ENGLISH SUMMARY
Brand logos play a crucial role in marketing communication and decision-making; 70% of all purchase decisions are made in-store and these decisions are mainly based on recognition and automatism. Visual elements like brand logos are a key defining feature for consumers to recognize a specific brand. Marketers are aware of the vital role that logos play in brand communication; valuable resources are spent on brand logo design. In spite of their central role in brand communication and brand recognition, brand logos have received surprisingly little empirical attention in the academic literature. As a result, empirical evidence on how brand logo (re)designs are processed and how this affects consumer responses is lacking. In this dissertation, I present a first systematic overview of the effects of different (re)design characteristics of brand logos on consumer responses by addressing the following research questions:

1. How does logo complexity affect consumer responses like brand recognition and brand attitude, and how does exposure affect this relationship?
2. How do different degrees of logo change affect consumer responses such as logo processing speed, brand association strength and brand attitude?

The outcomes can be used as a point of departure and as argumentation on whether a company should periodically redesign its brand logo or not, and if so, what type of change should be applied.

**Theoretical background: Brand logo complexity and redesigns**

Generally, it is assumed that simple elements are easier to remember than more complex elements because they require limited attentional capacity (Robertson, 1989; Airey, 2009), less processing capacity (Berlyne, 1960; Finn, 1988), and they are easier to encode in the consumer brain or memory system (Robertson, 1989). Translated to the domain of logo design, overall simple logos should thus be faster recognized than complex logos. To verify this claim, we tested the effects of logo complexity on brand recognition and brand attitude in two experiments. Both studies included exposure as an additional factor. When considering the effects of logo complexity, exposure is a construct that needs to be considered. Although a single exposure may be sufficient to process and store simple stimuli, it might not suffice to process and store complex stimuli into the consumer brain. In the first experiment described in Chapter 2, we tested the effects of brand logo complexity (i.e., simple and complex brand logos) and different degrees of exposure on brand recognition. In the second experiment described in Chapter 2, we extended the first study by also examining the effects on brand attitude. We use the Two-Factor model (Berlyne, 1970) to theorize whether a brand logo is positively or negatively evaluated.

Designing a brand logo is just a first step, however. To keep up with rapidly changing market conditions, marketers need to continuously update brand propositions...
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and aesthetics (Muzellec & Lambkin, 2006; Aaker, 1991; Kapferer, 1998). Although the importance of logo (re)designs has been underscored by several publications in the business press (e.g. Financial Times, The News Letter, Irish Times, Wall Street Journal; Muzellec & Lambkin, 2006), there is hardly any scientific evidence on brand logo redesign effects. This means that surprisingly little is known about conditions that lead to the failure or success of logo redesigns in re-branding campaigns. The design world does however mention a factor that contributes to the failure or success of a logo redesign: the degree to which a brand logo is redesigned. They describe small versus big logo redesigns as evolutionary versus revolutionary changes. Evolutionary redesigns are applied when brands hold a strong market position and want to update their image or communicate a change in brand strategy (Airey, 2009; Murphy, 2013). Revolutionary redesigns are applied to reflect a change in brand identity or to regenerate growth (Airey, 2009). Unfortunately, both theoretically and empirically it had remained unclear how big a redesign should be in order to increase consumer attention or change brand evaluations.

In this dissertation, I propose that brand logo redesigns can be processed at different levels of attention, following the hierarchical model of processing of Finn (1988). On what level of attention a redesigned brand logo is processed depends on the degree of which a brand logo is changed. With regard to attracting attention, an adjustment of a brand logo may be an effective tool in increasing attention, because novel stimuli are generally regarded as more arousing than familiar stimuli and consumers attempt to learn new or unfamiliar stimuli more actively (Berlyne, 1960; Campbell & Keller, 2003). However, new or adjusted stimuli lack the benefit of previous exposure, and both new (i.e., redesigned) and complex stimuli therefore require more systematic processing and more cognitive capacity. Multiple exposures can compensate for this additional capacity requirement. Although we know that exposure enhances information processing fluency (e.g., Anant & Sternthal, 1990) and leads to more favorable attitudes towards persuasive messages (for a review, see Bornstein & D’Agostino, 1992), to date, the relationship between different degrees of change, exposure, and logo processing remains unclear. Chapters 3, 4 and 5 present a first step in examining how people process different degrees of logo change and how this affects consumer attitudes. In addition, the attention people pay to brands, thus how important brands are to them (i.e., brand consciousness) and how sensitive they are for brand information (i.e., brand sensitivity) are also examined.

**Main findings**

In Chapter 2, two experiments on the effects of design complexity and exposure on brand recognition and brand attitude showed that initially, simple brand logos are recognized faster, however, complex brand logos benefit most from increased exposure. Furthermore, we found that complexity also moderated the effects of establishment on brand attitude: well-established complex brand logos were evaluated more positively
that recently established complex brand logos. No effect of establishment was observed for simple brand logos. These findings imply that logo design complexity may positively affect brand recognition and brand attitude in the long run.

Chapter 3 showed that although small degrees of logo change did not affect logo processing speed, substantial degrees of logo change did. This implies that when brand logos become less familiar (i.e., when they less resemble the original brand logo), consumers need to engage more actively in order to process the redesigned brand logo, which decreases logo processing speed. In this experiment we also examined whether brand consciousness as a moderator could affect this relationship. Findings showed that the decrease of logo processing speed for substantial changes particularly occurred for highly brand conscious consumers. Additionally, we found that exposure accelerated logo processing speed in particular for substantial degrees of logo change, which suggests that substantially redesigning a brand logo does not need to harm logo processing speed when a regular advertising campaign with repeated exposure is used.

Chapter 4 extended findings of Chapter 3 by showing that different degrees of logo change also affected evaluative consumer responses, i.e., brand association strength and brand attitudes. Although we found that logo processing speed initially is harmed by substantial degrees of logo change (Chapter 3), evaluative consumer responses benefit from such changes: in particular, substantially changed brand logos triggered positive consumer attitudes, whereas small degrees of logo change did not sort any effects. Furthermore, we found that exposure enhanced deeper levels of processing, and therefore positively affected brand attitudes. In addition, findings showed that brand sensitive consumers immediately responded positively to higher degrees of logo change, whereas low brand sensitive consumers required additional exposure to develop a favorable attitude toward higher degrees of logo change. These findings suggest that periodically redesigning a brand logo may keep the brand top-of-mind, which helps to retain and enhance favorable brand attitudes.

Finally, in Chapter 5 we aimed to replicate and extend findings of Chapters 3 and 4 by adding another degree of logo change: a large logo change. We found that large degrees of logo change decreased logo processing speed in particular for highly brand conscious consumers, and we found that large degrees of logo change led to a more negative brand attitude after several exposures, again in particular for highly brand conscious consumers. These findings thus suggest that large logo changes can backfire on consumer evaluations, even after increased exposures and amongst involved consumers.

Overall, findings across research chapters showed that substantially changed brand logos decrease logo processing speed, but positively affect brand association strength and brand attitudes. Decreased logo processing speed is restored by increased exposure, and effects on favorable brand attitudes are limited to substantially changed brand logos; small and large degrees of logo change respectively did not sort any effects, or sorted
negative effects on brand attitude. These findings suggest that familiar information, such as well-established logos or small logo redesigns, does not demand much processing capacity but also does not attract specific attention; after a while it blends in with the environment and consumers more or less take it for granted.

**Scientific relevance**

Our findings appear to reflect the paradox that human beings prefer either familiar, but perhaps boring stimuli on the one hand, and new and more challenging stimuli on the other hand. On the one hand, it would be extremely tiring and distracting to continuously expose oneself to new information. On the other hand, if one would only be exposed to familiar or expected information, lives would become extremely boring. People thus move between the comfort of the familiar and the excitement of novelty in their daily lives.

Although this paradox has not been mentioned explicitly in academic studies, it becomes evident when combining previous findings from different lines of research. One research line suggests that simple or familiar stimuli are preferred because they don't demand much processing capacity (Shapiro, 1999). Several other studies have shown that people prefer more challenging stimuli (Hekkert, Snelders, & Van Wieringen, 2003). Our findings suggest that this paradox can be explained by the fact that information is processed via two separately operating mechanisms in our brain, an 'automatic' mechanism that prefers fairly simple information (Alley & Cunningham, 1991; Bornstein, 1989; Van Enschot & Van Mulken, 2013), versus a mechanism that prefers to process more challenging information (Hekkert, Snelders, & Van Wieringen, 2003).

Visual information can follow these different processing routes. Small changes or simple stimuli are processed via the automatic mechanism. When changes in stimuli are bigger, or when stimuli are more complex, our brain requires additional capacity for active, more intensive information processing. Whether people process information automatically, or with more explicit attention, depends on whether people are motivated to process this information: people who are highly brand conscious or brand sensitive, are more interested in brands in general, and therefore process brand information at deeper levels of attention, especially when they are triggered by a change in brand information. This affects their processing speed (see Chapter 3, which showed that logo processing speed decreased for highly brand conscious consumers), but it positively affects their brand attitude, because they are not only able to process the changed information, but also find pleasure in the mental challenge the new logo poses. When people are not motivated to process information, which is the case for low brand conscious or low brand sensitive consumers, they are likely to fail to notice the change, even if such changes are quite big. Our findings suggest that exposure may help them notice and become acquainted with changes over time, as increased exposure enables them to learn about the changed object.
Finally, when logo changes are too complex to process, for example because they hardly resemble the original image that is stored in the consumer brain, this does not only harm processing speed, but also backfires on brand attitude, especially for highly motivated consumers.

**Practical relevance**

Current findings are relevant for companies that want to design or redesign their brand logo. Complexity as a design element can positively affect both brand recognition and brand attitude in the long run, and is therefore recommended for companies that have solid advertising budgets and strategies to communicate their message. For example, familiar (inter)national companies could easily increase brand logo complexity gradually, because consumers’ familiarity of the changed brand logo also gradually grows. For other types of companies or brands, like start-up companies that have made a quick advance, simple logos would be better: these companies have smaller advertising budgets, and simple logos need less exposure to be recognized. Furthermore, for small and medium sized enterprises, it may be safer to use a rather simple brand logo which can be easily stored in the consumer brain, because smaller companies are likely to have smaller advertising budgets, which may result in less frequent exposure of brand logos.

Although studies on the effects of brand logo (re)designs should be expanded to other types of brand logos and brands, our findings suggest that marketers and designers need to find a balance between on the one hand rejuvenation and renewal, and on the other hand the fact that the change cannot be too big. A substantial brand logo change can be carried out without being afraid of negative effects of low brand conscious consumers: they do not really care about such changes, thus their brand attitude is not affected. Highly brand conscious consumers on the other hand are willing to invest energy in processing the redesigned brand logo. Results showed that large degrees of logo change decreased logo processing speed in particular for highly brand conscious consumers. Additionally, large degrees of logo change led to a more negative brand attitude after several exposures, but again in particular for highly brand conscious consumers. Findings suggest that large logo changes can backfire on consumer evaluations, even after increased exposures. And because brand conscious consumers often function as brand ambassadors, they deserve extra attention in the redesign process to prevent them from experiencing these negative feelings.

**Concluding remark**

Hopefully these findings lead to more extensive research within the field of brand logo (re)design, creating a more sustainable basis for companies to make well-founded decisions with regard to the use of specific design elements and with regard to applying different degrees of change.
References


