#### Stockholm School of Economics

#### Master's Thesis in Marketing and Media Management

# Packaging as a Communicator of Brand Personality

# Comparing the importance of the whole and the details

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While practitioners have started acknowledging the importance of packaging design, the academic knowledge in the field is still lagging behind. More specifically, even though it has been shown that the majority of packaging fails to get the consumer's full attention in the retail setting, existing research has only approached packaging in settings where the consumer has no limitations on examining all aspects of the packaging or detail in question. These studies have shown that packaging has a great influence on the way consumers perceive the brand and product. However, this research aimed to fill this gap in existing research by finding out which aspects of packaging are responsible for communicating brand messages, and how the different levels of attention affect packaging's opportunity to do so.

Through a quantitative experimental study this research has shown that the peripheral view of packaging, in which the object appears unclear and blurred, may play a bigger role in the impression formation as previously thought. More importantly, this impression may differ from the impression communicated by the product under full attention. As brand personality impressions have been linked to product choice, communicating the wrong message may decrease the packaging's opportunity to get more attention from the correct target group. In addition, the study presented in this paper has shown that the message conveyed by packaging cannot be fully predicted based on the details of the design – using a traditional logo and color does not automatically mean that the holistic packaging will be perceived as traditional. All in all, this research has found strong evidence that highlights the importance of considering packaging as a holistic 'Gestalt' rather than a group of individual details.

Keywords: Packaging, Packaging design, Gestalt, Branding, Brand personality, Design

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# Definitions and clarifications

Some of the terminology regarding the topic of this report is complex and unfamiliar to most readers. To make the report more understandable and clear, these will be explained and defined here. In addition, some clarifications are made as to the way the different terms and concepts are represented in this study.

Gestalt	"whole", a holistic combination of details that according to Gestalt theorists is " <i>different from</i> the sum of its parts" (Wagemans <i>et al.,</i> 2012, p. 4)
	For example a song is a Gestalt formed by individual tunes, notes and melody, but the song cannot be seen as merely the sum of these elements.
Peripheral vision	'of, relating to, or being the outer part of the visual field' (Merriam-Webster Dictionary, 2015)
	In peripheral vision items appear blurred and unclear (Wu <i>et al.</i> , 2011), and consequently in this research the peripheral view of packaging is represented by blurred images of the stimuli (see appendix 1).
Individual elements	Packaging design includes the combination of "the various elements chosen and blended into a holistic design" (Orth & Malkewitz, 2008, p. 64). This research focuses specifically on two of these elements, namely the logo and a pictorial element.
Brand personality (BP)	This research follows Aaker (1997) and defines brand personality as "the set of human characteristics associated with a brand" (p. 347).
Semiotics	"The study of signs and symbols and how they are used" (Merriam-Webster Dictionary, 2015)
Semantics	A part of semiotics focusing on studying "the meanings of words and phrases in particular context" (Merriam-Webster Dictionary, 2015)

# 1 Introduction

When a designer starts creating a new packaging design for a product, their brief includes different types of brand values the manufacturer wants the packaging to convey and communicate to the consumer. To answer this request, the designer often starts by creating the individual details, such as the logo, typeface and different textual and pictorial elements, so that each of them will work as a tool to convey this message. The elements are created outside of their context and only in a later phase these details are then arranged together to form a Gestalt, a "whole". (van den Berg-Weitzel & van de Laar, 2015) Furthermore, even the holistic design is created in isolation without taking into account the surroundings the packaging will be portrayed in (Meyers & Lubli, 1998).

Most of the current research approaches packaging similarly. Many studies have looked into the different elements of packaging and their effects on the brand and product impressions perceived by the consumer. For example Boudreaux and Palmer (2007) showed how the imagery, layout and the color of a wine bottle label led to different brand personality impressions. Similarly, the form of the package has been shown to lead to different volume perceptions (Folkes & Matta, 2004), the color and shape of the package as well as different graphic elements of the package have been found to affect brand personality perceptions, and the logo also has been shown to have an effect on the purchase likelihood (e.g. Pantin-Sohier, Decrop & Brée, 2005; Bottomley & Doyle, 2006; Hynes, 2009).

However, the current marketplace where the consumer comes in contact with packaging floods with messages that try to reach the consumer (e.g. Clement, 2007; Rosengren, 2008; Hammer, Riebe & Kennedy, 2009; Walsh, Mitchell, Kilian & Miller, 2010). Regardless of companies' continuous attempts to presell products through advertising, purchase decisions are still largely affected by different stimuli in the retail store environment (Schoormans & Robben, 1997; Ampuero & Vila, 2006; Silayoi & Speece, 2007). As a consumer walks through a supermarket, they are faced with tens of thousands of different products (e.g. Botti & Iyengar, 2006), advertisements and signs. With the increased time-pressure consumers today feel as well as the decrease in the time to make all daily purchase decisions (Herrington & Capella, 1995; Rettie & Brewer, 2000; Silayoi & Speece, 2007), the amount of attention given for each packaging can be very limited, and only a few lucky packaging designs can expect to be properly examined. Narrowing down the consideration set allows consumers to deal with the information overload and confusion present in the marketplace (Silayoi & Speece, 2007). Thus, instead of focusing on the small print, the consumer mostly sees the details of the designs *in the context* of the other elements, seeing the packaging as a 'whole'

instead of as a group of details. Furthermore, even the holistic packaging is not perceived in isolation, but rather in the context of the retail environment.

Realizing this, some research has started adapting to a more holistic view of packaging design. As mentioned above Pantin-Sohier *et al.* (2005) showed that both the color and form of packaging act as antecedents for brand personality. More importantly, they showed that the same color can lead to different personality impressions depending on the form – on the context. This offers evidence that it is not enough to study the effects of the details in isolation as the same detail such as a logo, color or picture may lead to a different impression depending on the context. Accordingly, Orth and Malkewitz (2008) recognized that different categories of holistic design types, such as natural, massive or delicate, lead to different brand personality impressions, and created a framework matching the categories with different personality types. Still, both these studies allow the consumer to examine the details individually without the limits on attention that the retail setting forces on the consumer, which seems to be inadequate in imitating the average purchase situation where decisions are made in a complex environment and in a hurry (Pieters & Warlop, 1999).

Much research has been done in order to identify different stages in the buying process consumers go through when making purchase decisions. While there are many different models aiming to explain the subconscious processes leading to the purchase of a product, the majority agree on at least two of the phases: screening and evaluation (Clement, 2007). In the screening phase the eyes quickly scan through the different products and makes subconscious decisions of their relevance, whereas the evaluation phase involves comparing a few alternatives more based on their details (Pieters & Warlop, 1999). Research has also shown that items that are not in full visual focus, but rather in the peripheral area of the visual field, it is not possible tell apart the details – objects appear blurry and unclear (Wu, Cheng, Hu & Xu, 2011; Viswanath & Blaser, 2010). This brings with it an interesting question: are the details really necessary for the consumer to form impressions about the brand?

Scholars firmly agree that a strong brand personality, one of the main aspects of consumer impressions of a brand, can affect the decisions made in the buying process (Plummer, 1984-1985; Aaker, 1996; Aaker, 1999; Orth & Malkewitz, 2008), and for example in the wine category it was even shown to explain over half of the made purchase decisions (Boudreaux & Palmer, 2007). Thus, as the majority of purchase decisions are made at the point-of-purchase (e.g. Phillips & Bradshaw, 1993; Hausman, 2000; POPAI, 2015), packaging design offers a great opportunity to affect the consumers' choice process through

communicating a brand personality message. Moreover, packaging can have an advantage over traditional advertising as consumers are increasingly learning to avoid commercial messages (Matthes, Wirth, Schemer & Kissling, 2011), but still it is necessary for them to come in contact with packaging as they are shopping for their daily groceries (Underwood & Klein, 2002). Furthermore, packaging can often, especially in the category of fast-moving consumer goods, even be the only way of developing an impression of the brand and the product itself (ibid.). This packaging then gets carried home and often stays a part of the daily routines, and thus has a long-lasting opportunity to affect the consumer's perceptions through lived experience (Underwood, 2003; McNeal & Ji, 2003).

It is important to note that brand personality has two sides: brand personality statement, the input, and brand personality profile, out-take (Plummer, 1984-1985). The first is the personality the brand manager *wants* the consumer to perceive, while the second stands for what the consumer *actually* perceives (ibid.). This view takes into account the key point that it is possible that these two do not match. These discrepancies can damage the brand or the trust the brand receives from the consumers (Aaker, 1996). Acknowledging that consumers may form impressions and opinions about the brand with different levels of attention means that there are even more situations which may lead to discrepancies between the brand personality profiles and out-takes. Hence, it seems necessary to see how the different levels of attention lead to these impressions, and whether it is possible that they do not match.

As mentioned above, it is important to ensure that the brand personality profile matches the strategy and the positioning of the brand. The important role packaging plays at the point-of-purchase not only highlights the importance of communicating a brand message, but also that the message communicated by the packaging is the *right* one (Nancarrow, Wright & Brace, 1998). Consumers have to make quick decisions in the supermarket, and it has been shown they look for brands that match their own personality or aspirations (Aaker, 1999). Thus, getting the wrong impression while scanning the shelves through the peripheral vision may lead to the elimination of a brand from the consideration set (Mackworth & Morandi, 1967; Bruce, Georgeson & Green, 2003). This may even lead to the brand not reaching its target group. It is clear that more knowledge should be gathered on the effects of the context on different design elements and how it influences the way consumers perceive the brand and make purchase decisions. Furthermore, even though packaging has been shown to be a great influence in the consumer's decision-making process, not enough is yet known about the relative importance of the different elements and parts of packaging design on the importance of peripheral vision (Clement, 2007).

Even though packaging may have a great advantage in reaching the consumers over other advertising methods, it still faces similar challenges to traditional advertising. Phillips and Bradshaw (1991) conducted research over consumer behavior and interaction with the point-of-sale. They photographed and analyzed where consumers were looking during their shopping tour, and found that for 60% of the time people were not looking directly at displays. With this limited attention packaging receives in the retail setting, it is necessary to find out whether it is possible to communicate the all-important brand personality message in less time and with limited attention from the consumer, or if it is indeed necessary for the packaging to first ensure that the consumer will focus their gaze on the details. A package that can convey the brand message faster or easier can gain significant competitive advantage over its main rivals.

There is some evidence supporting the idea that packaging could indeed communicate a message with less attention to details from the consumer. Gonzalez and Kolers (1985) highlighted the importance of peripheral vision to the search process. Their research suggests that consumers process more information when it is obtained from objects in the peripheral area of vision, i.e. when the item is not in the central part of one's vision field, as opposed to when the focus is directly in the same object. This is when the consumer makes initial decisions about the relevance of the product and subconsciously decides whether a product is worth a closer look (Phillips & Bradshaw, 1993). Could it then be that they already then create perceptions about the brand as well, or is the communication of a brand personality message dependent on a more focused attention?

## 1.1 Problem area

Many companies in the field of consumer products have started to acknowledge the potential power of packaging, and accordingly re-allocating marketing resources away from traditional advertising towards packaging design (Underwood, 2003). According to Dickson (1997) companies spend more money on packaging than on advertising. Moreover, packaging "cannot escape performing the marketing function, even if a company does not explicitly recognize the marketing aspects of the package" (Silayoi & Speece, 2007, p. 1498). Regardless of this, the academic attention to the subject has remained low and rather generic (e.g. Underwood & Klein, 2002; Underwood, 2003; Clement, 2007). More specifically for example Ampuero and Vila (2006) noted that little research has been done over packaging's role in forming consumers' perceptions over the product and the positioning. Clement (2007) sees the gap in research even more critically and states that "the lack of consideration of visuals also reveals a complete lack of

understanding of the role of design in modern marketing" (p. 918). He adds that to truly understand consumers' buying behavior a more fundamental understanding of the role of visual stimuli in the situation of making purchase decisions is necessary.

As the competitive environment especially in the sector of fast-moving consumer goods is getting increasingly fierce, and at the same time consumers are dealing with busy, stressful lives (e.g. Underwood, 2003), it is important to see how the limited attention most packaging is exposed to affects the communicative ability of packaging. As the common assumption has been that in order to communicate, packaging needs to receive the attention of the consumer (Urbany, Dickson & Kalapurakal, 1996), scholars have focused on finding out which elements are most likely to capture this attention, and ignored the possibility that some communication may happen already in an earlier phase of the buying process. Furthermore, existing research has focused on analyzing consumers impressions of different marketing stimuli, which already have captured the consumers' full attention (Pieters & Warlop, 1999). The lack of knowledge over design's influence over the purchasing process is significant, and it is crucial to find more information over the perception of visual stimuli at the point-of-purchase (Clement, 2007).

According to Gestalt theory, people often first see things holistically as a whole "Gestalt" (e.g. Spelke, 1990; Orth & Malkewitz, 2008; Wagemans *et al.*, 2012). Only after perceiving the whole they start zooming in on the details and the parts that form the Gestalt. Similarly, in a retail environment people see packaging from different distances and angles, which limits the opportunity to separate the details from the 'whole' of the packaging. According to the Gestalt theorists, it is not possible to describe objects as a collection of individual details as those parts are not only influenced by what they are, but also by the surroundings and context they are in (Cziulik & dos Santos, 2011). This also leads to the feeling that it may be possible that the Gestalt of packaging could lead to a different impression of the brand than the one communicated by the individual details. Accordingly, Orth and Malkewitz (2008) suggest that the effect of packaging does not come from any individual detail, but rather the holistic design created by all the elements working together. "Design elements are combined into more complex (cognitive) components or factors of design, which are then aggregated during perception and convey particular characteristics (i.e., of a brand) to consumers." (Orth & Malkewitz, 2008, p. 65)

Thus, this research aims to study how packaging communicates a brand message with different attention levels of the consumer. It aims to shed light on the information gathering process of consumers in a retail setting, and to help designers create packaging that is more effective in its communicative role. The

findings will offer insights into *which* aspect of packaging is responsible for delivering the brand message – the packaging as a 'whole' or are the semiotic, i.e. symbolic, messages embedded in the individual details more important. Following the suggestion by Orth and Malkewitz (2008), this research will use brand personality as the main variable standing for consumer impressions. This concept, which will be examined more thoroughly in the following main chapter of this report, has been given much attention and has emerged as a popular tool to find generalizable terms explaining different responses to brands (ibid.). However, to get deeper knowledge on the perception process of consumers, this research also includes brand attitude as a dependent variable. In addition, to answer Clement's request of creating deeper knowledge of design's effect on purchase decisions, the research includes purchase intention as the final dependent variable. Hence, using cans of beer as stimulus object this research aims to review the roles of different aspects of packaging, in affecting the three elements described the following will be researched.

Firstly, if consumers offer limited attention to the details of the packaging, and only see the product in their peripheral vision field, is it possible for the packaging to convey a brand personality message? In other words, is seeing the individual details necessary for a brand personality message to be communicated? Furthermore, are the individual details separately responsible for the communication of the brand personality, or is it rather the holistic Gestalt formed by the details that the consumer uses for forming impressions about the brand? The findings of this research can thus lead to giving an idea of the importance of the context of packaging and its detailed elements, and possibly show that the Gestalt has more than aesthetic value only. Secondly, it is of great interest whether the brand message conveyed with the different levels of attention match each other, especially the full focus on the holistic can. In case of a discrepancy, a packaging design might not be able to find its target group. Furthermore, as current research often focuses on examining the individual elements separately, the finding might lead to suggest that new research methods in the field are necessary in order to create a deeper understanding of the information gathering process of consumers in a retail setting. Figure 1 summarizes the relationships to be studied in this research.

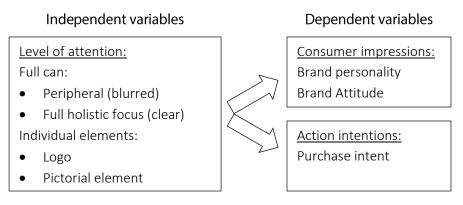


Figure 1 Researched independent and dependent variables

To sum up, there is a lack of research bringing together the knowledge of packaging as a branding tool and the knowledge of consumer shopping behavior. In order to explore this gap in existing research, this research aims to find out how different levels of attention from the consumer affect packaging's ability to communicate brand messages and influence the consumer's attitude and action intentions. More specifically three levels of attention are researched: the peripheral view of packaging, the holistic view of packaging (the Gestalt) and focus down on the individual details of the design.

# 1.2 Purpose of the study

The purpose of this research is to find out how packaging is able to communicate a brand message in an increasingly crowded marketplace and fill out some of the gaps and issues in existing research on the communicative ability of packaging. The primary aim is to find out how different aspects of packaging, especially the details versus the holistic view, communicate brand personalities. Furthermore, the risk of discrepancies between the messages is taken into account. Similarly, the relative importance of the details and the holistic package is researched to find out whether testing the impression created by individual details is indicative of the impression of the package as a whole. By further involving measurements for purchase intention and brand attitude, this research aims to gather a deeper, more fundamental knowledge on the ways packaging affects consumer's buying behavior in a complex retail setting.

Thus, the main research question is: What role do the Gestalt and the details of packaging play in communicating a brand impression? This is divided into a set of sub-questions detailed below:

• Is a consumer able to form a brand impression without seeing the details on the package?

- If so, is there a possibility that this impression does not match the impression formed with clear details?
- Does putting the details into the context of the package change the impression they communicate?
- What level of attention has most importance on the consumer's attitude towards the brand and purchase intention?

# 1.3 Expected knowledge contribution

The expected knowledge contribution of this research can be divided into two categories: scientific and practical contributions. Academically this research will contribute to the growing body of knowledge in the field of packaging design. Even though there is increasing interest in the field, the majority of this research still does not take into account the effects of the setting where the packaging and the design elements usually come in contact with the consumer. Thus, this research aims to help fill this gap and contribute to the understanding of how limited attention affects the impressions gained from packaging. It also takes an important step towards understanding the consumer's perception process in more detail. Furthermore, this research will make an important methodological contribution by examining the applicability of the findings of previous research – for example whether findings on the effects of logos from research made in isolation can actually be expected to hold true when the logo is presented in the context of packaging or advertising. The research method also proposes a way to address the different attention levels in future studies to increase the reliability of the findings through different situations.

One the other hand, this research will have direct implications for brand managers and packaging designers. By identifying the level on which the consumer gains the brand personality impression, clear implications on the relative importance of the Gestalt and the details of packaging will be offered. Furthermore, the research can offer valuable information on ways to improve the effectiveness of the communication of the packaging, which can help create competitive advantage against rival brands through strategic packaging design.

# 1.4 Delimitations

Due to the exploratory nature of this research as well as time and scope limitations, this research does have some delimitations. Firstly, packaging design is a broad term that covers many aspects of for example functionality, ergonomics, environmental issues, as well as the visual aspect (Bloch, 1995). This research focuses on the visuals, and more specifically the graphical execution of packaging design, which means that the shape of packaging is not in the scope of the research. This is done by using beer cans, which are identical in shape, as stimuli. However, shape has been proven to affect the impressions consumers form based on packaging (Pantin-Sohier *et al.*, 2005) and testing different shapes would give even more insights into the area of this research. Including the effects of packaging shape would increase the necessary sample size of this research beyond the possibilities offered by the time and resource limitations of this research. To ensure that the effects of the shape are as minimal as possible, a category using a very standardized packaging shape, beer cans, was chosen. Thus the effect the shape has on consumer impressions will be mainly a result of the existing expectations towards the category, and should be the same for each of the brands used in this research.

Secondly, there are some additional delimitations regarding the stimuli used in the research. Firstly, while the research includes different packaging designs, only one type of packaging under one product category, i.e. beer cans, is covered by this research. As consumers may be highly affected by different design types (e.g. Orth & Malkewitz, 2008), it was necessary to ensure the usage of more than one design from the same category to be able to draw generalizable conclusions. As there were two brands chosen, and for each brand two designs were created, the scope of this research was not enough to cover another category. Furthermore, this research focuses on primary packaging. Vidales Giovannetti (1995, as quoted by Ampuero and Vila, 2006) has divided different packaging types into primary, secondary and tertiary groups, and secondary packaging has also been shown to affect consumers' impressions of the brand (Schrijver, 2013). In the category of fast-moving consumer goods (FMCG), products come packaged in primary packaging, which is the package that directly comes in contact with the product, covers and protects it, and provides information about the contents of the package (Robertson, 2013). While secondary packaging can be used to organize products on shelves in supermarkets, or may be visible to consumers in different parts of the store environment, primary packaging is still most likely to come in contact with the consumer. For these reasons the main focus of most research on packaging as well as of this study specifically is on primary packaging.

Finally, the research focuses on unfamiliar brands. According to Hawkins, Best and Coney (2003) brands build personalities throughout their lifecycles, meaning that familiar brands have created a stronger brand personality through different contact points with the consumer. Thus to ensure that the results of the research are really a result of being exposed to a packaging, and not existing impressions that could have been derived from advertising or usage experience for example, it is necessary to choose only unknown products. However, the different attention levels may have different implications for familiar, well-known brands, and the results cannot be generalized to explaining those.

## 1.5 Report outline

This report is divided into 5 main chapter: Introduction, Theory and Hypotheses Generation, Methodology, Results and Analysis, and finally Conclusions and Implications.

The first chapter, Introduction has shed light into the topic and identified a research gap that this research aims to fill. It has explained the purpose and expected knowledge contribution of the research, and ended with notes on delimitations.

The following Theory and Hypotheses Generation chapter sheds light into the underlying theories of this topic. Based on the findings of an extensive literature review, hypotheses for the research are generated.

The third section, Methodology, explains the method applied in the research. It also explains the reasoning behind the chosen approach. In addition, the pre-tests and their findings as well as the questionnaire used in the main study will be discussed. Finally, the chapter will end with a discussion of reliability and validity as indicators of the data quality of this research.

Next, Results and Analysis offers an overview of the data collected and the results found based on them. In this sector the hypotheses presented in chapter 2 will be tested and the findings summarized.

Finally, the report ends with Discussion and Conclusions. This section will analyze the findings presented in chapter 4 and connect them to previous research. In addition, the findings of the research will be used to answer the research questions. Based on this, both theoretical and managerial implications of the research will be discussed. The chapter will end with presenting criticism towards the study, and offering suggestions on future research.

# 2 Theory and hypotheses generation

This chapter aims to build a theoretical background for the research described in the later chapters. Based on an extensive literature review the main chapters will look deeper into the topics of brands and brand personalities as well as packaging design and its communicative function. Based on the findings of the literature review hypotheses to be tested in chapter 4 will be formulated throughout this theory chapter. The chapter ends with a table summarizing the hypotheses and relating these back to the main research question and its sub-questions.

# 2.1 Brands and their personalities

A brand is not a product, but much more (Kapferer, 2008). According to the American Marketing Association, a brand is a "name, term, design, symbol, or any other feature that identifies one seller's good or service as distinct from those of other sellers" (American Marketing Association, 2014). Besides this classic definition, brands have been defined in many ways in marketing research. It can be defined from the brand-owner's perspective, like in the definition by the American Marketing Association, or from the consumers' perspective, like for example Kapferer (2008, p. 11) who states that "In essence, a brand is a name that influences buyers, becoming a purchase criterion" and that brands "convey certitude, trust. They are a time and risk reducer." Even though there is a broad spectrum of definitions and adjustments to them, the majority of these definitions have a high focus on the visual aspects of the brand, such as the logo or design (see e.g. Wood, 2000 for a review).

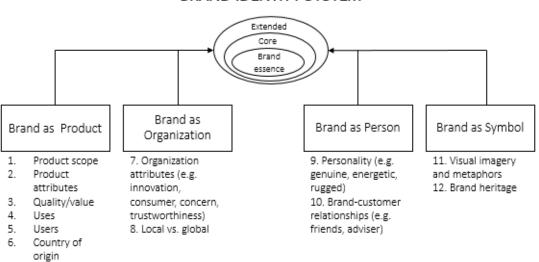
Similarly, a variety of definitions for brand equity has emerged. Feldwick (1996) categorized these meanings into three groups defining brand equity as either 1) the total value of the brand as a separable asset, 2) measurement of the consumers' attachment to the brand, or 3) a description of the associations and beliefs the consumer has of the brand. For example Keller's approach (1993) falls under the third one of Feldwick's categories as he sees brand equity as the representation of the consumer's familiarity with the brand, which is shown through recalling some unique, favorable and strong brand associations. The third category thus relates to brand image, which is the area that, according to Kapferer (2008), holds the true power of a brand. Kapferer further divides the brand image concept into the following aspects:

• Brand territory (perceived competence, products and services, know-how)

- Level of quality
- Qualities of the brand
- Most discriminating quality or benefit of the brand (perceived positioning)
- Typical user image, brand personality and brand imagery. (Kapferer, 2008).

Thus, Kapferer considers brand personality a part of a brand's image. However, as mentioned earlier there are two levels to brand personalities: the brand personality statement, which considers brand personality in the way the company wishes its brand would be perceived, and the brand personality profile, which refers to the actual impression the consumers have. As brand image is something that is only formed in the consumers' minds (Nandan, 2005), Kapferer's view only includes the consumers' view – the brand personality profile.

Similarly to the difference between brand personality statements and profiles described earlier, there is a separation between brand image and brand identity. Brand identities, like brand personality statements, are something the company creates itself. The consumers' out-take of this identity-creating work by the company and its marketing managers is considered the brand image (Nandan, 2005). David Aaker (1996) looked deeper into the concept of brand identity, and created the brand identity model (figure 2), which is based on seeing the brand as a product, organization, person and symbol. Under the "Brand as a Person" category lies personality, which has become an important source of interest in the field of marketing research (Aaker, 1997).



BRAND IDENTITY SYSTEM

Figure 2 Aaker's brand identity perspectives (1996, p. 79)

Similarly to Kapferer, who saw brand personality as one of the aspects included in brand image, Aaker directly links brand personality in the concept of brand identity.

To summarize the complexity with the different terms within the world of branding, the following illustration (figure 3) describes the most important separations. On the left, the company as the brand owner decides on the brand identity it wants consumers to perceive. A part of this brand identity is the brand personality statement. The company then uses different communication methods to transfer this impression to the consumers. The consumers, on the right side of the illustration, perceive the communications by the brand owner and a brand image is formed in the consumers' minds. As a part of this the also form brand personality profile. Obviously, the brand owners' aim is to ensure that the brand image and the brand personality profile – the consumers' impressions of the brand – match the brand identity and the brand personality statement.

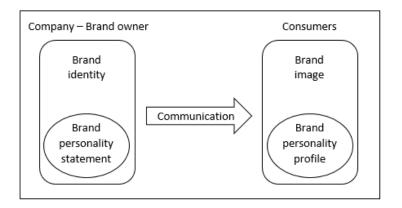


Figure 3 Brand identity - brand image link

Despite the complexity of the terminology surrounding brands, the importance and benefits of strong brands are vastly acknowledged by both the academic and the practical worlds. Among other things, strong brands have been shown to increase loyalty, open up opportunities for premium pricing and higher margins as well as offer support for new product and service launches (Ghodeswar, 2008).

However, as the number of strong brands on the market is increasing, even the strongest of brands have to stand out from others. For example Underwood (2003) noted that as the number of brands on the market keeps increasing, and especially the wide range of products the consumers comes across at the point-of-sale, the importance of strong differentiation through branding is necessary. According to many, one of the main ways to achieve the required level of differentiation is through the creation of a strong brand personality (e.g. Plummer, 1984-1985; Aaker, 1996; Halliday, 1996; Aaker, 1997; van Rekom, Jacobs & Verlegh, 2006; Ghodeswar, 2008). The following subchapters will look more closely into the brand personality construct by examining its background, definitions and consequences.

### 2.1.1 Defining brand personality

According to Plummer (1984-1985) brands can be described on three different levels: physical, functional and symbolic. Like mentioned earlier, in this increasingly competitive environment it is becoming hard for companies to distinguish themselves through the functions or physical attributes – for example mobile phones nowadays have almost identical functions, and as a consequence are forced to compete on the level of prestige or stylishness. Thus, it is this symbolic level that allows consumers to differentiate between thousands and thousands of products and make a final choice. This symbolic level is also where brand personalities can be found on, and that is what makes a strong, distinctive brand personality such a powerful branding tool – having strong symbolic associations of being prestigious or upper-class can lead to a more stable competitive advantage than any specific function of a product. The power of this symbolic value is what makes creating and communicating a strong brand personality so important. There are consumers who appreciate the functional benefits over the other benefit levels, but still the emotional, symbolic value is what truly allows brands to stand out of the crowd (Ghodeswar, 2008).

The idea of brand personality started with marketers and advertisers before academics started to create more theoretical knowledge regarding the subject (Azoulay & Kapferer, 2003) and recently the concept has been of great interest for researchers in the field of consumer behavior (Aaker, 1997). It refers to the "set of human characteristics associated with a brand" (Aaker, 1997), or the "characterization of the brand" (Plummer, 1984-1985) and consumers' impressions regarding the personality are often tested by asking questions such as "If Absolut Vodka was a person, what kind of person would he or she be?" (e.g. Aaker, 1997; Azoulay & Kapferer, 2003). For example Holiday Inn's brand is seen as cheerful, modern, reliable and practical (Plummer, 1984-1985). Regardless of the variety of definitions that have evolved around the brand personality construct, it is the description by Aaker that has remained the basis for most of the research ever since its publication in 1997 (Geuens, Weijters & de Wulf, 2009).

As a symbolic aspect brand personalities are relatively long-lasting and distinct (Aaker, 1997) and therefore create a strong differentiating opportunity allowing brands to distinguish themselves from rivals (Ghodeswar, 2008). Having a distinct personality can lead to a stronger, richer competitive advantage than any kind of functional feature of a product (Sherrington, 2003). It can also increase trust and loyalty (Fournier, 1998) and work as relationship-building tool between the consumer and the brand (Ghodeswar, 2008). It has even been shown to directly increase brand choice (Aaker, 1999) and lead to increasing growth (Ghodeswar, 2008).

Brand personality should not be confused with the user image of the brand. Plummer (1984-1985) discusses a great example of Oil of Olay. Research respondents described the stereotypical user of the brand as a practical, down-to-earth woman. However, the brand itself is seen as sophisticated, aspirational and upscale. This does also reflect how consumers buy brands whose personalities reflect their own aspirations: one might for example choose to buy Oil of Olay to appear as more sophisticated in the eyes of others (Malhotra, 1988). In fact, consumers often do select brands, which reflect their own self-identity (Hawkins *et al.*, 2003) or ideal self (Malhotra, 1988; Kim, Han & Park, 2001). Plummer (1984-1985) even simplifies consumer's choice process as considering all information available about a brand, and then deciding whether that brand's personality matches themselves. Similarly, Boudreaux and Palmer (2007) found that brand personality explained nearly half of consumers' purchase intent on different products. All in all, it is clear that building a distinctive brand personality profile can be a powerful tool in finding the correct target group. However, this also highlights the importance of communicating the *correct* brand personality throughout all different marketing efforts.

Besides its importance for differentiation and finding the right consumers, based on the definitions of brand equity and image discussed earlier, it is clear that brand personalities also play a big role in strengthening a brand's position in the market. In addition to the consumer-related effects discussed above, the benefits of a strong brand personality have been linked to brand equity (Keller, 1993), and through various different aspects such as brand attitude or purchase likelihood to brand success (Biel, 1993; Batra, Lehmann & Singh, 1993; Sheena, 2012). All in all, brand personality has appeared as a major driver for many of the goals companies aim to reach.

### 2.1.2 Brand personality scales and criticism

Aaker's groundbreaking research in 1997 associated brand personalities with the "Big Five" human personality dimensions, and was the start of brand personalities growing into a significant field of academic research (Avis, Forbes & Ferguson, 2014). According to her findings, brand personalities exist in five different dimensions: sincerity, excitement, competence, sophistication and ruggedness (see figure 4). Each dimension includes several categories and different items. For example sincerity includes items such as down-to-earth and sentimental.

Sincerity	Excitement	Competence	Sophistication	Ruggedness
<b>Down-to-Earth:</b> down to earth, family oriented,	Daring: daring, trendy, exciting	Reliability: reliable, hard working, secure	Class: upper class, good-looking, glamorous	Masculinity: outdoorsy, masculine, western
small town	Spiritedness: spirited, cool, young	Intelligence: intelligent, technical,	Charm: charming,	Toughness: tough,
Honesty: honest,		corporate	feminine, smooth	rugged
sincere, real	Imagination:		,	00
	imaginative, unique	Success: successful,		
Wholesomeness:		leader, confident		
wholesome, original	Contemporary: up-to- date independent,			
Cheerfulness:	contemporary			
cheerful, sentimental,				
friendly				

Figure 4 Aaker's brand personality scale (1997) as quoted by Avis, Forbes & Ferguson (2014)

Even though the international applicability of these five dimensions by Aaker have been questioned (e.g. Azoulay & Kapferer, 2003; Geuens *et al.*, 2009), many studies have confirmed the existence of different dimensions in different countries and cultures. While some differences have been found, most of the created modifications of the scale have remained relatively similar to the original version (Geuens *et al.*, 2009). Aaker, Benet-Martínez and Garolera (2001) showed that 4 out of the 5 dimensions stay the same between American and Japanese consumers. Only ruggedness was replaced by peacefulness in Japan. Similarly Kim, Han & Park (2001) found all five dimensions in a research with Korean consumers. In Canada sincerity is replaced by genuineness (d'Astous & Lévesque, 2003). Despite the large amount of attention to the topic, there have been relatively little suggested changes to Aaker's original scale, suggesting strong support for her model.

However, Aaker has also been criticized for not focusing only on personality traits, but also including other characteristics, such as 'modern' or 'upper-class' (e.g. Azoulay & Kapferer, 2003; Geuens *et al.*, 2009). Consequently, Azoulay and Kapferer defined the term of brand personality more strictly as "the set of *human personality traits* that are both *applicable to* and *relevant for* brands" (2003, 151). However, this definition limits many values that companies want to portray out of the scope of brand personality (see for example Orth & Malkewitz, 2008). Considering that in packaging design the brand personality to be communicated is generally a strategic managerial decision, this research shares the view of Orth and Walkewitz (2008), who adapted a brand management point-of-view and included some more managerially oriented items to their research. This is in line with Aaker's (1997) definition as well, as she originally defined brand personality to be related to human *characteristics* as opposed to personality traits only.

Furthermore, Aaker has also been critiqued for the applicability of the scale to different industries or for research conducted within one category (Siguaw, Mattila & Austin, 1999). As a response, different versions of the brand personality scale have emerged to fit the needs of different product categories and industries. For example Heiltjes (2014) looked into the beer industry specifically and by looking at both the brand personality statements and profiles of a range of beer brands came up with an adjusted scale (figure 5). This scale includes 22 items under 6 dimensions all ensured to be relevant for the category in question.

Aspirational	Premium	Real	Accessible	Confident	Unique
•Exciting •Young •Fun •Fresh •Modern	<ul> <li>High quality</li> <li>Passionate</li> <li>Prestigeous</li> <li>Reliable</li> <li>Premium</li> <li>Successful</li> </ul>	<ul> <li>National pride</li> <li>Authentic</li> <li>Traditional</li> </ul>	<ul> <li>Hospitable</li> <li>Friendly</li> <li>Relaxed</li> </ul>	<ul> <li>Self-conscious</li> <li>Bold</li> <li>Masculine</li> </ul>	<ul><li>Original</li><li>Distinctive</li></ul>

Figure 5 Brand values and personality items related to the beer category (Heiltjes, 2014)

Regardless of the specific scale used, scholars agree that the different brand personalities are created through all contact points the brand has with its consumers (Aaker, 1997). According to Plummer (1984-1985), brand personality is solely a result of communications: the intrinsic attributes of a brand or a product in themselves would not lead to describing a brand as cheerful or down-to-earth. One common way to communicate these personality traits has been the usage of celebrity endorsement, which leads the

consumers to attribute the characteristics of the endorser to the brand itself (Batra & Homer, 2004). This is referred to as the direct way to forming brand personality impressions (Aaker, 1997). These traits can also be communicated indirectly through product-related attributes, such as brand name, logo, advertising style and media or distribution channel (Batra *et al.*, 1993). One of these indirect ways to communicate brand personalities is packaging, which will be discussed more thoroughly in the following sub-chapter.

# 2.2 Packaging design

Packaging design as a term is broad, and covers multiple types as well as functions. Firstly, according to Vidales Giovannetti (1995, as cited by Ampuero & Vila, 2006) there are three types of packaging. Primary packaging is the wrapping of the product, and as such comes in direct contact with the product. Secondary packaging is meant to hold one or more primary packaging, and can be for example the box containing a jar of facial lotion. The final type, tertiary packaging contains the two previously mentioned types and is mainly used in protecting and identifying the products throughout the commercial chain (ibid.).

As the different types serve somewhat different purposes, there are also different functions for packaging. According to Prendergast and Pritt (1996) packaging's roles can be divided into logistical or marketing oriented functions. The logistical, primary functions include containment and protection of the product within, as well as creating convenience for both the reseller as well as the consumer (Prendergast & Pitt, 1996; Robertson, 2013). Besides these main functional roles, packaging has an important communicative marketing role (e.g. Prendergast & Pitt, 1996; Orth & Malkewitz, 2008; Ares & Deliza, 2010; Klimchuk & Krasovec, 2013; Robertson, 2013). As mentioned earlier, the importance of this communicative aspect of packaging is increasing through factors such as the increasing clutter and consumers' aversion towards traditional advertising as well as the big role of the retail environment in the buyers' purchase decisions.

Klimchuk and Krasovec (2013, p. 39) defined packaging design as "the connection of form, structure, materials, color, imagery, typography, and regulatory information with ancillary design elements to make a product suitable for marketing." They further state that packaging's "primary objective is to create a vehicle that serves to contain, protect, transport, dispense, store, identify, and distinguish a product in the marketplace. Ultimately, the goal of a packaging design is to meet marketing objectives by distinctively communicating a consumer product's personality or function and generating a sale." This view has been supported by other researchers, such as Orth and Malkewitz (2008), Underwood (2003) and Silayoi and

Speece (2007), who all see packaging as a combination of a variety of different elements brought together to match the different purposes and functions.

The importance of packaging has been increasingly recognized by both practitioners as well as academics. Packaging is now seen as not only a protector of the product, but also as a marketing and communication tool, the "silent salesman" (Pilditch, 1973), which especially increased in importance with the rise of the self-service era as packaging moved from behind the counter to the shelves for the consumers to choose based on what they see (Cervera Fantoni 2003 as quoted in Ampuero & Vila, 2006). Similarly, this new age of retail gave rise to the industry of packaging design agencies, which started emerging around the 1970s (Klimchuk & Krasovec, 2013). Packaging has even been said to be what people are buying in store – in some situations, especially in the category of FMCG, the packaging *is* the product (Nickels & Jolson, 1976; Silayoi & Speece, 2007). Taking the thought even further, Nickels and Jolson (1976) considered packaging to be the 5<sup>th</sup> P of the marketing mix bringing together the traditional aspects of product, price, place and promotion.

The increasing competitiveness in the marketplace and the role of packaging at the point-of-purchase are reasons for the growing interest in this "new" marketing tool. As mentioned earlier, consumers today are flooded with an ever increasing amount of advertising messages, and as a consequence it is becoming harder for companies to stand out of the crowd and catch the attention of consumers. This has led to a growing focus on packaging design, as packaging remains something that consumers necessarily come in contact with (Orth & Malkewitz, 2008). Furthermore, research shows that a major part of purchase decisions are done at the point-of-purchase (see Phillips & Bradshaw, 1993 for a review), which further highlights the importance of packaging design's role in ensuring that the product gets the attention of the consumer. Even for planned purchasing, it is common for the consumer to just recognize the need for a category, but to choose the specific brand to fit that need at the point-of-purchase while they are in contact with the packaging (Stern, 1962; McGoldrick, 1982; POPAI, 2015). Packaging design thus has a unique opportunity to affect consumers' purchase decisions as they are made.

Despite this great effect packaging can have on encouraging the choice of product, it has very limited time and attention from the consumer to do so. A substantial amount of products across categories is bought as an impulse. Actually, according to research anything between 30 and 50 % of all purchases as categorized by consumers themselves as impulse purchases (Hausman, 2000). Impulse buying refers to unplanned

purchases that are characterized by quickly made decisions, where packaging can play a big role is guiding decisions (ibid.). Furthermore, the average purchase decision is made in less than 12 seconds, and often only the chosen package gets full attention (Dickson & Sawyer, 1990; Urbany *et al.*, 1996).

Even though packaging design has clearly become increasingly important as a marketing tool (e.g. Nickels & Jolson, 1976; Underwood, Klein & Burke, 2001; Underwood, 2003), research in the field is still lagging behind, and especially studies regarding the ways packaging delivers brand messages and works as a communicative tool are missing (Underwood, 2003). It is important to create a stronger understanding about the different ways packaging creates attention and communicates a brand message. Whereas the individual aspects of packaging, for example the color and form of the packaging, have been studied, there is a lack of research with a more holistic, realistic view of packaging. (Orth & Malkewitz, 2008) Researching the effects of individual details has limited applicability to reality unless it can be shown that the details themselves are indeed the aspect of packaging that communicates the message. For example Taft questioned the findings of research assessing the meaning of colors and asked: "Is a color judged to be beautiful, elegant, or warm when presented as a chip equally beautiful, elegant, and warm when applied to the surface of an object such as a sofa, chair, etc.?" (1997, p. 40), and consequently highlighted the managerial importance of this knowledge.

To sum up, packaging is an important tool that can have great influence in consumers' purchase decisions and the impressions they gain about the brand. As mentioned earlier, brand personality and identity are communicated through the entire marketing mix. Taking into account the notion that packaging could be considered the 5<sup>th</sup> P of the marketing mix, or Underwood's (2003) notion that packaging is at least without doubt *related* to the strategic decisions in the marketing mix, it is clear that packaging design can play a big role in communicating brand personality messages to consumers. The following sub-chapters will discuss packaging as a brand personality communicator in further detail.

#### 2.2.1 Packaging as a communicator of brand personalities

Recently, more research has started looking into packaging as a possible antecedent of brand personality impressions. For example Pantin-Sohier *et al.* (2005) conducted a series of tests looking into the topic, and showed that packaging does indeed play a role in consumers' perception process, and that managers could affect the impressions of consumers by carefully choosing the shape and color of their packaging. Packaging

can communicate brand personality through not only color and form, but also through several other elements (Ampuero & Vila, 2006). However, Orth and Malkewitz (2008) suggested that rather than examining the individual aspects of packaging, such as the color and form studied by Pantin-Sohier *et al.* (2005), packaging should be studied holistically, and found that there are some generic design types that can be linked to different brand personality impressions. Despite this, the majority of existing research has looked into the specific elements of packaging. Two of these elements, namely logo and pictorial element, will be discussed in more detail below.

#### Logo

The American Marketing Association defines a logo as "a graphic design that is used as a continuing symbol for a company, organization, or brand. It is often in the form of an adaptation of the company name or brand name or used in conjunction with the name" (American Marketing Association, 2014). According to Buttle and Westoby (2006) logos are used by companies to communicate the uniqueness of their products or other offerings. Logically, a logo is practically always present in a product's packaging, and often includes the brand's name written in a specific, identifiable font. Consequently in this report the focus is on the textual types of logos. It has been well researched that specific font types lead to certain impressions in the viewer's mind (see Grohmann, Giese & Parkman, 2013 for a review). For example serif type fonts such as Times New Roman are perceived as elegant, charming and emotional (Tantillo, Di Lorenzo-Aiss & Mathisen, 1995).

More importantly, and making this finding relevant for the field of marketing and branding, Childers and Jass (2002) found that consumers tend to transfer the semantic associations linked to the fonts to the brands that use those specific fonts in their print advertising, similarly as a celebrity endorser's personality gets transferred to the endorsed brand. Consequently, Grohmann *et al.* (2013) studied how different font types in logos affect the brand personality perceptions of new brands. They showed that the font type can have a significant effect on the personality impression, and that brands should choose fonts that match their targeted brand personality. For example to give a rugged and competent personality impression, brands should choose heavy, compressed fonts. In addition, type fonts have their own connotative meanings independent of the word the typeface is applied to (Doyle & Bottomley, 2004). This suggests that changing the font of a word should change the impression conveyed by it regardless of the word itself. Thus, based on existing research the following is hypothesized:

H1. Changes in the font of the logo change the brand personality impressions when the consumer only sees the element separately.

#### **Pictorial elements**

Packaging also often has different pictorial elements that may either represent the product inside or represent different messages the packaging wants to convey about the product or brand (Klimchuk & Krasovec, 2013). The meanings of these pictorial elements are studied by semiotics, which is the study of signs: more specifically visual semiotics refers to the messages communicated by different visual stimuli, such as pictures (Margolis & Pauwels, 2011). According to Margolis and Pauwels (2011), "pictures function as signs 'by their own nature'". In packaging, there are often many elements that aim to communicate certain characteristics or values to the consumers through symbolism. For example, coat of arms is a common design element found in alcoholic beverage bottles as it functions as a sign of authenticity, tradition and trustworthiness (Klimchuk & Krasovec, 2013). However, it is clear already for copyright reasons that the different brands use differently executed coats of arms. Based on this it can be expected that rather than the specific execution of the pictorial element, it is the item itself being in the context of packaging that leads to a specific brand personality impression. In other words, having an element representing a coat of arms should increase the impression of trustworthiness regardless of the specific execution of the element. Supporting and taking this thought even further, Kanwisher, Yin and Wojciulik (1999) showed that people have difficulty separating pictures with similar semiotic meanings (such as an airplane and a helicopter) when exposed briefly to the picture. This leads to the following hypothesis:

H2. Changes in the execution of the pictorial elements will not lead to significant differences in the brand personality impressions when the consumer only sees the element separately.

#### **Holistic packaging**

Despite the fact that there is little research on the holistic view of packaging, there is still strong evidence to suggest that all its elements should indeed be researched as holistic Gestalts rather than individual pieces that form the package. For example Doyle and Bottomley (2004) showed that people prefer the brands where the font of the logo seems appropriate for the product or brand in question. This suggests that the logo is generally evaluated by the consumers in its context, and the impressions communicated by it should also be studied in context rather than separated from it.

Previous research on other design elements has also shown that the context may make a great difference: in the research by Pantin-Sohier *et al.* (2005) the same color was shown to lead to different brand personality impressions for different products. Furthermore, Taft (1997) also has critiqued the research on color and showed that same colors may lead to completely different impressions and attitudes depending on the context. This led him to the question the generalizability of previous research on colors altogether. Similarly, Bottomley and Doyle (2006) applied different colors to logos and ended their article with a warning to marketing managers to be careful when applying findings of color psychology to branding, as the findings may not hold true in a different setting. Based on these findings of the importance of context, the following hypothesis is formed:

H3. The brand personality communicated by the holistic packaging cannot be fully predicted based on the impressions consumers get from the individual details.

H4. The changes in the logo and pictorial element do not affect the brand personality communicated by the holistic view of the packaging.

### 2.2.2 Packaging in a retail setting

Although packaging and its details have been linked to brand personality impressions, the process which leads to the formulation of these impressions is less clear. Walking through supermarkets, customers are faced with thousands of products and packages. As mentioned earlier, often only the chosen package is seen and gets the full attention of the consumer. According to Phillips and Bradshaw (1993), while consumers scan the shelves they subconsciously make decisions over a product's relevance for them based on what they see in the peripheral vision. It has even been suggested by Mackworth and Morandi (1967)

that peripheral vision leads to more elaborate information processing than having the object in the center of the visual field.

Furthermore, existing research suggests that consumers are looking for brands that communicate personalities that match the consumer's own self-identity of aspirations. In order to be able to do so, the brands with matching personalities need to fall in the consumer's consideration set and thus be noticed and receive attention. Garber, Burke and Jones (2000) suggest that the likelihood of a consumer picking up a product is at least partly dependent on the message conveyed by the package. Indeed, taking into consideration the importance of peripheral vision in a purchase situation, it could be possible that the consumers form an initial brand personality impression based on what they see in the peripheral vision. Based on this the following hypothesis is formulated:

H5. Consumers form an initial brand personality impression based on what they see in their peripheral vision field (blurred image).

Research has shown that when on object is not in the center of the vision field the image of the object appears unclear. It is possible to see colors, but the details of the object are blurry. Thus, the main impression formed in the peripheral vision field would have to be based on the colors and shape of the packaging. However, as discussed earlier, it has been shown that in different contexts the same color may lead to a different brand personality impression. Ares and Deliza (2010) found that consumers analyzed shape and color independently of each other. Indeed, both the shape and the colors of the package have been of great interest to researchers, and have been shown to affect consumers' perceptions of the product (e.g. Berkowitz, 1987; Orth & Malkewitz, 2008; Ares & Deliza, 2010). Folkes and Matta (2004) found that package shapes that attract more attention are perceived as having a larger volume than their counterparts of same size but which fail to get the consumer's attention. Using the category of milk desserts, Ares and Deliza (2010) showed that both the color and the shape of the package had a clear effect on the consumers' expectations for product liking and sensory experience, such as taste. However, they also showed that the same color could lead to very different associations varying from premium and delicious to disgusting. This suggests the power of packaging as a tool for targeting the right customer group as well as shows the importance of making sure that the communicated message is the correct one. Similar studies on both shape and color have shown comparable results on both elements affecting expectations and perceptions (see for example Raghubir & Greenleaf, 2006; Pantin-Sohier et al., 2005; Schoormans & Robben, 1997). Put more straightforward, Silayoi and Speece (2007) claim that it is the total presentation

of the different graphical elements on packaging that is responsible for communicating a brand's identity. These findings regarding the importance of the context lead to the formulation of the following hypothesis:

H6. The brand personality impression formed based on the peripheral vision (blurred image) may differ from the one formed by the holistic view of the packaging.

## 2.3 Purchase intention and brand attitude

Based on the earlier hypotheses, consumers form an initial brand personality impression based on the peripheral vision view of packaging. However, it has been shown that the chosen package gets more attention than the non-chosen ones. Furthermore, different models in buying behavior theory divide the purchase decision making process into different phases. Most of these models include some kind of screening phase (often uses the peripheral vision or scans through the packages quickly without focusing on the details) (Clement, 2007). More importantly, however, the models state that the following phase is an evaluation phase, in which the items are individually examined and evaluated (ibid.). Thus, it seems that it is necessary for packaging to be fully in focus and the consumer to be able to examine the details as well before forming a purchase decision. This leads to the following hypothesis:

H7a. The holistic view of the packaging leads to a stronger purchase intention than the peripheral (blurred) view.

The font of the logo in packaging has been shown to influence purchase intention (Doyle & Bottomley, 2004). However, as mentioned above, it seems that it is necessary for consumers to see the whole package before making a purchase decision. Thus it can be assumed that the effect is higher when all the elements are combined and in context. In addition, as mentioned earlier, prior research shows that consumers examine packaging before making a final purchase decision, it is likely that they need information from more than one of the elements in order to decide on buying a product. Thus, similarly to the previous hypothesis the following is expected:

H7b. The holistic view of the packaging leads to a stronger purchase intention than the individual elements.

In addition to being a big contributor to consumer choice, packaging has a great role in affecting consumers' attitude towards the brand, specifically in FMCG (Silayoi & Speece, 2007). According to Bottomley and Doyle (2006) the concept of fluency is a main aspect affecting how a visual element is perceived. They linked both perceptual as well as conceptual fluency to more positive attitudes towards the brand. An object is perceptually fluent if it is easy to process. For example a stimulus in packaging, such as the logo, will be more perceptually fluent if it is supported by another congruent stimulus, such as the pictorial element or the color of the packaging, and will consequently be more liked (Bottomley & Doyle, 2006). Conceptual fluency on the other hand relates to the ease that a stimulus comes to mind (Lee & Labroo, 2004). One way to increase especially perceptual fluency could be presenting items in relevant contexts. For example Whittlesea (1993) increased the perceptual fluency of common words by presenting them in predictive contexts, and showed that this did lead to an increased liking of the words. Thus, it could be expected that presenting the elements of packaging design in their context rather than separately should lead to a more positive brand attitude. Thus, the following hypothesis is created:

H8a. Brand attitude is lower when the personality impression is based on the peripheral (blurred) view than when the impression is based on the holistic view.

H8b. Brand attitude is lower when the personality impression is based on the individual elements than when the impression is based on the holistic view.

Research question	Hypothesis
What role do the Gestalt and the details of pack	kaging play in communicating a brand impression?
Is a consumer able to form a brand impression without seeing the details on the package?	H5. Consumers form an initial brand personality impression based on what they see in their peripheral vision field (blurred image).
If so, is there a possibility that this impression does not match the impression formed with clear details?	H6. The brand personality impression formed based on the peripheral vision (blurred image) may differ from the one formed by the holistic view of the packaging.

# 2.4 Summary of hypotheses

Does putting the details into the context of the package change the impression they communicate?	<ul> <li>H1. Changes in the font of the logo change the brand personality impressions when the consumer only sees the element separately.</li> <li>H2. Changes in the execution of the pictorial elements will not lead to significant differences in the brand personality impressions when the consumer only sees the element separately.</li> <li>H3. The brand personality communicated by the holistic packaging cannot be fully predicted based on the impressions consumers get from the individual details.</li> <li>H4. The changes in the logo and pictorial element do not affect the brand personality communicated by the</li> </ul>
	holistic view of the packaging.
What level of attention has most importance on the consumer's attitude towards the brand and purchase intention?	H7a. The holistic view of the packaging leads to a stronger purchase intention than the peripheral (blurred) view.
	H7b. The holistic view of the packaging leads to a stronger purchase intention than the individual elements.
	H8a. Brand attitude is lower when the personality impression is based on the peripheral (blurred) view
	than when the impression is based on the holistic view.
	H8b. Brand attitude is lower when the personality impression is based on the individual elements than when the impression is based on the holistic view.

# 3 Methodology

This chapter focuses on explaining the methodology and the approach of this research and more importantly the reasoning behind the choices made. Firstly, the choice of topic and the scientific method will be discussed. Then the preparatory work including the choice of stimuli and the pre-tests will be explained in detail. In addition, the main study and the related questionnaire as well as the sample will be discussed. The chapter ends with a discussion of the quality of this research.

# 3.1 Cartils and topic

This research topic was initiated by branding and packaging design consultancy Cartils. The original interest in the topic arose when they were visited by another design agency, Diptic Design Agency from Paris, whose approach to design was very detail oriented. They start the design process by creating details that match the desired brand message to be delivered by the packaging, and only in the final phases of the project create a holistic design. This led to an interesting question: are the details really the only thing in design that matters, or does the context and the "whole" have a stronger role in communicating a brand message?

Looking into existing research regarding packaging design showed that the majority of design research does not take context into account when looking at the message conveyed by different aspects of the design. Those studies that do focus on a more holistic view only test the outcomes under full, unlimited attention. As this is not often the case in real life situations, it seems necessary to find out how important the full attention really is. Furthermore, no research compares the details to the holistic design to see how the context affects the message delivered. Thus the topic seemed relevant for both practitioners as well as academics.

# 3.2 Scientific approach and overall research design

This research started by an extensive review of existing theory related to the topic. Based on the findings, hypotheses were created, data collected and hypotheses either supported or rejected. This research thus mainly applies a deductive approach. The final discussion also includes induction, in which the implications for existing theory are inferred from the findings. (Bryman & Bell, 2011) Furthermore, following the

distinction between different research strategies by Bryman and Bell (2011), this research follows a quantitative research strategy, which is related to the testing of theory.

This research employs an experimental research design in which the level of exposure to the packaging is manipulated in three ways – the clarity of the stimuli is manipulated by blurring the stimuli pictures, and the focus to the Gestalt versus individual details of the packaging is manipulated by showing either a holistic view of the packaging or one of the details (pictorial element or logo) separately from the package. Finally the third manipulation involves changing two of the main elements in the packaging – logo and one pictorial element, to see whether changing them is enough to change the personality impression, or if the context has a stronger impact on the message. Thus, all manipulations are compared to the control stimulus, which is the original design presented with clear details.

Due to the quantitative nature of the research, a self-completion questionnaire was chosen as the research method (Bryman & Bell, 2011). Surveys are a good method for collecting data regarding unobservable data such as consumers' attitudes and opinions, and in addition allow for the collection of data for a large group of respondents (Bhattacherjee, 2012). The specific design of this survey will be described more in detail in chapter 3.6.

### 3.3 Preparatory work

The preparatory work for the research consisted of four steps described more in detail below. After choosing the stimuli, a qualitative pre-test was conducted to find out a suitable level of blurriness for the stimuli representing low attention levels. Secondly, the brand personality scale was tested to see that the chosen brands really could be described with the different personality items. Finally, the questionnaire was pilot tested with a group of respondents to ensure clarity and comprehensibility.

### 3.3.1 Selection of stimuli

The stimuli was chosen in collaboration with branding and packaging design agency Cartils. It was requested that the chosen product category will be one they work with. As Cartils is strongly focused on designing packaging for alcoholic drinks and spirits, beer was chosen to be the category tested. Following the criteria employed by Orth and Malkewitz (2008), beer as a category includes a wide range of brands with different

personalities, design elements that are common in many other product categories and many brands unfamiliar to the respondents. All in all, the category was considered very suitable for the purposes of this research. In the end, it was decided that specifically beer cans would be used as the stimulus items as they are mostly of a standard form and would decrease the opportunity of the shape of the packaging, which was not within the scope of this research, to affect the formed impressions.

The chosen brands were Tyskie and Feldschlösschen. Tyskie is a Polish brand, and the chosen package is a white can with red and golden details. Due to the high contrast the red is the predominant color in the package. Feldschlösschen is a Swiss brewery owned by the Carlsberg Group, and is one of the leading brands in Switzerland (Feldschlösschen, 2015). The chosen can is blue with a golden label and red details. Even though the brands are nationally well-known, they are limitedly available internationally, and should have relatively low familiarity among the respondents. Furthermore, the packaging designs differ from each other in many ways. Especially, the colors of red and blue have been shown to have contrasting connotative meanings even across cultures (Bottomley & Doyle, 2006). They also use different fonts in their logos and have different pictorial elements, which made the chosen cans ideal for this research.

For each brand, two designs were used. One design was the original design of the package, and for the other version two details (the logo and a pictorial element) were manipulated slightly – the aim was to change the message conveyed by the element but keeping the Gestalt as similar as possible. This was done in order to test whether a change in an element would lead to a change in the communicated brand personality. For both brands the changes included a somewhat different execution in the pictorial element (e.g. a more traditional execution of the castle in the Feldschlösschen can) and changing the typeface of the logo. The redesigns were done by two graphic design professionals at Cartils, and the changes were made in the way the designers would approach a similar project from a client company. The redesigns were discussed with several different packaging professionals until all details were agreed upon. All the used stimuli can be seen in appendix 1.

#### 3.3.2 Pre-test 1 – Blurriness level

The first pre-test aimed to find out the level of blurriness to be used to represent the peripheral view in the survey. The testable levels were based on a previous research done for Cartils on the identification of various brand under different visibility levels (Witjes, 2007). In this research six different brands were tested

on the clarity necessary for consumers to identify the brand. Half of the brands were identified at a 12 pixel Gaussian blur level, whereas others could be recognized already at a level of 27 or 40 pixels. However, this research tested only well-known brands, which often have a clear identifying element in the design. For example Heineken beer brand is known for the red star above the logo, and any green bottle with a red item in a similar location could be confused with Heineken. However, these levels of blurriness were a good starting point for this research. To find out a relevant level of blurriness ten people were shown pictures of the packages and asked what they can and cannot tell based on the pictures. The aim was to find a level which would not allow the respondents to identify details or the brand, but would still enable them to answer questions about the brand personality. The blurriness levels tested in the discussions were the three levels: 12, 27 and 40 pixels as well as additional levels of 15 and 20 pixels.

A qualitative approach was chosen together in discussions with the supervisor of this thesis, and a convenience sample of ten people was asked some questions regarding pictures with a different level of blurriness. The questions were related to identifying the product category and brand as well as being able to tell apart and describe the details in the package. On the blurrinest, 40 pixel level, none of the respondents were able to tell the product category. Similarly, on the blurriness level of 27 pixels the respondents still had trouble even recognizing the product category. Consequently, on either of these two levels they were not able to answer any additional questions. On the 20 pixel blurriness level respondents were able to recognize the product as a drink can, and were able to answer some personality questions as well. Once the picture was clearer the respondents started to be able to tell apart details and gave answers like "I think there is a castle" and "Oh, it was a crown!" Thus the 20 pixel blurriness level proved to be one where the respondents should be able to answer the questions, but still not be able to base their opinion of the specific graphical elements of the packaging design. The Feldschlösschen can yielded a bit more variation in results, one respondents recognizing the product category at 27 pixel level and one needing the level 15 clarity. However, the majority responded in a similar manner. Thus, based on the responses a 20 pixel Gaussian blur was decided to be used.

### 3.3.3 Pre-test 2 – Personality scale and manipulation checks

The second pre-tested aimed to see that the chosen brands truly communicate a brand personality message and that the respondents would be able to answer questions related to them. Furthermore, the test aimed to test the personality scale as well as the manipulations of the stimuli. A questionnaire using

the online tool Qualtrics was sent out to a convenience sample and a total of 64 responses was collected between the 26<sup>th</sup> and the 30<sup>th</sup> of March. This led to 14 to 17 responses per stimuli. The respondents rated one picture of each brand (either the old or the modified design blurred or clear) on the personality scale. In addition, a manipulation check consisted of questions "To what extent did you base your impression on..." with items "...on the details of the packaging?" and "...on the holistic view of the packaging?". The response scale was a 7-item Likert-scale ranging from "Not at all" to "Completely". The respondents were also asked "How easy or difficult was it for you to see the details of the packaging?" and the responses ranged from "Very difficult" to "Very easy". The questionnaire ended with feedback questions on the clarity and comprehensibility of the questions.

Firstly, the manipulation check showed that the pictures lead to the effects that were hoped for. The respondents who answered blurred pictures said that they based their answers mainly on the holistic view of the packaging (M=5.32), whereas respondents with the clear pictures based their answers on both the details and the holistic view ( $M_{details}$ =4.27,  $M_{holistic}$ =5.08). In addition, there was a significant difference (p=0.000) in the responses for the last manipulation check question regarding how easy it was to see the details. The differences between the two groups responding to blurry and clear pictures were compared by an independent samples *t*-test, and these results are summarized in table 1.

	Blui	rred pictur	es	Clea	ar pictures	Sig.	
	N	Mean	St. Dev	N	Mean	St. Dev	Sig. (2- tailed)
Impression based on <b>details</b>	61	3.48	1.86	63	4.27	1.69	.014
Impression based on <b>holistic</b> view	60	5.32	1.48	63	5.08	1.51	.380
It was easy to see the details	61	2.21	0.99	63	5.10	1.58	.000

Table 1 Pre-test manipulation check results

Furthermore, the pre-test showed that the two brands chosen for the research showed both a clear personality, and in addition differed significantly on many of the personality items. The differences between the two brands for items of fun, passionate, reliable, successful and distinctive all are significant on the 5 % significance level, and exciting, confident and bold show differences on a 10 % significance level. The personalities of the two brands are described in appendix 3.

In general, the pre-test showed that respondents were able to assign the personality items to the different items and were able to answer the questions. Based on the findings of the pre-test two personality items, relaxed and confident, were left out of the final survey as they showed little importance to the measuring the personalities of the brands (Tyskie:  $M_{relaxed}$ =3,81 and  $M_{confident}$ =4,06; Feldschlösschen:  $M_{relaxed}$ =4,00 and  $M_{confident}$ =3,86).

All in all, the findings of the pre-test were in line with the expectations. Furthermore, the feedback questions in the end of the survey as well as an open-ended feedback question showed that the questions and the structure of the survey were clear. The respondents agreed with the statements "The questions in this survey were clear" (M=5,69) and "The questions in this survey were comprehensible" (M=5,70). Thus, it seemed that respondents were able to answer the questions regardless of the blurriness of the pictures. The responses between the groups who received either the blurred or the clear pictures also showed no significant differences.

#### 3.3.4 Pre-test 3 – Pilot testing the questionnaire

In the third, last pre-test the final questionnaire was pilot-tested to ensure the understandability and comprehensibility of the questions. The questionnaire was given to ten respondents, who were asked to comment and "think out loud" while responding to the questions. The first three respondents were native English speakers, who checked the questionnaire for grammatical errors and suggested some minor changes in the formulation of the questions. The rest of the respondents were non-native English speakers to ensure that they would understand the questions similarly and that the language used in the survey would have minimal effect on the findings. Based on the comments some questions were slightly reformulated to make it more understandable for the respondent to know what the question referred to.

### 3.4 Stimuli

As mentioned earlier, the research used two brands: Tyskie and Feldschlösschen. For each brand a total of eight different stimuli was used. Besides the original design, a slightly manipulated design with changes in two of the design elements was used. For each of these versions there was a blurred version created according to the findings of pre-test 1 discussed in section 3.3.2. In addition, the two elements, pictorial

and logo, were presented separately from the can both in their original execution as well as in the manipulated state. The logos were presented on a neutrally colored light gray background following the method by Taft (1997). This was done as one of the logos was originally white and would thus not stand out from a white background. All in all, the research included 16 different stimulus items, of which two were presented to each respondent. Table 2 below describes the different response groups per stimulus.

	Blurred can		Clear car	)	Individual elements				
	Old New		Old	New	Old	New	Old	New	
	design	design	design	design	logo	logo	picture	picture	
Tyskie	42	40	39	38	41	44	37	39	
Feldschlösschen	41	41	38	42	38	39	43	38	
Total	164		157		162		157		

Table 2 Number of respondents per stimulus (N=320)

The pre-tests discussed earlier showed that these stimuli matched the requirements of this study. Firstly, the two brands showed a difference in the brand personality they communicate. Secondly, the pre-tests showed that the blurred version prohibited the respondents from answering the questions based on the details of the packaging, and thus matched the way items show in the peripheral vision field of the viewer. In addition, the manipulation of the individual elements matched the approach employed in packaging design when gradual changes in packaging are necessary.

As it was of utmost importance that the clarity of the images was similar through all stimuli in the same category (full cans, pictorial elements, logos), it was ensured that the size of the items would be as similar as possible. All cans were presented with exactly same size images and both the logos and pictorial elements were matched per the width of the picture. The images of the full cans were created from high quality photographs that were taken with the same conditions and setting to avoid any differences in the quality of the images. Finally, the images of the full cans were blurred using the Gaussian blur level of 20 pixels on Adobe Photoshop ensuring the exact same level of blurriness for each item. Appendix 1 shows the stimuli images used.

## 3.5 Main study

A total of sixteen groups of respondents was needed to answer questions regarding the different stimuli. However, as the respondents answered the same set of questions for two stimuli, they were assigned to two different groups – one for each of the brands. Each respondent thus answered the questions for one whole can and one separate element for the second brand in a randomized order. Before each stimuli they were presented with a short scenario explaining the situation they should base their responses on. The scenarios were:

For blurred cans: Imagine you are walking in the supermarket and stop in front of the beer shelf. While you are choosing which product to buy, you see an item in the corner of your eye. Because of its location you cannot see the item clearly. Please answer the questions based on the impression you get from the picture presented to you on the following page.

For clear cans: Imagine you are walking in the supermarket and stop in front of the beer shelf. While you are choosing which product to buy, you see a product in front of you. Please answer the questions based on the impression you get from the picture presented to you on the following page.

For pictorial elements: Imagine you are walking in the supermarket and stop in front of the beer shelf. While you are choosing which product to buy, you see a product in front of you. You look closer at the package and see the picture presented to you on the following page. Please answer the questions based on the impression you would get from a brand using the following picture.

For logos: Imagine you are walking in the supermarket and stop in front of the beer shelf. While you are choosing which product to buy, you see a product in front of you. You look closer at the package and see the logo presented to you on the following page. Please answer the questions based on the impression you would get from a brand using the following logo.

Each respondent thus received one full can scenario and one individual element scenario from different brands. The order and combination of the two were randomly assigned to avoid order bias or learning

effects. After answering the questions for two of the scenarios the respondents ended the survey by answering a set of background information and category familiarity questions.

### 3.5.1 Sampling

The respondent sample was a convenience sample, which can cause bias as the respondents are chosen on the basis of their availability. However, as Saunders, Lewis & Thornhill (2009) mention, this risk is lower if there relatively little variation in the population the sample is chosen from. As no major differences were expected within the population, using a convenience sample for the purposes of this research seemed appropriate. The responses were collected mainly online using different social media platforms to invite respondents to answer the survey. To increase the sample size, a part of the responses were collected in person in two different Dutch universities (Vrije Universiteit Amsterdam, Hogeschool van Amsterdam). These respondents answered the survey either using iPad's provided to them or on paper. All in all, a total of 37 (11.1%) respondents answered the questionnaire on paper. The data collection was conducted between the 7<sup>th</sup> and 15<sup>th</sup> of April. As the target respondent group is anyone who would buy packaged goods (and especially alcohol), all respondents over 18 were considered to belong to the relevant target group. As an incentive to participate in the study the respondents were informed that 0.20 € per response would be spent on buying school supplies for children in developing countries through UNICEF.

A total of 334 respondents answered the survey (296 online and 37 on paper). 14 responses were taken out as they were not complete (did not finish the questionnaire), which lead to 320 usable responses. As the rule of thumb says that each group of respondents should have at least 30 respondents (e.g. Stutely, 2003; Saunders *et al.*, 2009), a minimum of 240 respondents were necessary. Thus each group had between 37 and 44 respondents, meeting the requirement for a minimum number of respondents. The figures below summarize the main demographic descriptors of the sample.

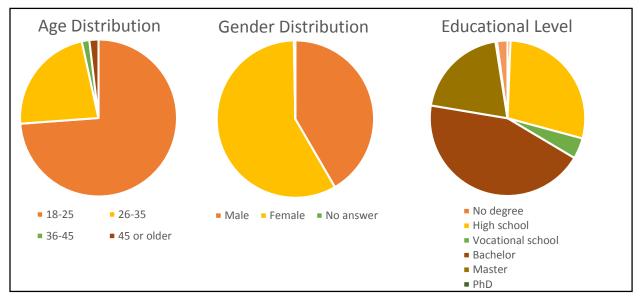


Figure 6 Demographic descriptors of the sample of respondents

The gender distribution of the sample was 41.6% men and 58.1% women. In addition one respondent did not want to answer the question. The age of the respondents ranged from 18 to 70, with a mean age of 24. This is a result of the majority of respondents being students. In fact, 73.6% of the respondents fell under the age group of 18-25 years old. All in all, a total of 44.1% of respondents held a Bachelor degree, and 19.9% a Master degree. The respondent group was very international with a total of 41 nationalities answering the survey. As discussed earlier in chapter 2.1.2, previous research has shown that brand personality impressions vary little between different cultural groups. In addition, brand personality is used as a tool to market a brand across cultures (Plummer, 1984-1985; Geuens *et al.*, 2009), supporting the choice of an international sample. Furthermore, there were no significant differences in responses between the different nationalities when grouped by continent. The majority of the respondents were European, the biggest group being Dutch (32.3%) followed by Finnish (18%). 22.4% of the respondents reported having English as their native language.

### 3.6 Questionnaire

The respondents answered 26 questions per stimulus. The questions included a brand personality scale, brand attitude and purchase intention measurements as well as manipulation check questions. In addition

each respondent was asked a total of 7 demographic and category familiarity questions. All in all, the survey included 59 questions out of which the majority were multiple choice items. Appendix 2 presents an example questionnaire.

As the sample was international, English was chosen to be used as the language of the survey to ensure everyone answering the exact same questions. However, as it was assumed that English would not be the native language of the majority of respondents, much effort was put into making sure that everyone would be able to understand the questions and response options similarly. Besides careful consideration of the formulation of the questions, the understandability of the survey was pre-tested with both native and nonnative English speakers and it was made sure that the terms used would be as comprehensible as possible.

The majority of the questions in the survey used a scale response (Bryman & Bell, 2011). Most response options in the questionnaire were presented on 7-item Likert scales. These scales are used to discover respondents' underlying attitudes, and as such matched the needs of this research well (Saunders *et al.*, 2009). Following the recommendations by Söderlund (2005) the questions using these types of responses negative items (e.g. "not interesting") were places on the left of the scale and positive items (e.g. "interesting") on the right side to increase the comprehensibility and logicality of the questions to the respondents.

The use of a 7-item scale was chosen as this allows the respondent to choose the option in middle – "neither agree nor disagree" (Saunders *et al.*, 2009). This was seen necessary to allow respondents to express possible inability to decide on the relevance of the different items. An even number of response choices is sometimes used to force the respondent to form an opinion, whereas in this research it was important also to know whether it was possible to get an impression based on the stimuli. Furthermore, it was likely that the differences found would be subtle as beer is often seen as masculine and rather traditional (Manning, 2012) and these expectations of the category in general are likely to be seen in the perceptions of the specific brands as well. The usage of a 7-item scale allowed for spotting more subtle differences in the impressions conveyed by the different stimuli.

#### 3.6.1 Brand personality

The brand personality scale used is based on the well-established brand personality scale (BPS) created by Aaker (1997). However, to ensure relevance to the tested product category, the items included in the study

were chosen by comparing the full BPS to the beer brand personality scale created by Heiltjes (2014). Ensuring that the scale used matched Aaker's original brand personality scale was important as the sample of respondents was international and the scale has been shown to be applicable across a broad range of nationalities. As further support for choosing the scale by Aaker, it has been used in research in similar categories before. For example Phau and Lau (2001) used the scale for identifying the brand personality of Tiger Beer, and in a more extensive research Orth and Malkewitz (2008) found the scale to be relevant for wines and that the impressions of the scale differed based on different packaging designs. Thus, the scale was found to be highly relevant for the purposes of this research as well.

The scale was presented with the question "To what extent do you find the following items to be characteristic for this brand?" The items were presented on a 7-item Likert scale ranging from "Very characteristic of the brand" to "Not at all characteristic of the brand" following the method by Geuens *et al.* (2009), which has been shown to lead to less neutral responses than the original five-item scale used by Aaker (Alpatova & Dall'Olmo Riley, 2011). In addition, as discussed before, the 7-item scale allowed for finding out more subtle differences in the impressions. To avoid order bias, the items were presented in a random order.

The items included in the scale were tested for indexes under the dimensions from Aaker's brand personality scale. Three of the dimensions showed high values for Cronbach's alpha and were accepted: Sincerity (authentic, original, fun, friendly, hospitable) had a value of 0.718, Excitement (bold, exciting, young, distinctive, modern) scored 0,758 and Competence (upper-class, reliable, successful, passionate) 0,757. Two items, namely masculine and traditional, did not fit under these three categories and were decided to be analyzed individually.

### 3.6.2 Brand familiarity

Brand familiarity was tested on a 7-item Likert scale with the question "I am familiar with this brand" and a response scale ranging from disagree to agree. The scale used was a self-anchoring rating scale in which only the ends of the scale were labelled (Saunders *et al.,* 2009).

### 3.6.3 Brand attitude

Brand attitude refers to an "individual's internal evaluation of the brand" (Mitchell and Olson (1981, p. 318). The attitude towards the brand was tested with the question "I perceive this brand as...". The items tested were presented on a bipolar scale with labels "not appealing – appealing", "not interesting – interesting", "low quality – high quality" and "negative – positive" (Ang & Lim, 2006; Sprears & Singh, 2004). The items were combined into an index with a Cronbach's alpha of 0,873.

### 3.6.4 Purchase intention

Purchase intention was measured with the questions "I would like to buy this product" and "It is likely that I will buy this product in the future" (Söderlund & Öhman, 2003). Both were presented with a 7-item Likert scale with responses ranging from "Strongly disagree" to "Strongly agree". Pearson's coefficient showed a value of 0,803 and thus the two items were combined into an index.

#### 3.6.5 Manipulation check

After each picture two questions were used for a manipulation check. The questions were "To what extent did you base your decisions on the details on the package?" and "To what extent did you base your decisions on the holistic view of the package?" Both questions were presented with a 7-item Likert scale with options ranging from 'Not at all' to 'Completely'. A third question asked "How sure are you of this impression of the brand presented to you on the previous page?" with a 7-item Likert scale ranging from "Not at all" to "Extremely".

### 3.6.6 Demographic questions

The respondent's age was asked with an open-ended question. Similarly, both nationality and native language were open ended questions. Educational level could be chosen from a set of alternatives (see example survey), and for the option 'other' an open ended question was used to allow the respondent to specify. Finally, gender was presented with a two-response alternative.

### 3.6.7 Category familiarity

Category familiarity was measured through two questions with response option on a 7-item Likert scale as suggested by Freling and Forbes (2005). For the question "Compared to most people, how familiar are you with beer?" the response scale ranged from 'Not at all familiar' to 'Extremely familiar'. For the second question "Please indicate how frequently you have bought beer within the last year" an ordinal scale ranging from 'Never' to 'Daily' was used. The two items showed a Pearson coefficient of 0,728 and were combined as an index.

### 3.7 Analytical tools

The data was analyzed using the statistical computer program SPSS Statistics 22. As a part of the responses were gathered on paper, these responses were plotted to the program manually and simultaneously checked for errors. Before analyzing the data the online responses were also checked for errors or missing data, and a total of 14 responses were excluded from the final sample.

Those variables, which were measured using multi-item scales, were combined into indexes. Their internal consistency was tested using Cronbach's alpha for variables included three or more items and Pearson's coefficient was used for two-item measures. Following the recommendations from Bearden, Netemeyer and Haws (2011) the indexes were accepted when Cronbach's alpha was higher than 0.7 or Pearson's coefficient higher than 0.5. The tested values were reported together with the explanation of the variables in the previous section, and all indexes showed a high internal consistency and were thus accepted.

## 3.8 Data quality

Reliability, replicability and validity are important terms in research (Bryman & Bell, 2011). Each of these aspects of this research will be discussed below in order to evaluate the quality of this work.

### 3.8.1 Reliability

Reliability refers to consistency of the findings based on the chosen data collection techniques or analysis procedures (Saunders *et al.*, 2009). Firstly, the secondary sources used in this research were mainly peer-reviewed journal articles. In addition, the interviewees were professionals from the field of packaging design with strong experience. The reliability of the secondary sources could be considered high.

Secondly, the variables were tested using questions based on well-established previous studies. Furthermore, all multi-item variables were combined into indexes using a minimum limit of 0.7 for Cronbach's alpha and 0.5 for Pearson's coefficient. This shows high internal consistency (Bearden *et al.,* 2011).

Thirdly, the questionnaire was pre-tested to ensure the comprehensibility and clarity of all questions. Manipulation checks were used to ensure that the stimuli worked according to expectations. These measures minimized the risk of the questionnaire design affecting the findings. Overall, the reliability of this research can be seen as rather high.

### 3.8.2 Validity

Validity refers to the extent that a measure truly tests what it is intended to test (Bhattacherjee, 2012). Below the different aspects of validity, namely internal, external and ecological validity, will be discussed.

#### Internal validity

Internal validity refers to the link between the independent and the dependent variable (Saunders *et al.,* 2009). According to Bryman and Bell (2011), experimental research designs often lead to strong internal validity. To increase internal validity, the respondents were randomly assigned to their groups and the order in which the stimuli was presented was random. This further supports the conclusion that the changes in the responses are a result of the different manipulations of the stimuli. In addition, the manipulation check questions both in the pre-test and the final test showed that the stimuli had the intended effects.

#### **External validity**

External validity, or generalizability, refers to the extent that the findings of the research can be expected to hold true in other situations or settings (Saunders *et al.,* 2009). This research only uses one product category, which limits the generalizability to other categories. However, the stimuli used does represent different designs and different brand personalities, and beer packaging includes elements similar to many other FMCG categories. The stimuli has been manipulated to represent a real-life setting through blurriness, but the two-dimensional stimuli and the online setting where the questionnaire was presented both limit the external validity of the research findings. Especially high is the risk of *reactive effects of experimental arrangements* (Bryman & Bell, 2011), which means that people may be influenced by the awareness of participating in a research. However, the use of a control group should limit this effect as the effect should be the same for all respondents.

#### **Ecological validity**

According to Bryman and Bell (2011), using questionnaires as a research method puts respondents in an unnatural situation of having to answer the survey questions. This reduces the ecological validity of the research. However, there are other aspects of the research that are not very natural. For example the stimuli was presented as a two-dimensional picture, which is not realistic to the actual situation where the consumer comes in contact with the packaging. Furthermore, it is likely that presenting a picture and asking questions with it makes the respondents process the information in the packaging more than they in a real life setting would. However, this research aims at taking into account more aspects of the natural situation than previous research by testing the effects of the package not being in full focus and critiquing existing research on the specific elements of packaging. Thus, although there is still more to be done to increase the ecological validity of this research, it can be consider to be higher than some other existing research in the field.

# 4 Results and analysis

This chapter will present the results of the statistical testing of the hypotheses. The findings will be presented in the order of the research questions. This means that the differences between the different types of stimuli and the brand personality impressions they generate will be discussed first. Thus, the hypotheses will be presented in a slightly different order than originally presented in the theory chapter. The following part discusses the effects on purchase intention and brand attitude. The chapter ends with a summarizing table of the findings.

## 4.1 Manipulation check

The manipulation check questions showed that the manipulation worked in the intended way also in the final study. An independent samples *t*-test showed significant differences on all questions between the groups answering the questions for either the blurred or the clear cans. In addition, the respondents answering individual elements also scored significantly lower on the question of how sure they were of their impression. A summary of the findings of the manipulation check can be found in tables 3 and 4 below. Furthermore, the question on brand familiarity revealed that the brand were indeed very unfamiliar in the respondent group with all stimuli scoring below 2 on average in familiarity (see table 5 for the specific values).

	Blurred can		Clear can		
"To what extent did you base your answer on"	Mean	Std. Dev.	Mean	Std. Dev.	Significance (2- tailed) p-value
the <b>details</b> of the packaging?	3.20	1.73	4.22	1.61	0.000
the <b>overall</b> <b>impression</b> of the package?	4.93	1.63	5.27	1.28	0.039

Table 3 Independent	samples t-test f	or manipulation	check (Details/overall view)

	Clear car	ı	Blurred	an		Individual elements		
	Mean	Std. Dev.	Mean	Std. Dev.	p-value*	Mean	Std. Dev.	p-value*
How sure are you of this impression of the brand presented to you on the previous page?	4.17	1.52	3.35	1.63	0.000	3.81	1.57	0.019

Table 4 Independent samples t-test results for manipulation check (Sure of the impression)

\* when tested against the clear can

	Familiar	ity mean	and standar	d deviati	ion		
	Tyskie			Feldschlösschen			
	Ν	Mean	Std. Dev.	Ν	Mean	Std. Dev.	
Old design blurred	42	1.81	1.27	41	1.39	0.80	
New design blurred	40	1.83	1.26	41	1.49	1.10	
Old design clear	38	1.63	1.34	38	1.71	1.58	
New design clear	38	1.50	1.35	42	1.50	1.31	
Old logo	41	1.59	1.47	38	1.42	1.06	
New logo	44	1.64	1.37	38	1.66	1.32	
Old pictorial element	37	1.57	1.41	43	1.28	0.67	
New pictorial element	38	1.55	1.18	38	1.37	1.08	

#### Table 5 Brand familiarity means per stimulus

## 4.2 Hypothesis testing

This chapter describes the statistical analyses used to test the different hypotheses. The testing was done using a variety of different statistical tests using the computer program SPSS Statistics 22. The hypotheses are tested using a variety of statistical tests, such as independent samples *t*-tests, ANCOVAs and MANCOVAs. The results are accepted on a 10% significance level as the exploratory nature of the research means that it is important to find even subtle differences between the conditions. Pillai's trace was used to calculate the F statistics and p-values for the MANCOVAs, as suggested by Field (2009), who named Pillai's trace the best option when the different groups are likely to differ along more than one variate as in this research.

### 4.2.1 Brand personality impressions based on the peripheral view

This first chapter will discuss the hypotheses related to the two first research questions, which both refer to the impressions conveyed by the peripheral view. The first hypothesis aiming to answer these questions suggested that consumers do indeed form an initial impression of a brand's personality based on what they see in the peripheral view. Table 6 presents a summary of the impressions for each can.

	Feldsch	nlösschen			Tyskie					
	New design		Old des	sign	New design					
	Μ	M Std.		Std.	Μ	Std.	Μ	Std.		
		Dev.		Dev.		Dev.		Dev.		
Traditional	4.40	1.53	4.35	1.53	4.20	1.60	4.34	1.43		
Masculine	4.40	1.31	4.35	1.31	4.54	1.40	4.34	1.48		
Sincerity	3.86	0.89	3.85	0.96	3.68	1.08	3.88	0.84		
Excitement	3.71	0.93	3.48	1.00	3.75	1.31	3.63	0.87		
Competence	3.71	0.99	3.60	1.11	3.41	1.09	3.55	0.92		

Table 6 Means for the different personality items for the blurred images

Looking at the perceived brand personalities of the two designs for both brands reveals that consumers can answer brand personality questions based on the blurred images. The means of the different items differ from the neutral value of 4, and show similar values to many earlier studies on brand personalities (e.g. Orth & Malkewitz, 2008; Geuens *et al.*, 2009). More importantly, while Aaker (1997) used a 5-item scale, her research also reports mean values similar to the ones found communicated by the blurred images in this study. While the findings reveal that the impression may not be strong, it still shows that consumers may start forming a brand personality impression already when an item falls into the peripheral area of their vision field. Hypothesis 5 is supported.

H5. Consumers form an initial brand personality impression based on what they see in their peripheral vision field (blurred image). SUPPORTED

The next hypothesis expects that the impression formed based on the peripheral view of the item may not match the brand personality impression that the consumer gets from the holistic view of the product. To test the hypothesis a one-way MANCOVA was used to investigate the differences in the brand personality profiles of the blurred and clear cans accounting for the effects of the four different designs as a covariate. This shows significant differences on a 1% level between the brand personalities of the two visual attention levels (F=5.53, p=0.000), while accounting for the different designs (F=1.46, p=0.204). A further investigation of the different personality items through one-way ANCOVAs shows that the results are significant for four out of the five items (for excitement F=1.45, p=0.229). Table 7 summarizes the findings of the ANCOVAs. The findings support hypothesis 6.

Table 7 One-way ANCOVA	(brand personalities of	f different levels of blurriness)
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	Traditional		Masculine		Sincerity		Excitement		Competence	
	F	р	F	Р	F	р	F	р	F	р
Blurriness level	23.77	0.000	7.22	0.008	2.81	0.095	1.45	0.229	4.87	0.028

H6. The brand personality impression formed based on the peripheral vision (blurred image) may differ from the one formed by the holistic view of the packaging. **SUPPORTED** 

#### 4.2.2 Details in their context

Hypotheses 1, 2 and 3 related to the importance of studying the individual elements of packaging in their context, and their analysis will be described below.

### **Testing the logos**

Hypothesis 1 relates to the logo and suggests that changes in the typeface of the logo will lead to changes in the perceived brand personality. A one-way MANCOVA taking into account the different brands as a covariate (F=9.62, p=0.000) showed significant differences between the old and new logos (F=2.14, p=0.063) and therefore supports the assumption that the changes in the logos lead to differing brand personality impressions. The subsequent ANCOVAs show significant differences on all the indexed

personality items, but not on the two individual items of traditional and masculine. Table 8 summarizes the results of the ANCOVAs. Despite not finding differences on two of the items, the findings strongly support hypothesis 1, as the indexes are all significant on a 1% level. In addition, the category of beer is generally considered masculine and traditional, which can be a possible explanation for the similar value for these two items (Manning, 2012).

	Traditional		Masculine		Sincerity		Excitement		Competence	
	F	р	F	Р	F	р	F	р	F	р
New/old logo	0.08	0.779	1.20	0.274	8.43	0.004	8.60	0.004	6.05	0.015

Table 8 One-way ANCOVA (brand personalities of different logos)

H1. Changes in the font of the logo change the brand personality impressions when the consumer only sees the element separately. SUPPORTED

### Testing the pictorial elements

Hypothesis 2 focuses on the pictorial element, and suggests that rather than the execution of the pictorial element in the packaging, it is the general knowledge of having that item as a sign of some characteristics that leads to the formulation of a brand personality impression. Thus, it was hypothesized that a change in the execution of the pictorial element will not lead to a change in the brand personality impression of the consumer. Again, the hypothesis was tested by running a one-way MANCOVA, which showed no significant differences between the pictures (F=0.32, p=0.899). Similarly, the consequent ANCOVAs summarized in table 9 showed no significant differences for any of the items, providing further support for hypothesis 2.

	Traditional		Masculine		Sincerity		Excitement		Competence	
	F	р	F	Р	F	р	F	р	F	р
New/old	0.04	0.836	0.84	0.361	0.04	0.835	0.50	0.481	0.06	0.815
logo										

H2. Changes in the execution of the pictorial elements will not lead to significant differences in the brand personality impressions when the consumer only sees the element separately. **SUPPORTED** 

#### Comparisons to the holistic view

The third hypothesis related to the elements of the packaging suggests that the brand personality impression the consumers form based on the holistic can cannot be estimated based on the individual elements. As a one-way MANCOVA showed significant differences between the four types of stimuli (F=9.46, p=0.000) when accounting for the different designs (F=2.27, p=0.046) the differences were researched further. To be able to draw proper conclusions on the relevance of the different elements, and compare the differences between the designs, it was decided to study the differences between the clear cans and the individual elements of the design through independent samples *t*-tests. The significance values of the differences are summarized in tables 10-13, and the means and standard deviations are presented in appendix 4.

	Tyskie		Feldschlösschen		
	Old design	New design	Old design	New design	
Traditional	0.054	0.106	0.460	0.453	
Masculine	0.221	0.996	0.635	0.306	
Sincerity	0.810	0.371	0.000	0.025	
Excitement	0.322	0.227	0.007	0.584	
Competence	0.070	0.482	0.046	0.866	

Table 10 Logo  $\leftarrow \rightarrow$  Clear can, p-values

Table 11 Pictorial element	$\leftarrow \rightarrow$ Clear can, p-values
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	Tyskie		Feldschlösschen		
	Old design	New design	Old design	New design	
Traditional	0.005	0.048	0.448	0.003	
Masculine	0.367	0.192	0.407	0.058	
Sincerity	0.862	0.976	0.644	0.435	
Excitement	0.020	0.031	0.948	0.501	
Competence	0.010	0.002	0.419	0.204	

	Tyskie		Feldschlösschen		
	Old design	New design	Old design	New design	
Traditional	0.715	1.000	0.994	0.026	
Masculine	0.206	0.450	0.429	0.092	
Sincerity	0.791	0.619	0.062	0.089	
Excitement	0.055	0.669	0.111	0.483	
Competence	0.692	0.039	0.499	0.512	

Table 12 Pictorial element + logo  $\leftarrow \rightarrow$  Clear can, p-values

Table 13 Pictorial element + logo + blurred can  $\leftarrow \rightarrow$  Clear can, p-values

	Tyskie		Feldschlösschen		
	Old design	New design	Old design	New design	
Traditional	0.507	0.433	0.165	0.692	
Masculine	0.079	0.223	0.324	0.440	
Sincerity	0.729	0.973	0.076	0.130	
Excitement	0.181	0.507	0.732	0.806	
Competence	0.848	0.258	0.273	0.938	

The results of the *t*-tests show significant differences between the logo and the clear can as well as between the pictorial element and the clear can for each of the designs. While not all designs differ on both elements, the results do show that neither the logo nor the pictorial element can be directly assumed to match the holistic view of the can. In addition, combining the two elements is also not sufficient – there are significant differences on some of the brand personality items for each can. Taking into account the personality impression of the blurred can improves the match, but still two of the designs differ on one item. All in all, the results show that it may be possible to predict the impression through the personalities of the individual details, but the matching element or combination of elements differs. This type of knowledge is impossible to gather without knowing the personality of the holistic design, and thus the findings partly support hypothesis 3.

H3. The brand personality communicated by the holistic packaging cannot be fully predicted based on the impressions consumers get from the individual details. **PARTLY SUPPORTED** 

Hypothesis 4 suggests that the changes in the logo and pictorial element do not transfer to the impression of the holistic view. To test the hypothesis, a one-way MANCOVA comparing the new and old holistic designs was conducted. Even though the logos were shown to lead to different personality perceptions, the findings show no significant differences between the new and the old holistic design (F=0.750, p=0.587) while accounting for the different brands (F=2.23, p=0.054). These findings thus support hypothesis 4.

H4. The changes in the logo and pictorial element do not affect the brand personality communicated by the holistic view of the packaging. **SUPPORTED** 

#### 4.2.3 Effects on purchase intention and brand attitude

Hypotheses 7 and 8 presented earlier discuss the effects of the source of brand personality impression on the purchase intention and brand attitude. Hypotheses 7a and 8a suggest that consumers who have based their brand personality impression on the holistic view (clear picture) of the packages will have higher purchase intention as well as more positive brand attitude than those who only saw the package in their peripheral vision (blurred). The differences between the types of stimuli were tested through one-way ANCOVA, which showed that the blurriness level had no significant effect on purchase intent (F=1.77, p=0.185) when accounting for the different designs (F=0.15, p=0.695). This means the data shows no support for hypothesis 7a.

H7a. The holistic view of the packaging leads to a stronger purchase intention than the peripheral (blurred) view. **NOT SUPPORTED** 

For brand attitude the findings are in line with the hypothesis. The one-way ANCOVA shows that the blurriness has a significant effect on brand attitude on a 1% significance level (F=9.99, p=0.002), when accounting for the different designs (F=3.34, p=0.069). In addition, the means of the different types of stimuli show that the effect is in the anticipated direction ( $M_{blurred}$ =3.37,  $M_{clear}$ =3.78) with the clear cans showing a total mean that is 0.41 higher than that of the blurred cans. The means per design and the related independent samples *t*-tests are detailed in table 14 below.

		Brand a	attitude					
		Blurred image		Clear image			Sig. (1- tailed)	
		N	Mean	Std. Dev.	N	Mean	Std. Dev.	
Tyskie	Old	42	3.46	1.26	39	3.92	1.13	0.043
	design							
	New	40	3.57	1.05	37	3.80	1.34	0.202
	design							
Feldschlösschen	Old	41	3.30	1.12	38	3.80	1.21	0.031
	design							
	New	41	3.15	1.13	42	3.61	1.17	0.037
	design							

Table 14 Independent samples t-test for brand attitude

The results of the independent samples *t*-tests show significant differences between the blurred and the clear image of three of the tested designs. While the new design for Tyskie does not show a statistically significant difference ( $M_{old}$ =3.57,  $M_{new}$ =3.80, p=0.202), the means show that the clear can still scores higher on brand attitude. The findings support hypothesis 8a.

H8a. Brand attitude is lower when the personality impression is based on the peripheral (blurred) view than when the impression is based on the holistic view. **SUPPORTED** 

Hypotheses 7b and 8b suggest that the holistic view of packaging would also lead to a higher purchase intent and more positive brand attitude than the individual elements. A one-way ANCOVA accounting for the brand (F=3.93, p=0.048) showed that the type of stimulus (logo, pictorial element or clear can) does not have a significant effect on purchase intention (F=1.21, p=0.301). This means there is no support for hypothesis 7b.

H7b. The holistic view of the packaging leads to a stronger purchase intention than the individual elements. NOT SUPPORTED

However, for brand attitude the ANCOVA showed that the type of stimulus has a significant effect on a 1% significance level (F=5.36, p=0.005), when accounting for the effects of the brand (F=3.03, p=0.082). To

look at the differences more specifically, two ANCOVAs were run to test the difference between both the logo and the pictorial element individually to the clear can. The results are presented in table 15 below.

	Ν	Mean	F	р	Brand (covariate)	
					F	р
Logo	161	3.53	3.49	0.063	1.55	0.214
Picture	156	3.96	1.81	0.180	2.17	0.142
Clear can	156	3.78	-	-	-	-

Table 15 One-way ANCOVAs (brand attitude between the logo/pictorial element and the clear can)

These results show that while the brand attitude based on the pictorial element shows no significant difference to the clear can (F=1.81, p=0.180) when accounting for the brand, the logo does show a significance on a 10% level (F=3.49, p=0.063). In addition, the means confirm that this effect is in the direction anticipated by the hypothesis. The results thus partially support hypothesis 8b.

H8b. Brand attitude is lower when the personality impression is based on the individual elements than when the impression is based on the holistic view. **PARTLY SUPPORTED** 

## 4.3 Summary of the hypothesis testing

Research question	Hypothesis
Is a consumer able to form a brand impression without seeing the details on the package?	H5. Consumers form an initial brand personality impression based on what they see in their peripheral vision field (blurred image). SUPPORTED
If so, is there a possibility that this impression does not match the impression formed with clear details?	H6. The brand personality impression formed based on the peripheral vision (blurred image) may differ from the one formed by the holistic view of the packaging. <b>SUPPORTED</b>

Does putting the details into the context of the package change the impression they communicate?	<ul> <li>H1. Changes in the font of the logo change the brand personality impressions when the consumer only sees the element separately.</li> <li>SUPPORTED</li> <li>H2. Changes in the execution of the pictorial elements will not lead to significant differences in the brand personality impressions when the consumer only sees the element separately.</li> <li>SUPPORTED</li> <li>H3. The brand personality communicated by the holistic packaging cannot be fully predicted based on the impressions consumers get from the individual details.</li> <li>PARTLY SUPPORTED</li> <li>H4. The changes in the logo and pictorial element do not affect the brand personality communicated by the holistic view of the packaging.</li> <li>SUPPORTED</li> </ul>
What level of attention has most importance on the consumer's attitude towards the brand and purchase intention?	<ul> <li>H7a. The holistic view of the packaging leads to a stronger purchase intention than the peripheral (blurred) view.</li> <li>NOT SUPPORTED</li> <li>H7b. The holistic view of the packaging leads to a stronger purchase intention than the individual elements.</li> <li>NOT SUPPORTED</li> <li>H8a. Brand attitude is lower when the personality impression is based on the peripheral (blurred) view than when the impression is based on the holistic view.</li> <li>SUPPORTED</li> <li>H8b. Brand attitude is lower when the personality impression is based on the individual elements than when the impression is based on the holistic view.</li> <li>SUPPORTED</li> <li>H8b. Brand attitude is lower when the personality impression is based on the individual elements than when the impression is based on the holistic view.</li> <li>PARTLY SUPPORTED</li> </ul>

# 5 Discussion and conclusions

This last part of the report will start by discussing the results presented in the previous chapter. In the next section overall conclusions will be presented and the research questions answered. This discussion will be followed by a discussion of both theoretical and managerial implications of the study. Finally, the report will end by critically evaluating the presented study as well as offering suggestions for future research in the field.

## 5.1 From the periphery to the center of focus

The first part of this research aimed to find out how packaging has an opportunity to communicate brand personalities while not receiving full attention from the consumer. While items are in the peripheral field of vision, i.e. outside of the small central point of the vision field, they appear blurry and unclear. Even though some research has studied how packaging may attract attention while in the peripheral vision (Mackworth & Morandi, 1967; Gonzalez & Kolers, 1985), currently the fundamental reasoning for the findings has been almost completely ignored. For example, it has been shown that color is one of the main elements guiding consumers' visual attention (Snowden, 2002), and that packaging that differs from the category standard receives more attention (Schoormans & Robben, 1997). However, even though brand personality's importance on brand choice has been clearly proven (e.g. Aaker, 1999; Aaker, 1996; Plummer, 1984-1985), it has not been considered that it could already have an effect before the product has even received the consumers' full attention.

This research has now answered this gap in existing research by showing that consumers are able to formulate at least an initial idea of the brand's personality without having the ability to thoroughly examine the packaging and especially its details. Even though items appear unclear in the peripheral vision field, different colors remain visible (Olkkonen, McCarthy & Allred, 2014). As different colors have often seen to lead to strong associations and consumer impressions and to be central to brand personality (e.g. Taft, 1997; Bottomley & Doyle, 2006; Ares & Deliza, 2010; Mininni, 2015), the findings are not surprising. According to Silayoi and Speece "consumers are more likely to read the label to check that the product information is consistent with their needs if the package makes it seem that the product is worth investigating more carefully" (2007, p. 1502). This study suggests that they might draw these conclusions already before consciously looking at the package.

However, it is still possible that this message communicated by the peripheral view differs significantly from the impression formed based on the item with visible details. The results show for example that for each of the cans consumers perceived the brands as significantly less traditional when they could not see the details of packaging. Again, this was to be expected based on previous work of scholars such as Pantin-Sohier, Decrop and Brée (2005), who clearly found that the same color can have completely different associations in a different context. However, this research has now shown that even the clarity of the details can lead to differences in consumer impressions: it may not even be enough to know how consumers usually perceive blue beer cans, for example. Like discussed earlier, consumers make initial decisions on the items to be included in their consideration set based on the peripheral view (Gonzalez & Kolers, 1985). Combining this knowledge to the findings suggests that a consumer looking for a highly traditional product might have left all of these packages out of their consideration set based on the initial impression of the brand. In short, the results show that brand personality may actually play an important role in product choice earlier in the buying process of the consumer than is previously believed.

The findings of this part of the research, and especially the support found for hypotheses 5 and 6, clearly show that the peripheral view may have an important role in consumers' choice processes. This is in line with existing research, which, as discussed earlier, has suggested that peripheral vision field is mainly responsible for choosing which items to include in one's consideration set and examine more thoroughly. However, while brand personality has previously been linked to product choice, its effects have only been researched under conditions of full attention from the consumer. Furthermore, there has not been research investigating the relative importance of the different design elements in communicating the brand personality impression formation process of consumers to understand more about the complexities of the purchase habits and attitudes.

### 5.2 From the holistic view down to the details

In addition to researching the effects of different levels of visual focus on the packaging, this research aimed to look at the differences between the individual elements of the design and the Gestalt these elements form. The findings show that the individual elements can offer consumers strong associations as to what the brand's personality would be like and offer confirmation that the individual elements of a brand's visual identity can work as powerful strategic tools (Hynes, 2009). Showing further support for previous research,

the findings show that changing the typeface of a logo can already lead to differing impressions of the brand (Childers & Jass, 2002; Henderson & Cote, 1998). This is especially notable, as the changes made in this research were relatively small and made with the purpose of keeping the blurred view similar.

However, the changes in the two elements of the designs led to no changes in the personality impression of the clear can. This finding thus supports the idea that consumers base their impression on the holistic view of the package rather than the details or more specifically the specific execution of the details. This finding follows in the footpath of Orth and Malkewitz (2008), who discussed the importance of researching packaging holistically rather than through detail-oriented strategies. This is further supported by the found support for hypothesis 2, which showed that changes in the pictorial element do not lead to differences in the impression conveyed by that detail. Thus the findings show the importance of the semiotic message carried by pictorial elements, and suggest that the impression formed is more related to the idea of having a specific picture (e.g. castle) in the packaging rather than the specific execution of the said element.

In addition, both the logos and the pictorial elements showed that the message they convey may differ significantly from the impressions based on the whole package. Especially interesting was that for both elements some designs even scored on the opposite sides of the neutral value of four. For example the new logo for Feldschlösschen scored a mean of 3.58 on sincerity, while the clear can scored 4.02 (p=0.025). The pictorial elements showed even stronger differences. Competence scored significantly lower for three of the clear cans compared to their pictorial elements. As an example the new Tyskie design was seen as somewhat incompetent (M=3.76), while the pictorial element in itself conveyed a competent message (M=4.44). This difference is significant on a 1% level (p=0.002). The pictorial element alone was not sufficient to create a competent brand personality. This clearly offers criticism towards existing research that has largely examined the different perceptions of logos and their typefaces, as well as other design elements. While this research also showed that changing the typeface of the logo may change the consumer's perception of the brand, it also showed that this effect does not directly carry over to the holistic package. The differences found between the different types of stimuli in this research again strongly support Orth and Malkewitz' (2008) request for research focusing on the holistic design. Furthermore, the differences show that while the findings of different studies on logos and color are fundamentally correct about the impressions communicated by the different elements, the applications of these findings can be more limited than expected.

All in all, the findings support the view of Gestalt theorists and the idea that "the sum is different than the sum of its parts" (Wagemans *et al.,* 2012, p. 4). While the results show that it may be possible to predict the personality impression on one of the elements or the combination of them, they also show that each one of the designs relates to their elements differently. For example the new Tyskie design has a similar personality to its logo, but has significant differences with the pictorial element. The old Feldschlösschen design on the other hand works the opposite way. Combining the impressions of the two individual elements with the blurred image still is not always enough to explain the final impression of the clear can. Thus, while it may be possible to predict the final personality impression based on the elements, it is not possible to know which specific element is the correct one.

### 5.3 Formulation of purchase intention and brand attitude

Hypotheses 7 and 8 were related to the formulation of brand attitude as well as purchase intention in the different situations simulated by the stimuli used in this research. The findings showed no differences in the purchase intention of the different stimuli types. This could suggest that consumers do indeed rely on their peripheral vision while deciding which packages to choose in their consideration set as suggested by Gonzalez and Kolers (1985), and this initial purchase intention may actually be considerably less affected by the individual details of the packaging. However, the category used in this research can also play a role in the lack of difference in the purchase intention for the different types of stimuli. Both brands scored relatively low on excitement, and beer cans may be considered lower quality than bottles for example. This was also clear in the comments some respondents gave after answering the survey. For example one respondent (female, 26) said "I never find canned beer upper-class and always buy it in bottles". This may have led to a low overall purchase intention for the products and at least partly explain the lack of differences found.

However, it seems that the details play a bigger role in influencing consumers' brand attitude. As the blurred can scores significantly lower on brand attitude than the clear can, it can be assumed that people are not able to formulate an opinion on the brand without being able to examine the details. While the individual details in total also scored lower on brand attitude, it should be noticed that looking at the data more closely reveals that while logos scored lower, the pictorial elements actually scored higher. Thus, while more research in the topic is necessary, it may be possible that the pictorial elements of a packaging design can have significant influence on the consumers' liking of and attitude towards the brand in

question. Underwood and Klein (2002) showed that adding a product picture to a packaging design made the consumers like the packaging more, and suggested that pictorial elements allow consumers to draw their own conclusions about the product and the brand. Thus, while it should not be said that some specific element is solely responsible for the consumers' attitude towards the brand, it is possible to influence that attitude through different, especially pictorial, elements.

## 5.4 Conclusions

The main research question that was to be answered in this research was: "What role do the Gestalt and the details of packaging play in creating brand personality impressions?" Put shortly, the findings of this research show that no individual detail is responsible for the brand personality communication, but rather it is the holistic view, the Gestalt formed by the details together. While the details certainly affect the consumers' perception of the brand, the message conveyed by an individual detail can be different in different contexts. The results also suggest that the Gestalt theory may be correct in that the "sum is different of its parts" also in packaging design, although this seems to be somewhat dependent on the specific design.

More specifically the sub-questions looked into the different aspects of the Gestalt and the details and their influence on consumers' brand personality impression, purchase intention and brand attitude. Firstly, as an answer to the first sub-question "Is a consumer able to form a brand impression without seeing the details on the package?" the findings indicate that the peripheral view indeed plays a role in the communication of brand personality, even though to a lesser extent than the full focus. The second sub-question asked "If so, is there a possibility that this impression does not match the impression formed with clear details?" This, too, was confirmed by the results. The findings showed that the two levels of visual attention can lead to significant differences in consumers' brand personality impressions.

The following sub-question aimed to find out the following: "Does putting the details into the context of the package change the impression they communicate?" The findings clearly showed that neither the logo nor the pictorial element of a packaging design is a clear indicator of the brand's personality communicated by the packaging as a whole. Moreover, the findings showed that the changes in the impressions of these elements do not directly carry over to the holistic impression suggesting the importance of context, and that the personality of the individual elements may even significantly differ from that of the holistic design.

Finally, however, the findings do show that the impression consumers form based on the holistic packaging may closely reflect the combination of the individual details. However, not all designs act similarly, and it is difficult to say which combination of elements is the one closest to the final impression.

As brand personality has been linked to both product choice as well as the evaluation of the brand, one of the sub-questions aimed to find out the following: "How does context affect purchase intention and brand attitude?" The findings show that while the product as a whole seems to be responsible for the purchase intention, but when formulating attitude towards the brand consumers rely more strongly on the individual details.

All in all, the findings have clear implications on the relative importance of the holistic view of the can, the peripheral vision as well as the individual details. While each one of these plays a role in communicating brand personality as well as affecting purchase intention and brand attitude, they do so differently from each other. The findings have clear implications both theoretically as well as practically, and these will be discussed in the sections below in more detail.

## 5.5 Theoretical implications

As mentioned above, this research has some important theoretical implications. Firstly, it shows that studying the impressions of design in different contexts is important and understanding the possible differences found here may lead to important findings. Furthermore, the findings of this research can act as criticism towards the generalizability of existing research on the different design elements. For example logos and the impressions they convey have been rather vastly researched, but the findings presented here suggest that those impressions may not carry over to situations where the logo is presented in a context of packaging or possibly even in advertisements.

While the methodology here has aspects that can be criticized (see the discussion in section 5.7 below), it does offer a new point-of-view to design research. Firstly, it can be beneficial to include different limitations on visual attention while studying design. This can reveal possible discrepancies in consumers' impressions and give more insights into the formulation of those impressions. Secondly, it is important to study the different design elements in their context as the impressions may be strongly influenced by their surroundings. This will not only give more information on the context effects over the impressions but also increases the usability and generalizability of the findings.

## 5.6 Managerial and practical implications

This research also have clear implications for both managers as well as designers. Firstly, and possibly most importantly, it is important to ensure that consumers are able to form the correct brand personality impression based on the peripheral view of packaging. It should be remembered that packaging is not always, or possible even most of the time, in full focus of the consumer, but still may have an opportunity to affect their opinions and choice processes. While this research still has shown that the individual details play an important role in the communicational function of packaging design, the main findings highlight that designers should not solely focus on the specific small executional aspects of the design. For example, it is not enough to focus on the execution of the logo for example to ensure the right message neither is it enough to modify the execution of the details to create a change in the perceived brand personality. It is important to keep in mind the overall view of the design, as this is what the consumer is likely to base their impression of the brand on. It can be beneficial for a designer to take a step back at times and evaluate the design as a holistic entity as opposed to constantly focusing on the small details.

Furthermore, the findings about the different roles of peripheral vision and elements to purchase intention and brand attitude offer interesting considerations to practitioners. Thus, by focusing on the impression consumers get from the peripheral view it may be possible to influence their purchase decision. While it has been recognized that efficient packaging should stand out on the shelf when it is in the consumers' peripheral visual field, it is also important to take into consideration the message the blurred view offers about the brand.

The findings also offer interesting implications for redesigns of packaging. As many brands may be cautious when thinking about redesigns, as they worry their brand may suffer as a consequence, this research has shown that it is indeed possible to update an old-fashioned design through small steps without affecting the total brand personality impression. On the other hand, brands looking to drive a change in the impressions of consumer, but looking to keep their identifiable design unchanged may need to consider taking somewhat bigger steps in the design changes. While these implications are clear based on the findings of this research, it cannot state an exact amount of change that is going to affect the consumer impressions, as this is likely to be highly dependent on the specific design as well.

## 5.7 Criticism of the study

Despite the clear implications to practitioners and academics, this research has some aspects to be criticized. Firstly, and possibly most importantly, the methodology puts the respondents in an unnatural situation. Even though existing research shows that items appear blurred and unclear in the peripheral vision field, which supports the choice of method for simulating that, the respondents were still able to fully focus on the pictures presented to them. In addition, the items were presented two-dimensionally out of the retail environment people usually come in contact with packaging. This further increases the unnaturalness of the research setting. However, using two-dimensional pictures out of the retail context is common in the research of packaging design, which supports the choice of method.

Secondly, there has been some criticism towards the research of brand personality. For example Avis, Forbes and Ferguson (2014) suggested that the concept works like a self-fulfilling prophecy, meaning that asking consumers if a brand is young leads them to assign the value for that brand, while they may not normally think of brands in that way. While previous research has shown that consumers do use brand personality items unprompted when they are describing brands (Geuens *et al.*, 2009), this could be especially a risk for the blurred image. However, in the pre-test finding out the blurriness levels some of the respondents had spontaneous, unprompted responses describing the brands aggressive or modern for example, which could offer evidence that it is not unnatural for consumers to assign these characteristics to brands even without seeing the packaging clearly.

Thirdly, as this research only tests packaging in one category they should not be directly generalized to other categories. While other product categories with similar elements may have similar findings, it cannot be stated that categories with very different design language would follow in the same path. However, many studies into packaging have only used individual categories as products within FMCG are relatively homogenous, and the findings can at least to a certain extent be expected to be generalizable across other low-involvement product categories.

## 5.8 Further research

This research aimed to take the first steps into identifying the different roles of packaging design elements in the communication of brand personality. As previous research has not taken into account the differences in visual attention and often tests elements out of their context, there is much more research to be done in the field to truly understand the sources of consumers' impression formulation processes.

Firstly, the findings of this research should be attempted to be expanded to cover different product categories. It is possible that the findings hold true across the FMCG sector for example, but as mentioned earlier more research is necessary before this conclusion can be made. Furthermore, it would be beneficial to aim to verify the findings in an actual retail setting. In addition, there is much more to find out about the processes that lead to a formulation of a brand personality impression. The specific design elements and their roles in this process should be studied by studying the packages holistically. This knowledge could offer important insights for designers and managers and help them create packaging that is as efficient in communicating the brand's message as possible.

Secondly, some complexity should be added to the stimuli used in this research to get deeper knowledge on the relevance of the different design elements and attention levels. The changes applied to the elements in this research are small and have aimed to hold the Gestalt of the package constant. However, it is likely that bigger changes in the execution of the elements would have an effect on the impression conveyed by the holistic design. Finding out the acceptable level of change before the personality impression changes would give brand managers and designers important information that can support decision-making when looking to gradually update a packaging design without affecting the brand image. On the other hand, the same information can also give ideas on what level of change is needed to start driving a change in the perception of the brand personality. In addition, further research should aim to test the importance of the details and the Gestalt in a more complex design. While both designs in this research had relatively few elements and thus not many links between the different items, it is possible that increasing complexity would lead to a higher relative importance of the Gestalt over the specific details.

Finally, packaging should be research more deeply in its context to see how the surroundings affect the abilities of a package communicating brand personality. For example testing the impressions when the package is surrounded by different types of packaging could give insights on whether consumers truly base their impressions on the packaging, or whether they compare the package with the ones next to it. Similarly it would be important to find out whether the location on the shelves affects this impression. Stores often

display cheaper products on the lower shelf. Do people then expect these products to be of lower quality or a certain type of personality just based on the location of the packaging? Furthermore, does the impression remain the same when the consumer comes across the packaging in a retail setting or in a restaurant, for example? While the research presented in this paper has given great insights into the way consumers process packaging and form impressions based on visual stimuli, it has just taken the first steps in understanding the various different factors affecting the process.

# References

Aaker, D., 1996. Building Strong Brands. New York: Free Press.

Aaker, J. L., 1997. Dimensions of Brand Personality. Journal of Marketing Research, 34(3), pp. 347-356.

Aaker, J. L., 1999. The Malleable Self: The Role of Self-Expression in Persuasion. *Journal of Marketing Research*, 36(1), pp. 45-57.

Aaker, J. L., Benet-Martínez, V. & Garolera, J., 2001. Consumption Symbols as Carriers of Culture: A Study of Japanese and Spanish Brand Personality Constructs. *Journal of Personality and Social Psychology*, 81(3), pp. 492-508.

Alpatova, A. & Dall'Olmo Riley, F., 2011. *Comparing brand personality measures*. Liverpool, UK, Academy of Marketing Conference 2011: Marketing fields forever.

American Marketing Association, 2014. *ama.org.* [Online] Available at: <u>https://www.ama.org/resources/Pages/Dictionary.aspx?dLetter=B</u> [Accessed 8 April 2015].

Ampuero, O. & Vila, N., 2006. Consumer perceptions of product packaging. *Journal of Consumer Marketing*, 23(2), pp. 102-114.

Ang, S. H. & Lim, E. A. C., 2006. The Influence of Metaphors and Product Type on Brand Personality Perceptions and Attitudes. *Journal of Advertising*, 35(2), pp. 39-53.

Ares, G. & Deliza, R., 2010. Studying the influence of package shape and colour on consumer expectations of milk desserts using word association and conjoint analysis. *Food Quality and Preference*, 21(8), pp. 930-937.

Avis, M., Forbes, S. & Ferguson, S., 2014. The brand personality of rocks: A critical evaluation of a brand personality scale. *Marketing Theory*, 14(4), pp. 451-475.

Azoulay, A. & Kapferer, J.-N., 2003. Do brand personality scales really measure brand personality?. *Journal of Brand Management*, 11(2), pp. 143-155.

Batra, R. & Homer, P. M., 2004. The Situational Impact of Brand Image Beliefs. *Journal of Consumer Psychology*, 14(3), pp. 318-330.

Batra, R., Lehmann, D. R. & Singh, D., 1993. The Brand Personality Component of Brand Goodwill: Some Antecedents and Consequences. In: D. A. Aaker & A. L. Biel, eds. *Brand Equity & Advertising: Advertising's Role in Building Strong Brands.* Hillsdale, NJ: Lawrence Erldaum Associates, pp. 83-96.

Bearden, W. O., Netemeyer, R. G. & Haws, K. L., 2011. *Handbook of Marketing Scales: Multi-Item Measures for Marketing and Consumer Behavior Research*. 3rd ed. USA: Sage Publications Inc..

Berkowitz, M., 1987. The Influence of Shape on Product Preferences. *Advances in Consumer Research*, 14(1), p. 559.

Bhattacherjee, A., 2012. *Social Science Research: Principles, Methods, and Practices.* 2nd ed. Tampa, FL: University of South Florida.

Biel, A. L., 1993. Converting Image into Equity. In: D. A. Aaker & A. L. Biel, eds. *Brand Equity & Advertising: Advertising's Role in Building Strong Brands*. Hillsdale, NJ: Lawrence Erlbaum Associates, pp. 67-82.

Bloch, P. H., 1995. Seeking the Ideal Form: Product Design and Consumer Response. *Journal of Marketing*, 59(3), pp. 16-29.

Botti, S. & Iyengar, S. S., 2006. The Dark Side of Choice: When Choice Impairs Social Welfare. *Journal of Public Policy & Marketing*, 25(1), pp. 24-38.

Bottomley, P. A. & Doyle, J. R., 2006. The interactive effects of colors and products on perceptions of brand logo appropriateness. *Marketing Theory*, 6(1), pp. 63-83.

Boudreaux, C. A. & Palmer, S. E., 2007. A charming little Cabernet - Effects of wine label design on purchase intent and brand personality. *International Journal of Wine Business Research*, 19(3), pp. 170-186.

Boudreaux, C. A. & Palmer, S. E., 2007. Effects of wine label design on purchase intent and brand personality. *International Journal of Wine Business Research*, 19(3), pp. 170-186.

Bruce, V., Georgeson, M. A. & Green, P. R., 2003. *Visual Perception: Physiology, Psychology and Ecology.* 4th ed. Hove and New York: Psychology Press.

Bryman, A. & Bell, E., 2011. Business Research Methods. 3rd ed. Oxford: Oxford University Press.

Buttle, H. & Westoby, N., 2006. Brand Logo and Name Association: It's all in the Name. *Applied Cognitive Psychology*, 20(9), pp. 1181-1194.

Childers, T. L. & 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(2), pp. 93-106.

Clement, J., 2007. Visual influence on in-store buying decisions: an eye-track experiment on the visual influence of packaging design. *Journal of Marketing Management*, 23(9-10), pp. 917-928.

Cziulik, C. & dos Santos, F. L., 2011. An approach to define formal requirements into product development according to Gestalt principles. *Product Management & Development*, 9(2), pp. 89-99.

d'Astous, A. & Lévesque, M., 2003. A scale for measuring store personality. *Psychology & Marketing*, 20(5), pp. 455-469.

Dickson, P. R., 1997. Marketing Management. 2nd ed. Fort Worth, TX: Dryden Press.

Dickson, P. R. & Sawyer, A. G., 1990. The Price Knowledge and Search of Supermarket Shoppers. *Journal of Marketing*, 54(3), pp. 42-53.

Doyle, J. R. & Bottomley, P. A., 2004. Font appropriateness and brand choice. *Journal of Business Research*, 57(8), pp. 873-880.

Feldschlösschen, 2015. *Feldsclösschen company website*. [Online] Available at: <u>http://www.feldschloesschen.com/en/Brands/Brand\_universe/Pages/default.aspx</u> [Accessed 24 March 2015].

Feldwick, P., 1996. Do we really need 'Brand Equity'?. Journal of Brand Management, 4(1), pp. 9-28.

Field, A., 2009. *Discovering Statistics Using SPSS (and sex and drugs and rock 'n' roll).* 3rd ed. London: SAGE Publications Ltd.

Folkes, V. & Matta, S., 2004. The Effect of Package Shape on Consumers' Judgments of Product Volume: Attention as a Mental Contaminant. *Journal of Consumer Research*, 31(2), pp. 390-401.

Fournier, S., 1998. Consumers and Their Brands: Developing Relationship Theory in Consumer Research. *Journal of Consumer Research*, 24(4), pp. 343-373.

Freling, T. H. & Forbes, L. P., 2005. An empirical analysis of the brand personality effect. *Journal of Product & Brand Management*, 14(7), pp. 404-413.

Garber, L. L., Burke, R. R. J. & Jones, J. M., 2000. *The Role of Package Color in Consumer Purchase Consideration and Choice*, Cambridge, MA: Marketing Science Institute.

Geuens, M., Weijters, B. & de Wulf, K., 2009. A new measure of brand personality. *Internation Journal of Research in Marketing*, 26(2), pp. 97-107.

Ghodeswar, B. M., 2008. Building brand identity in competitive markets: a conceptual model. *Journal of Product & Brand Management*, 17(1), pp. 4-12.

Gonzalez, E. G. & Kolers, P. A., 1985. On the interpretation of eye fixations. In: R. Groner, G. W. McConkie & C. Menz, eds. *Eye Movements and Human Information Processing*. North-Holland: International Union of Psychological Science.

Grohmann, B., Giese, J. L. & Parkman, I. D., 2013. Using type font characteristics to communicate brand personality of new brands. *Journal of Brand Management*, 20(5), pp. 389-403.

Halliday, J., 1996. Chrysler Brings Out Brand Personalities with '97 Ads. Advertising Age, 67(40), p. 3.

Hammer, P., Riebe, E. & Kennedy, R., 2009. How Clutter Affects Advertising Effectiveness. *Journal of Advertising Research*, 49(2), pp. 159-163.

Hausman, A., 2000. A multi-method investigation of consumer motivations in impulse buying behavior. *Journal of Consumer Marketing*, 17(5), pp. 403-426.

Hawkins, D. I., Best, R. J. & Coney, K. A., 2003. *Consumer Behavior: Building Marketing Strategy.* 9th ed. London, UK: Kogan Page Ltd.

Heiltjes, S., 2014. *Touching Brands: The Effects of Multisensory Packaging Design on Brand and Product Perception and Evaluation,* s.l.: Unpublished Master's thesis, University of Twente, Enschede, the Netherlands.

Henderson, P. W. & Cote, J. A., 1998. Guidelines for Selecting or Modifying Logos. *Journal of Marketing*, 62(2), pp. 14-30.

Herrington, J. D. & Capella, L. M., 1995. Shopping reactions to perceived time pressure. *Journal of Consumer Marketing*, 23(12), pp. 13-20.

Hynes, N., 2009. Colour and meaning in corporate logos: An empirical study. *Journal of Brand Management*, 16(8), pp. 545-555.

Kanwisher, N., Yin, C. & Wojciulik, E., 1999. Repetition Blindness for Pictures: Evidence for the Rapid Computation of Abstract Visual Descriptors. In: V. Coltheart, ed. *Fleeting Memories: Cognition of Brief Visual Stimuli.* London: MIT Press, pp. 199-150.

Kapferer, J.-N., 2008. *The New Strategic Brand Management: Creating and Sustaining Brand Equity Long Term.* 4th ed. London: Kogan Page.

Keller, K. L., 1993. Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. *Journal of Marketing*, 57(1), pp. 1-22.

Kim, C. K., Han, D. & Park, S.-B., 2001. The effect of brand personality and brand identification on brand loyalty: Applying the theory of social identification. *Japanese Psychological Research*, 43(4), pp. 195-206.

Klimchuk, M. R. & Krasovec, S. A., 2013. *Packaging Design: Successful Product Branding from Concept to Shelf.* 2nd ed. Hoboken, NJ: John Wiley & Sons.

Lee, A. Y. & Labroo, A. A., 2004. The Effect of Conceptual and Perceptual Fluency on Brand Evaluation. *Journal of Marketing Research*, 41(2), pp. 151-165.

Mackworth, N. H. & Morandi, A. J., 1967. The gaze selects informative details within pictures. *Perception & Psychophysics*, 2(11), pp. 547-552.

Malhotra, N. K., 1988. Self Concept and Product Choice: An Integrated Perspective. *Journal of Economic Psychology*, 9(1), pp. 1-28.

Manning, P., 2012. Semiotics of Drink and Drinking. London: Continuum International Publishing Group.

Margolis, E. & Pauwels, L., 2011. *The SAGE Handbook of Visual Research Methods*. London: SAGE Publications Ltd.

Matthes, J., Wirth, W., Schemer, C. & Kissling, A.-K., 2011. I See What You Don't See: The Role of Individual Differences in Field Dependence-Independence as a Predictor of Product Placement Recall and Brand Liking. *Journal of Advertising*, 40(4), pp. 85-99.

McGoldrick, P., 1982. How unplanned are impulse purchases?. *Retail and Distribution Management*, 10(1), pp. 27-32.

McNeal, J. U. & Ji, M. F., 2003. Children's visual memory of packaging. *Journal of Consumer Marketing*, 20(5), pp. 400-427.

Merriam-Webster Dictionary, 2015. [Online] Available at: <u>http://www.merriam-webster.com/dictionary/</u> [Accessed 4 May 2015].

Meyers, H. & Lubli, M. J., 1998. *The Marketer's Guide To Successful Package Design*. Chicago, IL: McGraw-Hill.

Mininni, T., 2015. Branded by Color. Brand Packaging, Volume April, pp. 6-9.

Nancarrow, C., Wright, L. T. & Brace, I., 1998. Gaining competitive advantage from packaging and labelling in marketing communications. *British Food Journal*, 100(2), pp. 110-118.

Nandan, S., 2005. An exploration of the brand identity-brand image linkage: A communications perspective. *Journal of Brand Management*, 12(4), pp. 264-278.

Nickels, W. G. & Jolson, M. A., 1976. Packaging - the fifth "p" in the marketing mix?. *Advanced Management Journal*, 41(1), pp. 13-21.

Olkkonen, M., McCarthy, P. F. & Allred, S. R., 2014. The central tendency bias in color perception: Effects of internal and external noise. *Journal of Vision*, 14(11), pp. 1-15.

Orth, U. R. & Malkewitz, K., 2008. Holistic Package Design and Consumer Brand Impressions. *Journal of Marketing*, 72(3), pp. 64-81.

Pantin-Sohier, G., Decrop, A. & Brée, J., 2005. An Empirical Investigation of the Product's Package as an Antecedent of Brand Personality. *Innovative Marketing*, 1(1), pp. 69-80.

Phau, I. & Lau, K. C., 2001. Brand personality and consumer self-expression: Single or dual carriageway?. *Journal of Brand Management*, 8(6), pp. 428-444.

Phillips, H. & Bradshaw, R., 1993. How Customers Actually Shop: Customer Interaction with the Point of Sale. *Journal of the Market Research Society*, 35(1), pp. 51-62.

Phillips, H. C. & Bradshaw, R. P., 1991. Camera tracking: a new tool for market research and retail management. *Management Research News*, 14(4/5), pp. 20-22.

Pieters, R. & Warlop, L., 1999. Visual attention during brand choice: The impact of time pressure and task motivation. *International Journal of Research in Marketing*, 16(1), pp. 1-16.

Pilditch, J., 1973. *The Silent Salesman: How to Develop Packaging that Sells.* 2nd ed. London: Business Books.

Plummer, J. T., 1984-1985. How Personality Makes a Difference. *Journal of Advertising Research*, 40(6), pp. 79-84.

POPAI, 2015. *Candy: Identfying Distinguishing Characteristics of the Shopping Trip.* [Online] Available at: <u>http://www.popai.com/industry-news-blog/candy-identifying-distinguishing-characteristics-of-the-shopping-trip</u>

[Accessed 30 May 2015].

Prendergast, P. G. & Pitt, L., 1996. Packaging, marketing, logistics and the environment: are there tradeoffs?. *International Journal of Physical Distribution & Logistics Management*, 15(3), pp. 220-238.

Raghubir, P. & Greenleaf, E. A., 2006. Ratios in Proportion: What Should the Shape of the Package Be?. *Journal of Marketing*, 70(2), pp. 95-107.

Rettie, R. & Brewer, C., 2000. The verbal and visual components of package design. *Journal of Product & Brand Management*, 9(1), pp. 56-70.

Robertson, G. L., 2013. *Food Packaging: Principles and Practice*. 3rd ed. Boca Raton, FL: CRC Press Taylor & Francis Group.

Rosengren, S., 2008. Publicity vs. Advertising in a Cluttered Environment: Effects on Attention and Brand Identification. *Journal of Current Issues and Research in Advertising*, 30(2), pp. 27-35.

Saunders, M., Lewis, P. & Thornhill, A., 2009. *Research methods for business students.* 5th ed. Harlow: Pearson Education Limited.

Schoormans, J. P. L. & Robben, H. S. J., 1997. The effect of new package design on product attention, categorization and evaluation. *Journal of Economic Psychology*, 18(2-3), pp. 271-287.

Schrijver, M., 2013. *Retail Ready Packaging and the Importance of Design*, s.l.: Unpublished Master's Thesis, University of Twente, Enschede, the Netherlands.

Sheena, G. N., 2012. Do Brand Personalities Make a Difference to Consumers?. *Procedia - Social and Behavioral Sciences*, 37(The International Conference on Emerging Economies - Prospects and Challenges (ICEE-2012), 12-13 January 2012), pp. 31-37.

Sherrington, M., 2003. Added Value: The Alchemy of Brand-Led Growth. New York: Palgrave Macmillan.

Siguaw, J. A., Mattila, A. & Austin, J. R., 1999. The Brand-Personality Scale: An Application for Restaurants. *Cornell Hotel and Restaurant Administration Quarterly*, 40(3), pp. 48-56.

Silayoi, P. & Speece, M., 2007. The importance of packaging attributes: a conjoint analysis approach. *European Journal of Marketing*, 41(11/12), pp. 1495-1517.

Snowden, R. J., 2002. Visual Attention to Color: Parvocellular Guidance of Attentional Resources?. *Psychological Science*, 13(2), pp. 180-184.

Söderlund, M., 2005. Mätningar och mått - i marknadsundersökarens cärld. Malmö: Liber.

Söderlund, M. & Öhman, N., 2003. Behavioral Intentions in Satisfaction Research Revisited. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior,* Volume 16, pp. 53-66.

Spelke, E. S., 1990. Principles of Object Perception. *Cognitive Science*, Volume 14, pp. 29-56.

Sprears, N. & Singh, S. N., 2004. Measuring Attitude Toward the Brand and Purchase Intentions. *Journal of Current Issues and Research in Advertising*, 26(2), pp. 53-66.

Stern, H., 1962. The Significance of Impulse Buying Today. *Journal of Marketing*, 26(2), pp. 59-62.

Stutely, R., 2003. *The Economist Numbers Guide: The Essentials of Business Numeracy*. 5th ed. London: The Economist Books Ltd..

Taft, C., 1997. Color Meaning and Context: Comparisons of Semantic Ratings of Colors on Samples and Objects. *Color Research & Application*, 22(1), pp. 40-50.

Tantillo, J., Di Lorenzo-Aiss, J. & Mathisen, R. E., 1995. Quantifying Perceived Differences in Type Styles: An Exploratory Study. *Psychology & Marketing*, 12(5), pp. 447-457.

Underwood, R. L., 2003. The Communicative Power of Product Packaging: Creating Brand Identity via Lived and Mediated Experience. *Journal of Marketing Theory and Practice*, 11(1), pp. 62-76.

Underwood, R. L. & Klein, N. M., 2002. Packaging as brand communication: Effects of product pictures on consumer responses to the package and brand. *Journal of Marketing Theory and Practice*, 10(4), pp. 58-68.

Underwood, R. L., Klein, N. M. & Burke, R. R., 2001. Packaging communication: attentional effects of product imagery. *Journal of Product & Brand Management*, 10(7), pp. 403-422.

Urbany, J. E., Dickson, P. R. & Kalapurakal, R., 1996. Price Search in the Retail Grocery Market. *Journal of Marketing*, 60(2), pp. 91-104.

van den Berg-Weitzel, L. & van de Laar, G., 2015. [Interview] (16 January 2015).

van Rekom, J., Jacobs, G. & Verlegh, P. W. J., 2006. Measuring and managing the essence of a brand personality. *Marketing Letters*, 17(3), pp. 181-192.

Vidales Giovannetti, M., 1995. El mundo del envase. Manual para el diseño y producción de envases y embalajes. Mexico City: Gustavo Gili.

Viswanath, D. & Blaser, E., 2010. Retinal blur and the perception of egocentric distance. *Journal of Vision*, 10(10), pp. 1-16.

Wagemans, J. et al., 2012. A Century of Gestalt Psychology in Visual Perception: I. Perceptual Grouping and Figure-Group Organization. *Psychological Bulletin*, 138(6), pp. 1172-1217.

Walsh, G., Mitchell, V.-W., Kilian, T. & Miller, L., 2010. Measuring consumer vulnerability to perceived product-similarity problems and its consequences. *Journal of Marketing Management*, 26(1-2), pp. 146-162.

Whittlesea, B. W. A., 1993. Illusions of Familiarity. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 19(6), pp. 1235-1253.

Witjes, R., 2007. *Verandering in design: Evolutionair of revolutionair? Een (r)evolutionair onderzoek naar de spatiële frequenties die betekenisvol zijn bij verandering van visuele objecten,* s.l.: Unpublished Master's Thesis, University of Utrecht, The Netherlands.

Wood, L., 2000. Brands and brand equity: definition and management. *Management Decision*, 38(9), pp. 662-669.

Wu, J., Zheng, C., Hu, X. & Xu, F., 2011. Realistic Simulation of Peripheral Vision Using An Aspherical Eye Model. *Eurographics*, pp. 37-40.

## Appendix 1 – Stimuli

## Feldschlösschen old design





Feldschlösschen new design



# FELDSCHLÖSSCHEN



## Tyskie old design







Tyskie new design







## Appendix 2 – Example questionnaire

#### Hey!

This survey is a part of my Master thesis at the Stockholm School of Economics. In the survey, you will be presented with two different scenarios of a situation in a supermarket, and asked some related questions. Please read the text carefully and answer the questions based on the pictures shown to you. It should take you about 5-10 minutes to complete the survey.

Besides helping me graduate by filling out this survey, you will also be a part of helping children in less developed countries do the same - for each response I get I will use  $0,20 \in$  to buy school supplies for those children through UNICEF. For example with 100 responses 50 children will get school supplies such as notebooks and pencils.

Thank you for your help!

lina

Imagine you are walking in the supermarket and stop in front of the beer shelf. While you are choosing which product to buy, you see an item in the corner of your eye. Because of its location you cannot see the item clearly. Please answer the questions based on the impression you get from the picture presented to you on the following page.

[STIMULUS PICTURE]

How familiar are you with this brand?

Not at all familiar OOOOO Extremely familiar

To what extent do you find the following items to be characteristic of the brand?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
Modern	0	0	0	0	0	0	0
Original	0	0	0	0	0	0	0
Passionate	0	0	0	0	0	0	0
Exciting	0	0	0	0	0	0	0
Upper-class	0	0	0	0	0	0	0
Traditional	0	0	0	0	0	0	0
Authentic	0	0	0	0	0	0	0
Fun	0	0	0	0	0	0	0
Distinctive	0	0	0	0	0	0	0
Bold	0	0	0	0	0	0	0
Young	0	0	0	0	0	0	0
Friendly	0	0	0	0	0	0	0
Hospitable	0	0	0	0	0	0	0
Masculine	0	0	0	0	0	0	0
Successful	0	0	0	0	0	0	0
Reliable	0	0	0	0	0	0	0

How do you perceive this brand?

	1	2	3	4	5	6	7	
Not interesting	0	0	0	0	0	0	0	Interesting
Not appealing	0	0	0	0	0	0	0	Appealing
Low quality	0	0	0	0	0	0	0	High quality
Negative	0	0	0	0	0	0	0	Positive

To what extent do you agree with the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I could see myself buying this product in the future	0	0	0	0	0	0	0
It is likely that I will purchase this product in the future	0	0	0	0	0	0	0

How sure are you of this impression of the brand presented to you on the previous page?

Not at all OOOOOO Extremely

To what extent did you base your answer on...

	Not at all	Slightly	Somewhat	Quite much	Moderately	To a high extent	Completely
the details of the package?	0	0	0	0	0	0	0
the overall impression of the package?	0	0	0	0	0	0	0

[This set of questions repeated to another stimulus and scenario]

#### **IKONEN 40620**

To finish up the survey here are some questions regarding your background. As mentioned earlier, none of this information will be used for anything else than the purposes of this research, and will be dealt with complete confidentiality.

How old are you?
What is your gender?
Male
Female
What is your nationality?
What is your native tongue?
What is your highest level of education (completed)?
Compared to most people, how familiar are you with the category of beer?
1 2 3 4 5 6 7 Not at all familiar OOOOOOO Extremely familiar

Please indicate how frequently you have bought beer (in a supermarket or similar setting) within the last year

Never	Less than Once a Month	Once a Month	2-3 Times a Month	Once a Week	2-3 Times a Week	Daily
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# Appendix 3 – Brand personalities

### Tyskie

						Upper-												
	Young	Exciting	Fun	Modern	Passion	class	Reliable	Successf.	Authentic	Trad.	Hospit.	Friendly	Relaxed	Confid.	Bold	Masc.	Original	Distinct
	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
Mean	3.25	3.75	3.81	3.69	3.88	3.38	4.50	4.19	4.56	5.13	3.94	4.25	3.81	4.06	4.13	4.81	4.31	4.44
St. Dev	1.34	1.18	1.22	1.58	1.31	1.36	0.89	1.33	0.81	1.31	0.57	1.00	1.11	1.06	0.89	1.05	1.30	1.26
Min	1	2	2	1	2	1	3	2	3	2	3	3	2	2	3	3	2	2
Max	5	6	6	6	6	6	6	7	6	7	5	6	6	6	6	6	7	6

#### Feldschlösschen

						Upper-												
	Young	Exciting	Fun	Modern	Passion	class	Reliable	Successf.	Authentic	Trad.	Hospit.	Friendly	Relaxed	Confid.	Bold	Masc.	Original	Distinct
Ν	15	15	15	15	15	15	15	15	15	15	15	15	14	14	15	15	15	15
Mean	2.67	3.27	3.27	2.80	3.00	2.80	4.40	3.60	4.27	5.27	4.33	4.53	4.00	3.86	3.40	4.53	3.60	3.53
St. Dev	0.82	1.28	1.39	0.94	0.93	0.94	1.35	1.59	1.49	1.16	1.05	1.19	1.62	1.10	1.24	1.19	1.12	1.41
Min	2	1	1	2	2	1	2	1	1	2	2	2	2	2	2	2	2	2
Max	4	6	6	4	5	4	6	6	6	6	6	6	7	6	6	6	6	6

Colored columns, orange p<0.05 grey p<0.10

# Appendix 4 – Independent samples *t*-tests for hypothesis 3

#### Table 16 Logo $\leftrightarrow$ Clear can

	Tyski	e									Felds	chlösso	chen							
	Old d	esign				New	design				Old d	esign				New	design			
	Logo		Clear	can	Sig.	Logo		Clear	can	Sig.	Logo		Clear	can	Sig.	Logo		Clear	can	Sig.
	М	Std.	М	Std.	р	М	Std.	М	Std.	р	Μ	Std.	М	Std.	р	М	Std.	М	Std.	р
		Dev.		Dev.			Dev.		Dev.			Dev.		Dev.			Dev.		Dev.	
Traditional	4.53	1.20	5.05	1.19	0.054	4.50	1.49	5.00	1.25	0.106	5.05	1.45	5.29	1.29	0.460	5.21	1.10	5.00	1.33	0.453
Masculine	4.63	1.16	4.95	1.12	0.221	4.84	1.08	4.84	1.35	0.996	4.66	1.70	4.82	1.14	0.635	4.90	1.35	4.60	1.29	0.306
Sincerity	3.89	0.91	3.93	0.86	0.810	4.19	0.80	4.03	0.80	0.371	3.05	1.02	3.95	0.96	0.000	3.58	0.85	4.02	0.86	0.025
Excitement	3.53	0.83	3.72	0.92	0.322	3.93	1.03	3.68	1.03	0.227	2.71	1.03	3.35	0.98	0.007	3.17	0.97	3.29	0.85	0.584
Competence	3.59	0.84	3.94	0.87	0.070	3.92	0.99	3.76	1.02	0.482	3.29	1.15	3.78	0.95	0.046	3.72	1.00	3.76	1.02	0.856

Table 17 Pictorial element  $\leftarrow 
ightarrow$  Clear can

	Tyski	9									Felds	chlösso	hen							
	Old d	esign				New	design				Old d	esign				New	design			
	Pictu	re	Clear	can	Sig.	Pictur	e	Clear	can	Sig.	Pictu	re	Clear	can	Sig.	Pictu	re	Clear	can	Sig.
	Μ	Std.	Μ	Std.	р	Μ	Std.	М	Std.	р	М	Std.	Μ	Std.	р	М	Std.	М	Std.	р
		Dev.		Dev.			Dev.		Dev.			Dev.		Dev.			Dev.		Dev.	
Traditional	5.81	1.10	5.05	1.19	0.005	5.56	1.21	5.00	1.25	0.048	5.49	1.05	5.29	1.29	0.448	5.79	0.87	5.00	1.33	0.003
Masculine	4.65	1.69	4.95	1.12	0.367	4.46	1.19	4.84	1.35	0.192	4.58	1.37	4.82	1.14	0.407	5.16	1.33	4.60	1.29	0.058
Sincerity	3.89	0.93	3.93	0.86	0.862	4.03	0.91	4.03	0.80	0.976	4.04	0.79	3.95	0.96	0.644	3.85	1.04	4.02	0.86	0.435
Excitement	3.23	0.90	3.72	0.92	0.020	3.23	0.79	3.68	1.03	0.031	3.34	0.83	3.35	0.98	0.948	3.16	0.87	3.29	0.85	0.501
Competence	4.49	0.93	3.94	0.87	0.010	4.44	0.87	3.76	1.02	0.002	3.95	0.94	3.78	0.95	0.419	4.07	1.14	3.76	1.02	0.204

Table 18 Logo +	pictorial	element	$\leftrightarrow$	Clear can
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	Tyski	e									Felds	chlösso	hen							
	Old d	esign				New	design				Old d	esign				New	design			
	Pic +	logo	Clear	can	Sig.	Pic +	logo	Clear	can	Sig.	Pic +	logo	Clear	can	Sig.	Pic +	logo	Clear	can	Sig.
	М	Std.	М	Std.	р	М	Std.	М	Std.	р	Μ	Std.	М	Std.	р	М	Std.	М	Std.	р
		Dev.		Dev.			Dev.		Dev.			Dev.		Dev.			Dev.		Dev.	
Traditional	5.14	1.32	5.05	1.19	0.715	5.00	1.46	5.00	1.25	1.000	5.29	1.26	5.29	1.29	0.994	5.49	1.03	5.00	1.33	0.026
Masculine	4.64	1.42	4.95	1.12	0.206	4.66	1.14	4.84	1.35	0.450	4.62	1.52	4.82	1.14	0.429	5.03	1.34	4.60	1.29	0.092
Sincerity	3.89	0.91	3.93	0.86	0.791	4.11	0.85	4.03	0.80	0.619	3.58	1.03	3.95	0.96	0.062	3.72	0.95	4.02	0.86	0.089
Excitement	3.39	0.87	3.72	0.92	0.055	3.60	0.98	3.68	1.03	0.669	3.04	0.97	3.35	0.98	0.111	3.16	0.92	3.29	0.85	0.483
Competence	4.02	0.98	3.94	0.87	0.692	4.17	0.97	3.76	1.02	0.039	3.64	1.09	3.78	0.95	0.499	3.89	1.08	3.76	1.02	0.512

Table 19 Logo + pictorial element + blurred image  $~~ \leftarrow ~~$  Clear can

	Tyskie										Feldschlösschen									
	Old design					New design					Old design					New design				
	Elements		Clear can		Sig.	Elements Clea		Clear	ear can Sig.		Elements		Clear can		Sig.	Elements		Clear can		Sig.
	Μ	Std.	М	Std.	р	Μ	Std.	М	Std.	р	Μ	Std.	М	Std.	р	М	Std.	М	Std.	р
		Dev.		Dev.			Dev.		Dev.			Dev.		Dev.			Dev.		Dev.	
Traditional	4.88	1.43	5.05	1.19	0.507	4.79	1.51	5.00	1.25	0.433	4.92	1.48	5.29	1.29	0.165	5.09	1.30	5.00	1.33	0.692
Masculine	4.56	1.38	4.95	1.12	0.079	4.56	1.20	4.84	1.35	0.223	4.59	1.48	4.82	1.14	0.324	4.79	1.42	4.60	1.29	0.440
Sincerity	3.88	0.90	3.93	0.86	0.729	4.03	0.89	4.03	0.80	0.973	3.61	1.04	3.95	0.96	0.076	3.77	0.91	4.02	0.86	0.130
Excitement	3.50	0.90	3.72	0.92	0.181	3.56	0.99	3.68	1.03	0.507	3.28	1.14	3.35	0.98	0.732	3.33	0.92	3.29	0.85	0.806
Competence	3.91	0.99	3.94	0.87	0.848	3.98	1.04	3.76	1.02	0.258	3.57	1.09	3.78	0.95	0.273	3.77	1.04	3.76	1.02	0.938