as to which dimensions could be expected from a chocolate bar in the market. If a chocolate bar had "flaps" at each end, these were not included in the measure, due to it being observed that these were often pressed tightly against the ends of the candy bar and not visible without manipulation.

The samples have a mean ratio of  $\approx 3.9$  and a median ratio of  $\approx 3.4$ . The median may be the best measure as a guideline, given that the extreme natures of the *Dark Stick* chocolate (fig. F.2) and the *Rittersport* chocolate (fig. F.1) have a lot of potential to influence the mean.

Case	Ratio
Rittersport	1.0
Kitkat	1.7
Twix	2.3
Daim	2.6
Skildpadde	3.0
Snickers	3.2
Mars	3.3
Lion	3.3
Yankie	3.3
Guldbarre	3.5
Crunch	3.8
Marzipan bar	4.4
Bounty Dark	4.6
Milky Way	5.0
Mjölkchokolad	5.2
Mountain	5.4
Kinder Maxi	5.5
Dark Stick	9.3

Table F.2: Ratio of length to width of the selected chocolate bars.

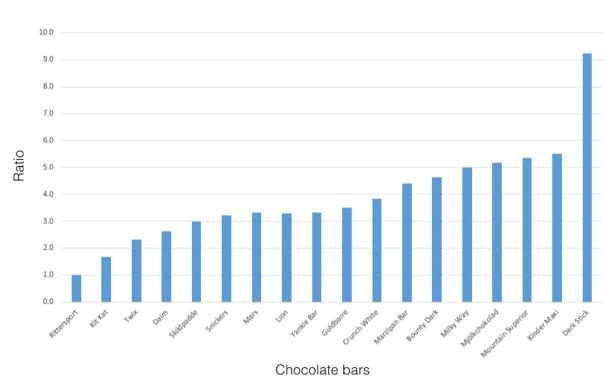


Figure F.19: Illustration of ratio of length to width of the selected chocolate bars.

#### F.2.2 Name and placement

All chocolate bars are equipped with the name of the product. The placement of the name on the wrapper varies between some of the bars, resulting in the following trends: nine names are centered on the wrapper, six are offset to the left, two are offset to the right, and one is split up leaving empty space in the middle with elements of the name appearing on both extreme sides. How each name is placed on the specific chocolate bars can be seen in table F.3.

### Appendix F. Chocolate investigation

Product	Name placement
Bounty	Center
Crunch White	
Daim	
Mars	
Milky Way	
Mountain Superior	
Rittersport	
Snickers	
Twix	
Dark Chocolate Stick	Offset left
Guldbarre	
Kinder Maxi	
Kit Kat	
Skildpadde Bar	
Yankie Bar Original	
Lion Bar	Offset right
Mjölkchokolad	<u> </u>
Marzipan Bar	Split

Table F.3: Name placement on chocolate bars.

#### F.2.3 Communication of content

Part of the visual design of some of the chocolate bar wrappers includes written descriptions of the content of the candy in question, such as *marzipan*, *liquorice* etc. This is the case for 10 of 18 chocolate bars. The two categories can be seen in table F.4

Available	Not available
Crunch White	Bounty Dark
Dark Chocolate Stick	Daim
Guldbarre	Kit Kat
Kinder Maxi	Lion
Marzipan Bar	Mars
Mjölkchokolad	Milky Way
Mountain Superior	Snickers
Rittersport	Twix
Skildpadde Bar	
Yankie Bar Original	

Table F.4: Availability of written description of content on the front of chocolate bar wrappers.

Some of the chocolate bars include graphics on the wrapper representing the content of the chocolate bar, e.g. a picture of the chocolate bar itself or some of the ingredients. 11 of 18 have a representation of the contents, e.g. *marzipan*. One provides context, e.g. a picture of a galaxy on the *Milky Way*. Three have both content and context elements, and three have neither content nor context.

Product	Graphical representation
Crunch White	Content
Daim	
Dark Chocolate Stick	
Kit Kat	
Mjölkchokolad	
Mountain Superior	
Rittersport	
Skildpadde Bar	
Snickers	
Twix	
Yankie Bar Original	
Milky Way	Context
Bounty	Both content and context
Guldbarre	
Lion Bar	
Mars	Neither content nor context
Marzipan Bar	
Kinder Maxi	

Table F.5: Availability of graphical representation of content and/or context on chocolate bar wrappers.

#### F.2.4 Nutritional information

A number of the chocolate bars (5 of 18) had nutritional information printed on the front of the wrapper and 5 of 18 had a nutritional notice on the top side of a flap. An example of this kind of information can be seen in figure F.20, and the list of all chocolate bars and the visibility of such information can be seen in table F.6.



Figure F.20: Nutritional information graphic taken from Crunch White (see figure F.13).

Product	Nutritional notice
Bounty Crunch White Daim Milky Way Mjölkchokolad	Visible notice on the front
Kit Kat Lion bar Mars Sniclers Twix	Visible notice in a flap
Dark Chocolate Stick Guldbarre Kinder Maxi Marzipan Bar Mountain Superior Rittersport Skildpadde Bar Yankie Bar Original	No visible notice

Table F.6: Visibility of nutritional information on front of the chocolate bar.

#### F.2.5 Background design

A few of the chocolate bars (5 of 18) have a design which involves a background with two distinct color choices, providing the feeling of the wrapper either consisting of two colors or having a base color with a ribbon wrapper around it. The bars in question are: *Crunch White*, *Dark sticks*, *Guldbarre*, *Mjölkchokolad* and *Mountain Superior*.

# Shampoo investigation

As part of creating cases for this project, it was deemed necessary to explore existing branding aspects of shampoo bottles. This is a step towards ensuring a more realistic feel for the artificial cases which are constructed.

### G.1 Shampoo samples

A number of different examples of shampoos were picked out for further inspection. The selection was carried out with the intent to have as much variety as possible, in order to provide as much data as possible. A list of the selected shampoo can be seen in figure G.1 and each shampoo is pictured in figures G.1 through G.16.

Product	Producer	Figure reference
Vores	Dansk Supermarked A/S	G.1
Sanex	Colgate & Palmolive	G.2
Sanex Men		G.3
Schwarzkopf Gliss	Henkel	G.4
Schwarzkopf Ultime essence		G.5
Elvital	L'oreal	G.6
Granier Fructis		G.7
Granier Respons		G.8
Head and Shoulders	Procter and Gamble	G.9
Pantene		G.10
Wella		G.11
WellaPro		G.12
Dove	Unilever	G.13
Elida		G.14
Neutral		G.15
Sunsilk		G.16

Table G.1: Names of a product and their producer of various shampoos.



Figure G.1: Vores.



Figure G.3: Sanex Men (Sanex, 2014a).



Figure G.5: Ultime essence (Schwarzkopf, 2014b).



Figure G.2: Sanex (Sanex, 2014b).



Figure G.4: Gliss (Schwarzkopf, 2014a).



Figure G.6: Elvital, L'oreal.



Figure G.7: Fructis, Garnier.



Figure G.9: Head and Shoulders (P&G, 2014).



Figure G.8: Respons, Garnier.



Figure G.10: Pantene (Pantene, 2014).



Figure G.11: Wella.



Figure G.12: Wella ProSeries.



Figure G.13: Dove (Dove, 2014a).



Figure G.15: Neutral (Neutral, 2014).



Figure G.14: Elida.



Figure G.16: Sunsilk.

## G.2 Layout trends

The purpose of investigating the shampoos was to gain insight into how a believable layout and bottle design would look. This will aid us in the construction of the case designs.

### G.2.1 Size ratio

In order to get some insight into the dimensions of the shampoos, the ratio of length to width was estimated. This is seen listed in table G.2 and illustrated in figure G.17.

Case	Ratio
Respons	2.2
Sanex Men	2.4
Gliss	2.5
Sanex	2.5
Elida	2.6
Vores	2.6
Elvital	2.8
Fructis	2.8
Ultime	2.8
Wella	2.8
Wella ProSeries	2.8
Dove	2.9
Sunsilk	2.9
Neutral	3.0
Head and Shoulders	3.2
Pantene	3.4

Table G.2: Ratio of length to width of the selected shampoos.

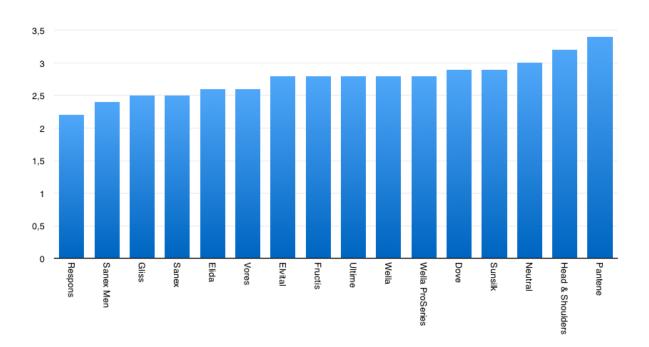


Figure G.17: Illustration of ratio of length to width of the selected shampoo bottles.

From the table G.2 and figure G.17, it can be seen that there is not a lot of variation in the ratio between length and width and that it only varies with 1.2 between the extremes. The average of the ratios (2.8) gives us an insight into the wanted dimensions of our bottles.

#### G.2.2 Placement of name

For all of the 16 shampoos included here, the name of the shampoo is presented at **top of the bottle**, just below the cap. *Name* is here defined to include any brand or logo representation.

In some cases as Sanex in figure G.2 the name is the logo and the brand, and in others like Vores in figure G.1 the name, brand and logo are 3 separate elements.

## G.2.3 Placement of shampoo indication

All shampoos were labeled as such. The placement of the label on the bottles varies between some of the shampoos, resulting in the following trends: Eigth shampoo indications are placed just under the name, five are placed on the bottom, three were centered in the middle of the bottle. The specific shampoos can be seen in table G.3.

Product	Shampoo indication placement
Elida Elvital Fructis Head and shoulders Respons Sanex Vores Wella	At the name
Dove Neutral Sunsilk	Middle
Gliss Pantene Sanex Men Ultime Wella ProSeries	At the bottom

Table G.3: Placement of shampoo label on the bottles.

It was additionally noticed that **all** shampoos included had a functional description at the very bottom of the bottle. An example can be seen in Danish in figure G.18 and in English in figure G.19.



Figure G.18: Example of functional description in Danish.



Figure G.19: Example of functional description in English.

## G.2.4 Graphic elements

Some of shampoo designs included graphical elements. If included, it was placed in the middle of the bottle as seen in figure G.20 and G.21.





Figure G.20: Example of a picture included on shampoo bottle.

Figure G.21: Example of abstract design included on shampoo bottle.

Some shampoo include neither pictures or abstract illustrations, resulting in the observation of the following trends: Seven shampoos include abstract illustrations, five include a picture and four include neither. The specific shampoos can be seen in table G.4.

Product	Graphic element	Image of
Eltival	Abstract	
Gliss		
Neutral		
Pantene		
Sanex Men		
Vores		
Wella		
Fructis	Image	Fruit and leaf
Head and Shoulders		Apple
Respons		Flower
Sanex		Ear of wheat
Ultime		Person
Dove	Neither	
Elida		
Sunsilk		
Wella ProSeries		

Table G.4: Table of whether graphical elements were included on shampoo bottles.

## G.2.5 Bottle design

Going through the investigation of the included shampoo bottles, a few layout trends were connected to the bottle design.

### Difference between bottle and top

Some of shampoo designs have a difference between the main body of the bottle and the top. This could be a different color or shade in the top. We do not include differences due to material. Example of a shampoo having no difference in color between bottle and top can be seen in figure G.22. Figure G.23 shows a shampoo bottle where a color difference is present.



Figure G.22: Example of no difference in color between the main body of the bottle and the cap.



Figure G.23: Example of a difference in color between the main body of the bottle and the cap.

There were either a difference or not between the bottle and the top, resulting in the following trends: 11 shampoos have a difference and five do not. The specific shampoos can be seen in table G.5.

Difference present	No difference
Elvital	Dove
Fructis	Elida
Gliss	Neutral
Head and Shoulders	Wella
Pantene	Wella ProSeries
Respons	
Sanex	
Sanex Men	
Sunsilk	
Ultime	
Vores	

Table G.5: Whether a difference in color or shade is present between the bottle and the top.

### Shape of the bottle

The shape of the bottles varied. It was either symmetric along the horizontal axis was present or not. An example of asymmetry is seen in figure G.24. Most (12 out of 16) of the bottles were symmetric along the horizontal axis and four were not. The specific shampoos can be seen in table G.6 and an example of an asymmetric bottle can be seen in figure G.24.



Figure G.24: Example of an asymmetric bottle design.

Symmetric bottles	Asymmetric bottles
Dove	Head and Shoulders
Elida	Sanex Men
Elvital	Sunsilk
Fructis	Wella
Gliss	
Neutral	
Pantene	
Respons	
Sanex	
Ultime	
Wella ProSeries	

Table G.6: Whether the shampoo bottle designs were symmetric along the horizontal axis.

## Transition to top

The transition from the main body of the shampoo bottles and the top varied. Either there is a smooth transition, meaning that the top is an integrated part of the bottle as shown in figure G.25 or there is a break in the shape of the bottle. With this is meant that the top is a separate part of the bottle, as seen in figure G.26.





Figure G.25: Example of transition from bottle to top being smooth.

Figure G.26: Example of transition from bottle to top were a break in line is present.

Smooth transition	Break in the line
Dove	Gliss
Elida	Pantene
Elvital	Respons
Fructis	Wella ProSeries
Head and Sholders	
Neutral	
Sanex	
Sanex Men	
Sunsilk	
Ultime	
Vores	
Wella	

Most (12 out of 16) of the shampoo bottles have a smooth transition and 4 have line breaks. The specific shampoos can be seen in table G.7.

Table G.7: Table of how the shampoo bottles transitioned to the top.

## Border or part of bottle

We have noticed that the manufactures of the included shampoos tend to present the relevant information on a sticker. We are under the assumption that this is due to practicality. There is however difference in the design of these stickers that are noteworthy and of use to us. The information present on the shampoo bottles were either on a contained space or as blending in with the color of the bottle. When information is presented in a contained manner, it could be a ribbon, an edge to a picture, anything that ends abrupt. An example of a border containing information can be seen in figure G.27. The other option is to present the information so that the sticker is not as prominent and almost create the illustration of information being printed on the bottle it self. An example of this can be seen in figure G.28.





Figure G.27: Border containing information presented.

Figure G.28: Information is not contained.

The two versions of presenting information gave us the following trends: Six of the stickers have a border and the remaining 10 do not. The specific shampoos can be seen in table G.8.

Nothing	A border
Dove	Elvital
Elida	Head and Shoulders
Fructis	Pantene
Gliss	Sanex Men
Neutral	Ultime
Respons	Wella ProSeries
Sanex	
Sunsilk	
Vores	
Wella	

...

Table G.8: Whether the information on the shampoo bottles is contained by a border or not.

#### G.2.6 Type of information presented

A lot of information is given on just the fronts of the included shampoo bottles. There is nine different information types presented; Function, hair type, content, endorsement, New sticker, use frequency, quality label, volume and scent. The count of how often they are present and on which shampoos can be seen in table G.9.

Function explains what a given shampoo can be used for; this can be anti dandruff, to add volume to hair, protect color, repair, give shine, etc. Information about hair type gives an insight into what kind of hair type the shampoo is intended to, normal, damaged, etc. Content is where content is written on the bottle as is seen in figure G.26 with liquid keratin. Quality labels are such as British Skin Foundation and Den blå krans<sup>1</sup> from Astma and Allergy Denmark. The remaining information types is what they seem to be.

Information type	Count	Product
Function	12	Elvital, Fructis, Gliss, Head and Shoulders, Neutral, Pantene, Sanex, Sanex Men, Sunsilk, Ultime, Vores, Wella ProSeries
Hair type	9	Dove, Elvital, Fructis, Pantene, Respons, Sunsilk, Ultime, Vores, Wella
Content	8	Dove, Fructis, Gliss, Respons, Sanex, Sunsilk, Ultime, Vores
Endorsment	4	Pantene, Sunsilk, Ultime Wella ProSeries
New sticker	3	Elida, Elvital, Ultime
Use frequency	3	Dove, Elida, Respons
Quality label	2	Head and Shoulders, Neutral
Volume	2	Vores, Wella ProSeries
Scent	1	Head and Shoulders

Table G.9: What kind of textual information was present on the shampoo bottles.

<sup>&</sup>lt;sup>1</sup> is a Danish certification. For more information, see http://www.astma-allergi.dk/denblaakrans, accessed the 1st of June, 2014

# **Appendix H**

# Design sketches

The following images are rough sketches for each of the four brand cases. The colors present in the sketches do not come close to what it intended, but were the closest thing to them at the time of drawing. Comments is added on the sketches to specify the design ideas. Some of the comments are in Danish.

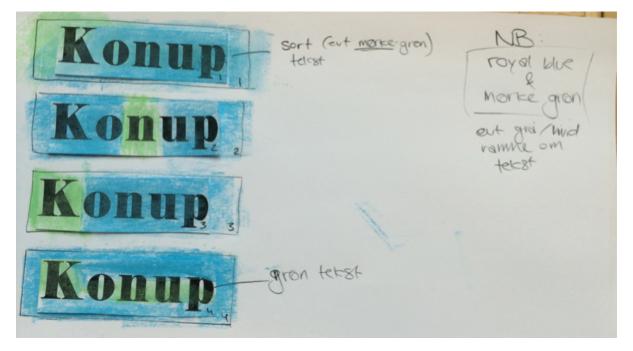


Figure H.1: All sketches for the design of Konup chocolate.

strift omrids
dybde: 80% af \$ brede runding
ingen amnids
Som billedet

Figure H.2: All sketches for the design of Zeffi chocolate.

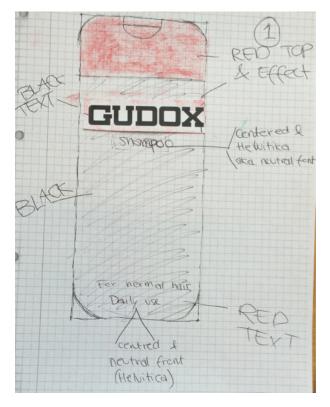


Figure H.3: 1st sketch for the design of Gudox shampoo.

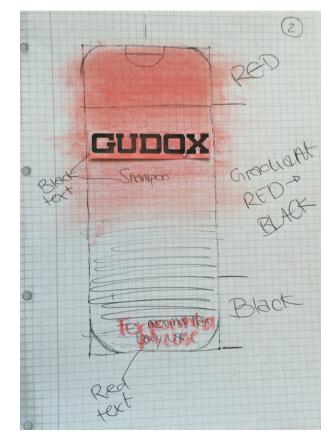


Figure H.4: 2nd sketch for the design of Gudox shampoo.

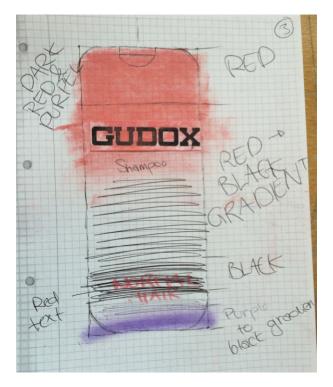


Figure H.5: 3rd sketch for the design of Gudox shampoo.



Figure H.6: 4th sketch for the design of Gudox shampoo.



Figure H.7: 5th sketch for the design of Gudox shampoo.



Figure H.8: 1st sketch for the design of Fevir shampoo.



Figure H.9: 2nd sketch for the design of Fevir shampoo.



Figure H.10: 3rd sketch for the design of Fevir shampoo.



Figure H.11: 4th sketch for the design of Fevir shampoo.

# Questionnaire

This appendix shows the questionnaires and the differences between the textual and visual versions. The reasoning behind these setups can be found in chapter 13.

## I.1 Welcome text

The first page that participants encounters is a welcoming page. Here a quick description of the questionnaire and what national demographic is to be included.

Brand perception	on
We need your help!	
are working on how brands ar	from Aalborg University, Denmark, and as part of a Master's Thesis, we re perceived. Therefore we need your help. In the following you will be nds descriptions and for each brand a number of questions. It will take o complete.
The collected data from this s back to you afterwards.	study will be anonymized as part of the analysis and can not be traced
	ited to Europe, North America and Australia. If you have not lived in one ears, we thank you for your interest, but we are sadly unable to use
Kind regrads, Line and Steffen	
Continue »	14% completed
Powered by	This content is neither created nor endorsed by Google.
Google Drive	Report Abuse - Terms of Service - Additional Terms

Figure I.1: Welcome text to the first and textual questionnaire.

The introduction was changed slightly from the first questionnaire to the second, specifically by including a notice that participation in the first study was neither a requirement or a hindrance for participation in the second study. See figure I.2.

Brand perception - Study no. 2
We need your help!
This is the second part of the study. It is NOT a requirement that you have participated in the first part. If you have participated in the first part, please feel free to participate in this second study too.
We are two Master students from Aalborg University, Denmark, and as part of a Master's Thesis, we are working on how brands are perceived. Therefore we need your help. In the following you will be presented with images of 4 different brands and for each brand a number of questions. It will take approximately 7-10 minutes to complete.
The collected data from this study will be anonymized as part of the analysis and can not be traced back to you afterwards.
The scope of the study is limited to Europe, North America and Australia. If you have not lived in one of these areas for at least 5 years, we thank you for your interest, but we are sadly unable to use your data in our study.
Kind regrads, Line and Steffen
Continue » 12% completed
Powered by This content is neither created nor endorsed by Google.  A Google Drive Report Abuse - Terms of Service - Additional Terms

Figure I.2: Welcome text to the second and visual questionnaire.

## I.2 Demographics data

After the first welcoming page, participants came to a general information page. That is seen in the following figures I.3 and I.4.

Brand perception		
* Required		
General information		
Please select gender *		
Please select your age group * in years		
Please write nationality * Your primary country of residence (p	referably in english)	
Please write your profession * Your primary occupation (preferably i	in english)	
« Back Continue »		28% completed
Powered by Coogle Drive	This content is neither created nor endorsed by Google. Report Abuse - Terms of Service - Additional Terms	

Figure I.3: General information page of the textual version.

The page shown in figure ?? was changed a little in the second questionnaire due to the color heavy focus of the visual version. A question on whether the respondent is color blind is added at the bottom. If a respondent answered "Yes" to being colorblind, they were directed to the page seen in figure I.8.

Brand perception - Study no. 2
Required
General information
Please select gender * ▼
Please select your age group * n years
Please write nationality * /our primary country of residence (preferably in english)
Please write your profession * /our primary occupation (preferably in english)
Are you colorblind? * ▼
« Back Continue » 25% completed
Powered by         This content is neither created nor endorsed by Google.           Coogle Drive         Report Abuse - Terms of Service - Additional Terms

Figure I.4: General information page of the visual version.

## I.3 Statement round

There were, as pointed out in chapter 13, small differences in how the statement part was structured in the two versions of the questionnaires. They are shown in full lenght in the following sections.

## I.3.1 Textual version

## **Brand perception**

\* Required

#### Brand #1 - Chocolate bar

Imagine a chocolate bar belonging to a brand, which is expressed by the following five attributes as a whole:

Rested, Masculine, Comfortable, Wealth, Heavy

#### Brand #1 is ... \*

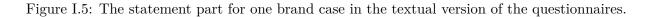
1 being "Not at all" and 7 being "Very much"

	1 (Not at all)	2	3	4	5	6	7 (Very much)
Down-to-earth	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\odot$
Stable	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\odot$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Responsible	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\odot$
Active	0	$\bigcirc$	•	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Dynamic	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\odot$
Innovative	$\odot$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\odot$

#### Brand #1 is ... \*

1 being "Not at all" and 7 being "Very much"

	1 (Not at all)	2	3	4	5	6	7 (Very much)
Aggressive	$\odot$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\odot$
Bold	0	0	0	0	0	0	0
Ordinary	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	0	$\bigcirc$	$\bigcirc$
Simple	•	$\bigcirc$	$\bigcirc$	0	0	$\odot$	0
Romantic	$\bigcirc$	$\bigcirc$	0	0	0	$\bigcirc$	0
Sentimental	0	0			$\odot$	$\bigcirc$	0
« Back Contin	ue »					42	% completed
Powered by				created nor e	-	-	



### I.3.2 Visual version

The question part for the second questionnaire was presented on the one page, but due to the length of it, it is here presented as two images.

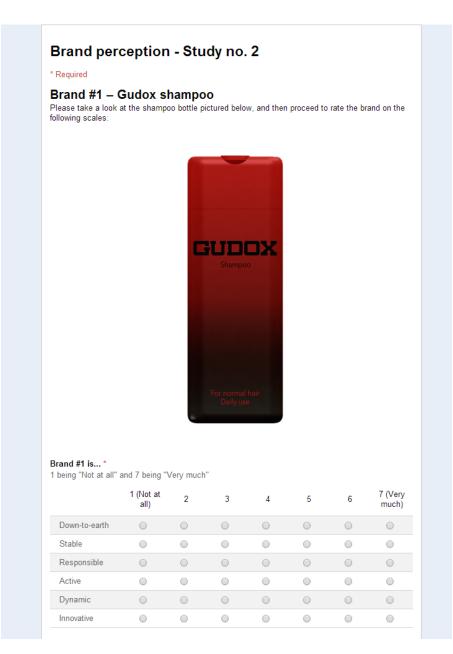


Figure I.6: The first part of the statement round for one brand case in the visual version of the questionnaires.

	1 (Not at all)	2	3	4	5	6	7 (Verj much)
Aggressive	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Bold	0	$\bigcirc$	0	0	0	0	0
Ordinary	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Simple		$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\odot$	0
Romantic	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Sentimental	0	$\bigcirc$	0	$\bigcirc$	0	0	0
r <b>and #1 is *</b> being "Not at all"	' and 7 being ''\ 1 (Not at all)	Very much 2	ı" 3	4	5	6	
being "Not at all"	1 (Not at all)	2	3			-	much
	1 (Not at	-		4	5	6	
being "Not at all" Determined	1 (Not at all)	2	3	0	0	0	much
being "Not at all" Determined Masculine	1 (Not at all)	2	3	0	0	0	much
being "Not at all" Determined Masculine Strong	1 (Not at all)	2 0 0 0	3	0	0	0	0

Figure I.7: The second part of the statement round for one brand case in the visual version of the questionnaires.

## I.4 Colorblind redirect

If participant answered "Yes" to being colorblind, they were redirected to a page telling them thanks for the interest, but due to colors being a pivotal point in the study, we could sadly not use them as a part of the population. See figure I.8.

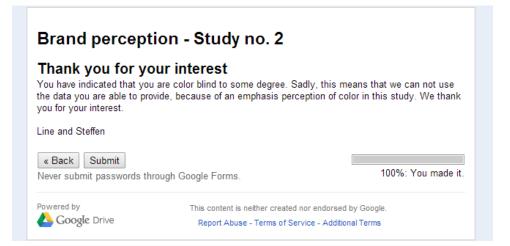


Figure I.8: Thanks for interest to colorblind participants.

# I.5 Thank you for participating

Ending the questionnaire, the final page thanked participants and in the textual version it was pointed out that another questionnaire will be distributed soon. Participants were asked if they wanted to be part of it and if so to write their email.

Brand perception	Brand perception								
2 C C C C C C C C C C C C C C C C C C C	<b>ipating</b> ng out another questionnaire in the near future. If you would like to rrite your email below. Your details will not be shared with anybody								
Remember to push the button bel	ow to submit your answer.								
Email address									
<b>« Back Submit</b> Never submit passwords through	Google Forms.	100%: You made it.							
Powered by	This content is neither created nor endorsed Report Abuse - Terms of Service - Additio	· · ·							

Figure I.9: Ending page of questionnaire, where participants were thanked.

# Checking for normality

All QQ-plots created in the process of checking whether the collected data is normally distributed are presented here. A "+" symbol indicate that data is viewed as normally distributed and a "-" symbol indicates that data is not viewed as normally distributed. An overview for the design attributes of the four brand designs can be seen in tables 15.1 to J.4. An overview of normality in the evaluation given in connection with personality items for each of the four brand cases can be seen in table ??. Examples of what is viewed as normal and non normal distribution can be seen in figures J.1 and J.2.

# HeavyMasculineComfortableRestedWealth+++++

Table J.1: Overview of whether data for attributes of Konup design is normally distributed.

More feminine Friendlier Relaxing Elegance Weaker + + ++

Table J.2: Overview of whether data for attributes of Fevir design is normally distributed.

# YoungerFriendlierActiveLighterExciting+++++

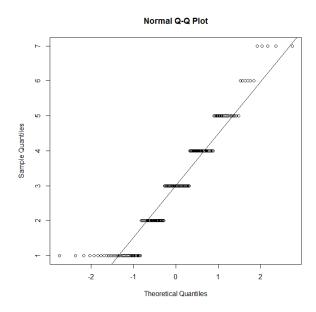
Table J.3: Overview of whether data for attributes of Zeffi design is normally distributed.

#### Masculine Strong Determined Exciting Traditional ++

Table J.4: Overview of whether data for attributes of Gudox design is normally distributed.

	Case	1: Konup	Case	2: Fevir	Case	3: Zeffi	Case 4	4: Gudox
Item	Text	Visual	Text	Visual	Text	Visual	Text	Visual
Down to earth	_	_	+	+	+	+	+	+
Stable	+	+	+	+	+	+	+	+
Responsible	+	+	+	+	+	_	+	+
Active	+	+	+	+	+	+	+	+
Dymanic	+	+	+	+	+	+	+	+
Innovative	+	+	+	+	-	—	+	+
Aggressive	+	+	—	_	+	+	+	+
Bold	+	+	+	—	+	+	+	+
Ordinary	—	+	+	+	+	+	+	+
Simple	+	+	+	+	+	_	+	+
Romantic	_	_	+	+	+	_	+	_
Sentimental	_	_	_	+	-	_	+	_

Table J.5: Overview of whether the personality respons data is normally distributed.



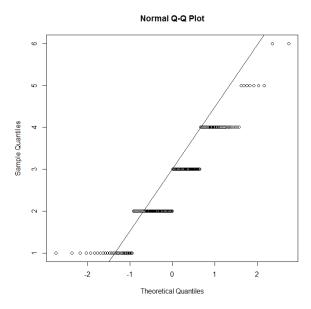


Figure J.1: An example of QQ-plot, where we view the data to be distributed normal: Item *Innovative* for the textual version of brand no. 1.

Figure J.2: An example of QQ-plot, where we view the data not to be distributed normal: Item *Responsible* for the visual version of Zeffi.

## J.1 QQ plots for Konup

### J.1.1 Design attributes

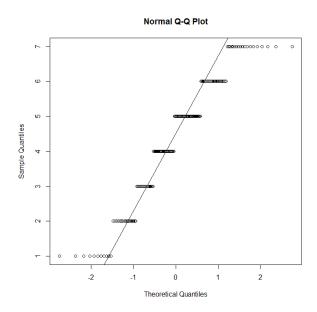


Figure J.3: QQ-plot for attribute *Heavy* for Konup.

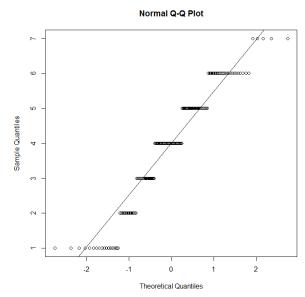
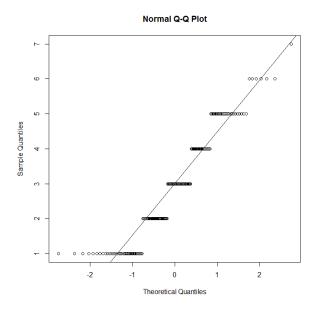


Figure J.4: QQ-plot for attribute *Masculine* for Konup.



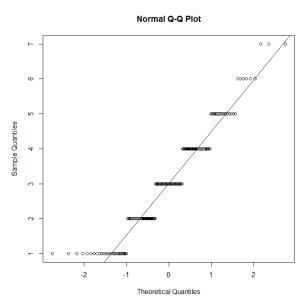


Figure J.5: QQ-plot for attribute *Comfortable* for Konup.

Figure J.6: QQ-plot for attribute *Rested* for Konup.

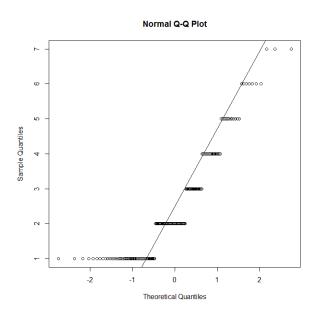
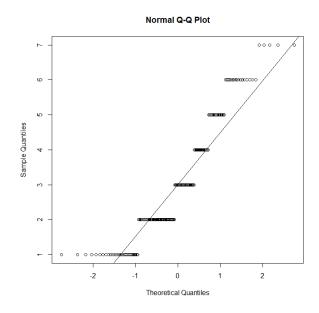


Figure J.7: QQ-plot for attribute *Wealth* for Konup.

## J.1.2 Personality items



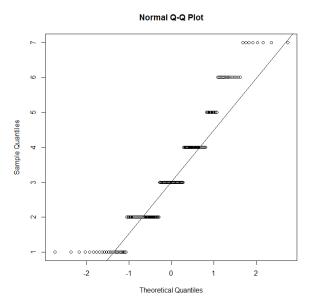
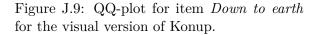


Figure J.8: QQ-plot for item *Down to earth* for the textual version of brand no. 1.



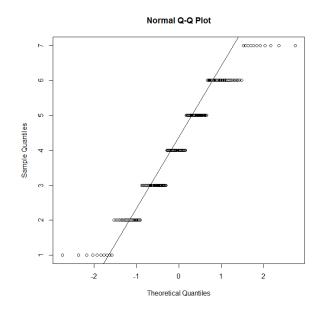


Figure J.10: QQ-plot for item *Stable* for the textual version of brand no. 1.

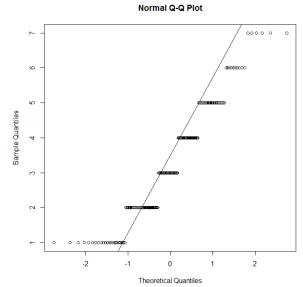


Figure J.11: QQ-plot for item *Stable* for the visual version of Konup.

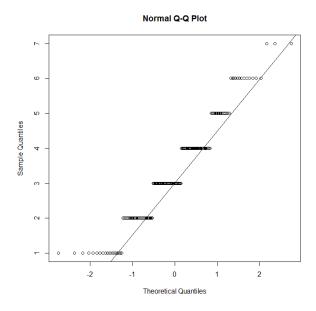


Figure J.12: QQ-plot for item *Responsible* for the textual version of brand no. 1.

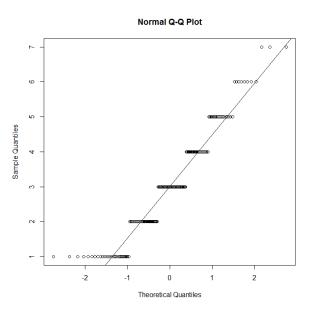


Figure J.13: QQ-plot for item *Responsible* for the visual version of Konup.

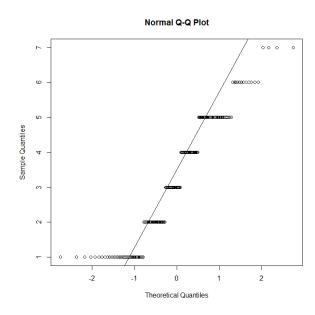


Figure J.14: QQ-plot for item *Active* for the textual version of brand no. 1.

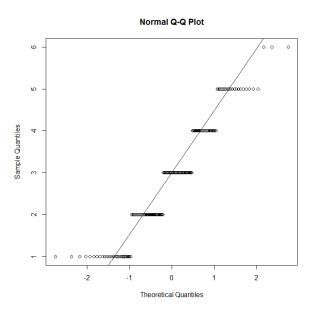
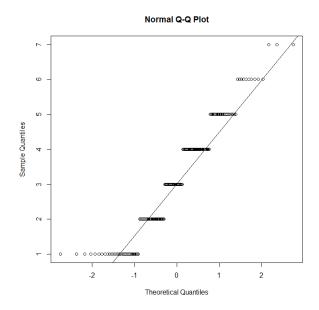
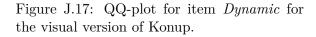


Figure J.15: QQ-plot for item *Active* for the visual version of Konup.



Normal Q-Q Plot

Figure J.16: QQ-plot for item *Dynamic* for the textual version of brand no. 1.



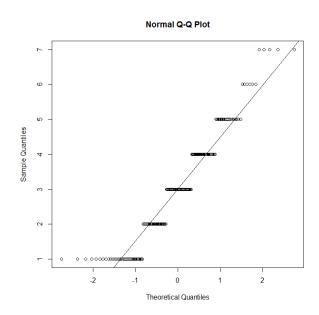


Figure J.18: QQ-plot for item *Innovative* for the textual version of brand no. 1.

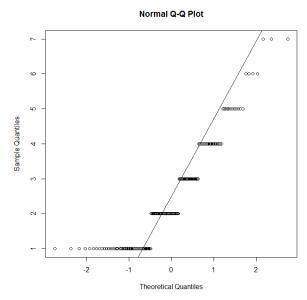
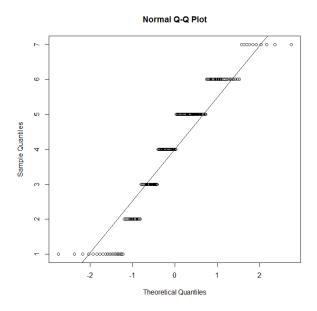


Figure J.19: QQ-plot for item *Innovative* for the visual version of Konup.

### Appendix J. Checking for normality



Normal Q-Q Plot

Figure J.20: QQ-plot for item Aggressive for the textual version of brand no. 1.

Figure J.21: QQ-plot for item *Aggressive* for the visual version of Konup.

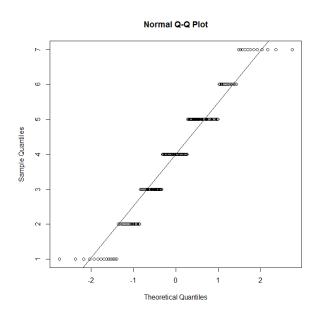


Figure J.22: QQ-plot for item *Bold* for the textual version of brand no. 1.

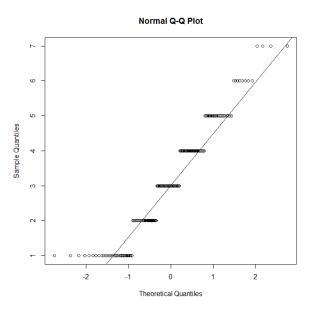
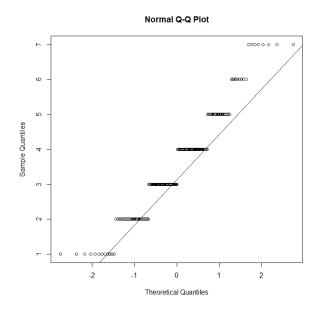


Figure J.23: QQ-plot for item *Bold* for the visual version of Konup.



Normal Q-Q Plot

Figure J.24: QQ-plot for item *Ordinary* for the textual version of brand no. 1.

Figure J.25: QQ-plot for item *Ordinary* for the visual version of Konup.

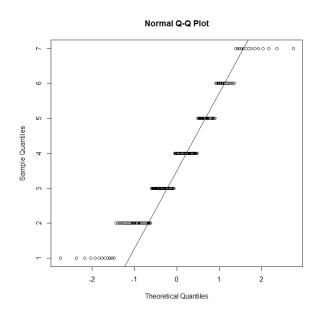


Figure J.26: QQ-plot for item *Simple* for the textual version of brand no. 1.

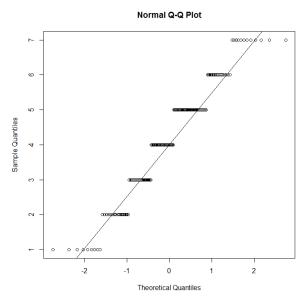


Figure J.27: QQ-plot for item *Simple* for the visual version of Konup.

### Appendix J. Checking for normality

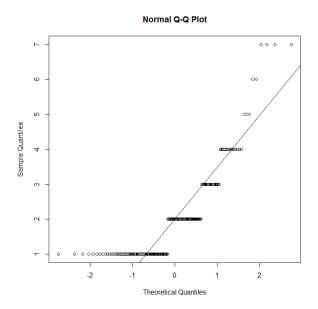


Figure J.28: QQ-plot for item *Romantic* for the textual version of brand no. 1.

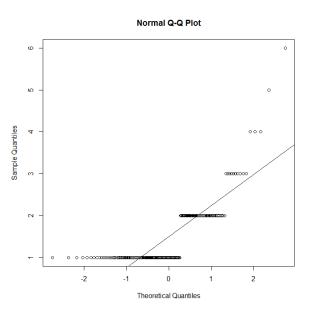


Figure J.29: QQ-plot for item *Romantic* for the visual version of Konup.

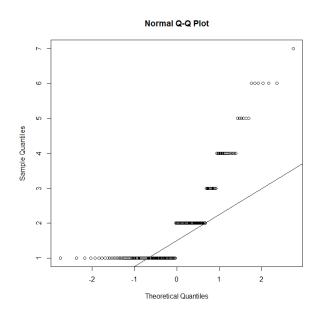


Figure J.30: QQ-plot for item *Sentimental* for the textual version of brand no. 1.

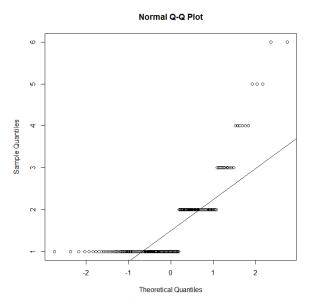
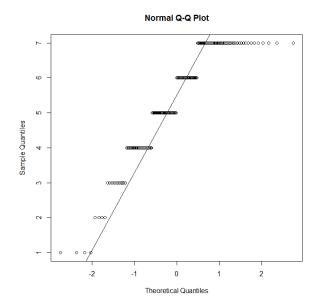


Figure J.31: QQ-plot for item *Sentimental* for the visual version of Konup.

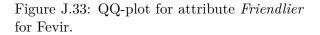
## J.2 QQ plots for Fevir

## J.2.1 Design attributes



Normal Q-Q Plot

Figure J.32: QQ-plot for attribute *More feminine* for Fevir.



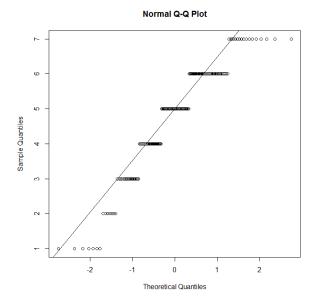


Figure J.34: QQ-plot for attribute *Relaxing* for Fevir.

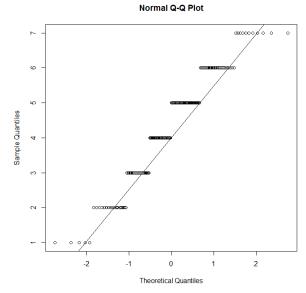


Figure J.35: QQ-plot for attribute *Elegance* for Fevir.

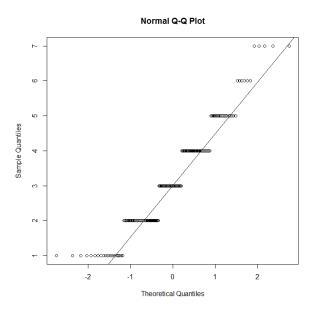


Figure J.36: QQ-plot for attribute *Weaker* for Fevir.

## J.2.2 Personality items

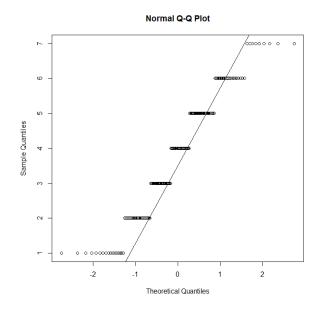


Figure J.37: QQ-plot for item *Down to earth* for the textual version of brand no. 2.

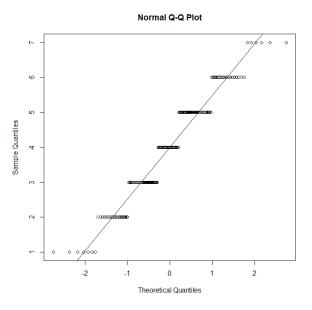
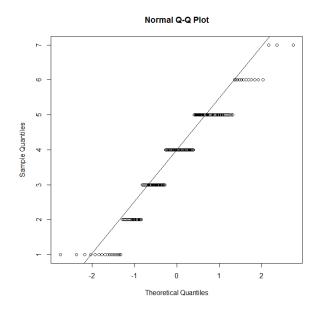


Figure J.38: QQ-plot for item *Down to earth* for the visual version of Fevir.



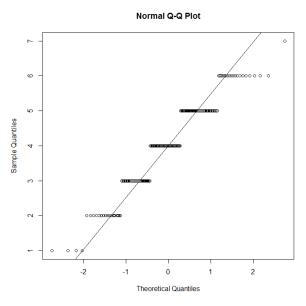


Figure J.39: QQ-plot for item *Stable* for the textual version of brand no. 2.

Figure J.40: QQ-plot for item *Stable* for the visual version of Fevir.

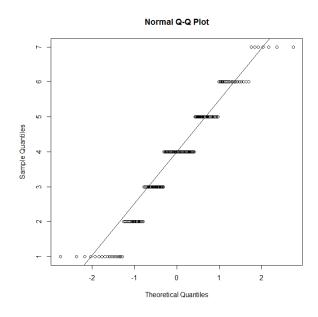


Figure J.41: QQ-plot for item *Responsible* for the textual version of brand no. 2.

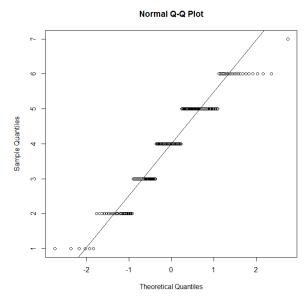
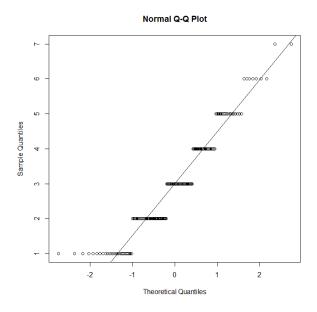


Figure J.42: QQ-plot for item *Responsible* for the visual version of Fevir.



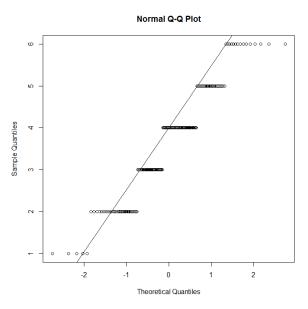
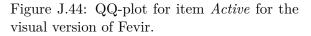


Figure J.43: QQ-plot for item *Active* for the textual version of brand no. 2.



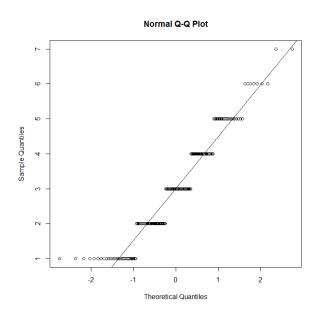


Figure J.45: QQ-plot for item *Dynamic* for the textual version of brand no. 2.

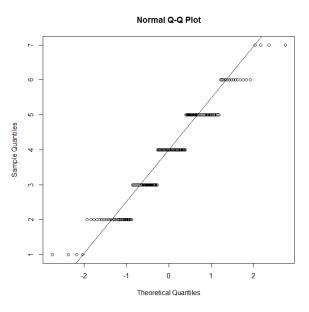
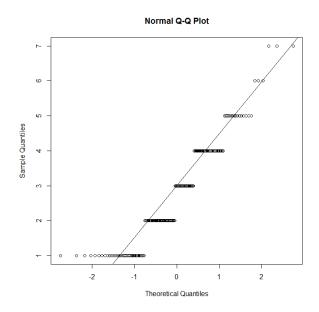


Figure J.46: QQ-plot for item *Dynamic* for the visual version of Fevir.



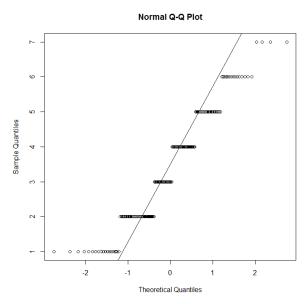
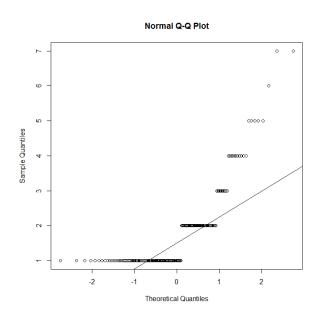


Figure J.47: QQ-plot for item *Innovative* for the textual version of brand no. 2.

Figure J.48: QQ-plot for item *Innovative* for the visual version of Fevir.

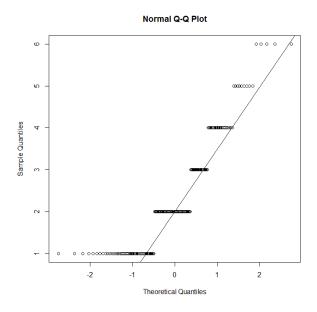
Normal Q-Q Plot



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Figure J.49: QQ-plot for item *Aggressive* for the textual version of brand no. 2.

Figure J.50: QQ-plot for item *Aggressive* for the visual version of Fevir.



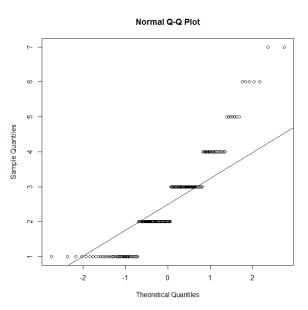
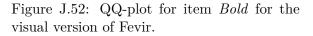


Figure J.51: QQ-plot for item *Bold* for the textual version of brand no. 2.



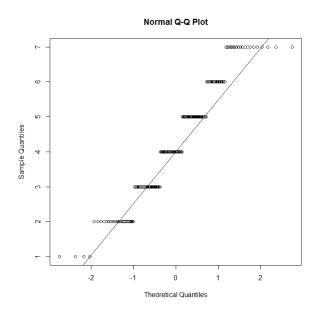


Figure J.53: QQ-plot for item *Ordinary* for the textual version of brand no. 2.

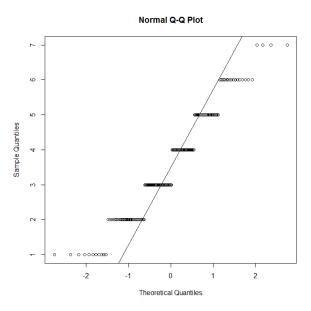
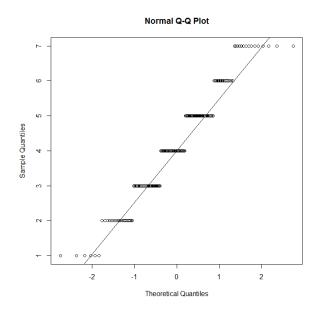


Figure J.54: QQ-plot for item *Ordinary* for the visual version of Fevir.



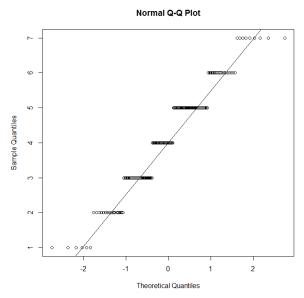
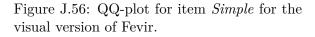


Figure J.55: QQ-plot for item *Simple* for the textual version of brand no. 2.



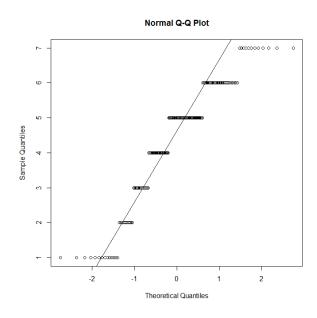


Figure J.57: QQ-plot for item *Romantic* for the textual version of brand no. 2.

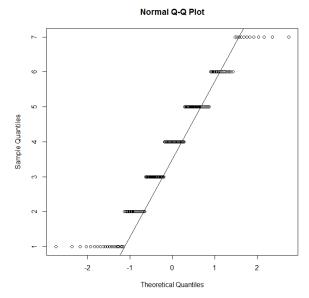
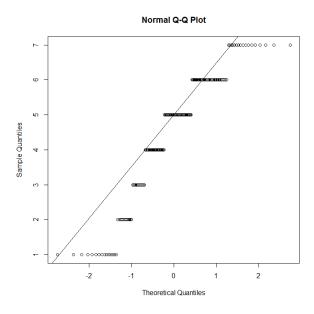


Figure J.58: QQ-plot for item *Romantic* for the visual version of Fevir.



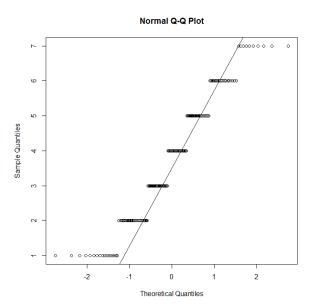


Figure J.59: QQ-plot for item *Sentimental* for the textual version of brand no. 2.

#### J.3 QQ plots for Zeffi

#### J.3.1 Design attributes

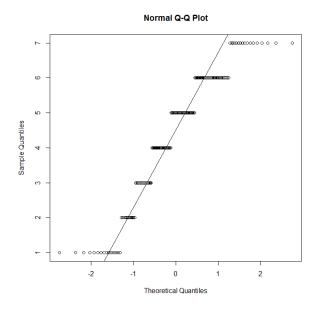


Figure J.61: QQ-plot for attribute *Younger* for Zeffi.

Figure J.60: QQ-plot for item *Sentimental* for the visual version of Fevir.

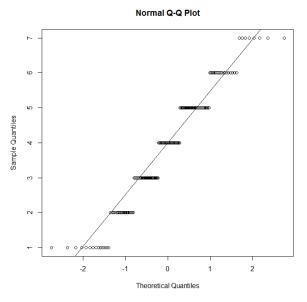
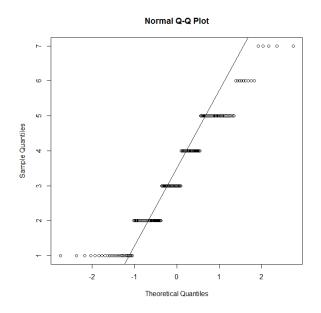


Figure J.62: QQ-plot for attribute *Friendlier* for Zeffi.



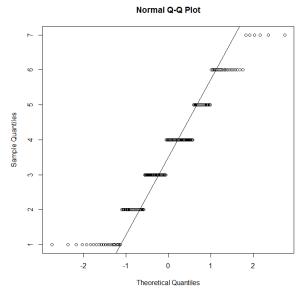


Figure J.63: QQ-plot for attribute Active for Zeffi.

Figure J.64: QQ-plot for attribute *Ligther* for Zeffi.

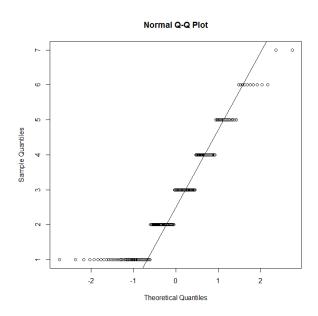
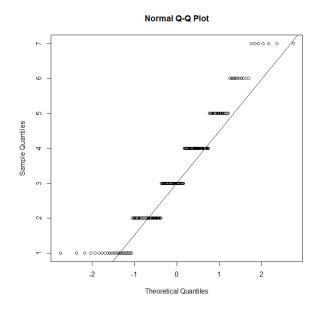
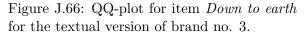


Figure J.65: QQ-plot for attribute *Exciting* for Zeffi.

#### J.3.2 Personality items





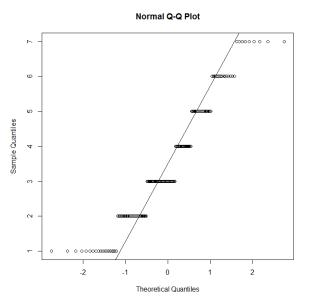


Figure J.67: QQ-plot for item *Down to earth* for the visual version of Zeffi.

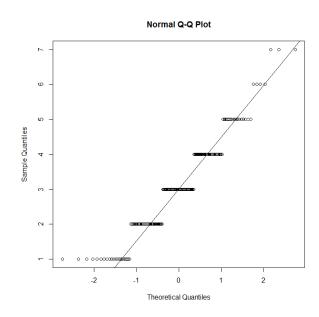


Figure J.68: QQ-plot for item *Stable* for the textual version of brand no. 3.

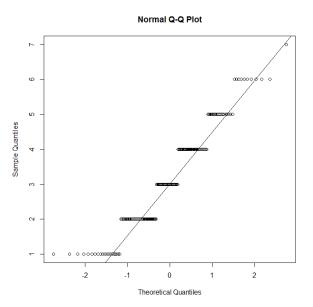
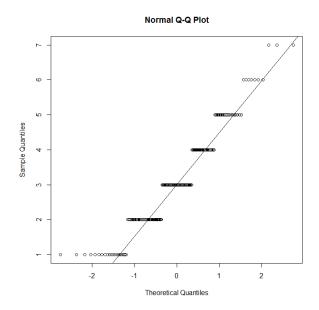


Figure J.69: QQ-plot for item *Stable* for the visual version of Zeffi.



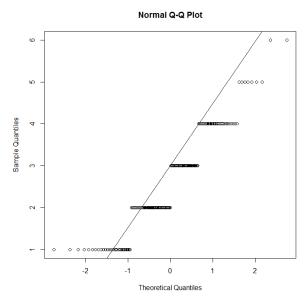


Figure J.70: QQ-plot for item *Responsible* for the textual version of brand no. 3.

Figure J.71: QQ-plot for item *Responsible* for the visual version of Zeffi.

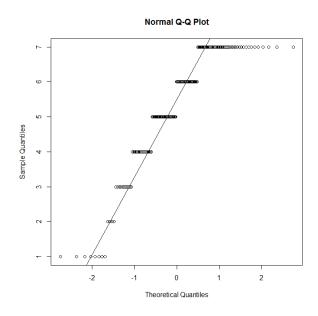


Figure J.72: QQ-plot for item *Active* for the textual version of brand no. 3.

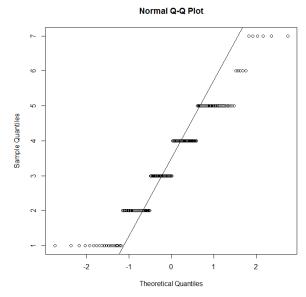


Figure J.73: QQ-plot for item *Active* for the visual version of Zeffi.

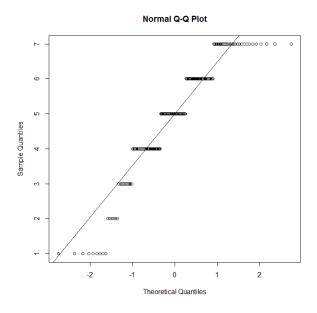


Figure J.74: QQ-plot for item *Dynamic* for the textual version of brand no. 3.

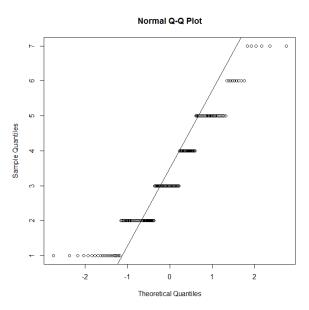


Figure J.75: QQ-plot for item *Dynamic* for the visual version of Zeffi.

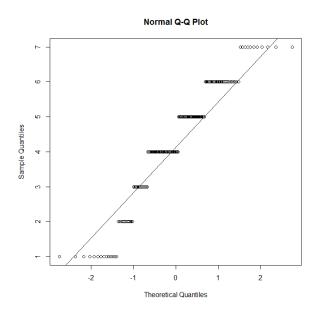


Figure J.76: QQ-plot for item *Innovative* for the textual version of brand no. 3.

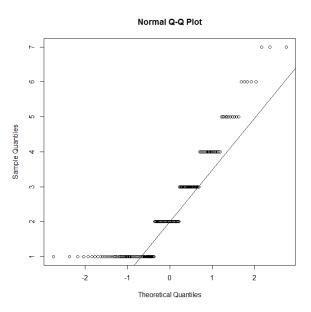
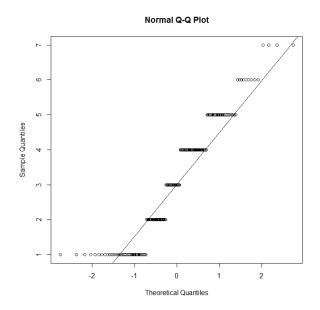


Figure J.77: QQ-plot for item *Innovative* for the visual version of Zeffi.



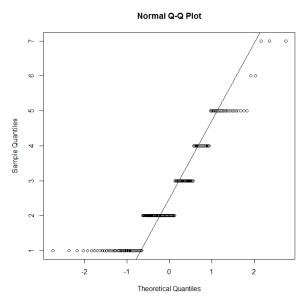


Figure J.78: QQ-plot for item *Aggressive* for the textual version of brand no. 3.

Figure J.79: QQ-plot for item *Aggressive* for the visual version of Zeffi.

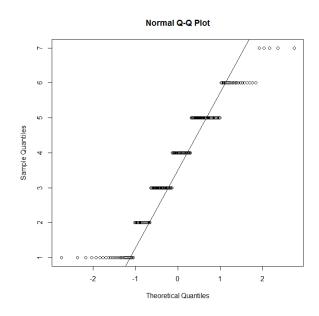


Figure J.80: QQ-plot for item *Bold* for the textual version of brand no. 3.

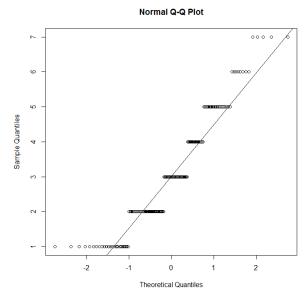
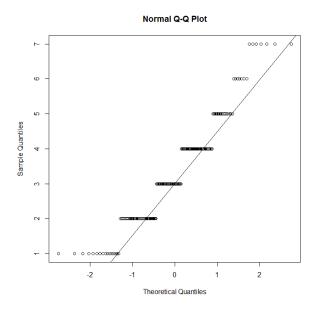


Figure J.81: QQ-plot for item *Bold* for the visual version of Zeffi.



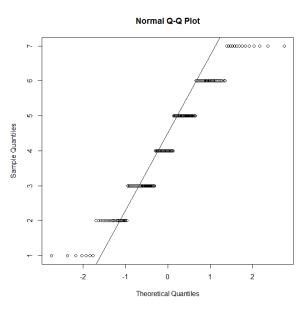
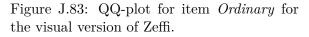


Figure J.82: QQ-plot for item *Ordinary* for the textual version of brand no. 3.



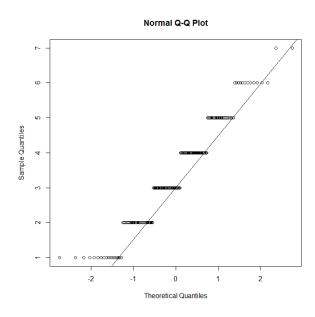


Figure J.84: QQ-plot for item *Simple* for the textual version of brand no. 3.

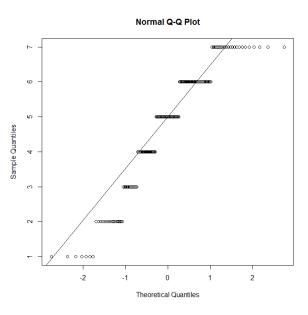
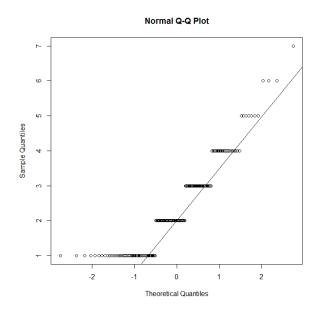


Figure J.85: QQ-plot for item *Simple* for the visual version of Zeffi.



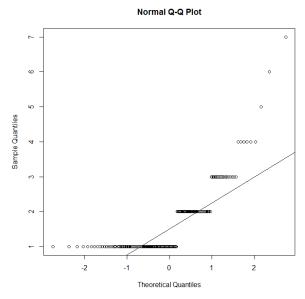
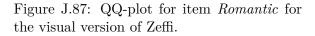


Figure J.86: QQ-plot for item *Romantic* for the textual version of brand no. 3.



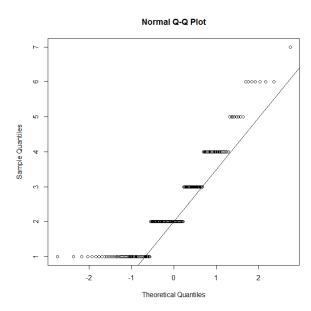


Figure J.88: QQ-plot for item *Sentimental* for the textual version of brand no. 3.

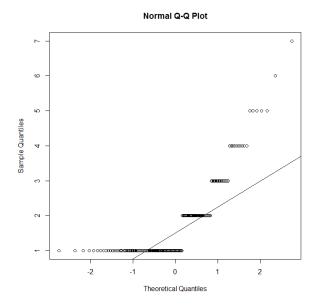


Figure J.89: QQ-plot for item *Sentimental* for the visual version of Zeffi.

### J.4 QQ plots for Gudox

#### J.4.1 Design attributes

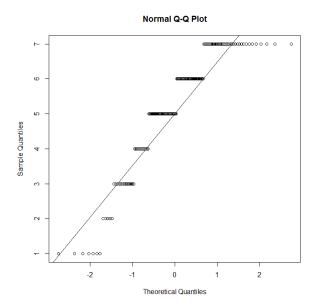


Figure J.90: QQ-plot for attribute *Masculine* for Gudox.

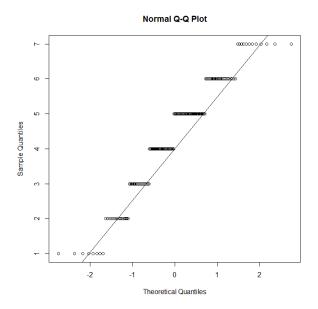


Figure J.92: QQ-plot for attribute *Determined* for Gudox.

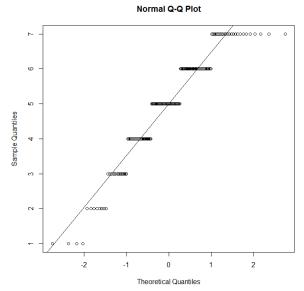


Figure J.91: QQ-plot for attribute *Strong* for Gudox.

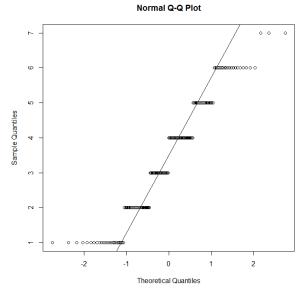


Figure J.93: QQ-plot for attribute *Exciting* for Gudox.

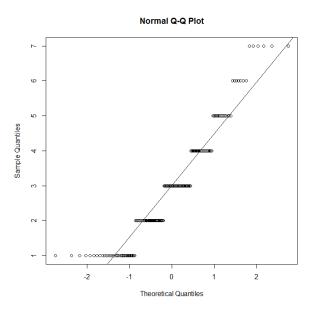


Figure J.94: QQ-plot for attribute *Traditional* for Gudox.

#### J.4.2 Personality items

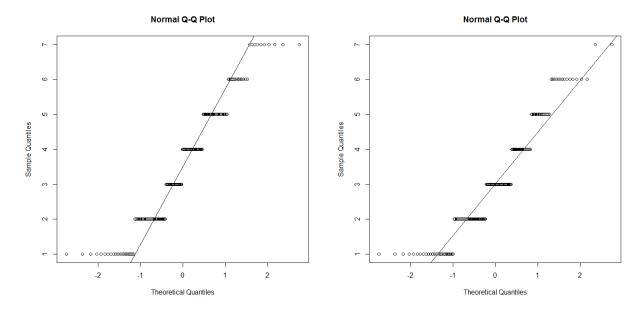
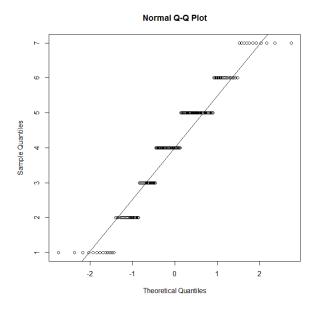
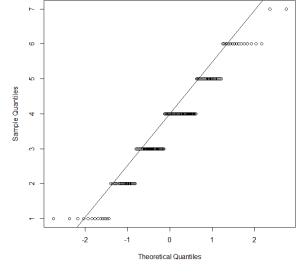


Figure J.95: QQ-plot for item *Down to earth* for the textual version of brand no. 4.

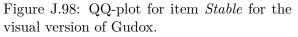
Figure J.96: QQ-plot for item *Down to earth* for the visual version of Gudox.





Normal Q-Q Plot

Figure J.97: QQ-plot for item *Stable* for the textual version of brand no. 4.



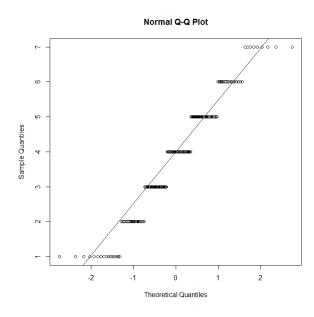


Figure J.99: QQ-plot for item *Responsible* for the textual version of brand no. 4.

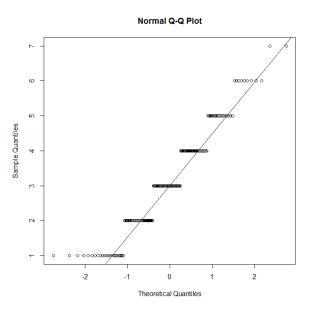
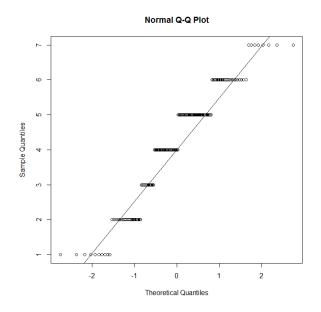


Figure J.100: QQ-plot for item *Responsible* for the visual version of Gudox.



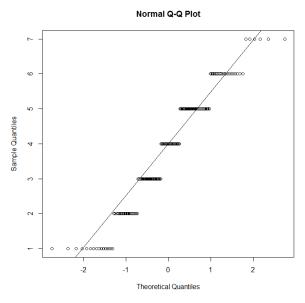
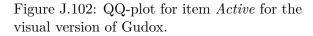


Figure J.101: QQ-plot for item *Active* for the textual version of brand no. 4.



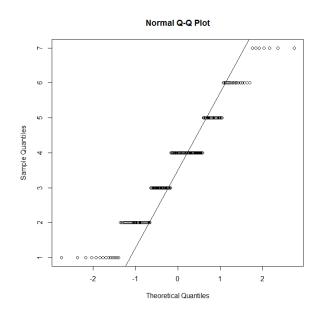


Figure J.103: QQ-plot for item *Dynamic* for the textual version of brand no. 4.

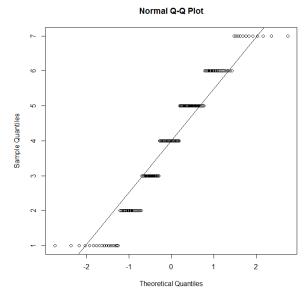
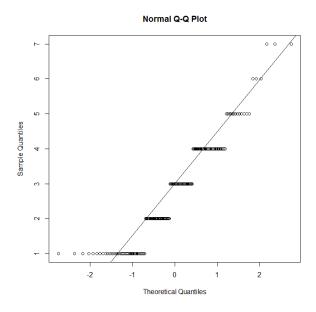


Figure J.104: QQ-plot for item *Dynamic* for the visual version of Gudox.



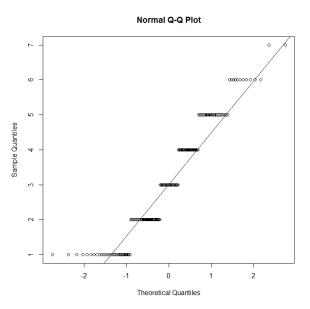
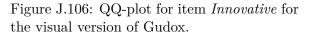


Figure J.105: QQ-plot for item *Innovative* for the textual version of brand no. 4.



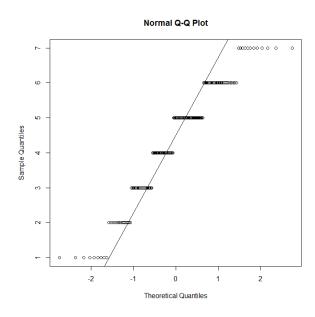


Figure J.107: QQ-plot for item *Aggressive* for the textual version of brand no. 4.

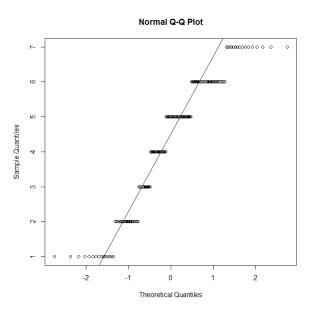
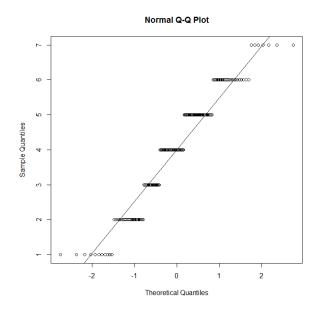


Figure J.108: QQ-plot for item *Aggressive* for the visual version of Gudox.



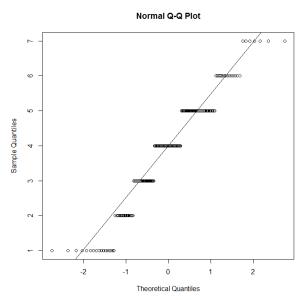
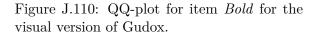


Figure J.109: QQ-plot for item *Bold* for the textual version of brand no. 4.



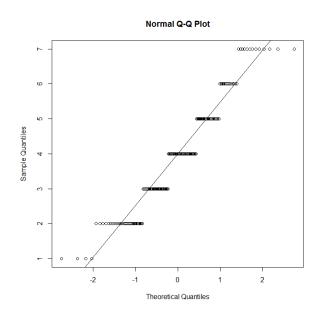


Figure J.111: QQ-plot for item *Ordinary* for the textual version of brand no. 4.

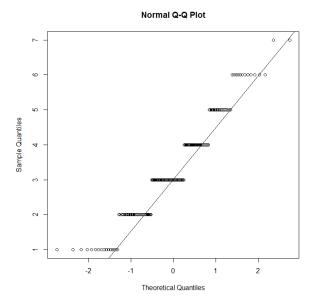
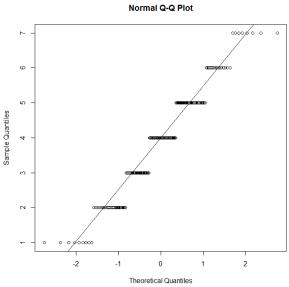


Figure J.112: QQ-plot for item *Ordinary* for the visual version of Gudox.



1 2 -2 -1 0 Theoretical Quantiles

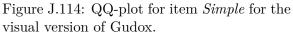
ø

Sample Quantiles

Þ

G

Figure J.113: QQ-plot for item *Simple* for the textual version of brand no. 4.



Normal Q-Q Plot

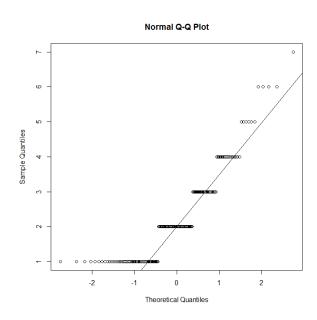
Normal Q-Q Plot

2

00 0

1

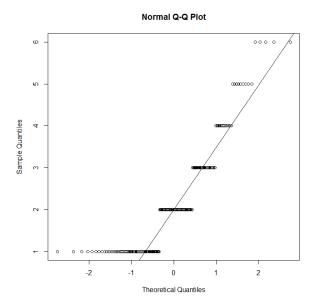
0



 $v_{1}$  -  $v_{2}$  -  $v_{2$ 

Figure J.115: QQ-plot for item *Romantic* for the textual version of brand no. 4.

Figure J.116: QQ-plot for item *Romantic* for the visual version of Gudox.



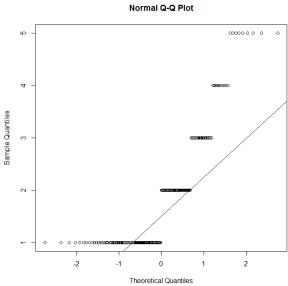


Figure J.117: QQ-plot for item *Sentimental* for the textual version of brand no. 4.

Figure J.118: QQ-plot for item *Sentimental* for the visual version of Gudox.

## Brands familiar to created cases

In this appendix, all brands and products mentioned in relation to familiarity of the created brand cases are shown. If a brand was mentioned more than once, it is still only pictured the once.

For each of our cases, the mentioned brands are portraied. In some cases the comments were quite specific naming both brand and model or naming a uniquely named product, making the search for the product in question easy. An example of this could be Red Door perfume (pictured in figure K.23). However in some cases, a comment could be a broad term for a range products such as L'oreal Elvital. In these cases, either a selection is presented or one that we assessed to be the one in question due to some similarties to the brand case in question.

#### K.1 Konup

Up, 2014).

Products and brands mentioned by participants in connection to Konup are as follows.







Figure K.2: A box of After Figure K.3: A pack of Sti-Figure K.1: A can of 7up (7 Eight (After Eight, 2014). morol gum (Stimorol, 2014).



Figure K.4: A bottle of Faxe Kondi beverage (Faxe kondi, 2014).

#### K.2 Fevir

Products and brands mentioned by participants in connection to Fevir are as follows.







Figure K.5: Head and shoulders citrus breeze shampoo (Head and Shoulders, 2014). Figure K.6: Wash & Go 2in1 shampoo (Wash & Go, 2014). Figure K.7: Respons, Garnier.



Figure K.8: Five editions of L'oreal Elvital (Eltival, 2014).



Figure K.9: Five editions of Gillette shaving gel Satin Care (Gillette, 2014).



Figure K.10: Four editions of Dove shower cream (Dove, 2014b).

#### K.3 Zeffi

Products and brands mentioned by participants in connection to Zeffi are as follows.



Figure K.11: Hubba Bubba bubble gum (Hubba Bubba, 2014).



Figure K.12: Big Red gum (Big Red, 2014).



Figure K.13: Four editions of Polos (Polo, 2014).



Figure K.14: Twix.



Figure K.15: Kit Kat.

#### **K.4** Gudox

Products and brands mentioned by participants in connection to Gudox are as follows.



ant (Malizia, 2014).



(Axe, 2014).



Figure K.16: Malizia deodor- Figure K.17: Axe deodorant Figure K.18: Ultrex shampoo for men (Ultrex, 2014).



Figure K.19: Hugo Boss Deep Figure K.20: Hugo Boss Deep Figure K.21: Boss Deep Red, 2014).



Red perfume for women (Hugo Red shower gel for women (Hugo Boss, 2014b).



Hugo Boss shower gel for men (Hugo Boss, 2014a).



Figure K.22: Ferrari Red perfume (Ferrari, 2014).



Figure K.23: Elizabeth Arden Red Door perfume for women (Red Door, 2014).



Figure K.24: Dior Fahrenheit perfume (Dior, 2014).



ant (Playboy, 2014).



Figure K.25: Playboy deodor- Figure K.26: Wella shampoo Figure K.27: Wash & Go 2in1 for men (Wella, 2014). shampoo (Wash & Go, 2014).



Figure K.28: Dax wax for men (Dax Wax, 2014).

## Terminology

- Advertisement encompasses in this project, any form of advert be it print, tv commercial, endorsement, etc.
- **Attribute** is the term used in this project for a word connected with expressive design elements. Attributes is what the constructed designs were made of.
- **Big Five** is a human personality measuring method with five factors that is capable of describing the main characteristics of personalities.
- **Brand** is a company's way of distinguish them from others, be it by logo, name, advertisement, etc. This project are based in the AMA definition of a brand, see page 8 for the full definition.
- **Brand architecture** is a strategy of how a brand is constructed and maintained. There are many types of brand structures and in most cases, they are adapted for the individual brand.
- **Brand expression** is the, in our case visual, embodiment of a company's identity. This could be logo, labels, colors, name, packaging, etc. It serves as the touch point for a perception of the brand by a consumer.
- **Brand image** is the consumers perception of a brand. Brand image is formed via exposure to a branded product or brand elements.
- **Brand personality** is a term for a collective of characteristics that are convey an unified perception of a brand's values. This is beyond the functional aspects of a brand and is a more holistic way of looking at brands.
- **Brand personality traits** is humanlike characteristics that are suitable for brands. Most authors agree on the presence of this kind of traits in brands.
- **Brand value set** is a collective of attributes that in their whole reflects what a brand is. In this project Identity is used as synonym for this.
- **Category confusion effect** is when product categories embody strong values even before individual brands are introduced. A known example of this is whisky. Without any brand mentioned most associate whisky with something upper-class and sophisticated.
- **Consumer type** is different kinds of consumers and most commonly is connected with an adjective descriptor. E.g. an innovative consumer is one that keeps up with the latest products.
- **Image spillover** is a term used in connection with the perception of one product having an effect on another.
- **Identity** refers in this project to a collective of attributes that in their whole reflects what a brand is. In this project *Brand value set* is used as synonym.
- **Product** is a single entity that are specific to a brand. A product is for instance a Kit Kat chocolate bar under the parent brand Nestlé.

- **Product category** refers to a specific type of product, but not any specific products or brands. E.g. a product category can be computer, where as there are a wide variety of brands within this categories and each brand can have a range of products.
- **Proto-brands** is early versions of the concept brand in connection with a historical view. It is what lies before the present understanding of brand. The term is coined by Moore and Reid (2008).
- **Visual expression** is design elements such as logo, color, name, typeface, etc that are used to express a brand's identity.
- **Umbrella brand** is described as a brand with more than one product with the same brand name (Sullivan, 1990).

## Content of appendix CD

#### Who is your brand.pdf

Data Folder containing:

- Comments from the the visual questionnaire.pdf
- Data for textual questionnaire.xlsx
- Data for visual questionnaire.xlsx
- **Images of finding the identity attributes** Folder with images documenting the proces of arranging attribute into groups, categorizing them and creating brand identities.

**Images of finding product categories** Folder with images documenting the proces of exploring and selecting possible product categories.

Brand designs Folder of design process:

- "The final 4 designs" Folder with bigger resolution pictures of the four designs.
- "Sketch ideas" Folder with images of the sketches.
- "Photoshop" Folder containing Photoshop files of the design.
- "ChocolatebarBase.png" High resolution of chocolate bar render.
- "ShampooBase.png" High resolution of shampoo bottle render.

## Bibliography

- 7 Up (2014). A can of 7 up. http://dizzyfrinks.com/drink/7-up/ Accessed on the 16th of May, 2014.
- Aaker, D. A. and Joachimsthaler, E. (2000). The brand relationship spectrum: The key to the brand architecture challenge. *California Management Review*, 42(4):p. 8 23.
- Aaker, J. L. (1997). Dimensions of brand personality. *Journal of Marketing Research*, 34(3):p. 347 356.
- Adams, F. M. and Osgood, C. E. (1973). A cross-cultural study of the affective meanings of color. *Journal of Cross-Cultural Psychology*, 4:p. 135 156.
- After Eight (2014). A box of after eight candy. http://www.festivalchocolate.co.uk/2012/05/coolbritannia/after-eight-dark-chocolate-mint-box/ Accessed on the 16th of May, 2014.
- Amare, N. and Manning, A. (2012). Seeing typeface personality: Emotional responses to form as tone. In *Professional Communication Conference (IPCC)*, 2012 IEEE International, pages p. 1 – 9.
- Amine, A. (1998). Consumers' true brand loyalty: the central role of commitment. Journal of Strategic Marketing, 6(4):p. 305 – 319.
- Avis, M. (2012). Brand personality factor based models: A critical review. Australasian Marketing Journal (AMJ), 20(1):p. 89 – 96.
- Axe (2014). Axe deodorant. http://www.gianteagle.com/79400551009.aspx Accessed on the 16th of May, 2014.
- Azoulay, A. and Kapferer, J.-N. (2003). Do brand personality scales really measure brand personality? *The Journal of Brand Management*, 11(2):p. 143 155.
- Big Red (2014). Big red gum. http://www.liketotally80s.com/80s-commercials-br.html Accessed on the 16th of May, 2014.
- Brumberger, E. (2003). The rhetoric of typography: The persona of typeface and text. *Technical Communication*, 50:p. 206 223.
- Burmann, C., Jost-Benz, M., and Riley, N. (2009). Towards an identity-based brand equity model. Journal of Business Research, 62(3):p. 390 – 397.
- Caprara, G. V., Barbaranelli, C., and Guido, G. (2001). Brand personality: How to make the metaphor fit? *Journal of Economic Psychology*, 22(3):p. 377 395.
- Childers, T. L. and Jass, J. (2002). All dressed up with something to say: Effects of typeface semantic associations on brand perceptions and consumer memory. *Journal of Consumer Psychology*, 12:p. 93 106.
- Coca-Cola (2014a). Choose love over like advert. https://www.youtube.com/watch?v=rw\_9OU56qKA Accessed on the 25th of March, 2014.
- Coca-Cola (2014b). History of coca-cola. http://www.coca-cola.co.uk/about-us/history-of-coca-cola-1886-1892.html Accessed on the 17th of April, 2014.

- Coca-Cola (2014c). Just add zero advert. https://www.youtube.com/watch?v=Lm4oiLzJs2g Accessed on the 25th of March, 2014.
- Crowley, A. E. (1993). The two-dimensional impact of color on shopping. *Marketing Letters*, 4:p. 59 69.
- Cyr, D., Head, M., and Larios, H. (2010). Colour appeal in website design within and across cultures: A multi-method evaluation. *International Journal of Human-Computer Studies*, 68:p. 1 – 21.
- Danesi, M. (2006). Brands and logos. In Brown, K., editor, Encyclopedia of Language and Linguistics, pages p. 109 – 116. Elsevier.
- Davies, G., Chun, R., da Silva, R. V., and Roper, S. (2001). The personification metaphor as a measurement approach for corporate reputation. *Corporate Reputation Review*, 4(2):p. 113 127.
- Dax Wax (2014). Dax hair wax. http://www.hairscissors.co.uk/dax-wax-short-and-neat-100g-654\_prod.html, Accessed on the 16th of May, 2014.
- de Chernatony, L. (1999). Brand management through narrowing the gap between brand identity and brand reputation. *Journal of Marketing Management*, 15(1-3):p. 157 179.
- de Chernatony, L., Drury, S., and Segal-Horn, S. (2004). Identifying and sustaining services brands' values. *Journal of Marketing Communications*, 10(2):p. 73 93.
- de Chernatony, L. and Riley, F. D. (1998). Defining a "brand": Beyond the literature with experts' interpretations. *Journal of Marketing Management*, 14(5):p. 417 443.
- Dior (2014). Dior fahrenhiet perfume. http://www.feelingsexy.com.au/fahrenheit-by-christiandior-13327/ Accessed on the 16th of May, 2014.
- Douglas, S. P., Craig, C. S., and Nijssen, E. J. (2001). Integrating branding strategy across markets: Building international brand architecture. *Journal of International Marketing*, 9(2):p. 97 114.
- Dove (2014a). Dove damage shampoo image. http://www.totalbeauty.com/content/gallery/best-dove-products/p67062/page3 Accessed on the 16th of May, 2014.
- Dove (2014b). Four editions of dove shower cream. http://modaeconomica.com/cream-oil-shower-de-dove/ Accessed on the 16th of May, 2014.
- Eltival (2014). Five editions of l'oreal elvital shampoos. http://www.gofeminin.de/make-up/l-oreal-paris-100-jahre-l-oreal-weil-sie-es-sich-wert-sind-d8107c157597.html Accessed on the 16th of May, 2014.
- Erevelles, S. (1998). The role of affect in marketing. *Journal of Business Research*, 42(3):p. 199 215.
- Esch, F.-R., Möll, T., Schmitt, B., Elger, C. E., Neuhaus, C., and Weber, B. (2012). Brands on the brain: Do consumers use declarative information or experienced emotions to evaluate brands? *Journal of Consumer Psychology*, 22(1):p. 75 – 85.
- Faxe kondi (2014). A bottle of faxe kondi. http://www.royalunibrew.com/Default.aspx?ID=1 Accessed on the 16th of May, 2014.

- Ferrari (2014). Ferrari red perfume. http://www.fragrancex.com/images/products/sku/large/ FERSCUDRR.jpg Accessed on the 16th of May, 2014.
- Field, A. and Hole, G. (2010). *How to design and report experiments*, pages p. 42 49. Sage Publication.
- Forbes (2013). The worlds most valuable brands. http://www.forbes.com/powerful-brands/list/ Accessed on the 14th of March, 2014.
- Geuens, M., Weijters, B., and De Wulf, K. (2009). A new measure of brand personality. International Journal of Research in Marketing, 26(2):p. 97 – 107.
- Gillette (2014). Five editions of gillette shaving gele, satin care. http://krazyclippers.com/riteaid-black-friday-alert-2-free-gillette-shave-gel/ Accessed on the 16th of May, 2014.
- Goldberg, L. R. (1992). The development of markers for the big-five factor structure. *Psychological assessment*, 4(1):p. 26 42.
- Green, D. and Loveluck, V. (1994). Understanding a corporate symbol. Applied Cognitive Psychology, 8(1):37 47.
- Gump, J. E. (2001). The readability of typefaces and the subsequent mood or emotion created in the reader. *Journal of Education for Business*, 76:p. 270 273.
- Head and Shoulders (2014). Head and shoulders citrus breeze shampoo. http://well.ca/products/head-shoulders-citrus-breeze\_5959.html Accessed on the 16th of May, 2014.
- Henderson, P. W. and Cote, J. A. (1998). Guidelines for selecting or modifying logos. *Journal* of Marketing, 62(2):p. 14 30.
- Henderson, P. W., Cote, J. A., Leong, S. M., and Schmitt, B. (2003). Building strong brands in asia: selecting the visual components of image to maximize brand strength. *International Journal of Research in Marketing*, 20(4):p. 297 – 313.
- Henderson, P. W., Giese, J. L., and Cote, J. A. (2004). Impression management using typeface design. Journal of Marketing, 68:p. 60 – 72.
- Hubba Bubba (2014). Hubba bubba bubble gum. http://www.wisechoiceuk.com/scripts/ prod-View.asp?idproduct=13381 Accessed on the 16th of May, 2014.
- Hugo Boss (2014a). Hugo boss shower gel. http://www.feelunique.com/p/Hugo-Boss-Boss-Boss-Bottled-Sport-Shower-Gel-150ml Accessed on the 16th of May, 2014.
- Hugo Boss (2014b). Hugo boss shower gel deep red. http://www.daily-shampoo.ch/duschgelwoman/ The top image at this page, accessed on the 16th of May, 2014.
- Hugo Boss Deep Red (2014). Hugo boss deep red perfume. http://www.osmoz.com/perfumes/hugo-boss/982/hugo-deep-red Accessed on the 16th of May, 2014.
- Hynes, N. (2008). Colour and meaning in corporate logos an empirical study. Brand Management, 16(8):p. 545 - 555.
- imgur (2014). Want to know what company makes your favorite brands? http://imgur.com/gallery/DVJ4gH1 Accessed on the 1st of June, 2014.

- Jacoby, J., Olson, J. C., and Haddock, R. A. (1971). Price, brand name, and product composition characteristics as determinants of perceived quality. *Journal of Applied Psychology*, 55(6):p. 570 – 579.
- Keller, K. L. (2008). Strategic brand management: Building, measuring, and managing brand equity, chapter 1. Pearson Education Publication, 3rd edition.
- Kervyn, N., Fiske, S. T., and Malone, C. (2012). Brands as intentional agents framework: How perceived intentions and ability can map brand perception. *Journal of Consumer Psychology*, 22(2):p. 166 – 176.
- Kinder (2014). Kinder maxi image. http://www.chockies.net/FERRERO-KINDER-Maxi-11batons-chocolat-au-lait-231-g Accessed on the 16th of May, 2014.
- Klink, R. R. (2000). Creating brand names with meaning: The use of sound symbolism. Marketing Letters, 11(1):p. 5 – 20.
- Klink, R. R. and Athaide, G. A. (2010). Consumer innovativeness and the use of new versus extended brand names for new products. *Journal of Product Innovation Management*, 27(1):p. 23 – 32.
- Knox, S. and Walker, D. (2001). Measuring and managing brand loyalty. Journal of Strategic Marketing, 9(2):p. 111 – 128.
- Kohli, C., Suri, R., and Thakor, M. (2002). Creating effective logos: Insights from theory and practice. *Business Horizons*, 45(3):p. 58 64.
- Kohli, C. S., Harich, K. R., and Leuthesser, L. (2005). Creating brand identity: a study of evaluation of new brand names. *Journal of Business Research*, 58(11):p. 1506 1515.
- Kotler, P. and Keller, K. L. (2008). *Marketing management*, chapter 9. Pearson Education International, 13rd edition.
- Li, Y. and Suen, C. Y. (2010). Typeface personality traits and their design characteristics. In Proceedings of the 9th IAPR International Workshop on Document Analysis Systems, pages p. 231 – 238.
- Lindstrom, M. (2005). Brand sense Build powerful brands through touch, taste, smell, sight, and sound, page p. 63. Free Press.
- Malizia (2014). Malizia deodorant. http://www.italianbarber.com/malizia-uomo-vetyver-deodorant-spray-150ml Accessed on the 16th of May, 2014.
- Manning, A. and Amare, N. (2009). Emotion-spectrum response to form and color: Implications for usability. In *Professional Communication Conference*, 2009. IPCC 2009. IEEE International, pages p. 1 – 9.
- McCrae, R. R. and John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of personality*, 60(2):p. 175 215.
- Moore, K. and Reid, S. (2008). The birth of brand: 4000 years of branding. *Business History*, 50(4):p. 419 432.
- Mordkoff, T. (2011). The assumption(s) of normality. http://www2.psychology.uiowa.edu/faculty/mordkoff/GradStats/part%201/I.07%20normal.pdf Accessed on the 24th of May, 2014.

- Morrison, G. R. (1986). Communicability of the emotional connotation of type. *Educational Communication and Technology*, 34:p. 235 244.
- Neutral (2014). Anti dandruff shampoo image. http://www.neutral.dk/Images/1545/1545-417556-Neutrl\_Anti-dndruffShmpoo\_Imge\_300x300.png Accessed on the 6th of May, 2014.
- O'Reilly, D. (2005). Cultural brands/branding cultures. Journal of Marketing Management, 21(5-6):p. 573 588.
- Pantene (2014). Pantene shampoo image. http://fabesfashion.files.wordpress.com/2013/08/20130803-190703.jpg Accessed on the 6th of May, 2014.
- Pett, D. and Wilson, T. (1996). Color research and its application to the design of instructional materials. *Educational technology research and development*, 44:p. 19 35.
- P&G (2014). Head and shoulders shampoo image. http://www.körperzentrum.ch/head-shoulders-apple-fresh Accessed on the 16th of May, 2014.
- Phan, M., Thomas, R., and Heine, K. (2011). Social media and luxury brand management: The case of Burberry. *Journal of Global Fashion Marketing*, 2(4):p. 213 – 222.
- Playboy (2014). Three editions of playboy deodorant. http://www.orangescs.com/catalog/product/view/id/11031/s/playboy-deodorant-150mlamazon/category/18/ Accessed on the 16th of May, 2014.
- Polo (2014). Four editions of polo candy. http://weheartit.com/entry/group/21438675 Accessed on the 16th of May, 2014.
- Red Door (2014). Elizabeth arden red door perfume. http://zzhi1688.blogspot.dk/2011/11/century-classic-brand-elizabeth-arden.html Accessed on the 16th of May, 2014.
- Romani, S., Grappi, S., and Dalli, D. (2012). Emotions that drive consumers away from brands: Measuring negative emotions toward brands and their behavioral effects. *International Jour*nal of Research in Marketing, 29(1):p. 55 – 67.
- Sanex (2014a). Sanex men shampoo image. http://www.matas.dk/sanex-for-men-2in1-shampoo-shower-250-ml Accessed on the 16th of May, 2014.
- Sanex (2014b). Sanex shampoo image. http://www.matas.dk/sanex-shampoo-mod-skael-250-ml Accessed on the 16th of May, 2014.
- Schmitt, B. (2012). The consumer psychology of brands. Journal of Consumer Psychology, 22(1):p. 7 17.
- Schneider, I. (2010). C-section comics: iphone vs. android vs. blackberry. http://www.csectioncomics.com/2010/11/iphone-vs-android-vs-blackberry.html Accessed on the 23rd of April, 2014.
- Schwarzkopf (2014a). Schwarzkopf gliss shampoo image. http://imagesits.chemistdirect.co.uk/Schwarzkopf-Gliss-Total-Repair-Shampoo-188094.jpg?o=UfdUc6UkAlnIWtYrp2FiOlZNFmIj&V=09Xx&q=75 Accessed on the 6th of May, 2014.
- Schwarzkopf (2014b). Ultime essence shampoo image. http://boots.scene7.com/is/image/Boots/10167731?wid=280&hei=343&op\_sharpen=1 Accessed on the 6th of May, 2014.

- Spence, C. (2012). Managing sensory expectations concerning products and brands: Capitalizing on the potential of sound and shape symbolism. *Journal of Consumer Psychology*, 22(1):p. 37 54.
- Stimorol (2014). A pack of stimorol spearmint gum. http://ikiosk.dk/stimorol-spearmint.html Accessed on the 1st of June, 2014.
- Stompff, G. (2003). The forgotten bond: Brand identity and product design. Design Management Journal (Former Series), 14(1):p. 26 – 32.
- Streiner, D. L. (2003). Unicorns do exist: A tutorial on ?proving? the null hypothesis. Canadian Journal of Psychiatry, 48(11):p. 756 – 761.
- Sullivan, M. (1990). Measuring image spillovers in umbrella-branded products. The Journal of Business, 63(3):p. 309 – 329.
- Sung, Y. and Tinkham, S. F. (2005). Brand personality structures in the united states and korea: Common and culture-specific factors. *Journal of Consumer Psychology*, 15(4):p. 334 - 350.
- Tannenbaum, P. H., Jacobson, H. K., and Norris, E. L. (1964). An experimental investigation of typeface connotations. Journalism & Mass Communication Quarterly, 41:p. 65 – 73.
- TeluguMail (2013). Editor's pick. http://www.telugumalli.com/?uandme=editors-pick Accessed on the 27th of March, 2014.
- Tupes, E. C. and Christal, R. E. (1961). Recurrent personality factors based on trait ratings. Technical report, DTIC Document.
- Ultrex (2014). Ultrex express care for men. http://www.hondoscenter.gr/en/products/man/skincare/cosmetics/c300-ultrex/4393-express-careAccessed on the 16th of May, 2014.
- Valdez, P. and Mehrabian, A. (1994). Effects of color on emotions. Journal of Experimental Psychology: General, 123:p. 394 – 409.
- Van der Lans, R., Cote, J. A., Cole, C. A., Leong, S. M., Smidts, A., Henderson, P. W., Bluemelhuber, C., Bottomley, P. A., Doyle, J. R., Fedorikhin, A., et al. (2009). Crossnational logo evaluation analysis: An individual-level approach. *Marketing Science*, 28(5):p. 968 – 985.
- Wash & Go (2014). Wash & go 2in1 shampoo. http://www.comparestoreprices.co.uk/healthand-beauty/other-wash-and-go-universal-2-in-1-shampoo-and.asp Accessed on the 16th of May, 2014.
- Wella (2014). Wella shampoo for men. http://www.lookfantastic.com/wella-sp-menmaxximum-shampoo-250ml/10620668.html Accessed on the 16th of May, 2014.
- Wu, L., Klink, R. R., and Guo, J. (2013). Creating gender brand personality with brand names: the effects of phonetic symbolism. *Journal of Marketing Theory and Practice*, 21(3):p. 319 329.

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