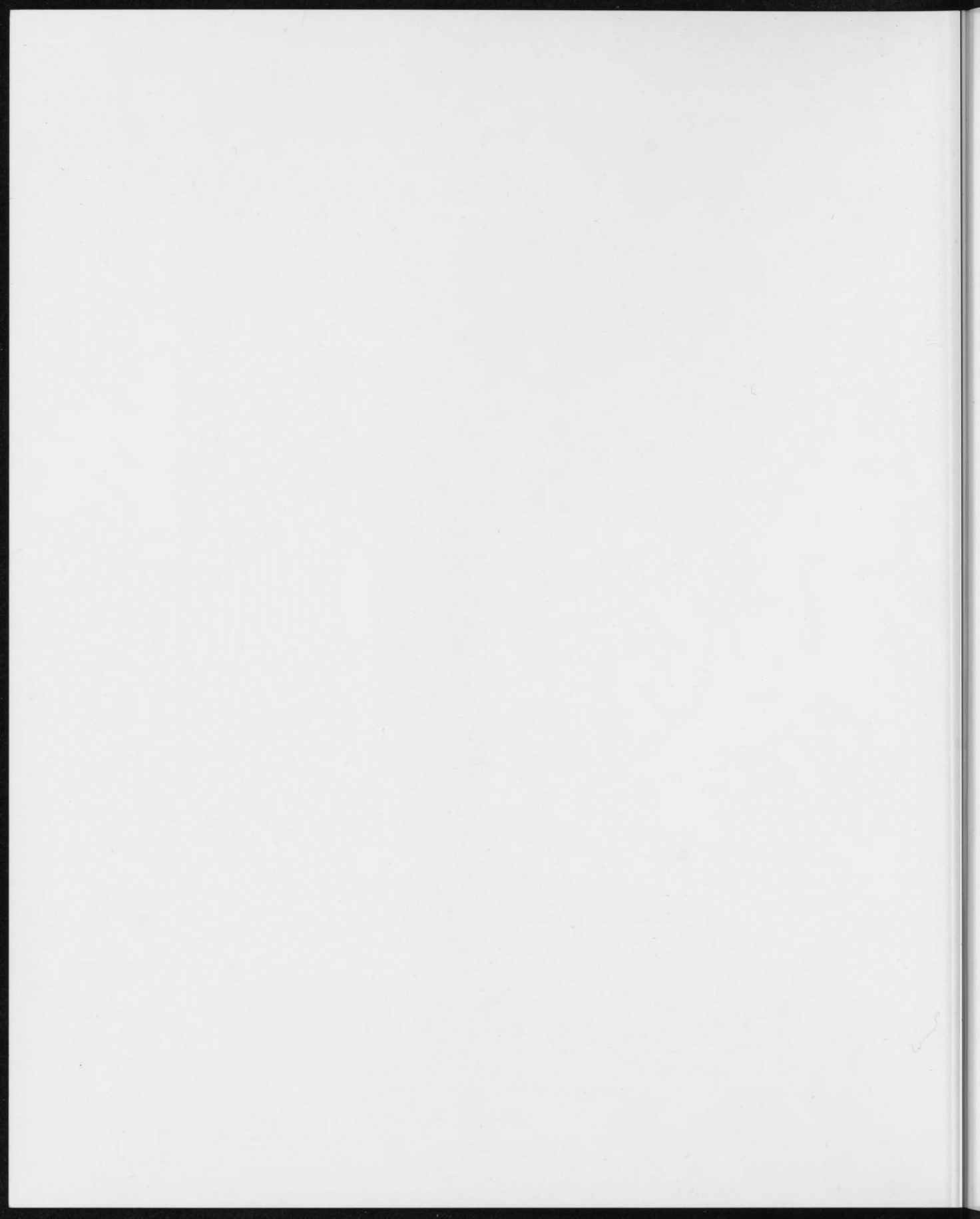


The Strategic
relevance of
Styling
AND
the
Management
OF
DESIGN

Styles

~~OSCAR PERSON~~
OSCAR PERSON



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THE STRATEGIC RELEVANCE OF STYLING AND
THE MANAGEMENT OF DESIGN STYLES

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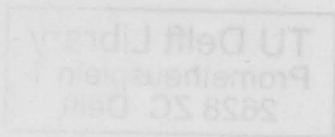
OSCAR PERSON

Frauz-Edward Oscar Kennethsson PERSON
Ingenieur Industrieel Ontwerpen
geboren te Enslöv, Sweden

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Oscar Person 2011

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Stellingen behorende bij het proefschrift "The strategic relevance of styling
and the management of design styles" van Ir. Oscar Person

1. Stylingstrategieën vormen het zakenlezen (dit proefschrift).
2. Bij het bepalen van de waarde van styling moeten marketing- en verkoop-
aspecten in de afweging worden genomen.
3. Ontwerpen van producten moet worden gebaseerd op de behoeften van de
consument.
4. De realisatie van een ontwerp moet worden gebaseerd op de mogelijkheden
van de technologie.
5. De realisatie van een ontwerp moet worden gebaseerd op de mogelijkheden
van de organisatie.
6. De realisatie van een ontwerp moet worden gebaseerd op de mogelijkheden
van de markt.
7. De realisatie van een ontwerp moet worden gebaseerd op de mogelijkheden
van de concurrentie.
8. De realisatie van een ontwerp moet worden gebaseerd op de mogelijkheden
van de samenleving.
9. De realisatie van een ontwerp moet worden gebaseerd op de mogelijkheden
van de natuur.

Deze stellingen worden openbaar en verdedigbaar gemaakt en zijn als
zodanig goedgekeurd door de promotoren, Prof. dr. J.P.L. Schoenman en
Dr. H.M.J.J. Sijben.

THE STRATEGIC RELEVANCE OF STYLING AND THE MANAGEMENT OF DESIGN STYLES

Proefschrift
ter verkrijging van de graad van doctor
aan de Technische Universiteit Delft,
op gezag van de Rector Magnificus prof. ir. K.C.A.M. Luyben,
voorzitter van het College voor Promoties,
in het openbaar te verdedigen op vrijdag 18 november 2011 om 10:00 uur

door

Franz-Edward Oscar Kennethsson PERSON
Ingenieur Industrieel Ontwerpen
geboren te Enslöv, Sweden.

Dit proefschrift is goedgekeurd door de

promotor:

Prof.dr. J.P.L. Schoormans

copromotor:

Dr. H.M.J.J. Snelders

Samenstelling promotiecommissie:

Rector Magnificus,	voorzitter
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Dr. H.M.J.J. Snelders,	Technische Universiteit Delft, copromotor
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Prof.dr.ir. J.A. Buijs,	Technische Universiteit Delft
Prof.mr.dr.ir. S.C. Santema,	Technische Universiteit Delft, reservelid

Stellingen behorende bij het proefschrift "The strategic relevance of styling and the management of design styles" van Ir. Oscar Person

1. Stylingstrategieën vormen het zakenleven (dit proefschrift).
2. Bij het bepalen van de waarde van styling moeten managers rekening houden met financieel rendement, met zichtbaarheid op de markt en met professionele erkenning (dit proefschrift).
3. Ontwerpers willen vaak niet gezien worden als stylisten, maar daarmee blijft een essentiële vaardigheid voor hun werk ondergewaardeerd.
4. De zwakke positie van styling binnen het industrieel ontwerpen kan beter worden begrepen vanuit de nalatenschap van het modernisme dan vanuit de dagelijkse praktijk van ontwerpers.
5. De kwaliteit van een ontwerp ligt in de handen van ontwerpers en niet in de denkbeelden van hun leraren.
6. Zoals historici hun stijlclassificaties continu moeten aanpassen aan hun ontdekkingen in de kunst, zo moeten brand managers hun stijlboeken voor een merk steeds weer aanpassen aan hun ontdekkingen in producten.
7. Ontwerpers moeten kritisch zijn wanneer zij theorieën uit andere disciplines in hun gedachtengoed opnemen.
8. De nabijheid van een beer getuigt van een hoge, doch gevaarlijke kwaliteit van vakantiehuisjes in het noorden van Europa.
9. Sauna, bier en bier in de sauna zijn drie zaken die je moet leren waarderen.

Deze stellingen worden opponeerbaar en verdedigbaar geacht en zijn als zodanig goedgekeurd door de promotoren, Prof. dr. J.P.L. Schoormans en Dr. H.M.J.J. Snelders.

Propositions accompanying the thesis "The strategic relevance of styling and the management of design styles" of Oscar Person

1. Styling strategies shape business (this thesis).
2. In assessing the value of styling, managers need to account for financial profitability, market visibility and professional acknowledgment (this thesis).
3. By shying away from their role as stylists, designers downplay a defining capacity of their work.
4. The weak position of styling in design is more based on the legacy of modernism than on a day-to-day practice facing designers.
5. The quality of design lies in the hand of designers and not in the visions of their teachers.
6. As historians have continuously adapted their style classifications to fit their discoveries in art, brand managers need to continuously adapt their style guides to fit their discoveries in products.
7. Designers should be more critical in their adoption of theories from other disciplines.
8. A bear is a strong yet dangerous indicator of cottage quality in the Nordic countries.
9. Sauna, beer, and beer in the sauna are three acquired tastes.

These propositions are regarded as opposable and defensible, and have been approved as such by the supervisors, Prof. dr. J.P.L. Schoormans and Dr. H.M.J.J. Snelders.

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Helsinki, October 2011

Oscar Person

CHAPTER 1

INTRODUCING A BUSINESS LOGIC FOR ON STYLE, STYLING AND MANAGEMENT

"I am sure we all realize ... how much appearance has to do with sales" with all cars fairly good mechanically it is a dominating proposition and in a product such as cars where the individual appeal is so great, it means a tremendous influence on our future prosperity ... however, the question arises -- Are we as advanced from the standpoint of beauty of design, harmony of lines, attractiveness of color schemes and general contour of the whole piece of apparatus as we are in the soundness of workmanship and the other elements of a more mechanical nature?"

Alfred P. Sloan, Jr.
CEO General Motors, July 8, 1926

The story of how Alfred Sloan introduced industrial design at General Motors represents a classic case of the strategic value of styling and how a company gained an edge on the competition by managing the style of its products. During the first decades of the twentieth century, Ford's Model T dominated the automotive market, and General Motors lagged behind. Capitalizing on the benefits of mass production, Henry Ford had been able to reduce the production costs of cars dramatically -- allowing Ford to introduce the Model T as "a car for the great multitude" in the autumn of 1908. As a cheap no-frills utility vehicle, the Model T was stripped of

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"ON STYLE, STYLING AND MANAGEMENT"

Helsinki, October 2013

Oscar Perren

CHAPTER 1

INTRODUCING A BUSINESS LOGIC FOR STYLING

"I am sure we all realize ... how much appearance has to do with sales; with all cars fairly good mechanically it is a dominating proposition and in a product such as ours where the individual appeal is so great, it means a tremendous influence on our future prosperity ... however, the question arises – Are we as advanced from the standpoint of beauty of design, harmony of lines, attractiveness of color schemes and general contour of the whole piece of apparatus as we are in the soundness of workmanship and the other elements of a more mechanical nature?"

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accessories and given a boxy look to reduce the amount of sheet metal work needed in production. From 1914, the Model T was only available in black, as this enabled Ford to produce the cars even more cost-effectively.¹ In challenging Ford's market dominance, Alfred Sloan realized that General Motors' chances of succeeding in direct price competition with Ford were slim. Instead, he set out to address the need for variety that Ford had neglected in its focus on efficiency and standardization. In doing so, he devised strategies for component sharing and used styling to create differentiation across General Motors' brand portfolio, with a distinct style for the products of each of its brands. Sloan also introduced the quick-drying lacquer paint Duco, which allowed General Motors to cost-effectively style the different brands in its portfolio in a variety of colours.²

The market response was overwhelmingly positive, and General Motors regained market shares quickly. In providing a low-cost utility vehicle for the masses, styling had from the outset been outside Ford's efficiency strategy. In fact, Henry Ford personally did not see any value in spending resources on improving the look and feel of products. He even found it unmanly to occupy himself with such a task.³ However, due to the success of styling at General Motors, Ford's grip on the market was gone. In a last-ditch attempt, Ford updated the appearance of the Model T in 1926. It was lowered, elongated and introduced in more colour alternatives.

¹ The Model T had originally been sold in a broad range of lacquer paint colours. Due to the multiple layers of paint needed and the long drying times, the application of lacquer paint was too time-consuming, and Ford accordingly scrapped it for enamel that could be quickly applied to sheets of metal and dried in large ovens. However, due to the high temperatures in the ovens, the drying process discoloured most pigments – making black the only viable option (Gartman, 2006).

² General Motors developed the quick-drying lacquer paint Duco together with chemists from DuPont in 1922. The paint was first applied on the General Motors Oakland in 1924, which was painted in two shades of blue. The "True Blue" Oakland was the brainchild of Alfred Sloan, who thought that consumers might want an additional colour alternative to choose from. The "True Blue" Oakland became a success and from 1925 onwards all General Motors vehicles were painted with Duco paint (Heitmann, 2009).

³ From a historical perspective on design, Ford's view on styling fits well with the traditional view of female decorators versus male designers that was dominant in design theory and practice during the professionalization of design at the turn of the 20th century.

However, this new styling strategy was not enough and it was too late, leading Ford to discontinue the production of the Model T in 1927. The same year, Alfred Sloan established the first industrial design department in the automotive industry and positioned it under the direct control of senior management to underscore the strategic relevance of styling within General Motors. He also hired the coachbuilder Harley Earl to lead this department of professional stylists – appointing him to vice president of design within General Motors. The department later came to be known as ‘the Styling Staff’ within General Motors, and in the decades to follow, it would – under the lead of Harley Earl – play an undisputed role in the success of the company (Gartman, 1994, 2006).

Almost a century after the introduction of styling at General Motors, styling remains a basic activity undertaken by designers. It also remains strategically important for companies in shaping the ‘design’ styles of mass-produced goods. As such, the management question posed by Alfred Sloan seems as relevant as ever: are companies as advanced in terms of the look and feel of their products as they are in issues of a more mechanical nature? In other words, do they harness the full strategic benefit of styling? And, perhaps most importantly, do they have the knowledge needed to manage the design styles of their products effectively?

In this doctoral thesis, I address these issues concerning the strategic relevance of styling for companies and the managerial decision making surrounding the formation of design styles. I take the view that styling activities are manageable and that companies reap profits by managing the style of their products strategically. To advance this argument, I study designers as ‘stylists’, who through their work shape the look and feel of new products. I also study the strategic objectives pursued through styling activities, and how managers go about in managing these design activities effectively. The broader scope of my thesis lies in outlining a business logic for styling – equipping managers and designers with the knowledge needed to pursue styling as a strategic resource in strategy formation and new product development.

A TABOO ON STYLING IN DESIGN

Within General Motors (Earl, 1955), a 'stylist' had the ability to visualize "lines and shapes and colour combinations that are beautiful" (p. 5) while never forgetting the "personal taste of the viewers or utility of his design" (p. 6). While the scope of design has broadened significantly since the early days of General Motors, industrial designers continue to shape the lines, shapes and colour combinations of products. However, the esteem in which this work is held has changed over the years. Today, styling is plagued by prejudice in the field of design – making it a taboo to talk about styling and the notion of designers as stylists. Design scholars avoid having their work associated with studies on "mere styling," making studies on styling a rarity in the literature on the management of design. The curricula of industrial design programmes seldom contain courses with direct reference to styling, stylists or even style.⁴ In practice, designers often reject the notion of styling or having their work described as such because they feel that the concept reduces their profession to a form of "wrapping of product in nice shapes and pretty colours" (Lorenz, 1990, p. x). At the same time, the success of the Apple iMac as well as Caterpillar trucks and loaders shows that styling is of great strategic value for companies when managed effectively. With the introduction of the rounded and candy-coloured iMac in 1998, Apple re-established its position in the computer industry, not unlike General Motors had done during the first decades of the 20th century. Apple did so by substantially changing the rules of competition in an industry that was slavishly cultivating a boxy grey style (see e.g. Fung, Chong, & Wang, 2004).⁵ Similarly, Caterpillar has bolstered

⁴ At the Faculty of Industrial Design Engineering (Delft University of Technology), one of the world's largest educational institutes in the field of design, the educational foundation is broad, equipping the students with skills in (1) technology, (2) aesthetics, (3) ergonomics and (4) business (for a broader discussion on the educational curricula, see Buijs, 2010). Still, not a single course name incorporates the terms styling or stylist. In fact, the terms are only included in the course descriptions for two elective courses, and even references to the broader term style are only found in a very limited set of course descriptions.

⁵ As with all analogies, the comparison is not perfect. In the case of General Motors, the dominant style was "owned" by a single company (Ford), who by its sheer market

its dominance in the heavy machinery industry by implementing a coherent style over its product portfolio, demonstrating that the value of styling is not confined to consumer companies and that companies operating in industrial markets also profit from managing the style of their products strategically.

Despite the significance of styling in design, styling became a taboo subject for both ideological and professional reasons. From an ideological perspective, perhaps the foremost reason for a taboo on styling follows from the misrepresentation of styling that followed from the effect of modernism on the education and practice of design.⁶ In short, the modernist ideal is that there should be only one rational (and optimal) solution to any design problem.⁷ Following the modernist ideal, it is even wasteful and therefore morally wrong (deceptive) for a designer to opt for another style than the one purportedly embodied in the technical and/or practical function of a product. Hence, styling and stylistic plurality (variety) became problematic in design, as they allowed for the possibility of multiple solutions to the same problem. With little respect for the actual position of stylists within companies such as General Motors, styling became framed as superficial, with the stylists seen to readily sacrifice the

dominance dictated the stylistic standard in the automotive industry. In the case of Apple, the dominant style (sometimes referred to as "IBM aesthetics") was followed by a number of producers, who all produced products according to a category standard.

⁶ For more in-depth discussion on the legacy of modernism in design education and practice, see e.g. Michl (1995) and Thackara (1989).

⁷ "True functional solutions were identical with true formal solutions: each and every function was meant to have one – and only one – solution proper to it, and, consequently, only one proper form" (Michl, 1995, p. 168). In his classic text 'Ornament and crime' from 1908, Adolf Loos (1998, p. 168) proclaimed: "Do you not see the greatness of our age resides in our very inability to create new ornament? We have gone beyond ornament, we have achieved plain, undecorated simplicity. Behold, the time is at hand, fulfillment awaits us. Soon the streets of the cities will shine like white walls! Like Zion, the Holy City, Heaven's capital." However, as noted by Forty (2000), the underlying assumptions behind what constituted a proper solution were a source of much debate, implying that there could be differences in what was advocated to have the expression of a proper solution.

utility of his/her design for mere effect.⁸ Over time, the 'truthfulness' of this modernist ideal has probably been underscored by how companies have used styling to create false expectations about what to expect from their products.⁹ For example, during the heyday of styling in the 1950s and 1960s, automotive companies profited from such false expectations in styling the exteriors of cars to express technological progress, even though the machinery under the bonnet dated back to the pre-war period. The use of styling to create such false expectations has also added to the general aversion towards commercial interest in design (Hestad, 2008). Nonetheless, past and present education in design is inherently entwined in commercial interests (see e.g. Buijs, 2007). In practice, designers have not stopped designing products in a multitude of styles, and for many companies styling fulfils an undisputable role in showcasing the (desired) qualities of products. For example, Lenovo is a style-leading producer of computers for business professionals – the sober look and feel of its products (such as the legendary ThinkPad series) have played an important role in emphasizing the reliability, quality and performance of its products by underscoring the durability of its designs.¹⁰ As such, styling can be a key activity undertaken by designers that is of strategic importance for managers in managing design. Yet, little in this work seems to support the

⁸ For instance, Percy Seitlin, the co-editor of the leading voice of the American graphic arts industry in the 1930s and 1940s (PM Magazine), wrote: "the industrial designer tackles his problem from the inside out. His design is based on function ... He is concerned with evolving a product that is honest, beautiful and of improved usefulness. The industrial stylist, on the other hand, is little concerned with the inside but very interested in the outside. He is a designer of shells and packages. His work is frequently more sensitive than the industrial designer's whose means are more subtle by comparison" (as cited in Pulos, 1986, p. 403).

⁹ The perhaps most famous example of these false expectations is found in 'planned product obsolescence' where styling is used to speed up the replacement rates of products by continuously introducing changes in design so that the old products appear outdated (see e.g. Stewart, 1959).

¹⁰ In the 1990s, the original ThinkPad design was modelled after a traditional black-lacquered Japanese lunchbox. Over the years, laptops from the ThinkPad series have become the first choice for "road warriors" who place great value in the functional simplicity associated with the original lunchbox style.

modernist ideal that styling should be reduced to superficial changes in form.

Next to ideological reasons, designers have also condemned styling for professional reasons. In their role as (professional) artists and craftsmen/craftswomen serving industry, designers have continuously worked to raise the stature of their profession.¹¹ Designers have also come to take on an ever-growing range of different roles within companies (see e.g. Valtonen, 2007). Today, designers are not confined to the design department, as the styling staff once were at General Motors. They are also found in areas such as engineering, marketing and strategy, all of which profit from design in a multitude of ways (Valencia, Person, & Snelders, 2011). In taking on a broader role within companies, design has increasingly become positioned as a process since the post-war era – or, today, even as a mind-set – downplaying issues concerning the materiality of design.¹² Styling has accordingly been portrayed as a simplistic industrial design activity of limited strategic relevance for managers in comparison to the broader scope of design.¹³ Nonetheless, styling remains a

¹¹ Establishing a common professional identity for design has not been an easy task, as designers display considerable ambivalence towards defining their profession. Woodham (1997, p. 167) for instance notes that “the widely-felt uncertainty of the connotations of terms commonly used in the interwar years such as ‘commercial art’ or ‘graphic design’, ‘industrial art’ or ‘industrial design’ reflected the inability of designers to establish a clear cut professional identity or status.”

¹² Van Winkel (2006) argues that design as a process became a dominant view during the 1970s, when design agencies such as Total Design in the Netherlands changed the way in which they argued for the relevance of design, and the different forms it may take. Here, the material reality of design became a secondary interest as the scope of design was shifted towards (effectively) managing the process of design. By the 1980s, a process view on design was extensively promoted within the emerging field of design management, with companies such as Philips emphasizing the importance of implementing a process for design (Blaich & Blaich, 1993). In the last decade, this process view on design has transformed further with designers being urged to facilitate a specific mindset (‘design-thinking’) within organizations (see e.g. Brown, 2008).

¹³ The Danish Design Centre for instance positions styling (‘Design som formgivning’) as the lowest form of professional design involvement in their classification scheme (Designtrappen) for the strategic usage of design, and advocates that companies should

prime reason (if not *the* reason) why companies turn to designers to gain an edge over their competitors.¹⁴ Thus, while designers may be averse to defining themselves as stylists, styling represents perhaps the most defining capability of their work.

STYLING AS A TOPIC FOR THE MANAGEMENT OF DESIGN

The animosity towards styling has long been evident in the literature on the management of design, with scholars typically favouring studies on the value of design over studies on the actual management of design activities such as styling. In fact, the literature on the management of design was long surprisingly silent with respect to styling and the management thereof. This situation is changing, and a growing body of management literature now addresses issues of styling. On the heels of the increased interest in styling, a range of new terms (such as aesthetic design, design DNA, product language, etc.) have emerged to cover designers' work on the look and feel of products. These concepts underscore the taboo that exists on styling in design, but the avoidance of references to styling (and the notion of designers as 'stylists') means that the research attempts remain half-hearted, as they avoid the historical and conceptual discussions associated with styling in design. For example, in much of the management literature, style is reduced to "the 'how' of the 'what' – that is the sum of the characteristics of how something is said or done, in the form of an identifiable pattern" (Schweizer, 2003, p. 28). According to this view, styling involves (superficial) changes to the form of a product that do not alter its functionality or underlying technology, and which can be replicated in other products.¹⁵ However, disconnecting style and styling

strive to go beyond this kind of involvement in profiting from design more effectively (<http://en.ddc.dk/>).

¹⁴ Bohemia (2002) found that 'improving the appearance' of products was a prime reason why Australian manufacturing companies contracted industrial designers. Similarly, the Swedish Industrial Design Association reports that styling is a fundamental form of industrial design involvement within Swedish companies (Nielsén, 2008).

¹⁵ In management literature, the assumed separation of form and function is also hinted towards in recent conceptualizations of industrial design in which industrial design is

from functionality and technology, as was done in modernism, is problematic. Form, function and technology intertwine and variations in one automatically have implications for the others (Dormer, 1993). It is therefore questionable how actionable a conceptualization of styling as superficial decoration is for the management of styling activities. Furthermore, as a process without materiality, it is questionable whether a pure process-view on design captures what design is, has been or should be about or how it can turn a profit for a company. Thus, with respect to the management of design, one can question how far research on styling has progressed since the early years of General Motors, and how well it addresses the challenges facing designers in styling new products and the challenges facing managers in approaching styling activities strategically today.

In studies on the management of design, styling often emerges as an elusive activity to manage. Styling is considered to be based on the "soft," creative capabilities of designers (Lorenz, 1994), with the results hinging largely on the skills, intuitions and connections of individual designers (Verganti, 2009). In addition, fluctuations in taste and fashion imply that market response to the outcome of styling is hard to predict prior to product launch (Cox & Cox, 2002; Moulson & Sproles, 2000). As a result, styling activities come across as elusive, and they have long been considered to be a particular problem area for the management of design (Kotler & Rath, 1984). Reports from practice also suggest that designers find their work undervalued (Moody, 1980) and that managers do not grant a high enough priority to styling in new product development and strategy (Bangle, 2001). At the same time, it takes training and often also a substantial amount of experience to develop the skills and intuition necessary to successfully style new products (Warell & Nåbo, 2001). As a result, there is an imminent need for studies to clarify the scope and strategic relevance of styling for companies today. Furthermore, as a

presented as having separate concerns for the aesthetic/symbolic qualities of products, independent from functionality. The functionality of products is conceptualized as a concern for engineering design (see e.g. Candi, 2010).

continuously 'emerging' body of management literature, more research is needed on the commercial pitfalls and benefits facing the management of styling activities in day-to-day practice.

PURPOSE OF THE THESIS

In the thesis, I take the view that styling is strategically relevant for companies and accordingly should be managed as such. The question facing the management of design is how should this be done? In setting out to answer this question, I unfold a business logic for the strategic relevance of styling and the management of design styles. The overarching goal of my thesis is to reassess the role of styling in design and, in doing so, equip managers and designers with the knowledge needed to approach styling activities more strategically.

I achieve this goal through six essays in which I cover managerial challenges ranging from setting the objectives for styling activities to the evaluation of how well designers achieved those objectives in styling new products. Thus, the thesis presents a comprehensive view on the strategic management of styling activities by addressing the following research questions: What constitutes the scope of styling, and how do companies use it strategically? What benefits do companies obtain from pursuing different strategies for styling? When should companies opt for one styling strategy over another? How can managers determine if styling strategies are successful?

RESEARCH APPROACH

Given the emerging character of my research topic, I incorporate a range of different research methods in addressing the different facets of the thesis. The first essays are both conceptual and exploratory in nature with a view to providing a foundation for a reassessment of styling in design. Studies on styling are not only few and far between in the literature on the management of design, they are also often surprisingly noncumulative within and across disciplines. Therefore, in providing a foundation for studies on styling, I review and integrate literature on styling in both

design and management. I also perform case studies and interviews with managers and designers to unveil the scope of styling activities in practice.

The latter essays in the thesis are more confirmatory in nature, focusing on empirically investigating strategic styling decisions in a quantitative manner. Over the last two decades, a growing body of management literature has addressed strategies for styling. A number of methods have also been introduced to support designers to take more strategic styling decisions (see e.g. Karjalainen, 2007; McCormack, Cagan, & Vogel, 2004; Warell, 2001). However, few studies delineate the main strategic paths companies can follow in styling new products, and even fewer address when to opt for one styling strategy over another. In the latter essays, I address this gap in the literature. In particular, I execute simulated (styling) decision-making tasks with design professionals. I also study how explicit and emerging styling strategies materialize in products – supporting managers to select an appropriate strategy for styling.

STRUCTURE OF THE THESIS

The essays were originally written for peer-reviewed journals and conference proceedings in design and management during the course of my PhD, and are thematically structured in three parts. The first part of the thesis lays a foundation for studies on styling by introducing the scope of the thesis (Chapter One) and the role of designers in shaping the expression of new products (Chapter Two). The second part of the thesis addresses the strategic relevance and managerial challenges associated with managing styling activities through theory development, interviews and case studies (Chapters Three and Four). It also focuses on demonstrating the effects of environmental factors and business strategies on strategic styling decisions by surveying the behaviours of professionals and companies in the market (Chapters Five and Six). In the third part of the thesis, I discuss the overall contribution of the thesis for theory and practice (Chapter Seven) – opening up future discussion on the management of design styles. I also exemplify the managerial implications of the thesis through an analysis of how Scandinavian design brands reap success by managing the joint stylistic

legacy of their products (Chapter Eight). Due to the requirements of different academic audiences, the format varies slightly over the essays. The essays organize themselves as follows:

In the essay in Chapter Two, I provide a foundation for studies on styling in design through a study on style. As noted earlier, a number of alternative concepts have emerged in theory and practice whereby designers' work on the look and feel of products can be discussed without mentioning styling, stylists or even style. However, the new concepts seldom touch upon the theoretical and historical assumptions underlying the notion of styling. As a result, they for the most part merely rephrase rather than actually resolve the conceptual issue of defining the scope of styling activities beyond superficial changes in form.

Many of the problems facing academics and practitioners in delineating the scope of styling are like the problems art historians have faced in defining the scope of style with respect to form and content (the artwork's equivalent to a product's functionality or technology).¹⁶ Therefore, in ending the first part of the thesis, Chapter Two sets out to resolve the problematic situation of styling in design by following up on the re-emergence of style in art history.

The elusive character of style has fuelled considerable debate among art historians over the years. The apparent lack of agreement on style has even made historians and philosophers distance themselves from the notion of style when analysing objects of art and architecture (see e.g. Alpers, 1987). But the recommendation to abolish style has not been successful. On the contrary, it has only led to the replacement of conventional style classifications with more elaborate descriptions, or the substitution of the word style by other, equally elusive terms that only

¹⁶ Similar to the complexity associated with separating form from function, Goodman (1975, p. 803) noted that "What is said, how it is said ... are all intimately interrelated and involved in style". He based his argument on the idea that content often fulfils an important role in descriptions of style because it allows for notable effects in the perceptual quality of an artwork. For example, the content of a painting (e.g., a portrayed landscape versus a portrayed still-life) allows for important perceptual qualities that define the style of a painter.

serve to cloud the issue at hand. As a result, historians and philosophers of art have argued for a re-appreciation of style while still acknowledging its ambivalent character (see e.g. Eck, McAllister, & Vall, 1995; Sohm, 2001).

Following up on this re-appreciation of style in art, I appropriate Ackerman's (1962) work on styles to the field of design as a means to analyse the design styles of mass-produced goods as materialized in brand styles. The skills associated with producing a style for a brand are often recognized as a key contribution of designers (see e.g. Hestad, 2008; Ravasi & Lojacono, 2005). Still, the literature on the management of design seldom addresses the theoretical assumptions underlying the notion of styles in products. In appropriating Ackerman's work on style to the field of design, I conceptualize design styles as the outcome of reoccurring problem-solving activities bringing about noticeable effects in products. When approaching styles as the outcome of problem solving, a separation between form and function (as advocated in the modernist critique on styling) is of little relevance in classifying objects to a style. Rather, what is important is the existence of a class of related problems, which brings about (repeated) effects in the expression of products through their solutions. Thus, the repeated design style of a brand (i.e. a brand style) encompasses a certain way of working in producing mass-produced goods.

This conceptual treatment of style links to design and problem-solving in its widest sense (e.g. Roozenburg & Eekels, 1995), whereby (1) a designer "devises courses of action aimed at changing existing situations into preferred ones" (Simon, 1969/1996, p. 129) and (2) a product's design constitutes a set of features combined as the solutions to problems as dictated by a technological paradigm (Dosi, 1982). However, while the scope of design can accordingly be conceptualized as an "activity that transforms a set of product requirements into a specification of the geometry and material properties of an artifact" (Ulrich & Pearson, 1998, p. 352), Ackerman's view on style specifically points to the expressive outcome of such transformations (Conkey & Hastorf, 1990). At Ford, the boxy and black no-frills expression of the Model T emerged as a side-effect of Ford's strong focus on cost optimization and efficiency. Conversely, the multitude of styles visible in General Motors' portfolio of automotive

brands was a strategic response to the need for variety that Ford had neglected in its strategy. To this end, from the perspective of design, the expressive character of products can be accidental, as was probably the case with Ford's Model T, or it can be more strategically planned, like in the case of General Motors. Following this view, which is described in greater depth in Chapter Four, I position the scope of styling to cover the expression of products. Extending beyond superficial changes in form, these expressive effects can originate in both form and content, and designers induce an effect on both in styling products. For example, by styling a product to have smaller buttons and a metal casing, a designer may not only give it a "sleeker" look, but also alter its usability and robustness. Or, by repeatedly using a specific material, a designer may not only improve cost-effectiveness in production, but also a company's visual recognition in the market place.

Building on art historical theories on style, I also separate the production of brand styles from the reception of such styles in the market. Specifically, I point to the fact that the market is often unaware of the underlying problem-solving activities of companies and designers, and therefore customers have to rely on perceived similarities and differences in attributing products to a style. This two-sided view on style implies that it is important to acknowledge that the problems or challenges of a designer do not necessarily lead to a solution that is recognized (or valued) by people in the market. As a result, the style of products is not determined by styling alone. Moreover, the scope of styling is not limited to the production of products in a certain style. As such, managers and researchers should not overestimate how much control a designer has over the market reception of a brand style.¹⁷ Nonetheless, through discussions on style, the interests of people concerning the actual and desired qualities

¹⁷ This is similar to the challenges managers face in controlling the image of a brand in the market. However, while brand image encompasses the totality of a brand (products, services, people, buildings, promotion material, etc.), a brand style attempts to describe the defining (expressive) character of a brand's products, often coupled with an ambition to understand the underlying reasons for these expressions.

of products can be unveiled and opened up for discussion and investigation.

The second part of the thesis (Chapters Three to Six) addresses the strategic relevance of styling for companies today. In the essay in Chapter Three, I investigate the scope of styling in new product development – turning from defining the scope of styling activities to the strategic relevance of these activities for companies. While a wealth of consumer studies address the reception of the aesthetic and symbolic outcomes of styling activities (for reviews see Creusen & Schoormans, 2005; Veryzer, 2000), comparatively few studies address the (strategic) decision making surrounding the creation of those effects (Krishnan & Ulrich, 2001). At the same time, as noted earlier, styling is often hard to manage strategically, with non-designers often downplaying the strategic importance of styling in company strategy and product development (see e.g. Bangle, 2001). However, many styling decisions are intertwined with decisions about the brand, the product line and a product's positioning in relation to the competition. Hence, to support the effective management of styling activities, there is a need for studies on styling that pinpoint the implications of styling decisions for management (Creusen, 2011).

In outlining the main strategic paths that companies can follow in styling new products, I perform interviews with managers and designers and review the extant literature on issues of styling in design and (marketing) management. Specifically, I discuss how styling strategies can be described and what strategic objectives companies pursue through different strategies. Extending the work of the Swedish designer and design theorist Rune Monö (1997),¹⁸ I study how numerous strategic styling

¹⁸ Trained as an engineer, Rune Monö (1920-2007) held various positions within Swedish industry before opening his own design consultancy, Rune Monö Design, in 1949. As a designer, he is most famous to the public for having designed the logotypes for the airline SAS and the grocery chain ICA. He was also one of the founding members of the Swedish association for industrial designers. As a design theorist and educator, he lectured at various design schools in Sweden about the communicative role of design, and was appointed Professor of Semiotics at University College of Arts, Crafts and Design (Stockholm) in 1987. He also published a number of texts on this topic, with the book *Design for Product Understanding* from 1997 being the most famous for an international audience. Prior to its

decisions concern the relation of a new product to existing ones. Building on sign theory and his own work on the communicative aspect of design, Monö identified three dimensions on which the decisions taken by designers can be studied: (1) between a new product and the present product portfolio of a company, (2) between a new product and the succession of product generations and (3) between a new product and competing dimensions.¹⁹ Applying these dimensions to the management of design, Warell (2001) suggests that the dimensions capture a product's position on the market. Supporting this claim, the interviewed managers and designers described strategic styling decisions on all three dimensions. Integrating these results with past findings reported in the literature, I discuss three main market objectives (goals) for styling: (1) drawing attention, (2) establishing recognition, and (3) creating symbolic meaning. Distributed over Monö's three dimensions, these main objectives embody a range of different company and product development objectives that are sought through styling activities. As a result, although it is difficult to provide exact guidance regarding styling and when the different styling objectives would be most beneficial, it is possible to distinguish a basic business logic for the implementation of styling strategies.

In the essay in Chapter Four, I describe how managers can go about in evaluating the value of styling activities – going from describing the strategic relevance of styling activities to the managerial performance assessment of these design activities. A main interest of practitioners and academics in evaluating (and conceptualizing) the value of styling has been its purported impact on financial profitability. In delineating the value of styling for General Motors, Harley Earl stated that the “only yardstick for measuring the success of styling is its success in the market. Styling that sells is, in the last analysis styling that succeeds” (Gartman, 1994, p. 17). However, capturing the value of design activities such as styling in

launch, the book was used as a manuscript at various design schools in Sweden for several years before being published in English. Today, the book still is a standard textbook at a number of design programmes in northern Europe.

¹⁹ Similar dimensions have also been proposed as relevant for design and styling by Baxter (1995) and van Grondelle and van Dijk (2004).

financial terms has been shown to be notoriously difficult. Apple sold 2million iMac computers in the first 12 months following its launch in 1998, and 6.5 million during its first 3.5 years on the market (Eisenman, 2004). While part of these sales were no doubt due to its novel look, the separate impact of Apple's styling activities is hard to assess because the company simultaneously launched an extensive advertising campaign emphasizing the novelty of the iMac (Cuffaro, Vogel, & Matt, 2002). This said, due to the sustained interest in the accountability of design investments,²⁰ being able to assess the value of styling activities remains pivotal for both managers and researchers.

Based on a redefinition of styling and a theory-building multiple-case study of style-sensitive firms, I address the value of styling activities for companies and the managerial challenges associated with assessing this value contribution of design. In the case study, I investigate the value of styling for style-sensitive companies in Finland, Sweden and the Netherlands. The results show that designers engage in styling activities not only to stimulate company profits, but also to enhance brand visibility and promote a wider acknowledgement of their artistic/crafts capabilities in the market. I illustrate these findings by describing how press coverage and design awards function as indicators of styling performance, alongside product sales within the studied companies. Next, the results extend the managerial reasoning on styling by showing how the value of styling activities depends on the contextual objectives and constraints that frame how companies make decisions on the expressions of their products. In delineating this dependency, I point to the importance of acknowledging the commercial and professional context in which styling activities take place, and of reframing this context by adapting styling activities, their objectives and/or environmental constraints.

In the essay in Chapter Five, I study how factors in the market environment frame strategic styling decisions – this is the first quantitative

²⁰ Since the foundation of the Design Management Institute in the 1970s, the value assessment of design has been an almost standing topic in conferences, seminars and publications produced by the institute.

study on styling decisions in the thesis. The literature on the management of design frequently advocates that companies should aim for differentiation from competitors and similarity within the brand when styling new products (e.g. McCormack et al., 2004; Warell, 2001). Many companies (including Caterpillar and Lenovo) have also reached market success with this strategy. At the same time, the success of the Apple iMac and the diversity of styles in the mobile phones of Nokia indicate that deviating from prior styles or simultaneously using different styles are also common practices in styling. It is also not uncommon for companies to emulate the style of market-leading competitors. As a result, trying to decide what strategy to follow for styling poses a complex problem for managers with respect to how a company (or brand) goes about in managing its product portfolio and its position in the market. Still, the existing literature provides limited guidance to support managers in selecting when to do what.

In an experimental setting, I investigate how factors in the internal and external market environment influence strategic styling decisions. I do this by analysing how similar or different a group of design professionals wanted to style a new product given different simulated market situations. The results of the study show that factors in the market environment systematically influence strategic styling decisions. They also show that the experience and educational background of the design professional have an effect on these types of decisions – underscoring the complex context in which styling activities occur.

In the essay in Chapter Six, I investigate how a company's business strategy shapes the expression of its products, providing a complementary view on how strategies for styling are formed. The (strategic) management literature holds that companies' decisions regarding actions and resources do not depend solely on (static) factors in the internal and external environment (such as the reactive styling decisions studied in Chapter Five). Companies are also seen to deliberately (proactively) shape their internal and external environment through their own decisions (see e.g. Miles & Snow, 1978; Porter, 1980). Following this line of reasoning, a large body of management literature has studied how companies implement and

profit from business functions depending on their business strategy. However, empirical studies on how companies implement and profit from design are almost nonexistent. As styling is a fundamental capability associated with industrial design, many investments in design equate with investments in styling. Nevertheless, the literature has not explored in great detail how strategies for styling materialize in products and how the expression of products relates to business strategies.

Acknowledging this lack of knowledge, I study the relation between design strategies for styling and business strategies in the German passenger car market. I integrate the expertise of automotive design students in assessing the brand's styling strategies with the expertise of industry experts in assessing the business strategies of the brands. The results show that automotive companies (brands) employ different styling strategies depending on their business strategies. Thus, when it comes to the question of what styling strategy to follow, I argue that companies could relate this question to their broader business strategy. Following up on the results presented in Chapter 4, I also include a research note on the impact of styling strategies on financial profitability, market visibility and professional acknowledgment. The results show that different value contributions accompany different styling strategies. Specifically, for companies seeking to develop market visibility and professional acknowledgment, the results confirm past claims in the literature on the importance of coherence over the present product portfolio in establishing a strong presence in the market (e.g. Karjalainen, 2004; McCormack et al., 2004). However, the results also question the need to stay consistent over time.

To conclude, Sloan pointed to the strategic relevance of styling for companies and the importance of managing the expression of products strategically. By doing so, he introduced a business logic for the management of design in mass-produced products. Through the reported studies, I followed up on this logic by presenting a reassessment of styling and the many benefits and challenges it brings for companies today. In the third part of the thesis, I conclude the research part of the thesis (Chapter Seven) by discussing the broader contribution of the individual studies

(essays) to the management of design in general and the management of design styles in particular.

Along with the research conclusions, I also exemplify for managers (and their designers) the business context of my thesis and the challenges facing them in defining and profiting from a design style. I do so in a final essay (Chapter Eight) on the design tradition with which I am most familiar, Scandinavian design. Scandinavian design is often celebrated for its artistic and crafts excellence. As a student of design, I more than once stumbled upon a book or presentation about the origin and societal relevance of this style. However, while much attention typically is granted to the creators of Scandinavian design and the design of individual (often iconic) products, less is typically said about the commercial relevance of this style for companies today, and how Scandinavian design companies (brands) have reached success by turning their historical style legacy into a strategic resource for design. Still, such an analysis opens up discussions on styling and the broader challenges facing managers and designers in profiting from the Scandinavian style today.

As an example of the strategic relevance of styling, I analyze the expressive character of Scandinavian design, and the aspects that turn these expressions into a strategic resource for styling. From a business perspective, I define the main design traits that make the products of Scandinavian design brands alike, and potentially different from those produced in other regional styles. I also describe what market properties make these shared traits profitable for companies. With an origin in a master-apprentice system in design, Scandinavian design brands do not only nurture financial profitability and market visibility, but also place great emphasis on maintaining (obtaining) recognition for the artistic and crafts qualities of their products. To this end, Scandinavian design brands exemplify the commercial context in which styling activities can occur, and the importance of not being blind to other value contributions than those pertaining to financial performance. While styling is intrinsically entwined in commercial interests, it is also inspired by the personal interests of designers. This is a fact that managers need to acknowledge in seeking to profit from styling. This duality of interests is often accentuated when

designers set out to shape the expression of products and, in doing so, need to balance the interests of their client with their own ambitions and aspirations. Styling thus presents a possibility to critically reflect on the position of design within companies and society at large. Through styling, we are confronted with the materiality of design and the unique position of designers in shaping the expression of products.

BRAND STYLES IN COMMERCIAL DESIGN²¹

Style has long been an important concept for distinguishing the works of individual artists and classifying works of art and architecture into groups, schools, regions, and periods.²² However, there is no reason why discussions of style should be limited to objects of art and architecture, excluding everyday objects of design, such as cars or shoes. As already noted by Alpers (1967), the art historian Heinrich Wölfflin (1864) pointed to similarities in style between Gothic cathedrals and Gothic shoes to illustrate that style extends beyond objects of art. In fact, all human artefacts may be said to represent or exemplify characteristics of a style (Goodman, 1975; Kubler, 1967), and historians and philosophers of art and architecture have often referred to everyday objects, such as cars (Kornelius, 1977) and shoes (Combrink, 1980) when attempting to refine their classifications. However, the use of style to describe and classify everyday objects is not without problems. In particular, the term 'style' is often used in a very broad and vague sense, and it is difficult to define it in a way that is both precise and useful. In the case of styling in design, it is particularly important to have a clear and consistent definition of the term, as it is a key concept in the design process. In this regard, a foundation for a measurement for a consistent and clear definition of style in particular. I study the design styles of mass-produced goods as materialized styles of companies. Building on the work of Johnson (1951), I describe how the expression of style in mass-produced goods is a result of a combination of factors, including the design process, the design team, and the design context. I argue that the design process is a key factor in the formation of style, and that the design team and the design context also play a significant role. I argue that the design process is a key factor in the formation of style, and that the design team and the design context also play a significant role. I argue that the design process is a key factor in the formation of style, and that the design team and the design context also play a significant role. I argue that the design process is a key factor in the formation of style, and that the design team and the design context also play a significant role.

CHAPTER 2

BRAND STYLES IN COMMERCIAL DESIGN²¹

Style has long been an important concept for distinguishing the works of individual artists and classifying works of art and architecture into groups, schools, regions, and periods.²² However, there is no reason why discussions of style should be limited to objects of art and architecture, excluding everyday objects of design, such as cars or shoes. As already noted by Alpers (1987), the art historian Heinrich Wölfflin (1886) pointed to similarities in style between Gothic cathedrals and Gothic shoes to illustrate that style extends beyond objects of art. In fact, all human artefacts may be said to represent or exemplify characteristics of a style (Goodman, 1975; Kubler, 1967), and historians and philosophers of art and architecture have often referred to everyday objects such as cars (Gombrich, 1972) and toys (Gombrich, 1980) when attempting to refine their classifications. However, with a few noteworthy exceptions (see e.g. Panofsky, 1997), everyday

²¹ This essay is an adaptation of Person, O. and Snelders, D. (2010). Brand Styles in Commercial Design. *Design Issues*, Vol. 26, No. 1, p. 82-94.

²² Studies in art history do not focus on style alone. Historians and philosophers of art and architecture complement their studies on style with investigations into the date, technique, function and significance of objects (Davis, 1990). Likewise, studies on style in design can yield valuable contributions to research on function, production, significance, use and other issues.

products made for commercial mass markets have seldom been discussed in the context of the treatment of styles in art and architecture.²³

In the product design literature, the style of new products was quickly recognized as an important subject, especially in relation to the market reception of new designs (see e.g. Earl, 1955; Holme, 1934; Lippincott, 1947; Paulsson & Paulsson, 1956). In addition, the skills associated with producing a style for a brand also have long been recognized in the management literature as a key contribution of design (see e.g. Kotler & Rath, 1984; Menge, 1962; Nash, 1937). Still, both literatures (on product design and management) have only briefly addressed the historical and theoretical assumptions underlying the notion of brand styles in products. In general, styles are explained as invariant (formal) elements that represent a brand, both in individual products and across product ranges, but little is said about the origin of these elements or what they refer to. The cursory treatment of style in design and management may be linked to its elusive character.²⁴ At first glance, we may readily recognize and classify objects as representatives of one style or another on the basis of their invariant elements. However, such snap judgements often do not have broader applicability. The elusiveness of style means that the assumptions underlying our classifications tend to collapse under scrutiny, compromising the pursuit of a more general theory of style.

In this article, we will discuss the notion of brand styles in commercial, mass-produced products as a concern for designers working

²³ While everyday products made for commercial mass markets are recognized as objects of interest for art historical inquiry, most studies on style have focused on the objects of individual masters, specific periods and regions rather than the mass-produced products of today's companies. Moreover, while objects are often treated as descending from 'artifact-production systems,' what defines such a system and how objects descend from it is not always clear (Davis 1990, p. 26). As such, as argued by Conkey (1990, p. 14), "these artifact production systems or design systems warrant further theoretical, methodological, and analytical attention [in studies on style]."

²⁴ Schapiro (1980, p. 139) noted that "Styles are not usually defined in a strictly logical way. ... the definition indicates the time and place of a style or its author, or the historical relation to other styles, rather than its peculiar features."

for companies in competitive markets. Building on earlier texts on style in art and architecture, we will discuss some of the current challenges with the concept of a brand style in design, and then explore a new conceptual framework that separates the production of brand styles from their reception in the market. Our contribution will be twofold. First, we will extend the art historical perspective to style production by applying it to commercial brand styles in product design. In particular, we will advance the view that the production of contemporary brand styles passes through various phases, each of which can be characterized by a particular perspective on the market differentiation of the brand in question. Second, we will follow the art historical argument that style attributions made during reception are subjective, employed rhetorically to further the interests of the critic. Applying this idea to style attributions of branded products—by consumers, designers, and the companies they work for—we will argue that brand styles can become an important vehicle for laying bare the interests of these various parties and opening up discussion among them about the actual and desired structural qualities of products.

MODERN AND CONTEMPORARY PROBLEMS WITH BRAND STYLES

In classifying objects by styles, art historians long relied upon a separation between form (how) and content (what) in works of art. Styles revealed themselves in the different ways the content of an artwork is expressed. Wölfflin (1950), in a classic example, gave the anecdote of four friends who initially decided to paint the same landscape and “firmly resolved not to deviate from nature by a hair’s breadth”, but ended up with four totally different paintings. According to Wölfflin, the disparity between the paintings represented a non-mimetic element of the artworks, in which the styles of the painters were expressed, unbound by the shared content of their work (for more information about the origin and legacy of this treatment of style in studies on art and architecture, see Summers, 1989). Such a view of style is also found in twentieth-century design, namely in the modernist division between form and function. In this view, stylistic

decisions are apparent from the lavish decoration of a product's technical and/or utilitarian function (for more in-depth discussions on the legacy of modernism in twentieth-century design theory and practice, see Burkhardt, 1986; Fuller, 1988). Given the modernist ideal that there can be only one rational (and optimal) solution to any design problem,²⁵ decisions regarding decoration were seen as redundant and this typically positioned the concept of style outside the scope of design (Pulos, 1986). However, the modernist perspective on style has been questioned on several accounts. First, as noted by Forty (2000), the modernists engaged in much debate about the underlying assumptions behind what would constitute a proper solution, implying that the expression of such solutions could differ. Second, as summarized by Dormer (1993, p. 55), "The claim that use influences the shape and form of a product is not the same as the claim that use determines the final design." Third, definitions of style are not limited to "decorations" of the form (Schapiro, 1980). A case in point is that a style can equally be grounded in the "content" of objects as much as their "form."²⁶ Any structural quality of design, whether it pertains to the how or what of a product can be a constituent element of a style. In product design, the use of boxer engines over successive product generations may for instance be perceived as a prominent characteristic of the Porsche style, while the more decorative aspects of the form of the cars (such as the shape of the headlights) have varied over the years.²⁷

²⁵ "True functional solutions were identical with true formal solutions: each and every function was meant to have one – and only one – solution proper to it, and, consequently, only one proper form." (Michl, 1995, p. 10)

²⁶ This point is examined by Goodman (1975, p. 808), who searched for styles in the expressive attributes of objects. "[S]tyle is not exclusively a matter of how as contrasted with what, does not depend on either synonymous alternatives or upon conscious choices among alternatives, and comprises only but not all aspects of how and what a work symbolizes."

²⁷ Note that by describing a brand style in terms of the how (form) and what (content) of the designs of the products falling under a brand we temporarily suspend considerations about the why. To stay with the example of Porsche, many consumers know that most car models in Porsche's history had a rear-positioned boxer engine. This is also frequently mentioned in Porsche advertising and (sometimes sponsored) editorial content in car magazines. It can be said to be central to the brand's heritage and identity. However, this structural aspect of

The elusive character of style has fuelled considerable debate among art historians over the years. During the latter part of the twentieth century, the apparent lack of agreement on style even made historians and philosophers actively distance themselves from the notion of style when analysing objects of art and architecture (Elsner, 2003). Alpers (1987), for instance, suggested avoiding the concept of style because it had been defined in so many ways that speaking about the style of objects led to more uncertainty than clarity. But the recommendation to abolish the notion of style has not proven successful in art history or in design. On the contrary, it has led to the replacement of conventional style classifications with more elaborate descriptions, or to the substitution of the word style by other, equally elusive terms that only serve to cloud the issue.²⁸ In response to this "unavoidable" character of style, a number of historians and philosophers (see, e.g. Conkey & Hastorf, 1990; Eck et al., 1995; Sohm, 2001) have sought to re-evaluate the concept of style, while still acknowledging its ambivalent character. While the notion of style is "a highly conditioned and ambivalent hermeneutical 'construct' worked out at a distinct moment in social and intellectual history" (Sauerländer, 1983, p. 254), it does not prohibit a degree of conceptual unity to its use when trying to describe and compare human artefacts of similar or different character (Conkey & Hastorf, 1990).

Porsche's car design is mentioned without ever explaining why the boxer engine's rear position would be a good solution. In fact, many car experts, and Porsche enthusiasts among them, think that a boxer engine in the back is not an ideal starting point for a sports car, and Porsche's history suggests that the choice of the boxer engine was perhaps more based on issues of availability, rather than of functionality (Leffingwell & Newhardt, 2005). Thus, the extent to which functions are part of a brand style is debatable, because even the central mechanical parts of a product that make up the function can be known by the market without being understood.

²⁸ For example, academics and practitioners have argued for the importance of design/product languages to establish recognition in the marketplace for a company or designer, while often only briefly relating their discussions on what constitutes a design/product language to the extant literature on style (see, e.g. Monö, 1997).

Similarly, designers have felt compelled to avoid the inherent ambiguity of style in theory and practice.²⁹ However, the notion of style seems intrinsically linked to how we seek similarities and differences between objects created by different designers and produced by different brands. For instance, we readily analyse and critique the styles of the past and comment on the styles of designers such as Karim Rashid or Philippe Starck. In many cases, we associate the style of a designer with a company brand. Eliot Noyes's typewriter designs have become associated with the style of IBM, and Jacob Jensen's stereo equipment with that of Bang and Olufsen. In the market, consumers may only have a vague awareness of designers, but they readily distinguish one brand style from another and attribute different designs to different brands based on considerations of style. Although there may be little agreement between expert historians in art, architecture, and design on what exactly should be included in the concept of style, the notion has survived its critics and is still used by experts and laymen alike.

With a renewed interest in the commercial role of design, the literature on design has begun to discuss how companies can gain a competitive advantage through brand styles (see, e.g. Baxter, 1995; Hestad, 2008).³⁰ In many of these discussions, the focus is on establishing a distinct style to help consumers recognize the products of a particular brand. The major aim here is to locate tangible product attributes (shapes, colours, materials, etc.) (Agarwal & Cagan, 1998; Chau, 2002; McCormack et al., 2004; Pugliese & Cagan, 2002; Warell, 2001) and to identify the meanings associated with these attributes (Karjalainen, 2004, 2007). The underlying idea is that designers can create brand recognition by replicating these

²⁹ When reflecting on the cursory treatment of style in product design, we also should not forget that design have sought to avoid being reduced to "[T]he wrapping of product in nice shapes and pretty colors", as a cynical designer describes the traditional role of designers as stylists within companies (Lorenz, 1990, p. x).

³⁰ In the management literature, where design has always been viewed as a commercial instrument, the concept of style was never abolished, and was always connected to market differentiation through recurrent design features in products, set within a larger goal of positioning a brand in the market. See, for example, (Kotler, 2000, p. 312)

attributes in the design of new products. Attempts have been made to capture the styles of brands such as Buick, Dove, Volvo, and Nokia by identifying (and interpreting) reoccurring attributes of their branded products. However, the classification and interpretation of reoccurring product attributes is a risky venture when the underlying assumptions behind the notion of styles in products are only addressed in passing. A danger is that some important characteristics of brand styles and their meaning may be overlooked. This can happen for a number of reasons. First, some companies have established a style for their brand without replicating the attributes of their previous products. For example, almost immediately after the launch of the Apple iMac in 1998, journalists were referring to a distinct iMac style characterized by glossy translucent and candy-coloured plastic. Second, the perception of a brand style by a target group of consumers in the market can be heavily framed by what consumers already know about a brand. We can find products in the marketplace that share several product attributes, yet are not perceived as representing a single brand style. For example, the Swedish garden equipment producer Stiga has the same distinct colour scheme and sturdy expression as the American heavy machinery producer Caterpillar, but their target consumers are unlikely to recognize a single brand style in the designs of the two companies. Third, the association of products with brand styles need not depend on particular concrete attributes that are repeated over the brand portfolio, but it can also be instantiated by similarities on a more abstract level. For example, many Alessi products express a similar type of playfulness through references to childhood that allow them to be classified to an Alessi style (or a specific time period of it), even though they do not share any concrete attributes. According to Alberto Alessi, the playful style of the company and its references to childhood symbolize an affective and potentially transitional quality of design (Alessi, 1994). This symbolic relation between particular designs and their meaning implies that a brand style does not need to incorporate specific design elements in each product, but can instead be established by

reoccurring references to the brand style in a wide variety of concrete product attributes.^{31, 32} All in all, the current discourse on brand styles is confronted with the problem of where and how to search for tangible evidence of styles in products. In addition, there might be a problem of style attribution, in that the way that people ascribe the products of a brand to a style is contextual and depends on knowledge about the brand and its previous styles. In the remainder of this paper we will present a new perspective on the production and reception of brand styles as a response to these problems. This perspective will draw equally from past thinking about style in art, architecture, and design. But before turning to this, we will first look more deeply into the root of modern and contemporary problems with the concept of style.

STYLE AND THE PROBLEM OF PROGRESSION

We start our overview with Giorgio Vasari, who in the sixteenth century proposed an analogy between developments in styles and periods of human life in that both undergo transitions from infancy to old age and death. He believed that the greatest maturity in style existed in his own time, the Renaissance, fostered by the newfound wealth and grandeur of a number of Italian cities. In brief, the style of works of art and architecture was seen as the outcome of a development of the artist and/or the society he/she lived in. Adhering to an ideal that styles develop over time, the task of the art historian, as argued by Minor (1994, p. 131), was "to decode the

³¹ In the literature on product semantics, styles are seen as important signs for meaning attribution, not only because of what they represent, but also because of what they can symbolize (see e.g. Vihma, 1995). Steffen (2000) refers to styles as 'symbol complexes' of meanings which typically transcend the direct associations we derive from products. Likewise, in the management literature (see e.g. Holt, 2004), a brand style is often recognized as an important sign for identifying and attributing (often allusive) meanings to a brand, including symbolic (or brand iconic) meanings. Note, however, that the assumptions underlying the notion of brand styles are only briefly touched upon in this literature.

³² In consumer psychology, abstract attributes are seen as a way of comparing products that share few concrete attributes, such as products from different product categories (Johnson, 1984).

meaning, to uncover the principles lying behind the mute face of a work of art." The art historian could make the past accessible for interpretation in the present through the style of an object, as that style was perceived as a direct outcome of personal as well as societal developments. In the nineteenth century, the "general" scheme of developments in styles was complemented by a Darwinian perspective, when terms such as "evolution" and "life" became common in discussions on style in art (Ackerman, 1962). In product design, styles are also discussed from a Darwinian perspective. Pye (1978, p. 134), for instance, argued that "so long as evolutionary changes in them [styles] continue, good design flourishes." Another example is the metaphorical use of design DNA (see, e.g. McCormack et al., 2004; Smyth & Wallace, 2000) as the driving force behind the design attributes that convey a product's brand identity over product generations. While there are theoretical differences between the "Vasarian" and the "Darwinian" perspectives in art history, both schemes were based on the ideal that styles improve over time, and that the improvements are tightly connected to personal and social progress.³³ This means that the style of an object could act as a sign of the time, readily interpretable by an art historian.

The ideal of style progression created a number of problems for art historians (Ackerman, 1962; Gombrich, 1972; Schapiro, 1980), and some of these may also be encountered by designers when analysing brand styles. The first problem with the ideal of progression in styles lies in its normative character. By explicitly stating, or implicitly acknowledging, that more advanced styles are preferable, some objects can be devalued only because of their apparently juvenile or primitive expression and/or deviation from a more advanced standard. For example, Karjalainen (2004) analysed the history of Volvo, and found that the brand style of Volvo changed from a

³³ Strictly speaking, evolution theory does not imply progress, since it does not assume that the principle of adaptation through survival has a particular direction. However, the applications of evolution theory in art have historically looked at evolution teleologically as a series of progressions, in correspondence to the popular reception of evolution theory in the late 19th and early 20th century.

boxy style to a more muscular style over a range of models introduced during the 1990s. This change is seen by Karjalainen as a response to a growing need in the market for dynamic looking cars. However, fearing that consumers would no longer recognize the new style as typical of Volvo, the car designers added style features from curvier Volvo models from the 1950s and highlighted these references to previous models in their effort to promote the new Volvo style. These retro-elements in the Volvo style support the view that changes in brand styles are not necessarily progressions.

A second problem with the ideal of style progression is that, in the case of art, the series of choices an individual takes to achieve a particular aim is unclear. The reason for this, as noted by Gombrich (1979, p. 210), is that the "aim of art . . . may shift, and what we take to be the end-point of a logical evolution may only look this way by hindsight." He exemplified this claim by pointing to individual artists who seldom know what constitutes the next step in a logical progression. After all, if the artists knew the ultimate goal of their work, why would they not ignore the steps in between and more quickly reach the final aim of the style? Similar problems exist for brand styles in commercial design. A number of studies have examined changes in brand styles over time. McCormack, Cagan, and Vogel (2004) noted that the Buick style has been altered quite radically over the years, with many of the alterations responding to changes in technology, design philosophy, or control of the company. Buick probably could not have foreseen many of these changes. Another example is the Apple iMac. When it was launched, Apple's designers presumably gave it a distinct style with the aim of generating attention in a market that had stagnated in terms of style. Later, when they extended the iMac style to other products (such as the iBook), they most likely did this to benefit from the positive connotations people had attached to the iMac. In other words, the aim that companies strive for in their designs can shift even within a single brand style and depends heavily on the continuously changing circumstances that a company finds itself in.

Finally, even if we allowed for the possibility that a brand style has a progressive and stable aim, it is often unclear what constitutes progression

for a brand style. This depends on who is evaluating it. People's reactions to styles can differ widely (Moulson & Sproles, 2000), and for this reason the designers' work on brand styles is tightly connected to the idea of market segmentation and product differentiation (Karjalainen, 2004). Thus, what is seen as advanced by some may be perceived quite differently by others, and various styles may be needed to achieve the same commercial aim among different groups of customers. This fact was already evident in 1754 when the London-based furniture maker Thomas Chippendale published *The Gentleman and Cabinet Maker's Director*, in which he marketed furniture in a variety of styles to fit the diverse home décor needs and wishes of potential clients (for more information about this early manifestation of consumerism, see Sparke, 1987). A more recent example of how people's reactions to style can differ widely is found in the distinct style of the 1998 Fiat Multipla. The style's distinctiveness was celebrated by art critics and designers. Thanks to its distinct style, the Multipla was even granted a place in the Museum of Modern Art in New York during its "Different Roads—Automobiles for the Next Century" exhibition in 1999.³⁴ However, despite its "artistic" success, far from everyone liked the appearance of the Multipla. In fact, many people thought it was too controversial, and sales never really took off.³⁵

THE PRODUCTION OF BRAND STYLES

In seeking an explanation for changes in style in the arts that avoids the ideal of progression, Ackerman (1962) argued that changes style wise occur because of the balance between stability and change that intrinsically exists in how people solve problems. Stable patterns of problem solving emerge due to factors such as tradition, accepted working techniques, and people's natural desire for continuity. Patterns change because of boredom, passion,

³⁴ <http://www.moma.org/exhibitions/1999/differentroads/>

³⁵ In 2007, the low appeal among consumers for the Multipla style was reaffirmed when Time magazine placed the car on its list of "The 50 Worst Cars of All Time". <http://www.time.com/cars/>

and the human instinct to reject past practices and explore new technical, expressive, and representative challenges and solutions. Ackerman (1962, p. 236) argued that in this problem-solving process "[a] style, then, may be thought of as a class of related solutions to a problem—or responses to a challenge—that may be said to begin whenever artists begin to pursue a problem or react to a challenge which differs significantly from those posed by the prevailing style or styles." In doing so, Ackerman avoided the ideal of progression in styles by linking the origin of a style to the search for a solution to a problem or challenge (for a review about the position and significance of Ackerman's treatment of style in art history, see Minor, 1994). If we apply Ackerman's definition to the design of mass-produced products, the expression of a brand style can be said to arise from a reoccurring set of solutions to a problem or challenge facing designers of branded goods.

Other authors have found that artists often test different solutions when seeking a solution to a problem or challenge. Schapiro (1980) noted that artists can express a number of different styles through their work, even during shorter periods of time. Wollheim (1987) argued that the reason for this is that an artist may have realized a solution only incompletely or simply not found a solution for their current problem or challenge at hand. Thus, not all the works of an artist (or a period) need necessarily be seen as the outcome of the same style and nor does each work need to be representative of that style to the same degree (Davis, 1990). When combining these insights with Ackerman's definition of style and applying them to design, we can arrive at a synthesized view of brand styles, one that accounts for the rise of new brand styles and their persistence as well as variation among various product designs within a brand.

Like Wollheim's argument for art, design too has been described as a matter of trial and error, where "we have to make the things we have designed before we can find out whether our assumptions are right or wrong" (Pye, 1964, p. 26). It is therefore not uncommon for designers to test a number of different solutions in the process of producing a brand style (for some examples from the automotive industry see Bangle, 2001;

Wolpert, 1980). Designers also work within a corporate setting where the production of a brand style is synchronized with broader developments in the company and its market environment (Ravasi & Lojacono, 2005). Thus, the designer is not limited by the repeated use of a solution to a distinct, previously unexplored problem or challenge facing a producer of branded goods. This implies that not all product designs of a brand should necessarily be seen as representative of a single style, or be seen as equally representative of that style.

Another implication of this view on style production is that designers, or the companies they work for, might not be aware that they are designing products in a certain way. Some of the reoccurring solutions used when producing an object can be created habitually, and may therefore not be recognized as a solution by the producer(s) of a style (Meyer, 1987). However, in a commercial setting, heavy competition between different brands will also force producers to become more self-aware and create styles deliberately in order to differentiate their brand from other brands. With these intended styles, brands aim to forge a strong visual identity for their brand—one that can be easily recognized in the market and assure potential customers of the brand's inherent quality (Ravasi & Lojacono, 2005).³⁶

The development of (intended) brand styles may involve several phases. First, during a *search phase* a designer or design team may search for solutions to a new problem or challenge facing a producer. While searching, the designer can test out different solutions, sometimes for different products that are produced by the brand. During this phase, the designer benefits from traditions and accepted working procedures and may also refer back to earlier solutions that are implicitly or explicitly known to him or her (for a longer discussion on how designers are bound by existing solutions, see Michl, 2002). We can for instance speculate about the degree to which Jonathan Ive, when designing the Apple iMac, was

³⁶ This was already much in evidence during the German Renaissance, when competition drove independent wood sculptor shops to produce "showily skillful" styles and brand them with the initials of the master sculptor (Baxandall, 1980).

influenced by the glossy white and blue translucent plastic of the already existing Rowenta Surfline iron.³⁷

A search phase can be followed by a *nurture phase* in which a company has settled on a set of solutions to a problem and then repeatedly asks its designer(s) to extend it to new products of the brand (as Apple extended the iMac style to the iBook). During the nurture phase, the brand style becomes more defined and more easily recognizable. By extending the brand style to new products, the initial product becomes a reference in itself that can be employed by designers and recognized by consumers. Nokia, for instance, makes use of so-called "lead products" to clarify internally what is representative for a set of products that are to be styled in a similar fashion (Karjalainen, 2004). Internally, these products express what Nokia desires to communicate to a specific target group in the market, and by studying these products Nokia's designers learn how they can embody the same brand style in new products aimed at the same target group.

A nurture phase ends when the process underlying the creation of a brand style enters a new search phase, or when it enters a *vary phase*. In a vary phase, a designer remains "true" to the original solutions but tries to build on them by incorporating new brand style references. To stay with the example of Nokia, at the turn of the century the company nurtured a particular solution in its mobile phones in response to the need (or challenge) to appear user friendly: many models were designed with a U-shaped curve under the display, denoting a friendly smile. Later Nokia phones (such as the 7600 model) showed variations of this style, no longer featuring a U shape but a curved, more leaf-like silhouette. Within Nokia this was not considered a big digression from the U shape because it was

³⁷ Rowenta launched the Surfline iron prior to the iMac. Regarding its apparent similarities with the iMac, Rowenta's marketing manager (Steve Jones) gave the following statement: "Rowenta is flattered to see that the new iMac design bears a close resemblance to our Surfline iron, which was launched five years ago. We wish Apple all the success with iMac that we have had with our irons."

(<http://www.theapplecollection.com/iMac/iStore/iron.html>)

felt that the phones retained the value of user-friendliness through their reference to an organic and natural shape (Karjalainen & Snelders, 2010).

This multi-phase perspective of brand styles implies that there can be a different perspective on market differentiation at different stages of the production of a brand style. The first association an individual reflecting on a brand style will have is that it serves to position the products of brand A against the products of brand B. However, the multi-phase view of brand styles makes it plausible that brand styles can also serve other types of market positioning for a brand. For example, differentiation against previous models of the same brand is a likely focus during the search phase, and differentiation against other models in the current brand portfolio is a likely focus of brand styles during the vary phase.³⁸ Thus, the multi-phase view of style production can help clarify the diverse role of design in differentiating a brand in the market.

In art historical writing, two forces are frequently mentioned as influencing changes in style, over and above their creators' intrinsic need for change: technological improvements and social rivalry (fashion) (Gombrich, 1972).³⁹ Technological improvements are relevant because they determine the boundary conditions for a solution. When applied to product design, technological improvements are particularly relevant because they determine what is economically feasible to produce (Pye, 1964). For example, the traditional technique for painting a car body at the beginning of the twentieth century was to coat the body with multiple layers of lacquer paint. The required drying period for each layer resulted in production times of up to a month. When Ford set out to produce the low cost Model T, this time was reduced to about four hours by flowing enamel

³⁸ Extending the work of the Swedish designer and design theorist Rune Monö (1997), Warell (2001, p. 51) argues that a "product's identity [style] can be described on three axes; the product range of the manufacturer; the products available on the market as a whole; and the historic succession of generations of products." He then proposes that descriptions on these axes can be used to position a product on the market. In support for such a claim, Karjalainen and Snelders (2010) found that Nokia supports its portfolio strategy through style differentiation and that Nokia actively seeks differentiation with respect to competitors as well as between different product lines within their portfolio.

³⁹ Similar factors are also discussed by Ackerman (1962) and Schapiro (1980).

on sheets of metal and drying it in large ovens. However, due to the high temperatures in the ovens, this production technique initially only worked for black pigments, and black became a prominent attribute of Ford's Model T style. When General Motors set out to challenge Ford's market dominance in the 1920s, the development of the nitrocellulose lacquer paint Duco allowed them to produce cars in more varied and colourful styles while still maintaining a quick drying time (Gartman, 2006).⁴⁰

Technological improvements do not necessarily render older technologies obsolete. Gombrich (1972) stated that the use of older technologies can serve the purpose of re-enactment and preservation, and as a result provide objects with symbolic meanings. Some brands seem to consciously seek to benefit from this. Harley-Davidson prominently displays its classic V-twin engine, a technical solution from the 1920s. This is one of the features that has turned its motorcycles into American icons (Stanfield, 1992). The company uses these engines even though more technically sophisticated solutions are available. Technology can also indirectly influence the creation of styles when it is invoked (for what it signifies and its artistic qualities) in the design of other objects (Schapiro, 1980). Streamlining initially emerged in aviation technology to improve flight efficiency. Later, everyday products also were streamlined to convey an expression of progress, speed, and non-friction (Meikle, 2005).

The second factor frequently mentioned as an influence on changes in style is competitive social rivalry among both producers and consumers. Social rivalry is important because it influences the direction in which a style develops. Gombrich (1972) noted that once something becomes a source of social rivalry, competition results in expressions far beyond functional and technological purposes. In Gombrich's view, even the decision to not conform to the rules of competition constitutes adherence to its underlying principles. If a challenger to the current rules can acquire sufficient social prestige, s/he might create a nonconformist fashion that

⁴⁰ For more information on the impact of technology on the expression of colour and style, Ball (2001) provides an extensive discussion about how colour technology have changed the expression of painting.

ultimately leads to new rules of competition. Thus, the solution offered by a challenger is relevant because it may point to the direction in which a field of experimentation is likely to become productive (Pye, 1978).

THE RECEPTION OF BRAND STYLES

Art historians position themselves as the receivers of a style when classifying art and architectural objects as belonging to a style while hypothesizing about their maker, significance, use, etc (Ackerman, 1962). In their attempt to attribute objects to an origin, art historians long lacked detailed knowledge about the production process behind their objects of study. As a consequence, art historians often had to rely on similarities and differences between the structural qualities of objects (the so-called "like and unlike") in order to be able to determine the origin of objects on the basis of an attribution of style (Elsner, 2003).⁴¹

Like art historians, consumers, designers, and the companies they work for may also focus on the style of products and the brands they belong to, on the basis of what is like and unlike (Schoormans & Robben, 1997). Thus, brand styles can help to identify a product's origin and make sense of its place in the world.⁴² In this sense-making, the attribution of products to a brand style is based on perceived similarities and differences between products within the brand and between different brands. Based on our discussion of style production in the previous section, we expect that these similarities and differences are based on reoccurring sets of solutions to problems or challenges, leading to recognizable effects (or a conspicuous lack thereof) in the structural qualities of a selection of products of a brand on certain markets, during a certain period of time.⁴³

⁴¹ While there is no universal system for describing the similarities and differences within and between such groups, Schapiro (1980, p. 139) noted that classifications of style were often based on "form elements or motives, form relationships, and expressions."

⁴² This is similar to style attribution in art (see e.g. Gombrich, 1985)

⁴³ With respect to the treatment of style in art history, Davis (1990, p. 29) notes that a way of working produces a style "insofar as certain actions have certain exhibited or unexhibited effects."

In addition, receivers in the market may be unaware of the company's practices and intentions, and they may have other interests when ascribing products to a brand style. In art history, it has been noted that each attribution of an object to a style starts with a focus in interest (e.g. aesthetic, technical, or expressive) on the part of the individual(s) making the attribution (Mattick, 2003). As a result, the grounds on which a receptive audience identifies a brand style are only loosely connected to the practices and intentions of its producers. This idea is taken to its logical conclusion by Elsner (2003, p. 106), for whom style is "a rhetorical tool whereby the visual practices of periods of the past or the different works of particular individuals (unconsciously similar through their shared stylistic quirks) may be defined."

Elsner's idea of style as a rhetorical tool suggests that what we notice in the design of a branded product also depends on what we seek. Even with full knowledge of the designer's and company's intentions, consumers and design experts still may have their own problems to solve when attributing objects to styles. In addition, style attribution is subject to "distorting" psychological effects. With respect to this, Gombrich (1999, p. 256) noted that "it is the deviation from the convention that is intended to impress you, but as soon as the deviation turns into a convention of its own . . . [it] leads inexorably to its demise." As a result, in distinguishing the unlike from the like we may initially overestimate, and later underestimate, what may be recognized as the most prominent characteristics of a style.⁴⁴

⁴⁴ With respect to comparisons of like and unlike, an interesting finding from psychology is that two objects, at the extreme, may be recognized as similar to each other simply because they are different from a third (For more information about how we form categories on the basis of judgments of similarity, see Goldstone, 1994). There also is a whole body of work in psychology that supports Gombrich's claim. New, discrepant information (in our case, a new style) may initially incite effortful processing of the information, which, in turn, leads people to compare and contrast this information with accessible knowledge from memory. However, these same studies show that, once this information becomes less surprising and more congruent to our expectations, people tend to show the opposite effect of assimilating information too easily and automatically, and by doing so exaggerating the similarity between incoming information and knowledge from memory (Herr, 1986). For the interested reader, Stacey (2006) provides a broader discussion on psychology and style.

The looser connection between defining styles in the process of production and attributing objects to styles in the process of reception holds two important consequences. First, a style is not statically grounded in objects; instead during reception, it is "sought" and expressed by someone (Davis, 1990). As such, a classification of a product to a style is revealing, as it unveils our perception of, and justifications for, similarities and differences among products and brands.⁴⁵ We noted above that style attributions have been criticized for this. However, here we want to argue that it is precisely because such judgements can be criticized that they have value in the design process. The attempts of experts, consumers, designers, and companies to attribute products to a style reveal how these different parties look at products and how they compare them to other products. Thus, by encouraging people to identify products according to their brand style, product design as an activity can become more self-aware, and therefore more open to discussion and guidance from others in the design field (such as consumers and managers of the company's brand portfolio). For this reason, we would urge companies and designers to become aware of how the products falling under a brand can be said to have a certain style and how their style attribution compares to others.

Second, since the recognition of brand styles in the market depends on a product's perceived similarity with and difference from other objects, knowledge influences how we attribute products to a style. A person must recognize and know some of the attributes that are seen as typical for a style to be able to classify objects as representative of it. This knowledge can be acquired through a long involvement with certain brands, and a desire to see a certain style in the products of a brand (or a subset of

⁴⁵ The expressive character of style definition with respect to its user's expertise, knowledge and opinions has been suggested as a prominent reason why the notion of style for periods has been so discredited in art historical writing. Sohm (2001, p. 14), for instance, notes that a style definition "tells us what codes a person has selected to signal political and social allegiance" and as such leaves the individual open to criticism about his or her expertise.

them).⁴⁶ On the whole, this knowledge may influence our ability to spot similarities or differences over products and brands. For example, the Jaguar X-type and the Ford Mondeo cars might not appear to have many similarities in their styles. However, both brands were owned by Ford Motor Company, and the cars are based on the same platform and share many components. Closer inspection of the cars—and knowledge of the car business or conversations with car mechanics—may lead consumers to the (somewhat self-ingratiating) conclusion that there are more similarities to these models than one would at first expect.⁴⁷ In mass markets where consumers lack sufficient knowledge about product design, imitations of brand styles are often interpreted as undesirable for the “original” producer because they may lead consumers to believe that a copycat brand has the same qualities as the “real” brand (Miaoulis & Damato, 1978). It is therefore not surprising that many companies go to great lengths to protect their brand styles. The success of the non-conforming Apple iMac style, for instance, inspired a number of other brands to launch products with coloured casings too. The products of Emachines (the eOne) and Future Power (the AIO) duplicated the iMac style to such a degree that Apple filed lawsuits against them (Chong, 2004). Still, in the same way that style definitions may differ among art historians, what consumers see as representative of a style is not fixed, and protecting a brand style is a challenging task.⁴⁸ Perhaps it is also an overly constraining one. Not all misconceptions about a style are necessarily bad; many can lead to new

⁴⁶ For art, Goodman (1975, p. 810) stated: “Styles are normally accessible only to the knowing eye or ear, the tuned sensibility, the informed and inquisitive mind” (see also Elsner, 2003; Goodman, 1980).

⁴⁷ In fact, Jaguar initially received extensive criticism in the press for making the X-type so similar to the Mondeo, because it was seen to dilute the Jaguar brand (see e.g. Kerwin, 2004).

⁴⁸ On a legal level there is a distinction between a situation when (1) a company that designs its products to resemble those of another company and (2) a company that strictly copies the style of a competitor. However, due to the practical problems involved in making a clear distinction between these two situations, companies often go to great lengths in trying to justify the uniqueness of their styles (For more information on the legal challenges in protecting brand styles, see Kapferer, 1995).

and potentially valuable meanings being attached to the brand, which may be commercially interesting for companies in their own right.⁴⁹

FINAL COMMENTS

In the spirit of Wölfflin, who compared shoes to cathedrals, we have approached the notion of brand styles by building on earlier texts on style written by historians and philosophers of art and architecture. We proposed that the expression of a brand style is grounded in the use of a particular set of solutions to an unexplored problem or challenge facing a producer of branded goods. The solution set can vary as it passes through different phases, each of which can be characterized by a particular perspective on the market differentiation of the brand. However, we also recognized that designers would be ill-advised to rely too heavily on replicating existing attributes in new products to achieve brand recognition, without first critically reflecting on comparable products and their similarities and differences. By distinguishing the like from unlike, designers should consider how they can contribute to the style attributions made by the receivers of a style, while searching, nurturing, and varying in the way that they work.

Finally, the differentiation of brand styles from other brand styles is an enduring phenomenon to be studied and mastered by designers in their own right, especially by those working in a commercial setting. However, given that styles are inherently ambiguous, we need to approach style adaptively, with an eye to the problem at hand. Brand style attributions enable us to define the potential of a design in light of other designs that either complement or compete with what a brand produces.

⁴⁹ An interesting case is Harley Davidson, whose current style to a large extent refers back to the way in which, amateur motorists in the 1960s customized cheap second-hand motorcycles of Harley Davidson and started treating them as icons for a modern outlaw lifestyle, against the original intentions of Harley Davidson (Holt, 2004). The value of such misconceptions (or creative misreadings) by design experts and consumers in attaching meaning to products has been discussed in design by, for example, Richardson (1993) and Lloyd and Snelders (2003).

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THE STRATEGIC RELEVANCE OF STYLING

While a wealth of consumer studies address the reception of the aesthetic and symbolic outcomes of styling activities, comparatively few studies address the main strategic path companies follow in styling new products – providing managers with little guidance in developing a strategy for styling. In this essay, I address this gap in the literature on the management of design. Specifically, based on interviews with Finnish design experts and a review of the literature on styling in design and marketing management, three main objectives for styling are delineated: (1) drawing attention, (2) establishing recognition, and (3) creating symbolic meaning. Furthermore, building on the work of Monö (1997), three dimensions on which strategic styling decisions can be classified are discussed. The dimensions are (1) between a new product and the present product portfolio of a company, (2) between a new product and the succession of product generations and (3) between a new product and competing products.

CHAPTER 3

COMPLEMENTING INTUITION: INSIGHTS ON STYLINGS AS A STRATEGIC TOOL⁵⁰

In the 1960s, General Motors' first manager of the Art and Color section, Harley Earl, stated that the "only yardstick for measuring the success of styling is its success in the marketplace" (Gartman, 1994, p. 17). Since then, the commercial value of styling has become well-established, both in the literature and in practice. Styling, i.e. the creation of a distinct visual identity for a new product (or a family of products) with aesthetic and/or symbolic implications, is frequently mentioned in academic discussions on the commercial role of design (Bloch, 1995; Crilly, Moultrie, & Clarkson, 2004; Lorenz, 1990; Veryzer, 2000). Furthermore, a number of cases within the practice of design suggest that styling is vital for brand rejuvenation and critical in making or breaking newly introduced products. The bubble shaped VW Beetle, for example, has become a symbol for the happy hippie era of the 1960s, and thousands of people are now longing to own the new Beetle (Brown, Kozinets, & Sherry, 2003). Together with the success of design companies such as Alessi and Kartell, these examples indicate that

⁵⁰ This chapter is an adaptation of Person, O., Snelders, D., Karjalainen, T. and Schoormans, J. (2007) Complementing Intuition: Insights on styling as a strategic tool. *Journal of Marketing Management*, Vol. 23, No. 9-10, p. 901-916.

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styling in commerce is an important phenomenon, both in our industrial past and more service-oriented present.

In spite of these reports of the critical importance of styling, the management of a successful styling strategy is one of the more elusive issues in new product development. Product styling holds several commercial benefits for companies, such as improving the customer's evaluation of, and satisfaction with a new product (Berkowitz, 1987; Tractinsky, Katz, & Ikar, 2000). The commercial value of styling is also evident in the amount of copyright infringement lawsuits where companies have taken competitors to court for illegally copying the style of their products (Jacoby & Morrin, 1998). Still, companies often struggle in their efforts to benefit from styling. Managers report that they face problems in managing the process and giving it sufficient priority in company strategy and product development (Dumas & Withfield, 1989; Hart & Service, 1988; Walsh, Roy, & Bruce, 1988). Furthermore, it takes training and often also a substantial amount of experience to develop the skills and intuition necessary to successfully style new products (Lawson, 1990; Warell & Nåbo, 2001; Wetlaufer & Arnault, 2001). New designers at companies such as Nokia and Volvo have for instance been noted to spend up to one or two years learning what constitutes feasible styling, as dictated by the brands' design philosophies (Karjalainen, 2004).

Such reports support the idea that styling is a touchy-feely process, best left perhaps to the intuition and creativity of designers alone. But while intuition and personal creativity undoubtedly play a role behind many successful products and brands, leaving the designer and styling process without managerial guidance is equally problematic. This is because, in order to reach success in the market, many design decisions need to be coordinated with the decisions of other functions such as marketing or engineering (Karjalainen, 2004; Kathman, 2002; McCormack et al., 2004; Ravasi & Lojacono, 2005; Warell, 2001). Strategic decisions on styling are often intertwined with decisions about the brand, the product line and a product's positioning in relation to its competitors. To support coordination in the decision-making process, generic approaches to styling are needed, to point out the main strategic paths that companies can follow.

THE COMMERCIAL LOGIC OF NEW PRODUCT STYLING

When James Dyson designed the first Cyclone vacuum cleaner in the 1980s, he deliberately gave the product a pink colour to emphasise its innovativeness and a transparent shell so that customers would see the swirling dust particles. Regarding these styling decisions, Dyson has stated that "if the product contains any new ideas then it is absolutely essential that the product be visually different" (Roy, 1993, p. 429).

A product's styling can be viewed from a purely disinterested perspective, elaborating on factors such as balance, rhythm, expression etc. with the overall goal to comprehend the visual qualities of the product. Styling can also, as in this paper, be discussed from a commercial perspective; i.e. how styling can add value to new products and contribute to the bottom-line profit and long-term success of companies. Of course, there might be a considerable overlap between the two perspectives: if someone perceives a product as beautiful, appropriate or attractive, there may well be a substantial influence on the likelihood that someone purchases that product at a surplus value (Bloch, 1995; Page & Herr, 2002).

To help companies improve their strategic decisions on styling, we are involved in a research programme on market-based styling decisions. In this program, we are attempting to unfold the commercial logic behind managerial decisions on styling. Recently, we performed eight focus interviews with industry design experts on how companies work with strategic styling in practice. All the experts had been involved in strategic decisions on product styling on a number of occasions. Their work experience ranged from six to more than twenty years. Six of the experts worked as senior managers at well-known Finnish companies in both low-tech (e.g. paper and furniture) and high-tech (e.g. telecommunication) industries. Two of the experts were Finnish senior design consultants, working with clients from a broad range of industries. All but one had international experience, either because they had worked abroad or worked in companies that made products for international markets. The interviews lasted approximately one hour each and were tape-recorded and transcribed into about 100 single-spaced pages of text for further analysis.

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Based on a review of the extant literature on styling in design and marketing literature and the interviews, we have identified a number of intermediary goals of styling in a commercial setting: (1) attention drawing, (2) establishing recognition, and (3) the creation of symbolic meaning. Each of these intermediary goals can be seen as pointing to a relatively separate process of attraction, important in their own right as being a precondition for the ultimate success of styling in the marketplace. Sometimes these goals can work together, but they can also conflict with each other, something we will discuss in more detail below.

In this article, we will also introduce a model about strategic styling decisions over these three processes of attraction. We propose that strategic styling is based on a decision about the degree of differentiation of the new product on three dimensions. Thus, in its effort to stimulate the processes of attraction, a company must decide to make the new product similar or different with respect to (a) the present product portfolio, (b) the succession of product generations, and (c) the products of competitors. The result is a model for styling decisions that allows managers to plan their styling efforts more strategically, by providing insight into both the ends and the means of styling on a conceptual basis.

THREE PROCESSES OF ATTRACTION

In our interviews, the experts came up with a number of goals for product styling. Most of these can be seen as 'intermediary,' in the sense that these goals were seen as instrumental for making the new product a commercial success. Four experts also stressed that a goal of styling was for designers to express themselves. However, it remained unclear during the interviews whether this goal is intermediary and instrumental for some other (commercial) cause, or whether it was seen as a goal on its own. Therefore, this goal is not considered commercial and will not be discussed in this paper.

The commercially inspired goals could be grouped into three categories. The first of these is attention drawing. This goal was spontaneously mentioned by three experts and came up as getting noticed

in the shop, making the product look new, getting attention of consumers through the press, and surprising consumers. The second goal was the creation of recognition in the market. This goal was spontaneously mentioned by seven experts and addressed issues of being recognized as a member of a product category or product line, as belonging to a brand, as being made for a specific target group or as being made by a specific designer. One expert also mentioned that a dramatic change from past designs could help customers to better remember the company. The third intermediary goal of styling was to provide the brand with symbolic meanings. This goal was spontaneously mentioned by all experts, and it pertained to the capacity of styling to provide a luxury status, appeal to fashion trends and certain values that are held in common, either by a target or reference group. Symbolic meaning was connected with styling through the associations it created with a certain period (e.g., 1960s), locality (e.g., Scandinavian) or talented designer (e.g., Fritz Hansen).

In sum, the experts made references to the ability of styling to: (1) draw attention, (2) create recognition, and (3) provide symbolic meanings for customers. These processes of attraction were also seen as strongly interconnected. The ability of styling to draw attention was seen as a precondition for using styling to create recognition. In addition, recognition can be seen as a precondition for having consumers derive symbolic meanings from products. We thus come to the tripartite model of attraction, which we discuss below.

Attention drawing

Attention refers to the selective focus of mental capacity on a particular object. In the marketing literature (e.g. Greenwald & Leavitt, 1984; MacInnis & Jaworski, 1989), it is recognised that attention is a necessary condition for deriving information from a product and memorizing this information. Following this line of thought, product styling has to capture and maintain the attention of customers before they can derive information from it (Schoormans & Robben, 1997). In line with the arguments raised by the experts, the literature suggests that, the more a product is styled to deviate from existing products, the more attention it will receive (Garber,

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1995; Schoormans & Robben, 1997; Veryzer & Hutchinson, 1998). Attention drawing can become a company goal in itself, especially in highly competitive markets that have an overproduction of new styles (Garber, 1995; Karjalainen, 2004; Underwood, Klein, & Burke, 2001). One of the experts working in the furniture industry pointed out that unknown companies are often forced to constantly launch new and innovative products in order to be noticed at trade fairs and exhibitions. There is also evidence in the field of cognitive psychology that novel and unexpected information captures people's attention to a greater degree than redundant or expected information (for a review, see Lynch & Srull, 1982). On a more emotional level, it has been shown that surprise, which is elicited by unexpected information, can have a positive influence on a consumer's evaluation of a product (Vanhamme & Snelders, 2003). Still, as noted by both the experts and the literature, this influence does not imply that consumers will always prefer a novel visual appearance over a familiar one, something we will discuss in more detail below.

Establishing recognition

In both design and marketing theory, styling is recognized as a cue to help consumers relate products to other products that belong to the same period, life style segment, or brand (Kreuzbauer & Malter, 2005; Pugliese & Cagan, 2002; Underwood, Chapman, Brocklehurst, Underwood, & Crundall, 2003). For example, by giving a hand-held device a casing of glossy white plastic and a circular touch-pad, we might recognize it as (or at least think it is) a part of Apple's iPod-family. Companies are therefore often advised to identify their brand's defining style elements as it can help them understand how consumers relate products to their brand (Karjalainen, 2004; McCormack et al., 2004; Pugliese & Cagan, 2002; Warell, 2001). However, as noted in both literature (Khermouch, Thompson, & Benezra, 1997; Schoormans & Robben, 1997) and our interviews, companies need to balance between making consumers recognize their brand and drawing attention with new, repositioned products that deviate in their styling. Mandler's (1985) theory of schema congruity states that recognition almost automatically leads to a mild form of acceptance, because what is

recognized from earlier encounters is more easily true and good for people. Based on this theory, Hekkert, Snelders and van Wieringen (2003) state that if a new visual style can be successfully classified as a memorable instance (to be recognized later), then this too will lead to a higher appreciation of the product. They state that it does not necessarily mean that the heightened attention that comes with new styles cannot be appreciated at the same time. Thus, although attention processes are a precursor to recognition processes, and although they are often conflicting, both can be seen as separate processes that can enhance the attractiveness of a product.

The balancing act between attention drawing and recognition is best understood as a process that occurs over time. For example, an expert working in the furniture industry pointed out the importance of attention drawing at trade fairs and exhibitions. Simultaneously, this expert saw this activity conflicting with the long-term goal of defining a visual brand style for the company in order to create recognition for the company and to generate some brand equity. While discussing the history of her company, another expert described that, when the company went from multiple brands (obtained through a number of acquisitions) to a single new brand, it was important that the styling made it clear that the products originated from one company. Internally, it was important to strengthen the team spirit and belief in the new brand by using a single brand style. Externally, a single brand style was important to make it easier for customers to recognize the products of the new brand. However quite soon after the launch of the single brand style the company had to implement a number of different styles to draw the attention of different customer segments.

Considering how our interviews spoke about the attraction of styling, it seems as they referred it to be based on a conscious process. This might be because they all worked with high involvement products that consumers are likely to have considered with some care and have reflected upon. However, it should be added that attention and recognition can also be based on pre-conscious, more or less automatic processing. As hypothesized by Zajonc (1968), repeated and unreinforced exposure can positively influence individuals' liking to unfamiliar or novel stimuli. Zajonc also shows that such effects can come about without having any

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awareness or conscious recognition of an object (for reviews of this effect, see Bornstein, 1989; Bornstein & D'Agostino, 1992). In the literature, it has been shown that repeated exposure can also positively influence the consumers' preference for product styling (Cox & Cox, 2002). Thus, when considering the goals of attention and recognition we should point out that these can come about more subtly than suggested by the experts.

Finally, attention to (or recognition of) *styling* can go hand in hand with recognition of (or attention to) other aspects of the product. For instance, aspects like functionality, technology, and advertising may create attention, while aspects of the original style of the product may remain highly recognizable. The iPod video, for example, is very similar in styling to the other members of the iPod family but the integration of video to the original iPod concept has drawn considerable attention to the product.^{51,52}

Creation of Symbolic meanings

The experts noted that people also attribute meanings to the product by recognising a product through its styling as belonging to a certain class of products. For example, by recognising our previously mentioned hand-held device as an Apple product, we might also think it is easy to use and is a trendy lifestyle accessory. Consumers attribute meanings to products that can be both functional and symbolic (Creusen & Schoormans, 2005; Crilly et al., 2004). All experts frequently mentioned the ability of styling to embody symbolic meanings in products such as its Scandinavian origin or its status as a luxury item.

Symbolic meanings refer to the more abstract values we attribute to a product that go beyond its utilitarian function. For example, value attribution can be based on symbols of age, status, culture or origin, all of which are very important in today's markets (Kotro & Pantzar, 2002). The symbolic meanings people attribute to products can either be personal or based on a cultural context (Zaltman, 2003). For instance, we all have

⁵¹ We thank an anonymous reviewer of Journal of Marketing Management for mentioning this possibility to us.

⁵² The iPod video represents the fifth generation of the classic iPod, which Apple later has extended into the iPod Touch.

objects that are special because we received them at certain occasion or from someone we like (personal meaning). In other cases, we might think a product is trendy because we have seen it in a fashion magazine or in connection to the 'hip' people in our surroundings (cultural meaning). McCracken (1986) states that the cultural meanings people attribute to products are grounded in the social context in which they are used. This implies that cultural meanings must be shared. When applied to styling, this means that new style transgresses from having personal meaning (based on attention and recognition of the style) to having a cultural meaning (based on attention and recognition of the social implications of a style). Thus, new styles acquire their initial meaning in a personal setting, but influential individuals (or influential companies) can create cultural meaning for a new style. For example, the specific meanings people derive from using furniture with Scandinavian design such as modernist stem from the context they have been displayed in, the advertisements they have been promoted with, etc. In addition, people decorating their homes with Scandinavian furniture might be seen as modern and fashionable because of the meanings that others attach to these products. One of the experts saw it crucial for her company to style their products to benefits from these kinds of symbolic meanings because their customers "like Scandinavian design."

Finally, our experts may have overstated that they were in control of the symbolic meaning that consumers attach to products. We should consider that product symbolism may also have a negative influence on product evaluation. For instance, if a consumer has negative associations to the 1980s, he or she might transfer these associations to a product when it is styled with clear references to this time period.

A THREE-DIMENSIONAL MODEL OF STRATEGIC STYLING

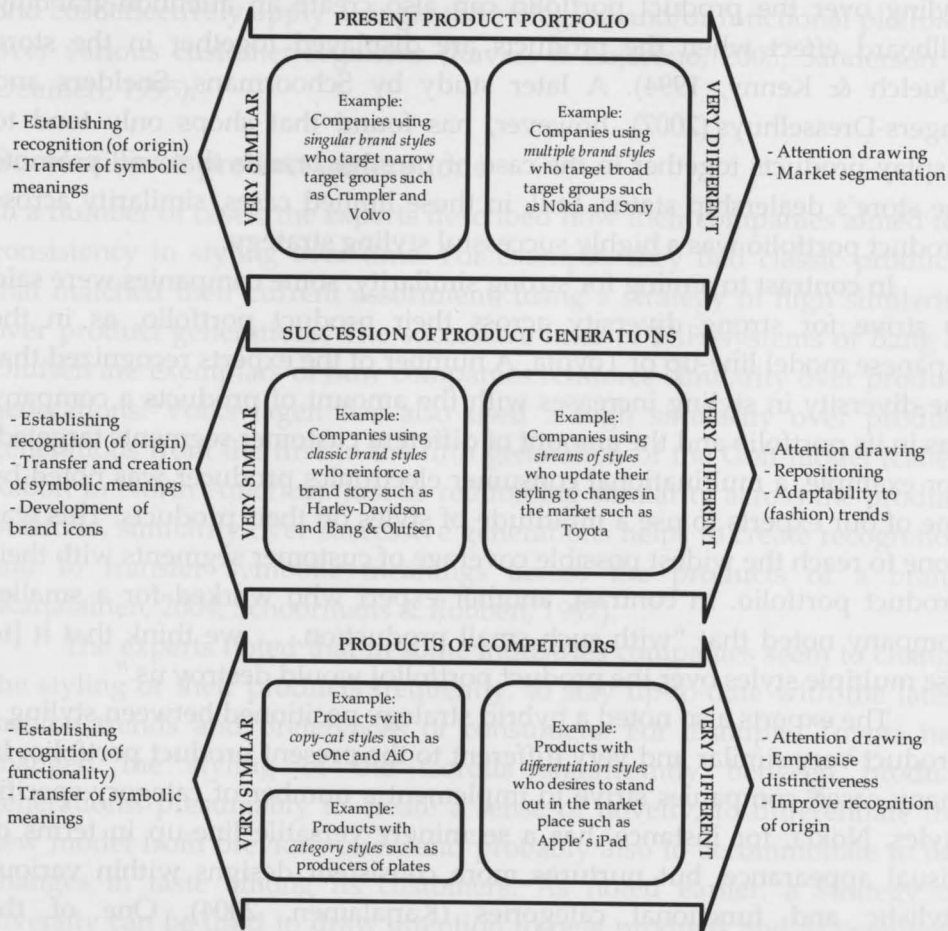
So how are the three commercial goals of styling related to the actual decisions that companies make? The Swedish designer and design theorist Rune Monö (1997) proposes that the decisions of designers are about the desired relation of the new product to existing products. Monö identifies

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three dimensions on which such a relation can exist: (1) between the new product and the present product portfolio of the company, (2) between the new product and the succession of previous product generations and (3) between the new product and the products of competitors. Applying this model to design management, Warell (2001) proposes that the three dimensions can also be used to position a product on the market. Our interviews support this view on design, as the strategic styling decisions mentioned by the experts can easily be classified according to these three dimensions. During the interviews, we also found that the experts often report on their past styling decisions as a combination of decisions distributed over these three dimensions. But as we showed before, decisions on styling are not always made for the same purpose. There may be different goals of styling a product and we have to take this into account when discussing strategic decision making on styling.

Thus, we will use Monö's generic model to combine the strategic decisions revealed by the interviews with insights from design and marketing theory. As a result, we propose a number of strategic directions (simplified as extremes) over the three dimensions (see figure 1). Within each dimension, the extremes stand for creating similarity or difference between the new and existing products. In some cases, we have also been able to identify a number of hybrid strategies that reside between the two extremes of similarity and difference. As a result, companies can have a varied set of strategic goals for their styling efforts, and their decisions on styling (over the three dimensions set out by Monö) can be seen as a result of these goals.

Figure 1: Potential objectives for strategic styling decisions



Present product portfolio

Volvo cars and Crumpler bags are examples of companies that have implemented a strong similarity across their product portfolios. Thus, all Volvo cars and Crumpler bags are styled to look similar to the other products of each brand. Theory suggests that by styling a product similar to existing products in the portfolio, a new product is more easily recognized as originating from a certain brand and consumers more readily

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transfer meanings from old products to the new products (Karjalainen, 2004; Warell, 2001). Further, it has been proposed that coordinating the styling over the product portfolio can also create an attention-grabbing billboard effect when the products are displayed together in the store (Quelch & Kenny, 1994). A later study by Schoormans, Snelders and Lagers-Dresselhuys (2007), however, has found that shops only tend to display products together in the case of prestige brands that will promote the store's dealership status. Still, in those limited cases, similarity across product portfolio was a highly successful styling strategy.

In contrast to aiming for strong similarity, some companies were said to strive for strong diversity across their product portfolio, as in the Japanese model line-up of Toyota. A number of the experts recognized that the diversity in styling increases with the amount of products a company has in its portfolio and the amount of different customer segments targeted. For example, a multinational consumer electronics producer was noted by one of our experts to use a multitude of styles on their products. This was done to reach the widest possible coverage of customer segments with their product portfolio. In contrast, another expert who worked for a smaller company noted that "with such small production, ... we think that it [to use multiple styles over the product portfolio] would destroy us."

The experts also noted a hybrid strategy positioned between styling a product very similar and very different to the present product portfolio. In many cases, companies strive to implement a number of category-specific styles. Nokia, for instance, has a seemingly versatile line-up in terms of visual appearance, but nurtures more consistent designs within various stylistic and functional categories (Karjalainen, 2004). One of the interviewed design consultants explained this phenomenon in the following terms: "if you take two Nokia mobile phones, they might look totally different because they are directed to different consumer groups ... these two consumer groups might be the snowboarding group and the business man and they do not have many things in common. So, ... the styling can be totally different." Another example is Sony, who also does not follow a singular brand style but historically often has implemented distinctly styled product lines to fit a particular target group (such as My

first Sony). In sum, this kind of hybrid strategy can create and maintain recognizable styles for specified groups of products, while simultaneously and cost effectively apply a single technological and/or functional platform over various customer segments (Ravasi & Lojacono, 2005; Sanderson & Uzumeri, 1995).

Succession of product generations

In a number of cases, the experts described how their companies aimed for consistency in styling over time. For example, they had classic products that matched their current assortment, using a strategy of high similarity over product generations. The successive lines of HiFi-systems of Bang & Olufsen are exemplars of how companies reinforce similarity over product generations. Volkswagen has also used a high similarity over product generations from the first to the fifth generation of the Golf model (called Rabbit in North America). Just as reinforcing similarity across the product portfolio, similarity over successive generations helps to create recognition and to transfer symbolic meanings across the products of a brand (Karjalainen, 2004; Schoormans & Robben, 1997).

The experts noted that in some industries companies seem to change the styling of their products frequently, to stay up-to-date with the latest fashion trends and preferences of consumers. For example, Toyota has changed the styling of the Corolla significantly between product generations, presumably to create a sense of novelty, to differentiate the new model from previous ones, and probably also to accommodate to the changes in taste among its customers. As noted earlier, a strategy of diversity can be used to draw attention to new products and to positively surprise customers. With respect to this, one expert noted that they yearly "add more fast-moving elements to the assortment, which are more campaign products, ... and which makes the assortment more interesting for the consumer."

As in the case of the present product portfolio dimension, companies often produce waves of similarly styled products, followed by strong deviations from the styling of previous models. In the case of Buick, researchers at Carnegie Mellon University (McCormack et al., 2004) noted

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that the Buick styling can be broken down into period styles that lasted several years, separated by more prominent changes. The transitions from one style to another were caused by changes in technology, design philosophy, studio leadership and/or control of the company. Companies have also been found to make major styling changes when they wish to reposition their brands (Underwood, 2003). In a case study of Volvo's design management in the 1990s, Karjalainen (2004) has described such a drastic style change. Starting with the introduction of the Safety Concept Car in 1992, Volvo implemented considerable style changes by applying a number of distinctive design features consistently across the whole product portfolio. This was done deliberately to strengthen the Volvo associations of safety and Swedish heritage, and to add a more dynamic and attractive flavour to the brand that had become too conservative and outdated in terms of styling.

Products of competitors

Although most literature on styling strategies tends to argue that companies should strive for styles that are distinct from those of competitors, we have also found examples where the reverse is true, that companies set out to style their product as similar to those of other companies. There may be a number of benefits associated with this latter strategy. Consumers might buy an imitator by mistake, or they may believe that the new product originates from the same brand or has similarities in quality with the original (Kapferer, 1995; Loken, Ross, & Hinkle, 1986; Miaoulis & Damato, 1978). Further, similarity in styling with a category standard can be important to make consumers recognize a product's functionality (Monö, 1997; Southgate, 1994).

From both the literature and our interviews we have identified two strategies aiming for strong similarity with competing products: copy-cat similarity and category similarity. In the case of a copy-cat strategy, a company strives to be similar to a specific competitor, either because it has a dominant market position or because it has a domineering style. An example of the first motive (dominant market position) is the host of IBM-clones that replicated the style of IBM PC's in the 1980s. An example of the

second (a domineering style) are the PC producers eMachines and Future Power, who introduced PC's during the mid-1990s (the eOne and the AIO respectively) that mimicked the styling of Apple's iMac to such a degree that Apple filed law suits against the two (Chong, 2004). In the case of category similarity, a firm strives to appear similar in styling to multiple competitors. In other words, a firm strives to appear similar to a category standard, such as many earthenware manufacturers do when they produce the generic type of white breakfast plates. Another example of this strategy is found in the description of one of the interviewed experts regarding the preparations of styling a new low-priced TV: "We did fairly superficial market research. We went to the shops and took all the catalogues. We wanted to see what is out there. We evaluated the existing products. What was good? What was bad? What is the tendency? What is the direction of the design? Is it sharp edges? Rounded shapes? Then we developed our concept [in line with what we saw]." Besides styling products similar to competing products in their own market, it was also noted that companies can match the styling of their products to complement manufacturers in other markets. An example of this strategy can be found in that, following the success of the iPod, a number of firms have launched accessories that match the iPod in styling.

In most cases, however, the experts stated that their firm, or the firms of their clients, strived to differentiate in styling from their competitors. For instance, one expert, while elaborating on her firm's positioning in the market, noted "We do not want to copy ... other brands and competitors. We want to do our own designs." As in the case of the Dyson's Cyclone cleaner, the importance of being perceived as unique (e.g. in terms of innovativeness) was commonly used as justification for this strategy. Research also shows that differentiation in styling is important to facilitate the learning of quality differences among products (Warlop, Ratneshwar, & Osselaer, 2005). Besides this learning effect, consumers might also associate a diverging style with a company's creativity and value. According to Holt (2002), consumers have grown tired of brands that in their market communications follow up on some cultural movement (e.g., urban music) without ever having had an instigating role in that movement. Since styling

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plays an important role in attaching meanings to branded products, and because product styling is a key cultural instrument for brands (Underwood, 2003), such a resentment for non-creative brands may well have become central in people's appreciation of distinctive and original styles. As one expert noted, it was crucial for their company to launch products that were different from competitors because their customers did not value products that held strong resemblance to existing products.

FINAL COMMENTS

Harley Earl's commercial perspective on styling went far beyond the argument that the success of styling should be measured in the marketplace. For example, he argued for the systematic use of minor style changes (1) to prepare customers for more radical style changes and (2) to yearly present customers with seemingly 'new' vehicles cost-effectively (Gartman, 1994; Sloan, 1996). In line with Harley Earl's commercial view on styling, we have elaborated on a number of other theories derived both from practice and the literature regarding the commercial role of styling. More specifically, we have elaborated on three processes of attraction and introduced a three-dimensional model incorporating a number of styling strategies. This model shows that the styling strategy a company should select for a new product is closely related to the strategic priorities of a company.⁵³

⁵³ Figure 1 summarizes some of the main business arguments raised in the literature and during the interviews with respect to strategic styling decisions. As such, the benefits associated with different directions sometimes overlap in more general terms. For example, in the (marketing) management literature on styling, direct references to the transfer of symbolic meaning are predominantly made with respect to branding and the efforts of companies to position themselves (and their products) through styling. In doing so, companies (and their designers) are advised to nurture similarity over the present product portfolio and over successive product generations to help consumers transfer their beliefs concerning existing products to new ones. Companies are also warned about how competitors can profit from existing meanings by styling their products to be similar to those of the competition. This said, a transfer of symbolic meaning also occurs when companies (and their designers) target products at different market segments, follow-up on trends in the market, etc.

Although it is difficult to provide exact guidance regarding on how to use styling and when the different styling strategies are most beneficial, it is possible to distinguish a basic logic regarding styling in commerce. First, attention is a prerequisite for making consumers notice products and subsequently derive meanings from their styling. Theoretically, the more a product is styled to deviate with comparable products the more attention it is given. Companies who desire to draw attention to a new product can therefore consider how their new product can deviate with their present product portfolio, prior product generations and the products of their competitors. Second, companies can use similarity in product styling to classify a product as a member of a certain product category or brand. By recognizing a product as a member of a category, consumers associate the product meanings relating to the category. Companies should therefore consider in what way they wish a new product to relate to existing products and brands and what meanings they might attach to the product. It should be noted here that there may be a conflict in the two goals of attracting attention and establishing recognition – to make a new product with a distinctive style that is at the same time reminiscent of existing products. But a resolution of this conflict lies in prioritizing which strategic goals are more important for the company, attention drawing or recognition. This does not need to be an either/or priority. Raymond Loewy's MAYA strategy (Most Advanced, Yet Acceptable) is an example of a mixed strategy that stresses distinctiveness over familiarity, but only to a certain degree (Lowey, 1988). But as we hope to have shown, there may also be other options available to strategic styling, and in some circumstances it might be more sensible to put recognition before attention drawing.

Third, the shared symbolic meaning of product styling is derived from the social context of the product. For example, where and when is it used? Who is using it and for what purpose? Companies can influence (for example, through advertising) how consumers perceive the social context and they should therefore, besides considering what meanings they wish to communicate, consider how to support the embodiment of these meanings in the product. However, the fact that consumers also derive personal

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meanings from products implies that companies cannot perfectly control that consumers only derive specific meanings from the styling of a product (Richardson, 1993). Further, it can be argued that the symbolic meaning of styling is iconic, and that product styling plays a role in visual culture. Since we have focused on the commercial role of styling, we have not explored this role here. However, there might be a more implicit and 'moral' fabric underlying some styling decisions, such as the expression of the designer, something that our interviewed experts mentioned. Even though they did not cite this motive explicitly as a commercial basis for company decision-making, it might still explain why some styling efforts are seen by companies as more appropriate and 'good.' Therefore, a further exploration of the relation between the commercial and public role of styling can help to clarify the importance of styling more fully.

As noted in the beginning of this paper, studies show that companies often struggle in their efforts to benefit from styling, due to problems associated with managing the styling process. Part of the problem derives from the complexity designers and managers face in discussing designs with each other (McCormack et al., 2004; Shaw, Shaw, & Tressider, 2002; Warell, 2001). The model and strategies that are presented here can support discussions on the strategic use of styling. It is however important to note that the world is too complex to be encompassed in generic models. The strategies discussed in this paper constitute a subset of potential strategies for how companies can benefit from styling. Although it has not come up in the interviews, there might still exist other intermediate goals of styling that attracts customers in a commercial setting. For instance styling might support changes in other areas such as functionality or technology. Despite these limitations, we believe that the goals, the strategies, and maybe more importantly the arguments presented in relation to each of them, can provide valuable insights into how companies can commercially benefit from styling by making more elaborate decisions.

In addition, we are convinced that strategic decisions on product styling can positively complement designers' intuitive sense for how to shape a product. We therefore hope that the arguments presented throughout this paper will inspire discussions on how companies should

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apply product styling to consumers and how they can improve the product styling process. The success of their decisions may be proven in the market. Further, it can be argued that the commercial and public roles of styling is iconic and that product and brand styling is iconic. Since we have focused on the commercial and public roles of styling, the author wishes to thank the University of Cambridge for its funding on an earlier version of this paper. The author would like to thank the designer, sometimes through our intermediary, for their time and effort, although they did not see this as their primary role for the company decision-making. It might still explain why some styling decisions are seen by companies as more appropriate and 'good'. Therefore, a further explanation of the relation between the commercial and public roles of styling can help to clarify the importance of styling more fully.

As noted in the beginning of this paper, we show that companies often struggle in their efforts to benefit from styling due to problems associated with managing the styling process. Part of the problem derives from the complexity designers and managers face in discussing designs with each other (McCormack et al., 2004; Shaw, Shaw & Trinder, 2002; Warril, 2001). The model and strategies that are presented here can support discussions on the strategic use of styling. It is however important to note that the world is too complex to be encompassed in generic models.

While investments in industrial design have been found to pay off, it is unclear how the value of such investments should be assessed. Especially, there is a lack of knowledge on the scope of the styling activities executed by industrial designers and how this value of design is realized. In this essay, I address the value (and performance assessment) of styling activities for companies. Expanding on the discussion on brand styles in Chapter 2, I define the scope of styling activities. Next, by building theory through a theory-building multiple-case study of style-sensitive companies in Finland, Sweden and the Netherlands, I study the performance assessment of styling activities. The results show that company managers and designers engage in styling not only to stimulate company profits, but also to enhance brand visibility and to promote a wider acknowledgment of their capabilities in the market. I summarize these results in a first comprehensive scheme on how styling is assessed within companies. The model delineates three domains of value contributions of styling that are of managerial interest in both the short and long term: (1) financial profitability, (2) market visibility and (3) professional acknowledgment. Furthermore, the results extend the managerial reasoning on styling by showing how the perceived value of styling changed in relation to the contextual objectives and constraints that framed how the companies operated and made decisions on the expression of their products.

CHAPTER 4

THE VALUE OF PRODUCT STYLING: A MULTIPLE-CASE STUDY ON THE PERFORMANCE ASSESSMENT OF STYLING ACTIVITIES WITHIN STYLE- SENSITIVE COMPANIES⁵⁴

Companies investing in industrial design are typically more successful than their competitors (for a review of how companies reach success through design see Mozota, 2003). In particular, a number of studies show that such companies achieve greater profits than their competitors, as evaluated with a variety of financial benchmarks (see e.g. Bruce, Pottter, & Roy, 1995; Hertenstein & Platt, 2000; Hertenstein, Platt, & Brown, 2001). This is particularly true of companies that are early users of industrial design in their industry, because their investments in design give them an edge on the competition (Gemser & Leenders, 2001). Given these findings, it is not surprising that a growing number of companies make the decision to invest

⁵⁴ This chapter is an adaptation of Person, O., Snelders and Schoormans, J. (2011) The value of product styling: A multiple-case study on the performance assessment of styling activities within style-sensitive companies (under review).

in industrial design to sustain a competitive advantage within their field (Julier, 2000).

Investments in design may pay off, but it is often unclear how managers should address the value of industrial design in day-to-day practice. Numerous definitions of industrial design exist in the design and management literatures (see e.g. Buchanan & Margolin, 1995; Kotler & Rath, 1984; Lorenz, 1990). As scholars continue to try to capture the different facets of industrial design, the scope of the profession seems to be ever broadening (Valtonen, 2007). The result is a blurring of the borders between what is meant with design, product development and innovation (Marxt & Hacklin, 2005). Managers remain therefore hard pressed to find adequate means for assessing the value of industrial design for their company (Hertenstein & Platt, 1997).

The lack of research concerning the value of design is particularly evident when it concerns the styling capabilities of industrial designers. Styling – roughly defined as providing products with a particular look and feel – has long been advocated as one of the most basic and valuable capabilities of industrial design (Doren, 1954; Lippincott, 1947). Contemporary literature on design also promotes the relevance of styling in industrial design (Person, Schoormans, Snelders, & Karjalainen, 2007; Wang, 1995). Specifically, the quality of designers' 'artistic' capabilities in shaping new products is put forward as a strategic resource to be managed diligently (Postrel, 2004; Ravasi & Lojcono, 2005; Verganti, 2008). Multinational companies spend significant resources on styling to secure effective designs for their products (Moulson & Sproles, 2000). These organizations also spend time and money on educating designers to style products in line with a design philosophy that is closely tied to their corporate and brand strategy (Karjalainen, 2004; Schmitt & Simonson, 1997). A case in point is Nokia, who has targeted a range of specific customer segments by using differences in form and colour to express its product portfolio in a variety of design styles. The company guards these styles carefully as a strategic resource: in 2006, Nokia took a range of manufacturers to court for styling their products in a Nokia brand style ("Nokia sues two Chinese rivals," 2006).

As noted by Krishnan and Ulrich (2001, p. 14), few management studies have investigated designers' work of style with a possibility to contribute substantially to company performance by studying this topic in more detail. A reason for this lack of research on style and styling is that the management of styling activities often is seen as a challenging, sometimes mystifying task. Styling is considered to be based on the "soft," creative capabilities of designers (Lorenz, 1994), with the results hinging largely on the skills and connections of individual designers (Verganti, 2009). In addition, fluctuations in taste and fashion imply that market response to the outcome of styling is hard to predict prior to product launch (Cox & Cox, 2002; Moulson & Sproles, 2000). As a result, styling activities seem elusive, and they have long been considered to be a particular problem area in the management of design (Kotler & Rath, 1984).

With an increasing interest in the accountability of investments, a value assessment of industrial design is becoming more important. However, in day-to-day practice managers find that traditional (financial) measures of performance only partly reflect the value of styling activities (Bangle, 2001). This creates a problem for managers, because they need to evaluate styling activities in order to manage these activities more effectively. In this paper, we address this problem in the management of design. Based on a clear (re)definition of styling, and a theory-building multiple-case study of style-sensitive companies, we argue that company managers and designers engage in styling activities not only to stimulate company profits, but also to enhance brand visibility and promote a wider acknowledgment of their capabilities in the market. We illustrate these claims by describing how press coverage and design awards function as indicators of styling performance, alongside product sales. Next, we extend the managerial reasoning on styling by showing how the value of styling should be assessed in relation to contextual objectives and constraints that frame how companies make decisions on the expression of their new products. The paper ends by discussing the implications of our findings for practice and theory.

PRODUCT STYLING DEFINED

Design as styling has been a recurring conception in the history of industrial design (Pulos, 1986). However, the definition of styling, and thus the scope of activities it describes, is a topic of debate. One popular conception follows a conception of style in art that arose in the beginning of the 20th century (see e.g. Ullmann, 1957), which hinges on the idea that industrial designers have separate concerns for the form and function of a product. Here, style and styling are limited to a concern for form, detangled from the functionality of a product. For example, Schweizer (2003, p. 28) notes that in much management literature style is defined “as the ‘how’ of the ‘what’ – that is the sum of the characteristics of how something is said or done, in the form of an identifiable pattern.” In this vein, styling involves changing the form of a product in ways that do not alter the product’s functionality or underlying technology, and which can be replicated in other products.⁵⁵

However, disconnecting styling from functionality and technology is highly problematic. In the past, industrial designers have resented the term styling for exactly this reason, because it reduces one of their core capabilities to a type of superficial, decorative art (Pulos, 1986) or to “the wrapping of products in nice shapes and pretty colours” (Lorenz, 1990, p. x). From the perspective of design, form, function and technology are intertwined, and variations in one automatically have implications for the others (Dormer, 1993). The same is found when looking to the adoption of design, where studies have indicated that consumers infer beliefs about product functionality (and quality) based on variations in form (Creusen & Schoormans, 2005; Rindova & Petkova, 2007).

At the same time, companies still expect designers to be responsible for the look and feel of products (Bohemia, 2002), and this has resulted in a number of attempts to address styling activities while avoiding the term

⁵⁵ This separation between form and function is also hinted towards in recent conceptualizations of industrial design (see e.g. Candi, 2010) where industrial design is presented as having separate concerns for the aesthetic/symbolic qualities of products, independent from functionality. The functionality of products is conceptualized as a concern for engineering design.

style. To this end, a variety of alternative terminologies have arisen, such as aesthetic design, semantic transformation, product language, product format, design DNA, etc. While we welcome the implied dismissal of the traditional conception of style and styling, the problematic separation between form and function is typically not addressed in these alternative terminologies. In addition, a more contemporary conception of styling has been developed that does not depend on a separation between form and function, or on a view of styling as superficial decoration. Like earlier definitions of styling in design, this reassessment of styling is adapted from a broader discussion on style in art and design (see e.g. Elsner, 2003; Person & Snelders, 2010; Sohm, 2001).

The separation between form and function has been a prominent concern for historians and philosophers in art and design who have written about style. Goodman (1975, p. 803) advocated a stronger relation between decisions on form and content (the artwork's equivalent to a product's functionality or technology): "What is said, how it is said ... are all intimately interrelated and involved in style" (p. 803). He based his argument on the idea that content often fulfils an important role in descriptions of style because it allows for notable effects in the perceptual quality of an artwork. For example, the content of a painting (e.g., a portrayed landscape versus a portrayed still-life) allows for important perceptual qualities that define the style of a painter. As earlier suggested by Ackerman (1962), such noticeable effects originate in how artists and designers go about in solving problems of technique and representation. On the one hand, they produce reoccurring effects when sticking with known solutions in order to avoid unnecessary risks and to follow accepted techniques. On the other hand, artists and designers produce new effects when seeking new solutions, as they are compelled by boredom and the human instinct to reject past practices and explore and challenge themselves with new technical or representational solutions. In balancing between these two, Ackerman (1962, p. 236) argued that a style "may be thought of as a class of related solutions to a problem – or response to a challenge – that may be said to begin whenever artists begin to pursue a

problem or react to a challenge which differs significantly from those posed by the prevailing style or styles."

When analysing styles as the outcome of problem-solving activities, the distinction between form and function is of little relevance. Rather, what is important is the existence of a class of related solutions to a problem (or set of problems), which brings about an expression ("noticeable effects") in products. In the case of industrial design, the application (and display) of a knucklehead V-twin engine in a motorcycle has become important in defining the style of Harley-Davidson, setting it apart from the style of other motorcycle brands. Another example is that of Karjalainen and Snelders (2010), who describe the strategic interest of Nokia and Volvo in establishing new product styles during the 1990s. Both companies took explicit actions to express their concerns for cell phone usability or car manoeuvrability, leading to telephones with friendly smiling lines and cars with more aggressive, backswept contours.

As a core capability of industrial design, our understanding of styling is that of a problem-solving activity that "transforms a set of product requirements into a specification of the geometry and material properties of an artifact" (Ulrich & Pearson, 1998, p. 352). To this end, theories on style specifically point to the expressive character of such transformations (i.e. the noticeable effects). This expressive character can be accidental, as was probably the case with Harley-Davidson's V-twin engines, or it can be more strategically planned like in the cases of Nokia and Volvo. Therefore, in distinguishing styling from the broader concept of design, we delineate the scope of styling as the (conscious) activity of shaping the *expression* of solution sets (as opposed to creating the solution sets *per se*). This reassessment of styling allows for noticeable effects of both form and function in a design, and designers may work on both when styling new products.⁵⁶ For example, by styling a mp3-player to have smaller buttons and a metal casing, a designer will not only give it a "sleeker" look, but also

⁵⁶ In the remainder of the text we use the term styling according to this definition, and the term 'expressive design' when referring to earlier work that addresses styling activities without calling it so.

alter its usability and robustness. Or, by repeatedly using black rubber on handles, the kitchenware brand 'Good Grip' not only improves the usability of their product but also its visual recognition in the market place.

CONCEPTUALIZING THE VALUE OF STYLING

A main interest of practitioners and academics in conceptualizing the value of styling has been its purported impact on financial profitability. Raymond Loewy, the designer who styled the iconic Lucky Strike packages in the 1940s, stated that the most beautiful curve was a rising sales graph (Gibney & Luscombe, 2000). He envisioned styling as the expression of technological and social progress in the high modern age, driven by the MAYA principle – "Most Advanced Yet Acceptable" (Loewy, 1951/2002). According to this principle, styling activities appeal to the public and stimulate sales by striking a balance between newness and familiarity. Similar claims had been made in the management literature (see e.g. Higgins, 1932; Nash, 1937), and by the 1950s styling was established as an important activity for boosting sales, and seducing consumers to replace products prematurely (see e.g. Stewart, 1959). Later, this financial effect of styling has been studied empirically for consumer products such as colour TVs (Bayus, 1988) and a range of other electronic consumer durables (Nes & Cramer, 2005). These studies confirm that changes in design expressiveness promote the sales of new products on the market.

Another potential value of styling is that it will help companies to expand their markets. During the first part of the twentieth century, General Motors' first manager of industrial design, Harley Earl, argued that the value of styling for General Motors laid in capturing larger parts of the market, as it served to differentiate its various brands through a variety of car styles. In an automotive market dominated by Ford's highly standardized Model T, Earl recognized the value of a segmented view of the market, and the importance of styling in responding to the latent need for variety across consumer segments (Earl, 1955; Gartman, 1994). Later studies have implicitly touched upon the expressive character of design, as a means to differentiate the products of a company and create an important

competitive advantage (e.g. Sanderson & Peng, 2001). Studies have also addressed specific ways in which expressive designs help brands to position themselves in the market (Kreuzbauer & Malter, 2005), and communicate brand values through particular design styles (Karjalainen & Snelders, 2010; Ravasi & Lojacono, 2005).

Recent studies have combined an interest in replacement rates and market segmentation by looking into the relation of styling activities with cycles in fashion and technology. Studies have investigated how styles are managed in the fashion industry (Cappetta, Cillo, & Ponti, 2006), and also how the logic of fashion applies to high-tech industries, introducing new forms of stylistic competition of products such as home computers (Eisenman, 2006) and mobile telephones (Djelic & Ainamo, 2005). Other studies have looked at the strategic relevance of expressive design in technology innovation (Dell'Era & Verganti, 2007; Verganti, 2008) and new product development (Person, Snelders, Karjalainen, & Schoormans, 2007). Together, these studies show an additional commercial benefit of styling in terms of seducing first-time buyers, and of its potential to reframe the perception of value of current buyers, thus changing earlier established bases for market segmentation. Eisenman (2006), for instance, describes how Apple obtained competitive advantage through the introduction of the candy-coloured iMac in 1998. This style also paved the way for stylish home computers, thus changing the rules of competition that until then had only produced in beige/grey/black 'office' styles.

The most cohesive body of work on the value of styling has been carried out in the automotive industry. These studies show that styling has an effect on both sales and profits. Fisher, Griliches and Kaysen (1962) documented the high costs associated with developing new automotive styles. Recognizing that such costs are fixed, Menge (1962) proposed that larger firms should use styling to give them a relative cost advantage over smaller firms, because styling costs per unit sold will be lower for them. Other studies have addressed the impact of changes in design styles on sales and market performance (Hoffer & Reilly, 1984; Millner & Hoffer, 1993; Sherman & Hoffer, 1971). With respect to such changes, scholars have found effects of styling changes on both long- and short-term profitability

(Pauwels, Silva-Risso, Srinivasan, & Hanssens, 2004) as well as the impact of style changes on sales performance in comparison to technological innovations (Talke, Salomo, Wieringa, & Lutz, 2009). In brief, these studies indicate that changes in style can have a positive impact on sales and profitability, and that the expressive value of styling can outlive the impact of technological innovations, irrespective of company size.

The abovementioned studies substantiate that styling activities can lead to higher sales and financial profitability. However, the question of how styling creates these financial values has not systematically been addressed in the management literature on styling. In addition, managers have also been found to attend to non-financial effects of design activities, which they can value because of their potentially intermediary role in achieving financial effects, or which they can value in their own right (Hertenstein & Platt, 1997). The management literature has only cursorily addressed such measures for design, and for styling in particular. However, it would be beneficial to pay attention to these measures for a number of reasons. First, managers are challenged by the fact that investments in design are typically made several years prior to market launch (Hertenstein & Platt, 2000). This means that there is a substantial lag between an investment in styling activities and its potential financial returns. Second, as is the case in industrial design activities in general (Hertenstein & Platt, 1997), the financial contribution of styling activities is often difficult to isolate from other company and product development activities. For example, Apple sold 2 million iMac computers in the first 12 months following its launch in 1998, and 6.5 million during its first 3.5 years on the market (Eisenman, 2004). While part of these sales were attributable to its novel look, the impact of Apple's styling activities is hard to assess because the company simultaneously launched an extensive advertising campaign emphasizing the novelty of the iMac (Cuffaro et al., 2002). Third, a style will not easily be recognized in the market as 'good' or appropriate if the quality of the product does not measure up to expectations. The application of a beautiful style can backfire when it is interpreted in the market as a misleading cover-up, creating the wrong

expectations about use.⁵⁷ Hence, in order to understand how styling provides value to companies, we will attend to both financial and non-financial measures of performance. Two research questions guide our inquiry:

What factors underlie the value of styling for companies?

How can managers assess the value associated with styling activities?

METHOD

We opted for an iterative theory-building multiple-case study approach to study our research questions. This choice was appropriate for several reasons. First, while a number of studies touch upon the value of styling, no study had explicitly set out to conceptualize this value for companies or address the need of managers to properly assess this value. Second, given the general ambiguity surrounding the concept of styling in the literature, it was unclear which of the factors mentioned in earlier studies would be relevant. Thus, a multiple-case study approach provided an opportunity to generate new theory, grounded in practice, on a conceptually unexplored research topic while at the same time reconciling and capitalizing on earlier studies (Eisenhardt, 1989). As such, our resultant theory will be "situated in and developed by recognizing patterns of relationships among constructs and across cases and their underlying logical arguments" (Eisenhardt & Graebner, 2007, p. 25).

In selecting cases, we followed a theoretical sampling strategy (Yin, 1994). We purposefully sampled a broad set of companies from different industries in Finland, Sweden and the Netherlands. Reports from industry indicate that the use of industrial design is a well-established practice within all these countries, with many companies profiting from investments in design (Candi, Gemser, & Ende, 2010; Nielsén, 2008). All

⁵⁷ During the 1950s and 1960s, such false expectations were common within the automotive industry where car exteriors often expressed technological progress, while under the bonnet lay an engine, suspension, and propulsion system dating back to the prewar period (see e.g. Pulos, 1986).

three countries also have a long tradition of industrial design education and of companies producing in (inter)nationally recognized styles. A further aim of our sampling was to study the value of styling under varying organizational and market conditions in order to provide a rich source of information for theory development. At the same time, we focused our sampling on *style-sensitive* companies that were recognized as leading in their styling within their industry for their knowledge and interest in our topic. In collaboration with design experts from academia and practice, we considered not only high-end design companies and companies operating in consumer markets where the use of styling is well-established, but also companies that profited from styling yet held a less publicly visible design profile. As a result, we covered companies that had a strong interest in styling but that (1) used styling differently, (2) operated in different markets and (3) had varying experience in managing styling activities. Thirty-two companies were contacted by e-mail and telephone. Sixteen of them volunteered to participate. Details about these companies are presented in Table 1.

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Table 1: Company and interviewee information

	Products	Informant(s)	Industry	Size
F1	Kitchen and garden tools	R&D manager	B2C	1,000 - 500 employees
F2	Building components	Vice president, Design	B2B	> 10,000 employees
F3	Heavy machinery	R&D manager	B2B	1,000 - 10,000 employees
F4	Kitchen appliances	Managing director	B2C	50-100 employees
F5	Sport equipment	Concept manager Product manager Industrial designer	B2C	500-1,000 employees
F6	Furniture	Managing director	B2B/B2C	0-50 employees
N1	Furniture	Managing director	B2B/B2C	100-500 employees
N2	Sport equipment	Senior industrial designer	B2C	50-100 employees
N3	Furniture	Export manager	B2C	100-500 employees
N4	Decoration goods	Design manager* Management assistant	B2C	100-500 employees
N5	Kitchenware	Design manager*	B2C	100-500 employees
S1	Healthcare	Product designer	B2B	1,000-10,000 employees
S2	Office furniture	Design/Product development manager	B2C	1,000-10,000 employees
S3	Home healthcare	R&D manager	B2C	100-500 employees
S4	Glassware	Design manager	B2C	500-1,000 employees
S5	Personal care	Category manager Brand director 2 product developers	B2C / B2B	>10,000 employees

F1-F6 = Finnish companies, N1-N5 = Dutch companies, S1-S5 = Swedish companies

* During the course of the study, one of the Dutch companies was acquired by one of the other companies, making the same person the informant for both companies

Data collection and data analysis

An important benefit of case study research is the possibility to integrate data analysis in data collection. This allows the researcher to follow up on emergent themes during the research process, instead of investigating such

themes post-hoc (Eisenhardt, 1989). With this benefit in mind, we organized data collection and data analysis iteratively to arrive at a coherent understanding about what factors influence the value of styling and how companies assess styling activities. To this end, we reflected critically on our list of topics after each interview, and performed two rounds of interviews with key informants at the participating companies. To this purpose, we requested interviews with the manager(s) involved in assessing the performance of the company's styling activities. In most cases, our request resulted in an interview with a member of general management and, in a few cases, with a person working in close collaboration with designers and managers on decisions on styling. In two cases, on the suggestion of the companies, multiple informants were identified and interviewed to better understand the value of styling, and how the company managed styling activities. Since there was high agreement among multiple informants in describing the styling practices of the companies, and since many decisions on style seemed based more on individual intuition than on collective debate, we concluded that single informants could provide a rich and accurate description of the perceived value of styling within an organization (even if this informant may personally favour some practices over others).

The aim of our first round of interviews was to map the relevant areas of interest regarding styling and its potential value for companies. The interviews were semi-structured and organized around a topic guide in order to stimulate natural dialogue (Fielding, 1993). The topics included a description of the company's industrial design organization, the relevance of styling in its industry and the specific value of styling for the company. The interviews lasted from 45 minutes to two hours, with the majority lasting well over an hour. In preparation for each of the interviews, we familiarized ourselves with the company's styling activities by visually reviewing its product portfolio and product history. Each interview began with a discussion on the role of industrial design within the company. Although the styling capacity of design was framed using a number of different terms, these terms all encompassed the expressiveness of design, concerning the 'look and feel' of new products. The interviews

ended with a discussion on the relevance of other value contributions brought forward in the literature, and those presented by other informants in previous interviews.

The interviews were audio recorded and transcribed, leading to over 360 single-spaced pages of verbatim data. In analysing the data, we reviewed and coded the transcripts to establish themes, connections and contrasts within and across the individual cases (Eisenhardt, 1989). In doing so, we complemented and triangulated the interview data with secondary data available on websites, from marketing and sales material, press reports and internal material provided by the informants. We also confronted emerging findings with the extant design and management literature on styling and industrial design.

The result of this first round of interviews was a list of value contributions associated with styling, and a set of factors that influenced the perceived value of styling, and its assessment by company managers. In a second round of interviews, informants were given the opportunity to comment on these findings and extend their initial reasoning. In preparation for the second round of interviews, we made a model to capture our preliminary findings in diagrammatic form. The role of the model was to provide a conceptual foundation that would enable us to comprehensively address our findings with the informants (Crilly, Blackwell, & Clarkson, 2006). The use of a model proved essential in (1) conveying our findings from the first round of interviews to the informants, (2) providing an integrative conceptualization of styling activities to frame further discussion, and (3) making the informants actively reflect and expand on the argumentation of themselves and others.

All companies volunteered to take part in the second round of interviews.⁵⁸ As in the first round, the interviews were semi-structured and typically lasted over an hour, with some lasting well over two hours. The aim of the interviews was to evaluate the relevance and completeness of our findings. By unveiling the various building blocks of our preliminary

⁵⁸ During the course of the study, one of the Dutch companies was acquired by one of the other companies, making the same person the informant for both companies.

model in a stepwise fashion, informants had the opportunity to comment and expand on our findings, allowing us to establish a more informed understanding of the value of styling for the companies. The interviews were specifically targeted at how this value was assessed, stressing not only *which* measures and practices were used but also *how, why* and *when* certain measures and practices were favoured (Sutton & Staw, 1995).

As in the first round of interviews, the discussions were audio recorded and transcribed. This resulted in a further 400 single-spaced pages of verbatim data. In analysing the data, we initially adhered to our established themes, and placed attention to potential new themes to complement and contrast findings the first round of interviews and from the literature. We were specifically interested in the conditions under which informants ascribed value to styling activities.

We ended the analysis by summarizing our finding in a final model, which consolidated the informants' reasoning across the cases (Eisenhardt & Graebner, 2007), focusing on the underlying structure of the companies' value assessments rather than the individual situation facing each company. The model and a summary of the study were distributed to the informants and three academic experts for comments, providing a second feedback loop on our findings. Each of the academic experts had previously studied management issues in industrial design in one of the three studied countries. Both the informants and the academic experts provided a number of minor clarifications to improve the completeness and relevance of our findings.

FINDINGS

The cases constituted fertile ground for theory development on the value of product styling and on the question of how managers can assess this value. This was helped to a large extent by the use of two rounds of interviews, which increased the consistency of the results: the informants agreed to a high degree on the factors that were summarized in the second round. Their comments also allowed us to better understand the importance of, and relationship between different factors. In presenting our findings, we

have anonymized quotations and company information in accordance with our confidentiality agreement with the participating companies.

Overall, the information about the value of styling was situated in a variety of business settings. At one extreme, the expression of products was a critical strategic resource for the competitive position of companies producing goods such as glassware and furniture. These companies had well-established organizational structures for design, encompassing the management of designers working on styling for both niche and mass markets. At the other extreme, the expression of products was an emerging area of competition for companies that produced heavy machinery and building components. These companies had only recently begun to develop effective management practices for styling (often together with the development of their general industrial design practices). Further, the cases included both companies pursuing a single style and those pursuing a multitude of styles within their product portfolios.

The informants connected styling to a range of product development and company activities. They also noted throughout the interviews how styling embraced both form and function, with the two being interrelated and inseparable in shaping the expression of new products. In addition, they stated that styling is tied to the companies' broader objectives and constraints in the organizational and market environment. Thus, while two styling activities may have produced products with similar effects (e.g., sales), the sought objectives and the specific constraints framing those products could result in one of them being perceived as more successful than the other. With informants frequently coming back to objectives and constraints, we will give a lot of attention to the contextual framing of styling activities, addressing the diverse and multifaceted value associated with these activities.

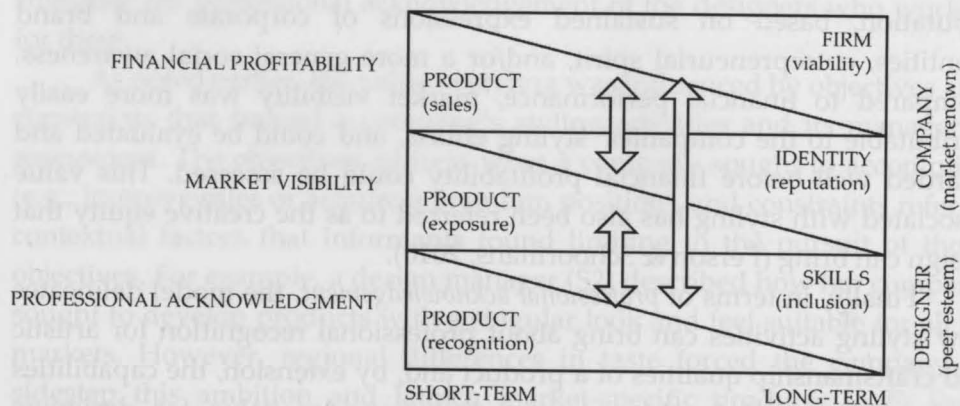
A three-layered value scheme for assessing styling performance

The informants described a range of value contributions in outlining the value of styling for their companies. Secondary materials such as websites and press reports also suggested that the companies targeted and profited from this capacity of design in different ways. In addition, styling provided

value to companies in short and long term. Styling activities not only targeted the direct objective of shaping the expression of a new product, but also long-term objectives on how those expressions related to firm profitability, and identity creation for the company and its designers. Managers thus attempted to assess a number of different value contributions, all seen as important in managing styling activities effectively.

As a multilayered scheme on how styling was assessed within the companies (see Figure 2), the model summarizes three domains of value contribution of styling that are of managerial interest both in short and long term: (1) *financial profitability*, (2) *market visibility* and (3) *professional acknowledgment*.

Figure 2: A three-layered value assessment scheme for managing styling activities



In terms of *financial profitability*, our model incorporates how styling activities brought value to new products in the short term by improving sales and increasing profit margins. It also covers how styling in the long run supported the overall financial viability of companies by enabling them to more consistently and effectively launch products with relevant expressions – sometimes leading to higher firm value through higher share prices. This conceptualization further embraces our earlier discussed studies on the value of styling by addressing the influence of styling on

costs. As we will show later when delineating the specifics of our findings, it also extends these studies by providing new insights into how financial value contributions are brought about by styling activities.

In terms of *market visibility*, the model captures how styling brought exposure and reputation for companies. On a short term, styling creates exposure for new products by expressing the qualities of the companies' products. The expressiveness of design, brought about by styling activities, is often depicted as 'semantic transformation' (Karjalainen & Snelders, 2010) or 'symbolic value creation' (Ravasi & Rindova, 2008) where designers transform certain ideas into the design of products, to be interpreted in the market. Such ideas can originate in corporate identities (Schmitt, Simonson, & Marcus, 1995), business ventures (Svengren, 1995), brand identities (Ravasi & Lojacono, 2005), or society at large (Forty, 1995). Thus over time, styling activities provide a basis for a company's reputation, based on sustained expressions of corporate and brand identities, entrepreneurial spirit, and/or a more general social awareness. Compared to financial performance, market visibility was more easily attributable to the companies' styling efforts, and could be evaluated and guarded well before financial profitability could be assessed. This value associated with styling has also been referred to as the creative equity that design can bring (Person & Schoormans, 2010).

Finally, in terms of *professional acknowledgement*, the model delineates how styling activities can bring about professional recognition for artistic and craftsmanship qualities of a product and, by extension, the capabilities of the designers.⁵⁹ In this sense, styling provides value for designers themselves, in the form of acknowledgement (and inclusion) among their peers. This professional esteem is different from the market visibility discussed above because it is based on recognition for the quality of designers. Reports from design practice (Bangle, 2001; Hertenstein &

⁵⁹ Professional acknowledgment is also recognized as important for innovation in general, as innovative professionals thrive when they receive recognition from peers based on their skills. However, while the innovation management literature typically stresses the technological skills of professionals, professional acknowledgment in terms of styling extends beyond technological mastery to artistic/crafts mastery.

Platt, 1997) suggest that designers are motivated by having their work evaluated in artistic terms. Our data revealed that acquiring professional acknowledgment among peers was critical for many companies and designers. The literature also suggests that pursuing artistic qualities can be of great interest to designers in styling new products (Kotler & Rath, 1984; Verganti, 2006), and that successful design managers stimulate designers in this area (Heskett (2002). Verganti (2006), for instance, attributes part of the success of Italian design companies to their ability to guarantee designers the latitude to pursue their personal interests throughout the product development process. In this study, we deepen these claims by pointing to how artistic and craftsmanship aspirations of designers resulted in expressive variety in the products, which was appreciated by management, and over time also brought market visibility and financial profitability to the firm. We also saw that some companies used specific strategies to stimulate the professional acknowledgement of the designers who worked for them.

As noted earlier, the value of styling was influenced by objectives and constraints that framed a company's styling activities and its managerial assessment. The objectives address what a company sought to accomplish (e.g., improve sales or acquire a premium position), and constraints refer to contextual factors that informants found limiting in the pursuit of those objectives. For example, a design manager (S2) described how her company sought to develop products with a singular look and feel suitable for all its markets. However, regional differences in taste forced the company to sidestep this ambition and launch market-specific products to fit local preferences of consumers. In outlining the perceived value of styling, she justified the use of multiple materials in the product portfolio by pointing to these regional differences.

At the start of the interviews, styling activities were often described as being rigidly framed by objectives and constraints. The problems facing designers in styling new products and the framing of those problems initially emerged as being fixed. However, it quickly became apparent that the impact of objectives and constraints was relative and negotiable. First, the descriptions of what constituted an objective varied over time,

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products, and situation. A vice president (F2), for instance, described how the company's recent interest in industrial design and styling originated in the desire to improve sales. However, her more personal interest extended to "whether the [expression of the] design is unique, outstanding, excellent," and this interest did not always have a direct bearing on sales. Second, an objective that initially appeared to be simple, often broke down into a multitude of objectives with a multitude of constraints, through which designers (and managers) had to navigate in order to create a suitable expression for the product. Third, managers employed various tactics to avoid or change the impact of different constraints. Several informants, for instance, described how they enhanced their designers' expressive freedom by outsourcing production.

In the sections below, we discuss the managerial interest in and challenges with assessing the value of styling in relation to each of the three domains of value contribution listed above. In particular, we will address (1) the main objectives and constraints pertaining to the value contribution of styling to those domains, (2) how value formation in one domain enabled or hindered value formation in another, and (3) how the studied companies assessed the performance of their styling activities in relation to the domains. As the informants described a range of intangible processes for monitoring styling activities, we sharpen our argumentation by focusing on how sales (financial profitability), press coverage (market visibility) and design awards (professional acknowledgement) functioned as tangible indicators of styling performance.

Financial profitability and sales

"Sales and profitability [is the goal of our business activities]. Profitability is the number one ... This is the only goal. The company has to make profit and then you try to reach that through different things. This [styling] is only one of them."

(F4, Managing director)

As discussed above, the informants pointed to both short- and long-term financial objectives of styling activities. The short-term objectives addressed

the sales of individual products, including discussions on how styling functioned as a marketing instrument for boosting sales and raising profit margins. The long-term objectives revolved around the role of styling in sustaining overall profitability, by helping companies launch products with relevant (premium) expressions for a variety of markets.

These financial objectives of styling were confined by internal organizational constraints and external market constraints. A recurring internal constraint on styling was the investment in technology and production facilities. Given the high costs associated with internal production capabilities (or the problem of finding suitable suppliers), these discussions centred on how the available means of production restricted designers in styling new products. For management, the objective was to maximize the returns on past investments in production (as fixed costs), and strive for styling solutions that would keep variable costs in check. This management objective had a prominent effect on the expression of a company's products. An interesting example is the prominent steel finish of products in portfolio of one of the furniture companies (N1). In outlining the history of the company, the managing director described how it had developed extensive expertise in producing steel components. In developing this expertise, the company had rejected product ideas incorporating other materials, because the company did not think it could produce them cost-effectively. The result was that many (external) designers began to incorporate steel components in pitching new product ideas. Thus, management had set the stage for the introduction of products in a recognizable style through their focus on steel production.

Important market constraints in the pursuit of financial objectives were consumer preferences and industry standards. First, consumer preferences were seen to be subject to trends in fashion, and this affected stylistic directions as well as the sales performance of new products. Companies could direct styling activities in line with or away from current trends in the market. This was confirmed by our visual analysis of the companies' products, which indicated considerable variety in the degree of adherence to the main trends in the market. Companies that adhered to trends typically sought broad market appeal. This often resulted in a

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certain blandness in the design of these products, so that they could function in a diverse range of environments. Conversely, deviation in terms of styling was typically associated with seeking a niche position in the market, in order to claim premium pricing. A design/product manager (S4) encapsulated this objective by saying, "What we need to work on is that it does not become a question of price before look, but rather look before price."

Second, for companies producing heavy machinery and healthcare products adherence to industry standards emerged as a prime concern for management in styling new products. Industry norms covered both formal regulations (agreements and legislation) and conventions among business customers. These norms imposed strict requirements on new products. For instance, in the healthcare industry governmental regulations prescribed the use of certain materials, and set key dimensions for the physical form of the product. Likewise, conventions set restrictions on the use of colours for many companies. Informants described how companies needed to adhere to such requirements when styling new products, even if it meant sacrificing the stylistic distinctiveness of the product needed to pursue other objectives. For example, an R&D manager (F3) described how his company had envisioned that it could become more cost-effective in styling by having fewer colour schemes to consider during new product development. However, he noted that adherence to colour guidelines often failed because customers demanded new products to be painted in colours that matched their own corporate branding. Hence, the long-term objective of sustaining premium positioning was blocked by the necessity to secure sales by catering to customer conventions.

While informants listed a range of financial objectives to styling activities, the financial value contribution was often difficult for managers to assess directly. Production costs were described as important tangible performance criteria during new product development. However, once products were on the market, the added value of styling on financial performance in terms of sales and premium pricing for new products was deemed impossible to isolate. To this end, the financial value of styling was not predominantly assessed through direct tangible indicators of

performance. This did not mean that managers questioned the impact of such activities on financial performance. In fact, all informants were convinced that styling could fulfil an important role in determining the sales performance of new products and that the expression of products played a role in determining the future viability of their company. Instead, informants often consulted key professionals and examined non-financial (and indirect) indicators in assessing the performance of styling activities. The expertise (and gut feeling) of these professionals had an important role in assessing the success/failure of future styling efforts, especially during product development. Key professionals often worked closely with the company's customers, holding positions in areas such as marketing and sales. As outlined by several informants, their prolonged experience in the market made them experts on what could work among the company's current customer base. Finally, because management had limited possibilities to isolate the impact of styling in financial terms companies also turned to market visibility and professional acknowledgement as indicators of the overall performance of styling activities.

Market visibility and press coverage

"We talk a lot about visibility [in our strategy for design], and that all new product features must be clear. There must be clear product advantages that you can see and that are connected to the claims we make about what the product should solve."

(S5, Marketing Manager)

Styling contributed to market visibility, establishing a company's renown in the market beyond the direct sales (circulation) of their products. Most informants pointed to how market visibility had a positive impact on financial profitability, and they saw the exposure and the resulting reputation of their products as important intermediate objectives in achieving financial profitability. Styling played a role in this because it was seen as the communicative aspect of design, capable of transferring specific meanings to customers. Informants also described how styling helped to

create publicity, both in 'paid' commercial (e.g., advertising) and 'free' editorial (e.g., product reviews) form.

During the interviews, a range of objectives for styling emerged that targeted market visibility. Short-term objectives revolved around acquiring exposure for individual products. Informants described how styling functioned as a means of expressing the functional and technical capabilities of products. In a broader sense, one designer (N2) described styling as "an extension of what a product is." This designer also described how his company always incorporated surface areas of uncoated material in their products to show off the high quality of the applied materials. Informants also described how styling was used for product positioning, by expressing the central brand values to consumers – "getting the right expression on it," as summarized by an R&D manager (S3). To this end, styling was important in producing distinctive designs that stood out from competitors.

Long-term objectives centred on identity-building and the role of styling in expressing a desired corporate (brand) identity and developing a reputation for that identity in the market. As reported in earlier studies (e.g. Ravasi & Lojacono, 2005), informants stressed how styling was a prominent tool in obtaining or maintaining a "premium" image, providing a foundation for the transfer of brand and product meanings. In establishing recognition, some companies instituted design guidelines to target their styling activities toward achieving "a coherent look". Some informants also described how styling activities were grounded organizationally, with the expression of products reflecting their company's internal process and ways of operating in the market. In this vein, a company's heritage of styles also emerged as a key resource in establishing a reputation for a company, because it pointed to an original quality inherent to its methods of production.

This said, past actions in styling also constrained companies and their designers. Two reasons for this were that successful styles created expectations in the market and established habits of production. With respect to expectations, one design manager (N4/N5) described how the success of past styling activities created expectations among consumers

about what they could expect from future products. He also noted that consumers were typically rather rigid in their responses to novel products – tending to disfavour products that strongly broke with current stylistic directions from the company, or in the rest of market. In repositioning the company's products, he carefully reviewed new products in order to ensure that they only partially conflicted with consumer expectations – sometimes launching “intermediary” products with intermediary expressions first, to “prepare the market.”

With respect to established habits, informants described how the past actions of a company could pose problems for managing styling activities effectively. The situation of one R&D manager (F1) provides an interesting example of the impact of such habits on styling activities. After the company had acquired a competitor, its management team wanted to integrate its own product portfolio with that of the newly acquired competitor. The idea was to create a stronger market presence for the company by taking over the competitor's current customers, and for this it put the two portfolios under its own brand name. In executing the merger, an important step was to extend its own design guidelines to the newly acquired competitor's products, thereby providing a coherent look for the company and transferring the positive associations people had for its own products to those of the acquiree. While guidelines on colour and the use of materials could be readily transferred from one product portfolio to the other, the merger was not entirely successful. The acquiree's products were very different, due to differences in the design process. The two companies had very different approaches to design, from the degree of sourcing components from outside suppliers, to the aesthetic ideals of the designers. These differences led to lower levels of execution of the products from the acquiree, and to unwanted reactions from sales representatives and end customers, who had started to question the company's reputation.

By targeting styling activities toward market visibility, companies (indirectly) sought to improve their financial profitability. In many cases, these two value contributions of style were described as being pursued simultaneously when styling new products. However, next to being a precursor of financial profitability, within some projects market visibility

was also valued in its own right. The clearest example of this emerged in the design of so-called "image products" where companies showed off their technical and/or production capabilities as well as their (sometimes desired future) position in the market. As an example, one manager (N3) described how his company had collaborated with two renowned designers to introduce a set of innovative furniture designs that clearly showcased the company's refined leather-application skills. With limited sales, the short-term financial value contribution was negligible, or perhaps even negative. He also did not envision any major sales volumes for the products in the future. However, the added exposure generated among architects and distributors meant that these solutions fulfilled an important role in sustaining the company's unique position in the market.

In assessing the impact of styling on market visibility, the expertise of key professionals with in-depth knowledge of the market played a prominent role for managers, next to their personal intuition and experience. Several informants felt that their extensive (personal) experience enabled them to predict what consumers and reviewers would think about new designs. However, the most tangible indicator of market visibility that emerged during the interviews was editorial press coverage. In its most quantified form, the value of styling was that it offered free publicity, and could lead to savings in advertising. One managing director (N1), for instance, carefully monitored his company's exposure in the press. Monitoring the press was "the only way" he could quantify the value contribution of styling activities. He did so by equating the degree of editorial press coverage with the costs of acquiring the same advertising space. He considered both the breadth of the coverage (i.e., amount of pages) as well as its circulation (i.e., size of the readership). In addition to saving advertising costs, press coverage was also deemed relevant because the press points out, and 'certifies' the expressive quality of designs to customers. In addition, press coverage reflects emerging stylistic directions in the market. As a result, a number of companies nurtured close relationships with journalists in order to (1) receive favourable treatment in the press, and (2) stay in tune with important trends in the market.

Our informants distinguished different types of press coverage, and they also valued these differently. Due to its narrow distribution, coverage in the trade press was least valued. Nonetheless, companies pursued coverage in trade magazines as a form of advertising (infomercial) to competitors and potential employees. With its broad distribution, coverage in the popular press was highly favoured among managers because it generates added exposure among consumers. Coverage in the design press was also favoured. In particular, coverage in the design press was seen as an endorsement of the aesthetic qualities of the designs that a company produced, and by extension the long-term reputation of its design skills. In addition, the interest of the design press in the artistic/craftsmanship quality of the designs of a company implied a relation to value formation in terms of professional acknowledgment.

Professional acknowledgment and design awards

"You have to recognize talent and originality [in design]. ... If you do not have resources to recognize talent, you have to buy it from somewhere because it is impossible to be in a company that does not have the resources to recognize it when you see it."

(F6 Managing director)

Professional acknowledgment refers to discussions on how designers (and managers) in some cases display a strong interest in a mastery of design that is based on artistic creativity and craftsmanship, which sits next to the more commercial interests of companies. Across the 16 cases, there were very different opinions raised about this value contribution. Some informants considered these interests as an unobtainable luxury that caused problems for managers when communicating with designers. In sharp contrast, another subset of informants vigorously stressed the importance of artistic and craftsmanship interests during the first round of interviews (with a greater number of informants adhering to their importance during the second round of interviews).

From a short-term perspective, professional acknowledgment refers to objectives set for the expressive qualities of products and the (often

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personal) interests of managers and designers in achieving excellence in artistry and craftsmanship with the expression of new products. While such interests went beyond the more direct 'commercial' objectives of companies, pursuing artistic and craftsmanship qualities need not conflict with obtaining financial profitability and market visibility. Pursuing professional acknowledgement often improved the attractiveness and distinctiveness of products – allowing companies to claim premium pricing and niche market positions. It also produced products that were harder for competitors to imitate. One design/product manager (S4) stated that the high-quality expressions the company's designers (sometimes referred to as studio artists) required experimenting with new production techniques in artistic work. These were typically harder to imitate for competitors due to their technical complexity. Accordingly, the company provided them with free time during work hours to develop such work, and supported the designers in displaying their works at exhibitions.

From a long-term perspective, professional acknowledgement was an important value for companies which allowed them to recognize the quality of designers and provide them with the opportunity to develop a mastery (skills and talents) in styling new products. At the most basic level, companies wanted to achieve a reputation as a good employer for designers. An R&D manager (F3) for instance described how information about working conditions spreads quickly. It was therefore important to grant designers a degree of expressive freedom, in order to be able to attract a skilled workforce. In its most extensive form, a long-term perspective on professional acknowledgment led to a company's design philosophy that supported its designers in their drive to seek validation and inclusion within the design world. To this end, informants argued that the expression of products not only sought to please the larger public but also elicit critical praise from peer designers and critical reviewers.

The more informants emphasized professional acknowledgment, the more they distanced themselves from the idea that the expression of their products was market driven. Instead, they stressed that the successful styling of their products was driven by the designers of the company, and their capacity to 'safeguard' their ideas throughout product development

and production. For example, a managing director (F6) of a furniture company was proud to be working with "design professionals" in turning their ideas into products. He also outlined how his company engaged in long-term collaborations with renowned designers under "gentleman's agreements," and provided them extensive freedom of expression and a high degree of control over the execution of their designs.

A number of cases suggested that designers were at least partly aware of a company's policy on design, before they started working for them. Informants also pointed out that the degree of novelty of the pitched designs was dependent on designers' preconceptions about the company's designs. Thus, as in other creative professions (see e.g. Sigelman, 1973), designers' self-selection and companies' contracting mechanisms functioned together in such a way that the personal interests (and ambitions) of a designer often aligned themselves with a company's commercial interest in design. In this selection process, a company's existing designers functioned as a prominent sign of quality for prospective designers. For example, the managing director mentioned previously who gave his designers a lot of freedom (F6) noted that renowned designers often approached him to be taken on as a designer for the company. Thus, a subset of companies vouched for the quality of designers by producing their work. In this vein, at least four companies (F6, N1, N3 and S4) collaborated with design or crafts schools as a way to spot talent and/or reinforce their standing among design institutions and upcoming designers.

Companies focusing on professional acknowledgment showed an acute appreciation of the role that intermediaries such as journalists and critics play in the reception of the company's styling effort (for a broader discussion on the related role of intermediaries in the reception of art, see e.g. Wijnberg & Gemser, 2000). Managers in these companies used a range of tactics to influence the judgments of intermediaries. A furniture company (N1), for instance, held yearly events to which it invited members from the press, but also the larger cultural scene. Members of the cultural scene were invited because they reaffirmed the company's position within a larger cultural (design) establishment. Similarly, other informants

emphasized the importance of the expert judgments of intermediaries such as design critics in establishing their position in the market. A number of informants also returned to the importance of being "loved" by professionals. Stature in terms of professional acknowledgement was here often picked up through informal exchanges between professionals operating in an industry.

Professional acknowledgement was often related to market visibility and a desire to establish (and legitimize) the reputation of a company's styling efforts. However, in order to profit from this value contribution of styling, companies needed to operate in markets where designers were known, and where their output was of a more general cultural interest. These constraints were substantiated by the informants working with products in fields such as healthcare, who stated that their products were of little interest to the broader design world. These informants also typically mentioned that consumers placed little relevance on the judgments of "design experts" in purchasing new products.

For a number of companies winning design awards was the most concrete evidence of professional acknowledgement. When we visited the companies, we found that design awards were often prominently displayed in showrooms and lobbies. A number of informants also mentioned that they systematically submitted new products to design competitions. In the management literature on design (e.g. Gemser & Wijnberg, 2002), design awards are conceptualized to contribute to the financial profitability of companies by granting the winner a sign of quality that is signalled to customers and competitors. Awards played a similar role in our cases, but they also served the additional functions of being an important quality sign for designers in positioning themselves on the labour market, and for managers in displaying the stature of their company in the design community. Perhaps the best example of the former was that several informants mentioned that the initiative to participate in competitions came from designers.

Studying the websites of the companies and the personal pages of the designers working for them, it also seemed that design awards held greater long-term value for designers than companies, as the former continued to

display awards several years after winning them. That said, effectively profiting from design awards was not without complications. Several informants pointed out that the large number of design competitions implies that almost anyone can win an award. In addition, awards are not granted solely on the basis of the aesthetic and craftsmanship qualities of products. A number of informants stated that the selection process of important awards is highly political, and influenced by the commercial interests of sponsors and advertisers. To this end, certain awards were deemed to be more valuable for the professional recognition of designers. Finally, among some managers there was also a great interest in being included in the nomination process for design awards, which to them was a sign of "being recognized" for the quality of the company's work, regardless of whether individual products won awards.

CONCLUSIONS

While improving the look and feel of new products still is a common argument for investments in industrial design (Nielsen, 2008), the literature has only provided limited guidance on the management of styling. During the last two decades, this situation has changed with a number of studies in the management literature addressing the strategic relevance of styling. However, issue of how to assess the performance of styling activities has largely been ignored.

In this paper, we addressed this gap in the literature by studying how style-leading companies tackle this issue. Following a multiple-case study approach, we performed two cycles of interviews at companies to develop a first comprehensive model of the value of styling activities for companies. We also complemented these interviews by visually analysing their products and reviewing public and internal documentation about the companies. We found that, when assessing the value contribution of styling activities, managers not only took financial values into account, but also the potential for market visibility and professional acknowledgement for a company and its designers. We also found that the performance assessment

in each domain varied depending on the objectives and constraints facing companies and designers in styling new products.

Our findings have both practical and scholarly relevance. Our findings provide a first comprehensive framework for understanding the value of product styling, enabling academics and managers to more effectively and rigorously address the expressive character of industrial design. Of scholarly interest is also our renewed conceptualization of styling, which on the one hand allows for continuity in theorizing about the expressiveness of design, but on the other hand it takes away the misconception that this expressiveness is tied exclusively to the form (and not the function) of products. In addition, researchers can incorporate the different value contributions outlined in our model to extend the scope of their studies. Researchers can profit from a better understanding the commercial context in which styling activities occur, while at the same time not be blind to other value contributions than merely those of financial performance. Recognizing the success of companies we studied, but also other companies of design renown (such as Apple, Kartell and Alessi), a broader view on the value of styling seems a fruitful endeavour for research.

Of more practical interest, managers can consider how to best assess and cultivate the different value contributions outlined in this article. Based on our later discussions with the informants, we have the impression that practitioners will learn most from this article by considering the various ways in which their objectives and environmental constraints may influence the assessment of their styling activities. Our findings point to the importance of the commercial and professional context in which styling activities take place, and of reframing this context by adapting styling activities, their objectives, and/or environmental constraints. A starting point for this is to take a broader view on the value of styling, through which we can make a better use of the power of styling. We therefore present these findings with the hope of stimulating broader interest in styling in both theory and practice.

ACKNOWLEDGEMENTS—do all no guidance... The author want to thank... Anders want to thank... Management... style... effectively and rigorously address the expressive character of industrial design. Of... styling, which on the one hand allows for continuity in theorizing about the expressiveness of design but on the other hand it takes away the misconception that this expressiveness is tied exclusively to the form and not the function of products. In addition, researchers can incorporate the different value contributions outlined in our model to extend the scope of their studies. Researchers can profit from a better understanding of the commercial context in which styling activities occur, while at the same time not be blind to other value contributions than merely those of financial performance. Recognizing the success of companies we studied, but also other companies of design renown (such as Apple, Kartell and Alessi), a broader view on the value of styling seems a fruitful outcome of the research.

Of more practical interest, managers can consider how to best create and cultivate the different value contributions outlined in this article. Based on our later discussions with the informants, we have the impression that practitioners will learn most from this article by considering the value

Despite the effect that decisions on styling can have on the commercial success of products and the importance of strategic styling decisions for companies, there is only limited guidance in the literature to support managers in delineating a strategy for styling. What are the main styling strategies that companies can follow in styling new products? When are different styling strategies more or less relevant? In this essay, building on the application of Monö's (1997) model in Chapter 3, I study how factors in the market environment affect strategic styling decisions across Monö's three dimensions. The selected factors are: (1) the product's stage in the product lifecycle, (2) the amount of products a company has in its portfolio, (3) the type of value for consumers that the brand communicates and (4) the resources a firm spends on executing the design. Manipulating these factors in a conjoint analysis study, I presented a number of market situations to design professionals and asked them what decisions they would make on the three styling dimensions. The results show that both internal and external factors in the market environment as well as individual differences among the design professionals influence strategic styling decisions.

CHAPTER 5

SHOULD NEW PRODUCTS LOOK SIMILAR OR DIFFERENT? THE INFLUENCE OF THE MARKET ENVIRONMENT ON STRATEGIC PRODUCT STYLING⁶⁰

Historically, the design literature has discussed the visual appearance of products in relation to theories such as the rules of gestalt (Baxter, 1995), product semantics (Monö, 1997), and generative methods for form explorations (Tjalve, 1979). In recent years, the design literature has also revived its interest in the more commercial consequences of a product's visual appearance. Already in the 1950s, the literature (e.g. Loewy, 1951/2002) discussed a product's visual appearance from a company strategic view. Today, the literature focuses on how decisions about the 'styling' of a product are embedded in organizational decision making on new product development (Warell, 2001) and branding (Karjalainen, 2004; McCormack et al., 2004). A significant part of this literature concerns the development of a consistent and distinct brand style for the products of a particular brand: (1) to facilitate recognition and (2) to transfer beliefs that

⁶⁰ This chapter is an adaptation of Person, O., Schoormans, J., Snelders, D. and Karjalainen, T. (2008) Should new products look similar or different? The influence of the market environment on strategic product styling. *Design Studies*, Vol. 29, No. 1, p 30-48.

consumers have concerning one product to another product falling under the same brand name.

Thus, the recent literature on product styling suggests that design managers should aim for differentiation from competitors and similarity within the brand when styling new products. It could be argued, however, that product styling can also be used in other ways to make a product stand out in the marketplace. For example, past research in the automotive industry has shown that changes in styling over product generations can have a positive effect on sales (Millner & Hoffer, 1993; Sherman & Hoffer, 1971). One should also consider the recent success of the Apple iMac and the diversity of styles in the mobile phones of Nokia, which indicate that a deviation from prior styles or the simultaneous use of different styles are also viable styling strategies. These examples are backed up by studies that showed that a deviation from prior products in terms of styling can be a good way to draw more attention to the product (Schoormans & Robben, 1997).

The amount of copyright infringement lawsuits indicate that designers not always style products to distinguish themselves from competitors (Jacoby & Morrin, 1998). Disregarding the legal constraints, there may exist a number of benefits to make a product look similar to its competitors. Consumers might mistake the new product for that of a strong competitor and, consequently, purchase the new product thinking that he or she is acquiring the product of the competitor (Miaoulis & Damato, 1978). Even when consumers are aware that the product is from another company, they may still assume that the product has the same attributes as the competitor (Kapferer, 1995).

Thus, styling decisions pose a complex problem for design managers, purporting to a company's (or brand's) product portfolio as well as to products of competitors. In this paper, we build on a model for styling decisions that takes this complexity into account. Based on sign theory, Monö (1997) has proposed that designers should consider three dimensions when they design new products. These dimensions are: (1) the present product portfolio, (2) the succession of product generations, and (3) the products of competitors. Applying this model to design management,

Warell (2001) proposed that the three dimensions can also be used to position a product on the market. Following Warell's line of reasoning, we view a styling strategy as a decision of differentiation versus similarity on these three dimensions. We note that current design theories on commercial styling have focused on the benefits to implement similarity over the present product portfolio and product generations, and to create a difference in styling from competitors. However, as discussed, evidence from prior research indicates that there may be other viable styling strategies, such as mimicking competing products or differentiating a new product from existing or previous products of a brand.

Despite the effect that decisions on styling can have on the commercial success of products (Bloch, 1995) and a number of calls for the importance of strategic styling decisions (Moulson & Sproles, 2000; B. Schmitt & Simonson, 1997), there is only limited guidance in the literature on what styling decisions should be based on. Baxter (1995) and Warell (2001) have argued that factors in both the internal and external environment influence how designers decide to style products. In an extensive case study on the design of the Volvo cars and Nokia mobile phones, Karjalainen (2004) supported this argument. He specifically noted that differences in styling between Nokia (a multitude of styles over their product portfolio) and Volvo (a strong similarity over the total product portfolio) can be explained by external market factors, such as the varying degrees of maturity of the markets for mobile phones (then low) and cars (high).

To our knowledge, Karjalainen's (2004) study is one of the few references that clearly specifies how factors in the internal and external environment influence actual styling decisions. Other authors (e.g. Baxter, 1995) have raised arguments for the importance and potential benefits of styling, but do not discuss how situational constraints influence the strategic styling decisions of design professionals. In the management literature on branding, product lines and market positioning there have also been publications on how to take internal and external factors into account when designing and launching new products. However, the implications for styling are seldom discussed.

In this paper, we wish to know more about the styling decisions that are made by design professionals. How do factors in the internal and external marketing environment influence the decisions about styling a new product similarly or differently with prior and existing products? Because a large variety of styling strategies exist in the market, we assume that design professionals adapt their strategies according to the situation at hand, and perhaps also to their past experience and education. Below, we first identify the factors that may influence the styling decisions of design professionals, based on previous literature and a qualitative pilot study among Finnish design professionals. Next, we will present a quantitative (conjoint analysis) study among Finnish design professionals, in which it will be shown that these factors are structurally related to the styling decisions that design professionals make.

PILOT STUDY: FACTORS INFLUENCING STRATEGIC STYLING DECISIONS

As much literature there is on the marketing decisions behind new products in general, as little is there on the commercial considerations behind styling decisions. Therefore, in order to better understand how styling decisions are taken, we decided to carry out a small interview study among design professionals who are experienced in making strategic decisions on styling. A confrontation of their answers with the extant literature on new product marketing has led to the identification of a number of factors, each of which capable of exerting an independent influence on styling decisions.

Eight focus interviews were performed with design professionals in Finnish industry (four women and four men). Six interviewees worked as senior managers (CEO, design manager, marketing manager, product development manager, and product manager), while the other two were senior designers at design consultancies. They had all been involved in strategic decisions on product styling on a number of occasions. The purpose of the interviews was (1) to investigate the validity of describing strategic decisions on styling according to the three dimensions of Monö

(1997) and (2) to uncover factors in the internal and external marketing environment that, according to the experts, directly influenced styling decisions. The interviews followed an interview schedule that started with open questions about these issues, possibly followed by more specific probes. The interviews lasted approximately one hour and were tape-recorded and transcribed for further analysis.

After careful analysis of the interviews,⁶¹ we found that the main strategic decisions could be described as striving for similarity or differentiation. The interviews also supported Monö's notion of three dimensions of styling decisions. Each of the three dimensions was spontaneously mentioned by the interviewees as an important aspect in their past decisions about the styling of new products. Each interviewee typically mentioned only one or two of the dimensions, suggesting that there might be individual differences between design professionals.

In conformance with earlier analyses by Karjalainen (2004) and Warell (2001), decisions on styling were found to be influenced by a number of factors, both internal and external to the company (see Appendix 1). We limit our discussion of these factors to four more comprehensive factors that were deemed highly relevant to the interviewees and that are sufficiently independent of each other. The selected environmental factors were: (1) the product's stage in the product lifecycle, (2) the number of products a company has in its portfolio (i.e. the assortment size), (3) the type of value for consumers that the brand communicates (i.e. its positioning), and (4) the resources a firm spends on executing the design. Below, we discuss the interviewees' insights regarding the four factors and confront these insights with the relevant literature. At the end of this section, we will discuss how there might exist

⁶¹ In analyzing the interviews, we reviewed and coded the transcripts to establish themes encompassing different types of styling decisions within and across the individual interviews. In doing so, we sought connections and contrasts between the different themes to better understand the implications of different decisions. We also confronted the arguments raised by the professionals with arguments raised in the literature.

individual differences in the way design professionals make styling decisions, based on previous education and experience.

Stage in product lifecycle: It has been suggested that the importance of product styling increases over the product lifecycle, because, at a certain moment in the lifecycle, producers will have achieved high performance and quality standards and it will become harder to compete on technology and functionality (Levitt, 1965). Product styling is described in this literature as a strategic tool to improve acceptance of new products (Morein, 1975) and reduce the speed of a decline in sales (Levitt, 1965). Whether companies should decide to style products similarly or differently to existing products is only briefly touched upon. In our interviews, the experts recognised that the importance of product styling increases over the product lifecycle. They also described a number of different styling strategies distributed over the product lifecycle. For example, one expert saw differences in styling compared to competitors as crucial in mature markets where all companies have access to similar manufacturing capabilities. Another expert described how her company in the early stages of the product lifecycle implemented a distinct styling over their product portfolio, (1) to help consumers recognise the products of her brand, and (2) to strengthen the team-spirit within her company. However, she noted that quite soon after the launch of the single brand style the company had to implement a number of different styles to better fit the requirements of their strategy to simultaneously aim for multiple customer segments. The stages of growth and maturity can be seen to pose the most interesting situations for decisions on styling. At the growth stage, sales are taking off and it is important for a firm to establish its position in the market. At the maturity stage, it is important for a firm to maintain (and possibly strengthen) its position in a situation when it becomes harder to compete on functionality and technology. In the main study, we research how design professionals make decisions at the beginning of these two stages, because we reasoned that strategic decisions on styling precede the actual market developments.

Assortment size: According to our interviewees, the number of products a firm has in its portfolio influences styling decisions. A high

number of products in the portfolio of a company was seen as a reason to differentiate between sections of the portfolio. A more limited portfolio, on the other hand, was seen as a reason to promote similarity. Brand and line management studies showed that companies typically expand their product lines when they perceive unexploited opportunities in the market (Putsis & Bayus, 2001). In addition, the number of products a firm holds in its portfolio is found to have a positive effect on the perceived reliability of a brand (DelVecchio, 2000), product quality (Dacin, 1994), market share (Kekre & Srinivasan, 1990) and a negative effect per unit production cost (Bayus & Putsis, 1999). Some of these studies were carried out over multiple industries, in which case the number of products has been defined as a number relative to an industry average (Kekre & Srinivasan, 1990). In the main study we will also investigate different industries and for that reason we will define the number of products in relative terms.

Value for consumers (positioning): A third factor is the type of brand value that the product is meant to communicate to the market. This factor is connected to the positioning of the new product, and our interviewees felt that this factor was a strong driving force behind many of their styling decisions. For example, one expert noted that her company basically uses three styling strategies over their product portfolio. Their entry-line products are often styled similar to prior product generations and to each other to make it easier for consumers to recognise the products' functionality. However, for the products aimed one step higher at the middle segments, the company uses a differentiation strategy over the product line and over product generations because these products often are lifestyle accessories. A distinction can be made here between functional and symbolic positioning. These two positioning strategies have been discussed earlier in literature on brand and line management (Midgley, 1983; Park, Jaworski, & MacInnis, 1986) but not directly in relation to styling decisions. Functional positioning refers to a product that is positioned on its functional benefits. An example from the interviews is an emphasis on a product's efficiency and durability. Symbolic positioning refers to a product that is positioned as a means for self-expression and prestige. An example of this that came out of the interviews is the desire of some

companies to position the new product as being designed by a reputed artist or designer like for instance Philippe Starck. Bhat and Reddy (1998) showed that it is possible for a product to be positioned to have both functional and symbolic meanings for consumers. Therefore, in the main study, the two levels were defined in terms of an emphasis on one of the two, instead of being exclusively of one type.

Resources for design: Some of our interviewees mentioned that their styling decisions depended heavily on resource constraints. The design literature (e.g. Hubka & Eder, 1996) recognises the importance of this factor in the development of new products, and explains how the available resources for design influences the design process at large. Furthermore, the dependence of styling decisions on resources is noted in an autobiography by Alfred Sloan (1963/1996). Sloan describes how General Motors, during his time at the company, systematically used minor style changes (with low costs associated) to delay the necessity to perform major style changes (with larger costs associated). In the interviews, the experts argued that companies spending fewer resources on design also styled their products to appear more similar to their competitors than companies who spent extensive resources on design. Larger investments in design were also seen to promote the use of multiple styles over the firms' product portfolios. In the main study, resources spent on design were measured at levels: limited versus extensive. Again, because resources for design vary heavily over industries, the two levels were defined relative to an industry average.

Education and experience: Education and experience of the design professionals are the last two factors that may have influenced the decisions of our interviewees. These two factors are not so much environmental factors but individual differences, and our interviewees tended to differ on these two factors. Their educational background ranged from design, to marketing, to engineering, and their work experience ranged from six to more than twenty years. The literature also acknowledged that there are a number of professions involved in decisions about the design of new products (Dumas & Mintzberg, 1991). Designers often have a crucial role in the process but they are not the only profession

involved in styling decisions. For example, marketers can be involved in decisions on colour combinations for new products and engineers in the selection of materials and/or in the detailing of the design. The literature (Moulson & Sproles, 2000; Tovey, 1997) also referred to managerial intervention points where senior managers review and provide guidance for the design of new products. At the same time, it has been suggested that the quality of styling decisions improves with experience (Karjalainen, 2004; Warell & Nåbo, 2001), and our interviews supported this. Therefore, educational background and level of experience are believed to influence styling decisions significantly. As a result, these two variables were included in the main study, in addition to the four environmental factors.

MAIN STUDY

The main study was set up to investigate how the factors described above influence the styling decisions of design professionals. These styling decisions are modelled here as a striving for similarity with or differentiation from the three dimensions of Monö: (1) the present product portfolio, (2) the succession of product generations, and (3) the products of competitors. The method employed is conjoint analysis. This method has been used before, to assess professionals' decision-making in a number of other studies (e.g. Hultink & Robben, 1995; Murry & Heide, 1998).

Conjoint design: The method of conjoint analysis is based on the principle that respondents are presented with a number of potential situations, or 'profiles,' each described as a particular combination of factors. An example in our case would be a profile where the new product is at the beginning of maturity in the product life cycle, the company has a narrow assortment size, has a functional value for consumers, and there are limited resources for design. Respondents are asked to evaluate each profile, and on the basis of these evaluations it becomes possible to calculate the relative influence (or utility) of each factor on the respondent's evaluations.

The influence of the four environmental factors (with two levels each) on styling decisions was studied through a conjoint task with a full-

factorial 2x2x2x2 design. This resulted in 16 different profiles (combinations of factor levels) that respondents had to evaluate. A limitation to four factors with two levels each was necessary in order to reduce the workload and complexity of the task for respondents (Hair, Anderson, Tatham, & Black, 1995). Each profile was evaluated on three dimensions, related to the three dimensions of Monö. For each dimension, respondents were asked to indicate to what degree a new product should resemble other products (of previous generations, of the portfolio, of competitors). This was done on three nine point scales (1: 'Strongly resemble in appearance' to 9: 'Strongly differ in appearance') for each of the 16 profiles, providing a total of 48 evaluations per respondent.

Respondents: For the main study, we sought a diverse set of professions with varying degree of experience to reflect the different competences involved in styling decisions (all respondents had at least one to five years of work experience). Respondents (n=45) were recruited by e-mail, telephone, and/or face-to-face meetings. They were all alumni or students of two design management programmes aimed at people with different educational and/or professional backgrounds. Alumni were recruited from the first programme (n=23) that is aimed at master students within the field of economics, engineering, and design. Students and alumni were recruited from the second programme (n=22) that is aimed at professionals who currently work in industry and wish to deepen their knowledge in design management. The sample consisted of 30 men and 15 women and their age ranged from 25 to 59 with an average of 37. More information about the respondents is presented in Table 2. As can be seen in table 2, respondents had a diverse educational background and varied in their level of experience.

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Table 2 Respondent information

Position within firm		Industry	
Designer	12 (26.7%)	Consultancy in various industries	11 (24.4%)
Design manager	5 (11.1%)	Textiles, etc.	3 (6.7%)
Engineer	2 (4.4%)	Pulp, paper and paper products	2 (4.4%)
Managing director/CEO	4 (8.9%)	Publishing and printing	3 (6.7%)
Marketing/Sales manager	4 (8.9%)	Machinery and equipment	4 (8.9%)
Product manager	2 (4.4%)	Electrical and optical equipment	4 (8.9%)
Product development Manager	3 (6.7%)	Furniture	3 (6.7%)
R&D manager	4 (8.9%)	Transport equipment	2 (4.4%)
Other	9 (20.0%)	Other	13 (28.9%)
Academic degree (highest)		Number of employees	
High school diploma	5 (11.1%)	Fewer 10 employees	10 (22.2%)
Bachelor	14 (31.1%)	10 to 49 employees	5 (11.1%)
Master	23 (51.1%)	50 to 249 employees	9 (20.0%)
Other	3 (6.7%)	250 to 499 employees	3 (6.7%)
		More than 500 employees	18 (40.0%)
Academic field		Type of products sold by current employer	
Design	17 (37.8%)	Consumer products	15 (33.3%)
Engineering	14 (31.1%)	Industrial products	9 (20.0%)
Business (economics, management, marketing, etc.)	12 (26.7%)	Both industrial and consumer goods	21 (46.7%)
Other	2 (4.4%)		
Amount of work experience (years)		Amount of work experience (projects)	
1 to 5 years	11 (24.4%)	1 project	2 (4.4%)
5 to 10 years	11 (24.4%)	2 to 4 projects	10 (22.3%)
More than 10 years	23 (51.1%)	5 to 9 projects	6 (13.3%)
		More than 10 projects	27 (60.0%)

Questionnaire: The conjoint task was incorporated in a questionnaire. Before the start of the conjoint task, the respondents were provided with a

written description of the purpose and structure of the study. Respondents were told that they were to imagine themselves as working for a consumer durables company that produces and markets its own products and that they were *"responsible for the decisions with respect to the appearance"* of the company's new products. Next, they were told that the company is currently in the process of developing a new product and is now at a stage where decisions on the product's appearance need to be taken. Throughout the questionnaire, terms such as 'product appearance' and 'designed' were intentionally used. This was done because some of the design experts interviewed in the pilot study had expressed negative feelings against the term styling.

Next, respondents received instructions about the conjoint task. The descriptions of the factors, levels, and the styling decisions were provided to them, and they were invited to return to these descriptions while evaluating the profiles during the conjoint task. The factors and their levels were presented to respondents as text, accompanied by pictograms. This combination was also used later on in the conjoint task. This was done to reduce the amount of text the respondents had to consider for each profile, and to serve as a reminder of the profiles they were evaluating. The factor descriptions presented to the respondents are provided in Table 3. The respondents were also given an explanation regarding the outcome of striving to style a new product similarly or differently to the products of each of the three dimensions, including a visual example with form primitives (cubes, cylinders, spheres, and pyramids) rather than actual products to avoid framing the respondents for a particular type of products.

After the instructions, the respondents were given the conjoint task. The questionnaire ended with an assessment of the respondent's educational background and work experience in design management.

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Table 3 Factor descriptions

Factor	Description
Stage in product lifecycle - Beginning of growth (the market is developing) - Beginning of maturity (the market is levelling of)	The product lifecycle portrays distinct stages in the sales history of a product. Here, you will be asked to advise your consumer durables company at two different stages of the product lifecycle: <i>beginning of growth</i> and <i>beginning of maturity</i> . At the growth stage, the market is developing in terms of sales. At the maturity stage, the market is levelling of in terms of sales.
Assortment size - Narrow assortment - Broader assortment	In the different situations, your fictive company has either a <i>narrow</i> or <i>broader</i> assortment of products that they currently are producing and marketing. A narrow assortment refers to the situation where the company has significantly fewer products in their assortment than the industry average. A broader assortment refers to the situation where the company has significantly more products in their assortment than the industry average.
Value for consumers - Functional - Symbolic	Value for consumers concerns the reason for why a customer purchases a product. In the situations presented, you will be asked to advise the company in relation to <i>functional</i> and <i>symbolic</i> products. Although both types of products involve products that fulfil practical needs, a functional product is mainly bought for its functional benefits and a symbolic product mainly as a means for self-expression and prestige.
Resources for design - Limited - Extensive	When developing a product, companies allocate different amount of resources on design. Here, you will be asked to give your advice under two different conditions: <i>limited</i> and <i>extensive</i> resources for design. Limited concerns the case when the company spends significantly fewer resources on design than the industry average. Extensive resources refer to the case when the company spends significantly more resources on design than the industry average.

RESULTS

The suitability of using Monö's dimensions to describe styling decisions was tested first. This was done by looking at the correlation between the

scores on the three dimensions. Table 4 shows that the dimensions reflecting internal similarity / differentiation (portfolio and generations) correlating modestly, and both of these dimensions showed low correlations with the dimension reflecting external differentiation / similarity (competitors). The correlation of .48 (between portfolio and generations) implies that 23% of variance in one of these dimensions is shared with the other, leaving 77% of the variance in each dimension that is not shared with the other. For this reason, we decided to treat the portfolio and generations dimension as separate constructs, leading to three dimensions, representing the amount of differentiation/similarity on portfolio, generations and competition.

Table 4 Correlation matrix between three dimensions of styling decisions (N=720)

	1. Present Product portfolio	2. Succession of product generations	3. Products of competitors
1. Present Product Portfolio	1.000	-	-
2. Succession of product generations	0.48***	1.000	-
3. Products of competitors	0.27***	0.28***	1.000

*** $p < .001$

The conjoint analysis was performed in two stages. First, the influence (utilities) of the four factors on the three dimensions was estimated by three separate regression analyses, one for each dimension. Effects coding was used for the two levels of each factor (-1 and +1), to estimate the utility of each factor. To enhance the reliability of the data, the regression analysis was carried out over the 16 average profile scores. Second, the effects were studied of the respondents' experience and education on their evaluation on the three dimensions. Since this analysis is about individual differences, the raw profile scores were used here, leading to $16 \times 45 = 720$ observations for the analyses.

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Effects of internal and external factors: Three regression analyses on the 16 averaged profile scores revealed three models which accounted for 82% to 92% of the variance in the dimensions (see table 5 and table 6). The results revealed that value for consumers and resources spent on design both had significant influence on all three dimensions. For all three dimensions, it was perceived more important to be different in the case of symbolic positioning and extensive resources for design than in the case of functional positioning or limited resources for design. The assortment size was only significant for the portfolio dimension. An extensive assortment promoted a higher difference with the present product portfolio than a limited assortment. For all the dimensions, the resources a company spent on design had the greatest influence on the respondents' decisions on styling.

Effect of experience and education: Three regression analyses performed using the 720 raw observations, with the respondent's experience and education levels as additional variables in the model. Two measures of experience were used. The first was based on the number of years the respondent had worked and the second on the number of product development projects the respondent had participated in. Both variables were dummy coded to less than / equal to five years versus more than five years, and less than / equal to five projects versus more than five projects. The measure representing the respondents' education was also dummy coded and a distinction was made between having formal (art-based) design training or not.

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Table 5 Mean scores for styling decisions distributed over the levels of each factor^c

	Present product portfolio Mean (SD)	Succession of product generations Mean (SD)	Products of competitors Mean (SD)
Stage in product lifecycle			
- Beginning of growth	4.80 (.82)	4.86 (.72)	6.53 (.84)
- Beginning of Maturity	5.02 (.59)	4.76 (.62)	6.49 (.78)
Assortment size			
- Limited assortment	4.71 (.63)	4.68 (.56)	6.55 (.89)
- Extensive assortment	5.11 (.75)	4.94 (.75)	6.47 (.71)
Value for consumers			
- Functional	4.63 (.67)	4.56 (.74)	6.14 (.81)
- Symbolic	5.19 (.65)	5.06 (.47)	6.88 (.57)
Resources for design			
- Limited	4.38 (.38)	4.31 (.43)	5.89 (.56)
- Extensive	5.43 (.53)	5.31 (.40)	7.13 (.35)

^c 1: 'strongly resemble in appearance' to 9: 'Strongly differ in appearance'

Table 6 Standardised regression weights of dependent variables on independent variables, based on mean scores per profile (N=16)

Independent variables (market attributes)	Dependent variables (styling strategies)		
	Present product portfolio	Succession of product generations	Products of competitors
Intercept	4.91 (.07)***	4.81 (.08)***	6.51 (.07)***
Stage in product lifecycle	0.11 (.07)	-0.05 (.08)	-0.02 (.07)
Assortment size	0.20 (.07)*	0.13 (.08)	-0.04 (.07)
Value for consumers	0.28 (.07)**	0.25 (.08)*	0.37 (.07)***
Resources for design	0.52 (.07)***	0.50 (.08)***	0.62 (.07)***
F-statistic	20.31***	12.59***	30.20***
R ²	0.88	0.82	0.92
Adjusted R ²	0.84	0.76	0.89
N	16	16	16

* $p < .05$

** $p < .01$

*** $p < .001$

Standard errors are in brackets

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Table 7 shows the results of the three regression analyses. Note that because the regression were based on the raw scores of the respondents, considerable less variance is explained than in the regression models reported earlier. At the same time, the reported significance levels remain comparable because of the higher number of observations. The new model for styling decisions on the portfolio dimension shows similar results as before. It also extends the results of the averaged data by revealing the additional influence of a product's stage in the product lifecycle and the respondent's working experience in years. Compared to the beginning of the growth stage, it was considered more important to be different in appearance at the beginning of the maturity stage. In addition, there was a main effect of working experience in years. If respondents had more than five years of working experience, individuals had a greater preference to style a new product to differ in appearance with the present product portfolio than those with less than five years working experience. Finally, the model for the present product portfolio dimension also revealed an interaction effect between the stage in product lifecycle and the respondents' work experience in years. Figure 3 shows that, at the beginning of the growth stage, respondents with fewer years of working experience indicate a lower preference for differentiation from other products in the portfolio than respondents with more years of experience. At the beginning of maturity this difference disappears, and both groups have an equally high preference for differentiation from other products in the portfolio.

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Table 7 Standardised regression weights of dependent variables on extended independent variables, based on raw scores of respondents (N=720)

Independent variables (market attributes)	Dependent variables (styling strategies)		
	Present product portfolio	Succession of product generations	Products of competitors
Intercept	4.83 (.10)***	4.89 (.09)***	6.84 (.08)***
Stage in product lifecycle	0.25 (.10)**	-0.05 (.08)	-0.02 (.07)
Assortment size	0.18 (.08)*	0.13 (.08)	-0.04 (.07)
Value for consumers	0.26 (.08)**	0.25 (.08)**	0.37 (.07)***
Resources for design	0.55 (.08)***	0.50 (.08)***	0.62 (.07)***
Working experience (more than 5 years)	0.20 (.10)*	-	-
Working experience (more than 5 years)	-0.32 (.10)**	-	-
Stage in product lifecycle	-	-	-
Working experience (more than 5 projects)	-	-0.18 (.09)*	-0.43 (.08)***
Education in design	-	-	0.52 (.07)***
F-statistic	12.84***	12.50***	31.13***
R ²	0.10	0.08	0.21
Adjusted R ²	0.09	0.07	0.20
N	720	720	720

* $p < .05$

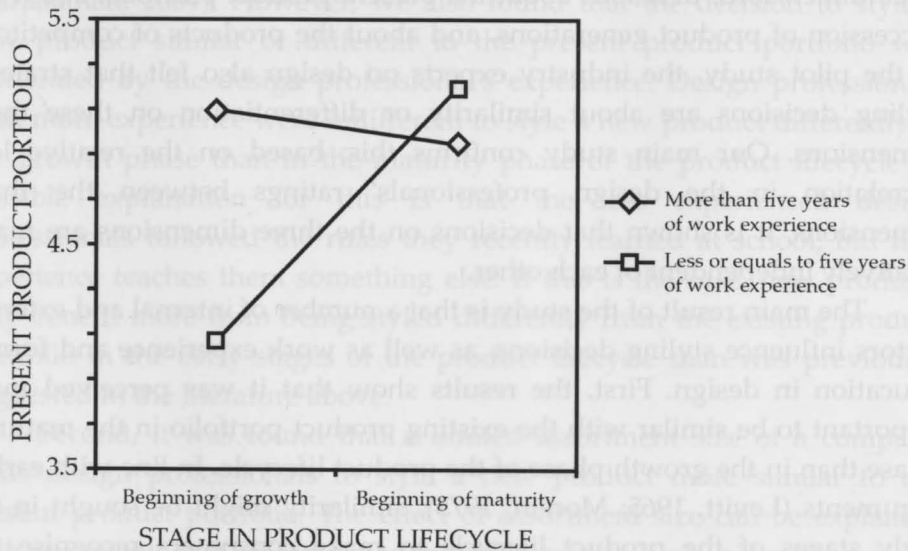
** $p < .01$

*** $p < .001$

Standard errors are in brackets

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Figure 3 Interaction effect between stage in product lifecycle and work experience on styling decisions in relation to the present product portfolio^d



^d“Strongly resemble in appearance” and 9: “Strongly differ in appearance”

For the generation and competitor dimensions, the regression models replicate the findings based on the average score, and extend them by showing additional effects of the respondents' work experience (expressed by the number of product development projects) and education level. For the generations' dimension, there was a modest effect of experience. More experienced respondents had a higher preference to style a new product to be similar in appearance to prior products than those with less experience. For the competitor dimension, this effect was much stronger: again more experienced respondents indicated a higher preference for similarity. Education also had a significant effect on styling decisions in relation to the products of competitors. Design professionals with formal art-based training in design had a greater preference for differentiation from competitors than those without a formal design education.

DISCUSSION

We suggested that styling decisions unfold according to Monö's (1997) three dimensions: decisions about the present product portfolio, about the succession of product generations, and about the products of competitors. In the pilot study, the industry experts on design also felt that strategic styling decisions are about similarity or differentiation on these three dimensions. Our main study confirms this: based on the relative low correlation in the design professionals' ratings between the three dimensions, it is shown that decisions on the three dimensions are made relatively independent of each other.

The main result of the study is that a number of internal and external factors influence styling decisions, as well as work experience and formal education in design. First, the results show that it was perceived more important to be similar with the existing product portfolio in the maturity phase than in the growth phase of the product lifecycle. In line with earlier arguments (Levitt, 1965; Morein, 1975), similarity might be sought in the early stages of the product lifecycle to make consumers recognise the product's origin, and by doing so reduce the risk associated with trying out a new product.⁶² When the product is widely known in the market, the product is styled differently to reduce the speed of eroding sales by targeting new customers and/or stimulate repurchases. Another explanation could be that in the early phases of the product lifecycle, when competition mostly revolves around technology and functionality (Levitt, 1965), companies spend fewer resources on design and style new products similar to the existing product portfolio. Later in the product lifecycle, when companies need to differentiate themselves on other factors than technology and functionality, companies spend greater resources on design and, therefore, have the possibility to successfully style a new product differently. Our findings also correspond to the styling strategy

⁶² In the conjoint task, the design professionals were asked to make their decision concerning the beginning of the growth phase or the beginning of the maturity phase of the product lifecycle as we reasoned that strategic decisions on styling precede the actual market developments.

that Nokia used in the past decade. In the early years, when the mobile phone industry was young, a Nokia style was more easily recognised in the appearance of their different mobile phones than in recent years (Karjalainen, 2004). However, we also found that the decision to style a new product similar or different to the present product portfolio was moderated by the design professional's experience. Design professionals with more experience were indifferent to style a new product differently at the growth phase than in the maturity phase of the product lifecycle. A possible explanation for this is that the less experienced design professionals followed the rules they recently learned at school, but that experience teaches them something else. If this is the case, new products may benefit more from being styled differently from the existing product portfolio in the early stages of the product lifecycle than was previously suggested in the literature above.

Second, it was found that a limited assortment size of a company leads design professionals to style a new product more similar to the present product portfolio. The effect of assortment size can be explained with arguments that are similar to those we used to explain the effect of the stage in the product lifecycle. In the case of a limited assortment size, similarity is sought to make it more likely that customers recognize the company's brand style. In the case of a large assortment size, the company is more likely to serve several customer segments simultaneously. In this situation, differences in styling are important to match the preferences of different customers. For example, Skil (a power tools division of Bosch) has used differences in styling over their product portfolio to target products to different customer segments (Halman, Hofer, & van Vuuren, 2003).

Third, it was perceived as more important to differ in styling in the case of symbolic positioning than in the case of a functional positioning. This effect was found on all three styling dimensions. Design professionals strive for differentiation over the product portfolio and over product generations for symbolic products. This finding is in contrast to prior studies, where symbolic brands such as Bang & Olufsen (Warell, 2001) and Harley Davidson (Pugliese & Cagan, 2002) are described to benefit from

implementing similarity over the product portfolio and over product generations.

It is hard to say which is more advisable since to the authors' knowledge there are no studies demonstrating what is preferred by consumers. But in favour of the design professionals in this study, it might be argued that styling is for the most part about conveying symbolic meanings, and symbolic meaning reflects on the owner of the product (1997). Following Bourdieu (1986/1979), the function of style – and the symbolic meaning it carries – can be seen as the creation of distinction. Tasteful (stylish) products should be distinctive, both from existing products (as a demarcation of difference), and from products of previous generations (because judgments of taste are part of a dynamic status game). From a company perspective this means that multiple styles over the product portfolio may be necessary to cater for the tastes of different consumer segments. In addition, the symbolic meanings people derive from product styling should be seen as changeful (Moulson & Sproles, 2000); what was modern in the 1970s is retro today. For these reasons, a symbolic positioning of the product is more likely to imply the creation of difference on all three styling dimensions.

The fourth factor, and the one with the greatest influence on styling decisions, was the resources a company had available for design. For all three dimensions, it was perceived as more important to differ in styling in the case of extensive resources for design than in the case of limited resources for design. These findings can be taken as support for earlier arguments in the literature (Sloan, 1963/1996) that there are considerable costs associated with implementing and promoting new styles. Reconsidering this overall importance of resources for design, we wonder if this factor is necessarily a strategic decision on itself, or perhaps a consequence of other decisions on styling. For instance, it might well be that resources become available for styling *because* design managers feel that the product has arrived at the maturity stage of the product life cycle, or *because* it aims for a more symbolic positioning for the brand. If that is the case, resources available for design are not so much a strategy as such, but more a consequence of a styling strategy.

In addition to the four environmental factors, we also looked at the effect of experience and educational background. Compared to the less experienced professionals, the more experienced design professionals had a higher preference to style a new product different to the present product portfolio, and similar to prior product generations. This result suggest that experienced professionals care more about the historical role of product styling, and less experienced professionals more about the consistency within the product assortment, which is not very surprising.

A last finding is that more experienced design professionals have a preference to style a new product similar to competitors. In addition, we found that professionals without a formal (art-based) education in design also preferred to style a new product similar to competitors. These combined results can have an explanation in a fear of lower market acceptance of distinctive styles. By styling a product different from competitors, a new product can draw attention, surprise customers, and reinforce its difference from competitors. However, a too radical styling can make consumers devalue a new product because it becomes controversial rather than stunningly new and different (Moulson & Sproles, 2000). Our findings may indicate that experience, and the lack of education in design, promote risk avoidance on this styling dimension.

Limitations and future research

The contribution of this paper has been twofold. For academic interest, we have provided a better understanding of the decision-making of design professionals with regards to styling. For practical interest, we hope to help designers and the companies they work for to improve their decision-making on styling. We have done this by providing a framework that describes three relevant dimensions for styling on which decisions should be made, and four factors to consider when making decisions on styling. However, when interpreting the presented work, it is important to keep in mind some boundary conditions.

First, while collecting the data for the main study, some respondents indicated that they found it hard and time-consuming to perform the decision tasks. These indications suggest that design professionals

recognize a complexity in taking styling decisions. In retrospect, the decision to focus on only four factors can be seen as fortunate, because we probably would have received more problems if we had included a higher number of factors in the study. Still, the pilot study suggested that there are probably more than four factors that influence styling decisions. Future studies are encouraged to further explore which additional factors influence styling decisions.

Second, this study builds on previous studies on the success of strategic decisions in new product development. Often, such studies ask professionals about their past decisions, and the consequences of those decisions, whereas we chose to ask professionals about what they expect to do in a particular situation. We chose for this latter approach to avoid the problem of a so called hindsight bias (Curren, Folkes, & Steckel, 1992), where decisions are reconstructed by respondents in the light of the results of those decisions. So, unlike more general studies on strategic decision making in new product development, we focused on people's expectations about the likely outcomes of their decisions. Focusing on expectations provides valuable insights, as professionals in the real world also work with expectations about the success of various styling decisions, and they are likely to draw on their experience when making such decisions. However, expectations and reality do not necessarily match up, and we therefore call for follow-up studies on the appropriate measures of the success of new product styling, and on the conditions leading to such success.

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recognize a complexity in taking styling decisions. In retrospect, the decision to focus on only four factors can be seen as fortunate, because we probably would have received more criticism if we had included a higher number of factors in the study. My post study suggested that there are probably more than four factors that influence styling decisions. Future studies are encouraged to explore factors which additional factors influence styling decisions.

Second, this study looks at styling decisions on the success of strategic decisions in new product development. Often, such studies ask professionals about their past decisions and the consequences of those decisions whereas we chose to ask them about what they expect to do in a particular situation. This is a more forward approach to avoid the problem of a so-called hindsight bias (see Kahneman, Slovic, & Amos, 1982), where decisions are evaluated in retrospect in the light of the results of those decisions. In this study, we are interested in strategic decision making in new product development. The study is a descriptive study about the study which is a qualitative study. The study provides insight into the styling strategies of automotive companies and how they relate to their business strategies. The study is a qualitative study. However, the study is a quantitative study. The study is a quantitative study.

How companies take decisions on actions and resources does not depend solely on factors in the internal and external environment, as in the case of the (reactive) styling decisions studied in Chapter 5. Companies also deliberately shape their internal and external environment through their own decisions. Following this line of reasoning, a large body of management literature addresses how companies implement and profit from business functions depending on their business strategy. However, how companies implement and profit from design is only cursorily addressed. In this essay, I address the link between design strategies for styling and business strategies. Specifically, I investigate how the styling strategies of automotive companies (as conceptualized in Chapter 3) are influenced by their business strategy. Extending the discussion in Chapter 4, I also study how different styling strategies lead to different value contributions for such brands. The results show that automotive companies employ different styling strategies depending on their business strategies. They also demonstrate that different value contributions accompany different styling strategies. Thus, when seeking to decide which styling strategy to follow, I argue that companies should relate this question to discussions on their broader business strategies.

CHAPTER 6

LINKING DESIGN AND BUSINESS STRATEGIES: THE STRATEGIC EMPLOYMENT OF STYLING IN THE GERMAN PASSENGER CAR MARKET⁶³

One can wonder why cars look like they do. Car companies spend millions of dollars on styling, and some models of a brand look similar to each other and to those of the competition whereas others look different. Is this a coincidence, or are similarities and differences in car designs based on the strategic choices of companies?

A large body of literature in strategic design and design management advocates that there is (or should be) a close link between strategies for industrial design and business strategies (see e.g. Lorenz, 1990; Svengren, 1995). This said, empirical studies on the link between strategies for design and business strategies are almost nonexistent. In the strategic management literature the relation between strategy and design is only cursorily

⁶³ This chapter is an adaptation of Person, O., Schoormans, J. and Snelders, D. (2011) Linking design and business strategies: The strategic employment of styling in the German passenger car market. Paper presented at the 18th International Product Development Management Conference, Delft University of Technology, Delft, 5th – 7th of June. For the coherence of the thesis, the original manuscript is extended with an unpublished research note on the link between styling strategies and financial profitability, market visibility and professional acknowledgment.

addressed. This is in sharp contrast to the research attention given to the relation between strategy and other business functions, such as R&D (Weisenfeld-Schenk, 1994), marketing (McDaniel & Kolari, 1987), sales (Slater & Narver, 1993) and even specific capabilities such as information technology (Song, Benedetto, & Nason, 2007). These studies show that companies employ and profit from business functions differently depending on their strategy. However, the relation between industrial design and a company's business strategy has not been addressed. In the emerging field of design management, references to established theories and findings from the strategic management literature are often absent (notable exceptions are Hsu, 2009; Slappendel, 1996). Overall, the seminal work on strategic typologies and their impact on business functions of Miles and Snow (1978) and Porter (1980) has been neglected when it comes to the strategic employment of design. Likewise, Mintzberg's (1978) classic work on intended and realized strategies is weakly integrated in the discussion on how companies form strategies for their efforts in industrial design.

In this article, we address the relation between design strategies for styling and business strategies. As noted above, little is known about the relation between business strategy and industrial design. Specifically, there is a need to pinpoint potential design strategies for styling and relate these to particular business strategies. Styling – the expressive capacity of design – constitutes one of the most fundamental capabilities associated with industrial design. As such, strategies for design typically include certain principles for styling new products (Ravasi & Lojcono, 2005), in which companies can combine a range of strategic and tactical decisions on the style of new products (Person, Snelders et al., 2007). The strategic deployment of styling is exemplified by Sony in the 1980s, when it cost-effectively targeted its Walkman technology to multiple market segments, using a range of design styles (Sanderson & Uzumeri, 1995). Another example is the introduction of the rounded and candy-coloured iMacs and iBooks at the end of the 1990s, when Apple created a new position for itself in the computer market, and changed the rules of competition through the style of their products (Eisenman, 2004; Ravasi & Lojcono, 2005).

Empirical studies on the link between styling strategies and business strategies are of great urgency. A range of studies show that companies can reap great profit from investments in design (see e.g. Gemser & Leenders, 2001; Goodrich, 1994). Studies also suggest that many investments in design begin as investments in styling (see e.g. Bohemia, 2002; Nielsén, 2008). As a result, styling constitutes a prime interest for managers in profiting from and forming strategies for design. However, profiting from design activities such as styling is a challenging management task. There is widespread confusion among managers about what designers do (Moody, 1980) and how design activities such as styling link to other business activities (Bangle, 2001). Reports also indicate that managers struggle to give design sufficient priority in strategy formation (Dumas & Withfield, 1989; Hart & Service, 1988). To facilitate a more effective usage of design, it is therefore pivotal to clarify the link between design and strategic management. Or, as concluded by Hertenstein and Platt (1997, p. 18), acquiring an understanding about strategy "is an absolute imperative if a design manager hopes to achieve full recognition for the design group and the many contributions it makes to the success of new and redesigned products."

As a foundational capability of design, the argumentation above is particularly relevant for decisions on new product styling. However, while a wealth of studies have addressed consumer response to the aesthetic and symbolic outcomes of styling activities (for reviews see Bloch, 1995; Veryzer, 2000), surprisingly few management studies have historically addressed the styling decisions of designers on form and style that shape these effects (Krishnan & Ulrich, 2001). This situation is changing with an increasing body of management literature addressing styling decisions. Among other things, studies have investigated how styles are managed in the fashion industry (Cappetta et al., 2006), and how the logic of fashion applies to high-tech industries, introducing new forms of stylistic competition among products such as home computers (Eisenman, 2006) and mobile telephones (Djelic & Ainamo, 2005). Other studies have looked at the strategic relevance of expressive design in (technology) innovation (Dell'Era, Marchesi, Verganti, & Zurlo, 2008; Dell'Era & Verganti, 2007) and

new product development (Person, Snelders et al., 2007). Still, how explicit and emerging styling strategies materialize in products and how the expression of those products link to business strategies has not been explored.

In addressing the relation between business strategies and styling, we begin by applying the earlier work of Miles and Snow (1978) and Porter (1980) to the field of design – proposing a set of research hypotheses relating a company's styling strategy to its business strategy. Subsequently, we test these hypotheses in an empirical study on the strategic employment of styling in the German passenger car market. We end by discussing the implications of our findings for the management of industrial design and its connection to wider business strategies.

DELIBERATE AND INADVERTENT DESIGN STRATEGIES FOR STYLING

As formulated by Mintzberg (1978, p. 935), "when a sequence of decisions in some area exhibits a consistency over time, a strategy will be considered to have formed." Mintzberg notes that sequences of decisions can be formulated a priori as a strategy is established before decisions are made, or they may form over time (sometimes unintentionally) as decisions are made one by one. Nonetheless, the decisions mirror how companies manage their internal and external environment over time (for a review on strategic decision-making see Elbanna, 2006). In this paper, we are interested in how styling strategies connect to wider business strategies. Our inquiry focuses on the styling strategies by which designers (and the companies they work for) shape the expression of new products, and how this relates to the wider strategic actions of companies on the market.

Across a broad set of industries, managers and designers describe how styling plays an undisputed role for companies (Bangle, 2001; Bohemia, 2002). From a historical perspective on design (e.g. Prown, 1982), styling activities reflect the people who make, buy and use objects. Thus, decisions during new product development become visibly evident in the expression (style) of products. In this process, different business strategies

lend themselves to different expressions, as decisions on actions and resources produce noticeable effects in the expressions of new products. Since companies need to resolve different problems over the new products they develop, these expressions are subject to change, and will be based on design briefs that vary in scope and intention (Person & Snelders, 2010).

Designers often fulfil an important role in styling new products, thus shaping their expression. Their activities may be informed by a strategy for styling, but a styling strategy can also emerge inadvertently. The expression of cars during the first part of the twentieth century is a classic case in point. As noted by Gartman (1994, 2006), the distinct style of Ford's Model T was the outcome of mass production and a highly standardized production process targeting to produce a low-cost vehicle for the masses. Consumers were even dissuaded to select other colours than black for their Model T as it reduced the possibilities for Ford to produce cars cost-effectively. As a result, a styling strategy emerged as a side-effect of Ford's strong focus on cost optimization and efficiency. Conversely, the multitude of styles visible in General Motors' (GM's) portfolio of automotive brands formed as a strategic response to the need for variety that Ford had neglected in its strategy. In doing so, GM's styling strategy was underpinned by a number of decisions. GM established the first industrial design department (the Styling Section) within the automotive industry. This department of the first professional car stylists in the automotive industry was instructed to implement design guidelines for the different brands in GM's portfolio to secure brand differentiation. GM also improved their production capabilities by introducing the quick-drying nitrocellulose lacquer paint Duco – to more cost-effectively implement the different styles suggested by these guidelines.

The styling examples of Ford and GM show that the styling efforts of companies have strategic relevance, and that this strategic relevance can lie in choices to differentiate (or not differentiate) the style of new products from that of other products. In classifying styling strategies as differentiation choices, we build on the work of the Swedish designer and design theorist Rune Monö (1997). Monö proposed that many decisions of designers are about the relation of a new product to existing products. He

identified three dimensions on which such relations can be based: (1) between a new product and the present product portfolio of a company, (2) between a new product and the succession of previous product generations and (3) between a new product and competing products (similar dimensions have also been proposed by Baxter (1995) and van Grondelle and van Dijk (2004)). Applying Monö's model to the management of design, Warell (2001) suggests that the three dimensions capture a product's position on the market. Subsequent studies also unveil that managers and designers associate a range of different company and product development objectives to decisions on these three dimensions of styling (Person, Snelders et al., 2007). In addition, design professionals are found to display stable decision patterns (strategies) in how they relate aspects of the business environment to decisions concerning the style of new products on these three dimensions (Person, Schoormans et al., 2007).

Finally, a long tradition of studies on styling strategies exists in the automotive industry, where styling strategies have been studied on one or two of Monö's styling dimensions. Fisher, Griliches and Kaysen (1962) reported on the high costs coupled with changes in styling over model generations. Menge (1962) proposed that larger manufacturers can use quick changes over successive generations as a market tool, because they have a relative cost advantage over smaller manufacturers. Sherman and Hoffer (1971) showed that changes in styling over model generations in the 1950s and 1960s had a positive effect on sales in both high- and low-priced car segments. Similarly, over a greater time period (1953 to 1981), Hoffer and Reilly (1984) demonstrated that changes in styling over model generations are a significant determinant of demand with the effect varying over model classes. Millner and Hoffer (1993) confirmed this for the years 1978 to 1991 – once again, demonstrating a significant effect of style changes on sales for most model classes. Pauwels, Silva-Risso, Srinivasan and Hanssens (2004) extended these findings by demonstrating that changes in styling over time have an effect on both long- and short-term performance measures. Further, Talke, Salomo, Wieringa and Lutz (2009) found that a model's relative newness in styling in comparison to past models and the competition had a positive effect on sales, and this effect

prevailed over the product lifecycle. Still, given this wealth of studies on the financial impact of styling decisions, the question remains unanswered how styling strategies relate to the wider business strategies of companies.

LINKING DESIGN STRATEGIES FOR STYLING TO BUSINESS STRATEGIES

Two often cited typologies for describing business strategies are those introduced by Miles and Snow (1978) and Porter (1980). Miles and Snow identify four archetypal business strategies – Prospectors, Defenders, Analyzers and Reactors. They grounded their typology in (1) how companies establish their product-market domain and (2) how they manage structures and processes to reach success in those domains. Prospectors achieve success by continually redefining their market, adopting new systems and technologies and relying on decentralized structures to manage change. Defenders guard a portion of the market through a stable set of products (and customers), favour systems/technologies with proven effectiveness and depend on centralized structures to safeguard efficiency. Analyzers pursue a hybrid strategy between Prospectors and Defenders by carefully approaching new market opportunities while protecting a core market. Reactors do not pursue coherent structures and processes – making this an unsuccessful strategy in comparison to the three other archetypes. Independently of Miles' and Snow's typology, Porter (1980) identifies three business strategies for establishing a competitive advantage: Cost leadership, Differentiation and Focus. Cost leadership entails targeting price-sensitive buyers through relatively standardized products at a low per-unit cost. Differentiation involves targeting less price-sensitive buyers through products that are seen as unique in comparison to the competition. Focus entails producing products that fulfil the specific needs of a smaller segment of buyers better than the competition. Thus, Cost leadership and Differentiation target larger portions of the market that have a relatively high or low level of price-sensitivity, while a Focus strategy targets the more specific needs of smaller groups of buyers. Similar to Miles' and Snow's (1980) Reactor

strategy, Porter also recognizes an unsuccessful state in which companies are not clear about their value proposition and/or market scope.

In a survey among manufacturing companies, Slappendel (1996) found no relation between business strategy (following the typology of Miles and Snow) and the degree that companies used design. She therefore concluded that design is relevant for Prospectors, Defenders and Analyzers alike. Hsu (2009) found that companies have different objectives for design (and product development) depending on their business strategy. In a small-scale, nonstatistical study of Taiwanese IT companies, he found that design strategies concerning styling were more commonly raised among Prospectors and Analyzers than Defenders. Unfortunately, how the different strategies materialized in products was outside the scope of Hsu's investigation. Nonetheless, departing from Hsu's initial findings, our general proposition is as follows:

Companies employ different styling strategies depending on their business strategy.

In the section below, we articulate our proposition in a set of tentative research hypotheses. We do this by relating the styling strategies on Monö's three dimensions to business strategies. Neither Miles and Snow (1978) nor Porter (1980) have addressed styling in outlining their typologies, nor have subsequent studies explicitly addressed the employment of industrial design as part of a business strategy. However, both typologies address the broader product development context in which styling activities take place. In doing so, they describe how the scope of product development changes depending on a company's business strategy, and how this influences the products that companies put on the market.

RESEARCH HYPOTHESES

When articulating our hypotheses, we will use an adapted version of Miles and Snow's and Porter's typologies, following the work of Walker and Ruekert (1987). These authors distinguished considerable overlap between the typologies of Miles and Snow (1978) and Porter (1980), and accordingly

merged them in one overarching typology incorporating Prospectors, Low-cost Defenders, Differentiated Defenders and Reactors. Slater and Olson (2000, 2001) found support for the distinction between Low-cost and Differentiated Defenders. However, they also kept Analyzers as the validity of this strategy had been demonstrated in several studies. Hence, like strategy researchers before us (e.g. Slater, Hult, & Olson, 2007), we utilize the hybrid typology of Slater and Olson (2000) in addressing the link between design strategies for styling and business strategies. Scholars have noted that companies may pursue several strategies simultaneously (Moore, 2005; Segev, 1987) as well as change strategies over time (Snow & Hambrick, 1980). For example, companies such as IKEA and Dell have demonstrated that successful differentiation does not necessarily preclude a broad market scope. Hence, in developing the hypotheses, we relate a company's employment of styling to the degree to which it adheres to each of the following business strategies: Prospector, Analyzer, Differentiated Defender and Low-cost Defender. No hypotheses are formulated for the Reactor strategy. This strategy is defined by its lack of consistency, so no meaningful predictions can be made regarding Reactors' design strategies for styling. Therefore, in the same vein as others before us (e.g. Shortell & Zajac, 1990), we omit this strategy in developing our hypotheses.

Styling products in relation to the product portfolio: The design and management literature both suggest that by styling products in the product portfolio to look like each other they are more easily recognized as originating from a certain brand, and consumers more readily transfer meanings from existing products to new ones (see e.g. Kapferer, 1995; Karjalainen, 2004). However, as noted earlier (Sanderson & Uzumeri, 1995), companies also style products in their portfolio to look different from each other. For example, at the beginning of the millennium Nokia nurtured a multitude of design styles in its portfolio to cater for differences in taste across different segments (Karjalainen & Snelders, 2010). Person, Schoormans, Snelders and Karjalainen (2007) also found that design professionals favour styling products differently from each other in the case of a broad rather than limited product portfolio. Thus, whether a company should style products to make them look similar or different from

the other products in its portfolio can be looked at as a strategic design decision that relates to how companies manage their product-market domain.

As described by Miles and Snow (1978), Prospectors pursue product development to exploit new market opportunities. Further, the Prospector's domain for product development is typically "broad and in a continuous state of development" (p. 55). As such, the product portfolio of Prospectors is likely to be broad – spanning over multiple market segments. In this situation, to pursue a multitude of styles in the portfolio seems a logical outcome from readily following-up on different market and product opportunities:

H_{1a}: The more a company pursues a Prospector strategy the more the products in its product portfolio look different from each other.

As an in-between strategy, Miles and Snow conceptualize Analyzers to pursue product development to create "the well-conceived addition" (p. 77), by which they seek "the ability to grow through market penetration as well as product market development" (p. 78). Products may be styled to look both similar to and different from each other as Analyzers balance between these two different market objectives. Thus, no relation is expected between styling strategies for the product portfolio and the Analyzer strategy.

Miles and Snow describe how Defenders target "a simple extension of the current product line or an extension into clearly related areas" (p. 38). In doing so, Defenders reach success by either providing a low-cost or differentiated (premium) alternative (Walker & Reukert, 1987). Porter (1980) notes that Cost-leadership requires the development of products with the goal of reducing material costs, facilitating ease of manufacturing, and so forth. A Differentiation strategy implies that product development targets areas such as superior product quality, product uniqueness and premium pricing. As a result, it is topical for Low-cost Defenders to deliver products and services at the lowest overall cost whereas it is key for

Differentiated Defenders to provide high-quality products and services to develop and maintain a premium image. To this end, styling is likely to fulfil different roles among Low-cost Defenders and Differentiated Defenders. Accounting for Hsu's (2009) findings, to implement a coherent look over the product portfolio may be too costly for Low-cost Defenders whereas it may be an important strategy for a Differentiated Defender in developing a premium image:

H_{1b}: The more a company pursues a Low-cost Defender strategy the more the products in its product portfolio look different from each other.

H_{1c}: The more a company pursues a Differentiated Defender strategy the more the products in its product portfolio look similar to each other.

Styling products over product generations: The literature on design advocates that companies should style new products to resemble products from previous generations in order to allow for an enduring look (identity) in the market (Karjalainen, 2004; Warell, 2001). The success of products such as Harley-Davidson motorcycles and Lenovo laptops affirms this position. When it comes to the role of innovation in such products, small incremental changes in styling have been demonstrated to help evolve consumers' perceptions of product use and category membership (Kreuzbauer & Malter, 2005). However, as demonstrated in a range of earlier studies (e.g. Sherman & Hoffer, 1971), companies can also reap profits from styling products to deviate from past models. In the case of Buick, McCormack, Cagan and Vogel (2004) noted that the Buick style can be broken down into a number of periods, each with its own expression. The transition from one style to another was caused by changes in technology, design philosophy, studio leadership and control of the company. Major changes in styling can also be the result of companies that reposition themselves in the market (Underwood, 2003). Karjalainen and Snelders (2010), for instance, found that a radical new style fulfilled an

important role in updating and repositioning Volvo in the 1990s. The laws of fashion also imply that companies periodically need to update their style if they want to stay relevant in relation to the current trends in the market (Moulson & Sproles, 2000). Thus, styling strategies link to how companies defend their product-market domain as they develop products over time.

As noted by Miles and Snow (1978), the domain of Prospectors is a constant state of development as companies readily follow-up on emerging trends in the market. As an expression of the advances in the technology or functionality of products, it is expected that the styling strategy will seek to make new products look different from previous generations in order to differentiate them:

H_{2a}: The more a company pursues a Prospector strategy the more its products look different over product generations.

As in the previous section, no predictions are made for the Analyzer strategy. Products may be styled to look both similar and different over product generations, because Analyzers balance between the objectives of approaching new markets (where they might want to signal a departure from previous generations) and protecting existing ones (where they might want to build on the brand's heritage). Thus, no straightforward relation is expected between styling strategies over product generations and the Analyzer strategy.

The domain of Defenders is likely to be more stable, with companies focusing on developing well-conceived improvements and additions to past products. However, Low-cost Defenders and Differentiated Defenders might develop these additions differently over time. Low-cost Defenders obtain success by providing a competitive alternative to more pricey competitors. In doing so, optimization of cost is key, and activities such as styling are likely to fall outside the core business interests. Differentiated Defenders reach success by creating a carefully nurtured, distinct image in the market, likely to be underlined by a coherent style over time. Hence, in linking styling strategies on Monö's second dimension to business strategies, we propose the following hypotheses:

H_{2b}: The more a company pursues a Low-cost Defender strategy the more its products look different over product generations.

H_{2c}: The more a company pursues a Differentiated Defender strategy the more its products look similar over product generations

Styling products in relation to the competition: A large body of literature on design advocates that companies should differentiate themselves from their competitors in styling new products (Karjalainen, 2004; McCormack et al., 2004; Warell, 2001). Companies such as Apple and Bang&Olufsen can be seen as successful examples of pursuing this strategy for styling (see e.g. Chong, 2004). However, given the high amount of copyright infringement lawsuits (Jacoby & Morrin, 1998), it is clear that companies do not always style products to be different from the competition. Disregarding the legal constraints, there exist a number of benefits in imitating strong competitors. Consumers might mistake the new product for that of a strong competitor (Miaoulis & Damato, 1978), and even when consumers are aware that the product is from another company they may still assume that the product has similar attributes as the competitor (Kapferer, 1995). Thus, styling strategies relate to how companies manage the interaction with their competitive environment in general.

In following up on new product and market opportunities, Prospectors may profit both from styling products to be similar to or different from the competition. On the one hand, as noted by Rindova and Petkova (2007), looking like the competition may reduce learning costs for consumers and, accordingly, facilitate faster consumer adoption. On the other hand, a differentiated look may be a necessity to make consumers notice the benefits of new products. Given this two-sided view, it is hard to predict how styling strategies relate to a clear direction for Prospectors for competing with other brands, and no hypotheses are formulated for Prospectors here.

In contrast to a situation where both similarity and difference offer viable strategies for styling, distinct design strategies for styling seem possible for Analyzers, Low-cost Defenders, and Differentiated Defenders. In bringing out an improved or less expensive product, for Analyzers, it seems logical to style products similar to the competition to benefit from the positive associations consumers already have with competing products. Low-cost Defenders are also likely to style products to look similar to the competition in order to profit from the positive associations consumers have with competing (often more expensive) products. Unlike their low-cost counterparts, it seems essential for Differentiated Defenders to look different from the competition in order to safeguard their uniqueness and premium image. Hence, in linking styling strategies on Monö's third dimension to business strategies, we propose the following hypotheses:

H_{3a}: The more a company pursues an Analyzer strategy the more its products look similar to the competition.

H_{3b}: The more a company pursues a Low-cost Defender strategy the more its products look similar to the competition.

H_{3c}: The more a company pursues a Differentiated Defender strategy the more its products look different from the competition.

METHOD

We studied the use of styling strategies in the automotive industry – particularly the German passenger car market. While the scope of industrial design is broader today than in the early days of General Motors, styling continues to fulfil an important role in the automotive industry. Major car manufacturers spend hundreds of millions of dollars in planning and conducting research on styling (Moulson & Sproles, 2000). Many car companies also host regional design studios of stylists who spot emerging trends in the market. The importance of styling is further underlined by the

high number of automotive design schools around the world, and the importance placed on styling activities at these schools.

Our focus on Germany follows the lead of an earlier study on styling in the automotive industry (Talke et al., 2009). Germany constitutes the largest, and perhaps most competitive, car market in Europe. Most major European car brands and a large number of original equipment manufacturers (OEMs) are present in the market. Several national car magazines closely cover the introduction of new models in the market, offering a variety of publicly available data on new product launches. As a result, it provides a diverse stylistic scenery, grounded in the actions of multiple brands and OEMs, and followed by a number of experts who monitor the competitive position of different brands and models.

Sample

In striving for a comprehensive view on the employment of styling strategies, we began by compiling a list of the main automotive brands operating in the German passenger car market in 2009 (see Table 8). In doing so, we reviewed *Ward's World Motor Vehicle Data 2009* and new car registration data from the *European Automobile Manufacturers' Association* (ACEA).

Table 8: Studied automotive brands

Alfa Romeo	Ford	Mazda	Seat
Audi	Honda	Mercedes-Benz	Skoda
BMW	Hyundai	Mini	Smart
Chevrolet	Jaguar	Mitsubishi	SSangYong
Chrysler	Jeep	Nissan	Subaru
Citroën	Kia	Opel/Vauxhall	Suzuki
Dacia	Lada	Peugeot	Toyota
Daihatsu	Lancia	Porsche	Volkswagen
Dodge	Land Rover	Renault	Volvo
Fiat	Lexus	Saab	

With a focus on the general passenger car market, we excluded niche brands producing super-sports cars (e.g. Ferrari and Lamborghini) and limited-series luxury vehicles (e.g. Bugatti, Maybach, MG Rover and Rolls

Royce). Our review resulted in a list of 39 automotive brands for which we assessed their design strategy for styling as well as their pursued business strategy.

Measures

In avoiding common source bias, we relied on the expertise of automotive design students in assessing the brand's styling strategies and on industry experts in assessing the business strategies. The choice of these two expert groups (rather than company managers) was appropriate for a number of reasons. First, we were interested in the realized strategies of the brands rather than their intended strategies. Specifically, we wanted to capture how styling had been implemented given a brand's business strategy in that same period. Second, retrospective accounts of strategy by managers often differ significantly from the intended strategies reported by the same managers prior to implementation (Golden, 1992). There are a number of reasons for this difference. Successful managers often avoid stating specific strategies in order to keep options open and not overlook relevant concerns for employees (Quinn, 1977). Managers often also prefer to report their intended strategies as opposed to (emergent or) realized strategies (Snow & Hambrick, 1980). In tandem, managers sometimes resist predetermined strategy typologies because they perceive their organization as unique and therefore not accurately covered by generic typologies (Miles & Snow, 1978).

Given the situation above, experts can provide important insights on strategy. Domain experts serve as sources of extensive up-to-date content knowledge and pride themselves in staying informed about developments in their field of expertise (Shanteau, 1988). With a comparative view on the market, external experts are suited to identifying the realized strategies of companies (Smith & Grimm, 1987). Hence, our automotive design students and industry experts provided in-depth knowledge on automotive styling and the automotive industry in general, and this allowed us to acquire an independent assessment of the brands' styling and business strategies.

Styling strategy assessment: 15 automotive design students assessed the styling strategy of each brand. The students were recruited

from a Master programme in automotive design and were paid 20 Euros for their participation. They were all trained in styling and displayed a strong interest in automotive design. In preparation for the assessment of the brands' styling strategies, we began with selecting a representative set of models for each brand. We visited the German websites of all the brands to list available models. To avoid an overestimation of coherence within a brand, we excluded versions that were presented as separate models, but that in reality had only limited (or no) difference to other versions in terms of their exterior styling (such as the Mini Cooper next to the Mini One). For the same reason, we also included one version of models that were sold as hatchback, sedan (saloon) or station wagon (estate) versions of the same model – and we always selected the hatchback over the sedan (for small cars), and the sedan over the station wagon (for larger cars). Among this initial set of cars, we selected the top five selling models for each brand by reviewing the new passenger car registrations from 2007 to 2009 (www.kfz-auskunft.de). Pictures of the selected models were acquired from public sources on the Internet (e.g. Wiki Commons), grey-scaled with the background digitally removed to standardize the comparisons. All pictures show the models slightly rotated, from the same high front/left-side angle, which is the most commonly used perspective in the automotive industry. The final outcome of this procedure was a set of 173 pictures of car models available in the German market in 2009.⁶⁴

A brand's styling strategy was estimated as the degree to which the models of a brand looked similar to or different from other models over Monö's (1997) three dimensions: a) other models within the present portfolio of the brand, b) the previous generation of the models, and c) competing models from different brands. The styling strategy of a brand on one such dimension was calculated as the average score on the dimension over the different models of the brand.

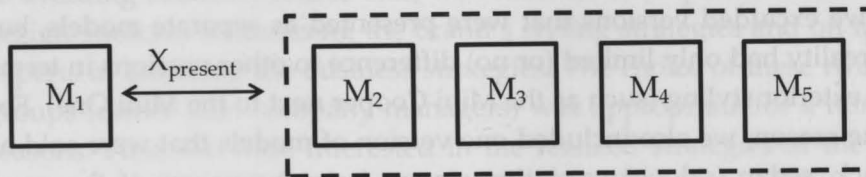
In order to assess the styling strategies of the brands, the students were asked to make visual comparisons for each model on each of the three

⁶⁴ Some brands (e.g. Jaguar and Smart) had five or less different models available on the German market in 2009, and these brands were represented by all their different models.

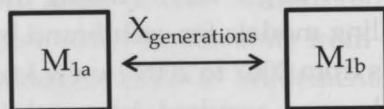
dimensions (see Figure 4). Different procedures for the assessment task were pretested with two academics and two PhD students, with the aim of minimizing the complexity and tediousness associated with the task.

Figure 4: Types of visual comparisons over Monö's three dimensions

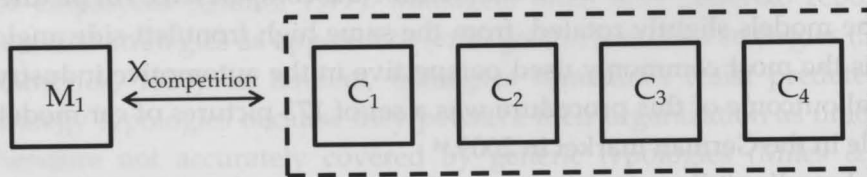
PRODUCT PORTFOLIO



PRODUCT GENERATIONS



COMPETING PRODUCTS



With respect to the present product portfolio dimension, each student evaluated how much one model per brand looked like the other models in the portfolio of the same brand ('How much does the car on the left look like the cars on the right?', 1: 'it looks very different' to 7: 'it looks very similar'). With respect to the succession of product generation dimension, we checked the German version of Wikipedia and found that 126 of the 173 models had a predecessor. For these models, we prepared additional pictures, and asked students to evaluate how much a model of a brand (shown on the left of the page) looked like its predecessor (on the right of the page) ('How much does the car on the left look like the car on the right?', 1: 'it looks very different' to 7: 'it looks very similar'). Finally, with

respect to competing product dimensions, we established the main competitors for each model by going over car reviews in the three influential German car magazines: *Auto Motor und Sport*, *Auto Bild* and *Auto Woche*. In particular, we selected those models of other brands that were most frequently mentioned in direct comparison tests between models (Vergleichstests). We limited our study to up to four competitors for each model. Following this procedure, we established competitors for 156 out of the 173 models, again preparing additional pictures. For these models, students evaluated how much each model looked like its main competitors from other brands ('How much does the car on the left look like the cars on the right?', 1: 'it looks very different' to 7: 'it looks very similar').

Each student received an A4 booklet in which they had to rate one model of each brand on each dimension. Five separate booklets were created for each dimension, each incorporating one model per brand, and thus a maximum of 39 comparisons per booklet. With 15 students participating in the task, each booklet was evaluated by three students. Before evaluating the cars, students were first trained by having them perform the same task on a smaller set of other products. Between performing the comparisons on each dimension, small breaks were scheduled for the students to reduce the fatigue and tediousness of the task.

The styling strategy for each brand was calculated as the mean score of the 15 students (three per model) on each dimension. Prior to averaging the scores on each dimension over the booklets, we calculated the intraclass correlation coefficient (ICC) for each booklet to assess the inter-rater reliability between the students. On each dimension, the inter-rater reliability averaged over the booklets was assessed and ranged from moderate for the competing products dimension (ICC=0.63), to almost perfect for both the present product portfolio dimension (ICC=0.81) and the succession of product generations dimension (ICC=0.89). We therefore could average the students' evaluations on each dimension for each brand as an estimate of the brands' styling strategy (following Dunn, 1989).

Business strategy assessment: We asked 12 industry experts to indicate the degree to which each brand had adhered to a Prospector,

Analyzer, Low-cost Defender and Differentiated Defender strategy between 2002 and 2009. The time period of the study was purposefully selected to cover model changes in the portfolio of the studied brands. We looked at the introduction year of all models available in the brands' product portfolios in 2009, and selected the average year of introduction for the earliest 25 per cent as the starting point for our study.

All of the industry experts had many years of experience in the automotive industry from working in areas such as R&D, marketing, sales and design and/or from educational institutes teaching automotive design. We used a 'snowball' (chain referral) technique in sampling the experts where four independently approached experts recommended other suitable experts for our study. In purposefully sampling our experts, we explicitly selected (and asked to be directed to) experts with a broad view on the automotive industry, who were able to have a comparative view on the business strategies of the different brands. In doing so, we not only reached experts known to us, but also people recognized for their industry expertise among their peers.

The assessment of the brands' business strategies was performed during face-to-face sessions with the experts. The sessions allowed us to make sure that the experts understood the assessment task properly. The face-to-face contact also allowed us to acquire knowledge about the reasons underlying their assessments – helping us to make a more informed interpretation of our findings. Each session took between one to two hours during which the experts indicated the degree to which the different brands had adhered to the different business strategies. They did so by reading four statements (one for each business strategy), and by indicating for each of these on a five-point scale how descriptive they found the statement of the actions of each brand between 2002 and 2009 (1: 'Not descriptive at all' to 5: 'Highly descriptive'). The statements were adopted from Slater's and Olson's (2000) nominal self-typing scale, and adjusted to fit the assessment task in the face-to-face sessions (see Appendix 2). The assessments were made by placing the different brands (each printed on a separate card) on a large paper scale placed on the table in front of the expert. This procedure facilitated a comparative view, which allowed the

experts to sharpen their view on the brands' business strategies as they positioned and repositioned all brands on the scale. The assessment task was pretested with two professors and two PhD students to ensure the clarity of the descriptions and to explore the complexity of and time needed for the task.

The business strategy for each brand was calculated as the mean score of the 12 experts with respect to each statement. Prior to averaging the scores on each dimension, we calculated ICC for each business strategy statement to assess inter-rater reliability. As shown in Table 9, the inter-rater reliability for five statements ranged from moderate to almost perfect (Dunn, 1989). We therefore could average the scores of the experts with respect to each statement as an estimate of the brands' business strategies.

RESULTS

We regressed each of the styling strategies on the business strategies, arriving at one model for each of Monö's three dimensions: the styling strategy for the present product portfolio dimension, the succession of product generations dimension, and the competing products dimension.

Prior to estimating the models, we studied the Pearson's correlation coefficients between the different business strategies. The correlation matrix (see Table 9) indicated very high negative correlations between pursuing a Low-cost Defender and Differentiated Defender strategy ($r = -0.94$, $p < 0.001$). The high correlation fits with theory and with remarks made by the industry experts while they rated the brands. Walker and Ruekert (1987) conceptualize Low-cost and Differentiated Defenders as two opposing defender strategies on the opposite end of the Prospector strategy. A number of industry experts also indicated that they saw them as opposing strategies in the automotive industry.

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Table 9: Correlations among the business strategy scores (n=39)

	1. Prospector	2. Analyzer	3. Low-cost Defender	4. Differentiated Defender
1. Prospector	<i>0.88</i>			
2. Analyzer	0.17	<i>0.66</i>		
3. Low-cost Defender	-0.65**	0.38*	<i>0.96</i>	
4. Differentiated Defender	0.72**	-0.18	-0.94**	<i>0.92</i>

** correlation is significant at the .001 level (two-tailed)

* correlation is significant at the .05 level (two-tailed)

Intraclass correlations are shown in italics on the diagonal.

With very high negative correlations between business strategies, multicollinearity problems were a concern. (Hair et al., 1995).⁶⁵ We therefore recoded the business strategy scores – capturing the brands' business strategies in three scores instead of the original four. We reversed the Low-cost Defender scores and combined them with the Differentiated Defender scores to produce a composite scale that ranges from Low-cost Defender (Low) to Differentiated Defender (High). We retained the original Prospector and Analyzer scores to estimate more “theoretically well motivated” regression models and avoid specification errors (O'Brien, 2007, p. 683).

An overview of the regression analyses is presented in Table 10. The first model regressed the styling strategy for the present product portfolio dimension on the business strategies ($R^2_{adj} = 0.43$; $F(3, 34) = 10.47$, $p < 0.001$). We calculated the Variance Inflation Factor (VIF) values for each factor

⁶⁵ In initially estimating regression models for each of Monö's dimensions incorporating the original business strategy scores, the Variance Inflation Factor values were well above the threshold value of 10 (Hair et al., 1995) – indicating multicollinearity problems.

(business strategy score) to check for effects of multicollinearity. The values ranged between 1.64 and 3.03, which is well below the recommended threshold value of 10 (Hair et al., 1995). The Prospector scores did not significantly influence the styling strategy on the present product portfolio dimension. The regression analysis showed a positive impact of the Low-cost-to-Differentiated-Defender scores on the styling strategy scores for the present product portfolio dimension ($\beta = 0.82, p < 0.01$), supporting H_{1b} and H_{1c}. In other words, the more a brand pursued a Differentiated Defender strategy the more similar the products in its portfolio looked to each other. In contrast, the more a brand pursued a Low-cost Defender strategy the more different the products in its portfolio looked from each other.

The second model regressed the styling strategy for the succession of generations dimension on the business strategies ($R^2_{adj} = 0.35; F(3, 34) = 7.50, p < 0.01$). VIF values ranged from 1.50 to 2.76, again well below the recommended threshold. The Prospector scores were not significantly related to the styling strategy scores on the succession of product generations dimension. The regression analysis showed a positive impact of the Low-cost-to-Differentiated-Defender scores on the styling strategy scores for the succession of product generations dimension ($\beta = 0.58, p < 0.05$), supporting H_{2b} and H_{2c}. In other words, the more a brand pursued a Differentiated Defender strategy the more similar it styled its products over time. In contrast, the more a brand pursued a Low-cost Defender strategy the more different its products looked from each other over time.

The third model regressed the styling strategy for the competition dimension on the business strategies ($R^2_{adj} = 0.25; F(3, 35) = 5.18, p < 0.01$). The VIF values were acceptable at 1.53 to 2.86. The regression analysis showed a positive impact of the Analyzer scores on the styling strategy scores for the competing products dimension ($\beta = 0.52, p < 0.01$), supporting H_{3a}. In other words, the more a brand pursued an Analyzer strategy the more similar it styled its products to the competition. The Low-cost-to-Differentiated-Defender scores were not significantly related to the styling strategy scores on the competing products dimension.

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Table 10: Impact of business strategy scores on styling strategy scores

	Dependent: Styling strategy		
	Present product portfolio β -values	Succession of product generations β -values	Competing products β -values
Prospector	-0.22	0.06	0.09
Analyzer	0.16	-0.01	0.52**
Low-cost to Differentiated			
Defender	0.82**	0.58*	0.24
R ²	0.48	0.40	0.31
Adjusted R ²	0.43	0.35	0.25
F-value	10.47	7.51	5.18
N	38	38	39

** significant at the 0.01 level

* significant at the 0.05 level

DISCUSSION

While a large body of literature argues for the importance of nurturing a strong link between strategies for design and business strategies, surprisingly few empirical studies have explored this linkage – and even fewer have addressed it quantitatively. Acknowledging this void in knowledge, we performed a quantitative study on the link between design strategies for styling and business strategies in the automotive industry. Our results show that automotive companies (brands) employ different styling strategies depending on their business strategies. Specifically, building on the work of Miles and Snow (1978) and Porter (1980), we found that the more a company pursues a Differentiated Defender strategy the more its products look similar to other products in the portfolio and over product generations. In contrast, the more a company pursues a Low-cost Defender strategy the more its products look different from each other. Our results also showed that the more a company pursues an Analyzer strategy the more its products look similar to the competition.

These findings suggest that a company's business strategy has direct consequences on the employment of design. They also extend past studies

on the implementation of business strategies along lines not yet addressed in the strategic management literature. An underlying assumption in this literature is that companies can reach success by pursuing different business strategies. The most successful companies are simply those whose business functions most effectively interact with their competitive environment. The responsibility of management is to adopt and implement suitable strategies for business functions in interacting with this environment. By surveying what styling strategies automotive companies adopt given their business strategy – a topic previously unaddressed in the strategic management literature – our findings add to past literature on the implementation of business strategies.

In distinguishing the creation of similarities and differences in car designs, we answer the calls for more focused research efforts on the management of styling activities (Creusen, 2011; Krishnan & Ulrich, 2001) as well as for research on the relation between strategies for design and strategies for business (Hertenstein & Platt, 1997). Our findings also add to past studies on the management of design and styling activities. As noted earlier, several case studies indicate that companies pursue a range of strategic objectives through styling under a range of different market conditions. In doing so, studies have shown that companies profit both from implementing a coherent style over their products as well as facilitating the coexistence of multiple styles across different market segments. Some companies also nurture a coherent style over product generations whereas others frequently break with past styling efforts. The results of our study suggest that the styling strategy of a company depends on its business strategy – making both differentiation and imitation viable strategic options for styling new products. We thus provide an explanation for the sometimes opposing findings brought forward in the management literature on design.

Limitations and directions for future research

We explored the relation between styling strategies and business strategies in the automotive industry. This is an industry where styling has long held centre stage. Because of their leading role in styling, many of the strategies

employed for the style of cars may also be relevant for other products. Indeed, reports from practice indicate that concepts and practices from the car industry trickle down to other industries. For example, many consumer goods companies have followed the practice of automotive companies by hosting regional design studios in order to better account for differences in taste across geographical regions. This said, the strategic employment of styling strategies in the automotive industry is not necessarily the same for how styling is used (or should be used) in other industries. Gemser and Leenders (2001) found that companies profit differently from design depending on how mature the use of industrial design is within an industry. This suggests that styling may be used differently in industries where attention to industrial design has developed more recently. Thus, future studies could investigate the link between styling strategies and business strategies in different industries with different levels of experience in industrial design.

As a first study on the relation between styling strategies and business strategies, we turned to established typologies to assess the business strategies and styling strategies of automotive brands. In assessing the business strategies, we relied on a hybrid typology of Walker and Reukert (1987) with roots in the work of Miles and Snow (1978) and Porter (1980). This typology is well cited in the strategic management literature, where it has been used to survey how companies implement other business functions. Thus, our adapted use of the hybrid typology builds on a range of earlier work on the implementation of business strategies. The ICC scores associated with the experts' evaluation of the different brands also indicated satisfactory reliability in assessing the different business strategies. Nonetheless, future studies may profit from applying more refined typologies (see e.g. Desarbo, Benedetto, Song, & Sinha, 2004) to understand the strategic role of styling, and its relation to strategies in areas such as marketing, R&D and sales. In addition, while it is implied that all strategies – if correctly implemented – can be successful, we did not incorporate direct performance measures in our study. To this end, future studies should incorporate performance measures to get more

insight on how to effectively employ styling activities given a company's business strategy.

In assessing the styling strategies of the different brands, we relied on Monö's three dimensions to capture the main styling decisions underlying the brands' styling strategies. We employed two types of comparisons to assess the brands' styling strategies across the three dimensions. First, students performed pair-wise model comparisons of past and present models of each brand to assess the styling strategy over model generations. Second, they performed model-group comparisons where each model was compared to (1) other models in the product portfolio and (2) models of the competition. These procedures allowed us to practically acquire an in-depth assessment of the brands' styling strategies through multiple comparisons. It also allowed us to account for an important peculiarity associated with assessments of style. Assessments of style are complicated in the sense that different (reoccurring) features of a design may be more or less relevant in determining the style of an object (Person & Snelders, 2010). In having students compare each model to (groups of) other models, we accounted for this effect. Similar measures have also been used in other studies on styling strategies (see e.g. Person, Schoormans et al., 2007; Snelders, Morel, & Havermans, 2011). However, it has not been addressed in earlier studies how these 'holistic' comparative measures relate to more traditional feature-based measures of styling strategies (see e.g. McCormack et al., 2004). Future studies should therefore be targeted at evaluating different measures of styling strategies, in order to resolve the benefits and challenges associated with different measures.

Managerial implications

When it comes to the question of what styling strategy to follow, we suggest that managers relate this question to the broader business strategy of the company. Our findings point to a number of insights to help managers create an appropriate styling strategy. In specific, our findings suggest that companies may benefit from seeking a greater degree of coherence over their products as they seek a Differentiated (premium) position in the market. However, as also suggested by our findings,

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developing a coherence over products may not be relevant when companies seek cost-leadership, and products are developed to lower material costs, facilitating ease of manufacturing, etc. Finally, when adopting an Analyzer strategy (i.e., pursue to be responsive to emerging developments in the environment), managers need to balance a potential need for coherence or difference across the product portfolio with the occasional need to make their products look similar to the competition.

This business logic of styling strategies does not preclude that managers will need to consider how to implement styling activities on a case-by-case basis. A quantitative study on the employment of styling cannot provide all the answers. The mastery of managers in tailoring their styling efforts, and to fit them in with their organization and competitive environment will determine the success of their styling activities. Design is not a standard solution but rather a carefully managed business function targeted to fulfil specific roles for companies.

NOTE: THE IMPACT OF STYLING STRATEGIES ON FINANCIAL PROFITABILITY, MARKET VISIBILITY AND PROFESSIONAL ACKNOWLEDGMENT

In the essay in Chapter Four, three domains of value contributions of interest in assessing the performance of styling activities were identified: (1) financial profitability, (2) market visibility and (3) professional acknowledgement. In investigating how business strategies and styling strategies in the German passenger car market relate to each other, we did not relate them to performance because the size of the data set (N=39) did not allow for mediation analyses. This said, understanding the relationship between styling strategies and performance poses a question of key relevance for the management of styling activities. Therefore, in order to ensure the coherence of the thesis, we explore the value contribution of pursuing different styling strategies in a research note. We do this by regressing the brands' financial profitability, market visibility and professional acknowledgement on the brands' styling strategies as described in Monö's three dimensions.

In preparation for estimating the models, we extended the original data set with data on the brands' financial profitability, market visibility and professional acknowledgment. Assessments of the brands' financial profitability and market visibility were acquired from the German Automotive Club, ADAC. Every year, ADAC publishes a report (Der ADAC-AutoMarX) on the performance of the main automotive brands in the German passenger car market. The report presents an in-depth assessment of the brands' financial profitability ("Markt-stärke") and market visibility ("Marken-image"). The assessment of financial profitability covers (1) the brands' sales between October and March and (2) their year-on-year market growth. The assessment of market visibility is based on a (brand) image survey of 4000 German consumers. ADAC summarizes its assessments using two standardized scores for 33 of the 39 brands we studied in the fifth essay. The brands' professional acknowledgment was assessed by 15 automotive design students who rated all the brands on a four-item scale ("I would find it very prestigious to work as an automotive designer for ...", "Other automotive design students would strongly admire me if I worked as a designer for...", "The most reputed automotive designers work for ..." and "Only the most talented designers have a chance to work for..."). The scale was developed in collaboration with two professors with expertise in design management, and pre-tested with four PhD students. The scores of the students were averaged for each brand to provide a measure of the brands' professional acknowledgement. Prior to averaging the scores, we calculated the intraclass correlation coefficient for the students' assessments of the brands on each item to assess the inter-rater reliability of their scores on each item. The inter-rater reliability was excellent for all four items, ranging from 0.91 to 0.96. We therefore could average the scores for each item. Next, we performed confirmatory factor analysis to assess the validity and reliability of the scale. All items loaded on a single factor. The alpha coefficient for the four items was 0.99. We therefore averaged the scores over the four items to produce a combined score for the professional acknowledgment of each of the brands.

In estimating the effects, we arrived at one regression model for each value contribution (see Table 11). The first model regressed the brands' financial profitability on the three styling strategies ($R^2_{\text{adj}} = 0.07$; $F(3,31) = 1.76$, $p = 0.18$). We calculated the Variance Inflation Factor (VIF) values for each factor (styling strategy score) to check for effects of multicollinearity. The values ranged between 1.00 and 1.46, which is well below the recommended threshold value of 10 (Hair et al., 1995). The resulting model was nonsignificant and none of the three styling strategy scores significantly influenced financial profitability. In other words, we did not find any specific styling strategy leading to improved or decaying financial performance. The second model regressed the brands' market visibility on the three styling strategy dimensions ($R^2_{\text{adj}} = 0.29$; $F(3,31) = 5.26$, $p < 0.01$). VIF values ranged from 1.00 to 1.46, well below the recommended threshold. The regression analysis showed a positive impact of the styling strategy scores for the present product portfolio dimension on the market visibility scores ($\beta = 38$, $p < 0.05$). In other words, the more the products in a brand's product portfolio looked alike over the product portfolio the more brand visibility it held in the market. The styling strategy scores on the two other dimensions did not display any significant effects. The third model regressed the brands' professional acknowledgment on the three styling strategy dimensions ($R^2_{\text{adj}} = 0.42$; $F(3,36) = 9.79$, $p < 0.001$). The VIF values were again well below the threshold at 1.12 to 1.57. The regression analysis showed a positive impact of the present product portfolio scores on the professional acknowledgment scores ($\beta = 57$, $p < 0.01$). In other words, the more the products in a brand's product portfolio looked alike over the product portfolio the more professional acknowledgment it held among the automotive students. The styling strategy scores on the other two dimensions did not display any significant effects.

In the strategic management literature, a key assumption is that many strategies may be profitable for companies. Walker and Ruekert (1987, p. 18) for instance conclude that "both Porter and Miles and Snow suggest that the selection and implementation of generic business unit strategies are not necessarily contingent on the external environment. That is, across different environmental contexts, one can find business units effectively

pursuing each of the strategies described by those authors." In other words, there are typically greater variations in performance between companies pursuing the same strategy than there are between companies pursuing different strategies (Slater and Olson 2000).

Our results support the idea that companies can reach success by pursuing different strategies. The brands' financial profitability was not linked to any specific styling strategy, suggesting that styling products to be similar or different over Monö's three dimensions both provide viable strategies for styling. This said, the results also show that coherence over the product portfolio was positively related to improved market visibility and professional acknowledgment. Hence, for companies seeking such value contributions, our study confirms past claims in the literature on the importance of coherence in establishing a strong presence in the market (e.g. Karjalainen, 2004; McCormack et al., 2004). However, the results also question the need to maintain this consistency over time. Furthermore, styling products to be different from the competition was not significant for any of the value contributions. In other words, the brands obtained financial profitability, market visibility and professional acknowledgement from both products styled to be similar to and different from the competition. Given the attention granted to differentiation in design, we hope that our findings will stimulate more research on the multifaceted value that styling can bring for companies and designers, and the role played by differentiation/coherence in obtaining those value contributions.

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Table 11: Impact of styling strategy scores on financial profitability, market visibility and professional acknowledgment

	Dependent: Styling strategy		
	Financial profitability	Market visibility	Professional acknowledgment
	β -values	β -values	β -values
Present product portfolio	-0.02	0.38*	0.57**
Succession of product generations	0.28	0.22	0.13
Competing products	-0.29	0.28	0.18
R ²	0.16	0.36	0.47
Adjusted R ²	0.07	0.29	0.42
F-value	1.76	5.26	9.79
N	33	33	39

** significant at the 0.01 level

* significant at the 0.05 level

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CHAPTER 7

CONCLUSIONS: NEW CHALLENGES FOR THE MANAGEMENT OF STYLE

THE MANAGEMENT OF DESIGN STYLES

Products are the outcome of the efforts of professionals in many fields. However, industrial designers are typically the only professionals with a specific responsibility (and training) to shape the expression of new products in a commercial setting. As a result, styling represents perhaps the most defining work undertaken by designers. In spite of this, studies on styling are few and far between in the literature on the management of design.

At the same time, the question of how companies should approach styling activities poses a challenge for the management of design. An important reason for this is that managers and designers lack the knowledge needed to discuss the look and feel of products strategically (McCormack et al., 2004; Warell, 2001). On the one hand, managers often only possess a basic understanding about the work processes of designers. Styling is considered to be a "soft," creative capability of design, with the results hinging largely on the skills of individual designers, which makes it hard to manage (Lorenz, 1994). This situation is further complicated by the fact that managers are also seldom equipped with the knowledge needed to evaluate (critique) the styling work of designers. On the other hand, designers seldom receive extensive training in management and strategy, making it hard for them to defend their styling work within a corporate setting. Reports suggest that designers find their work

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Table 13: Impact of styling strategy issues on financial profitability, market visibility and professional acknowledgment

	Dependant styling strategy		
	Financial profitability	Market visibility	Professional acknowledgment
	β -value	β -value	β -value
Present product portfolio	-0.02	0.38*	0.57**
Succession of product generations	0.25	0.22	0.13
Adjusted R ²	0.14	0.05	0.27
F-value	1.76	2.26	6.79
N	31	31	39

*Significant at 10% level

**Significant at 5% level

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THE MANAGEMENT OF STYLE**

Products are the outcome of the efforts of professionals in many fields. However, industrial designers are typically the only professionals with a specific responsibility (and training) to shape the expression of new products in a commercial setting. As a result, styling represents perhaps the most defining work undertaken by designers. In spite of this, studies on styling are few and far between in the literature on the management of design.

At the same time, the question of how companies should approach styling activities poses a challenge for the management of design. An important reason for this is that managers and designers lack the knowledge needed to discuss the look and feel of products strategically (McCormack et al., 2004; Warell, 2001). On the one hand, managers often only possess a basic understanding about the work processes of designers. Styling is considered to be a "soft," creative capability of design, with the results hinging largely on the skills of individual designers, which makes it hard to manage (Lorenz, 1994). This situation is further complicated by the fact that managers are also seldom equipped with the knowledge needed to evaluate (critique) the styling work of designers. On the other hand, designers seldom receive extensive training in management and strategy, making it hard for them to defend their styling work within a corporate setting. Reports suggest that designers find their work

undervalued (Moody, 1980) and that managers do not grant high enough priority to styling in new product development and strategy (Kotler & Rath, 1984). Hence, to support the effective management of styling activities, there is a need for studies that pinpoint the strategic relevance of styling for companies, and the strategic paths companies and designers can follow in shaping the look and feel of products.

In this doctoral thesis, I propose a business logic for the strategic relevance of styling for companies and for the management of design styles. My central argument is that styling activities should be managed and that companies can cultivate profits by taking a more strategic approach to managing the style of their products. To advance this argument, I addressed the position of designers as stylists, who through their work shape the expression of new products. I also addressed how companies gain an edge on the competition through styling by strategically managing the expression of their products.

CONTRIBUTION OF THE THESIS

The main contribution of the thesis lies in outlining the strategic paths that companies can follow in styling new products – answering calls for research on the management of styling activities (Creusen, 2011) and on the relation between design and strategy (Hertenstein & Platt, 1997). Understanding the main strategic paths that companies can follow in styling new products poses a question of key relevance for research on the management of design. While a wealth of studies have investigated the aesthetic and symbolic outcomes of industrial design (for a review see e.g. Veryzer, 2000), comparatively few studies focus on the styling process through which such effects are created by designers and the companies they work for. Furthermore, while a number of different styling strategies are mentioned in the literature, few studies address the value of different strategies and when to opt for one strategy over another.

In the first part of the thesis, I provide a foundation for studies on styling in design. It consists of an introduction (Chapter One) and essay (Chapter Two). In this essay, I investigate the concept of design style as

materialized in brand styles. While both the design and management literatures recognize the importance of designers' work in producing a style for a brand, both literatures have only briefly addressed the assumptions underlying the notion of brand styles in products. Appropriating Ackerman's (1962) work on style in art to the field of design, I conceptualize a design style as the outcome of reoccurring problem-solving activities, which brings about noticeable effects (or a conspicuous lack thereof) in the expression of products. I also separate the production of a design style from its reception in the market – stressing that both deliberate and accidental effects (and the rhetoric surrounding them) should be the point of interest for studies on style in design.

In the second part of the thesis, I address the strategic relevance and challenges associated with managing styling activities in four essays. In the first of these essays (Chapter Three), I report on interviews with managers and designers focusing on the main strategic path that companies can follow in styling new products. Integrating the interviews with a review of the literature, I identify three main market objectives for styling: (1) drawing attention, (2) establishing recognition, and (3) creating symbolic meaning. By extending Monö's (1997) work on design, I also distinguish three dimensions on which styling decisions take place: (1) between a new product and the present product portfolio, (2) between a new product and the succession of product generations, and (3) between a new product and the competition. In the second essay this topic (Chapter Four), I describe how style-sensitive companies assess the value of styling activities. I summarize three domains of managerial interest in assessing the contribution of styling in both the short and long term: (1) financial profitability, (2) market visibility and (3) professional acknowledgment. I also extend the managerial reasoning on styling by describing how the value of styling changes depending on how companies make decisions on the expression of their products. In the third essay on managing styling activities (Chapter Five), I measure how factors in the market environment frame the strategic styling decisions of design professionals. The results show that strategic styling decisions are influenced by both factors in the market environment and the educational background and experience of the

design professionals. In the fourth essay on this topic (Chapter Six), I extend these results by studying the link between expert judgments of styling and business strategies. In doing so, I position styling and the expression of products in relation to how companies in general manage their competitive environment. The results of the study show that a company's business strategy correlates with the expression of its products. The results also support the idea that the expression of products may stem from both explicit and emerging strategies for styling. Moreover, they also show that styling strategies link differently to financial profitability, market visibility and professional acknowledgment.

LIMITATIONS AND FUTURE RESEARCH

Given that the five essays are written as articles, the specific limitations associated with the different studies have already been reported separately for each essay. In addition, there are three inherent limitations to this thesis that offer fruitful avenues for future research that I will discuss in concluding the research part of the thesis.

First, given the elusive character of style, definitions of style are seldom impervious to critique. However, the alternative – to abolish studies on style – has not proven successful, either in art or design. Style is intrinsically linked to how we describe objects, and references to a style serve an important role in separating the like from the unlike. Hence, avoiding style typically leads to more problems than solutions. Therefore, it is not surprising that scholars have argued for a re-appreciation of style, while still acknowledging its ambivalent character (see, e.g. Conkey & Hastorf, 1990; Eck et al., 1995; Sohm, 2001). In the thesis, I appropriated Ackerman's (1962) work on style in art to the field of design – conceptualizing the expression of design styles as originating in the problem-solving activities of companies. This conceptualization fits well with the past thinking on problem-solving in design (e.g. Dosi, 1982; Simon, 1996) where design can be seen to transform "a set of product requirements into a specification of the geometry and material properties of an artifact" (Ulrich & Pearson, 1998, p. 352). It also proved well suited to

capturing how managers and designers described the scope of styling activities in practice. This said, Ackerman's view on style is broad. It also allowed for the broadening of the scope of styling significantly. More conceptual work should therefore be carried out to further explore the implications of Ackerman's definition of style for studies on design. In particular, future studies could address the effects of technological solutions on the expressiveness of products, and the specific role designers fulfil in shaping and showcasing new technology.

Second, companies do not necessarily implement and profit from styling in the same ways. Gemser and Leenders (2001) found that companies profit differently from design depending on how mature the use of industrial design is within their industry. I studied the strategic relevance of styling to a range of different companies operating in different industries and markets. The results of the studies suggest that styling activities are used differently depending on the situation. This said, in extending the findings of the thesis, future studies should address the management of styling activities within specific industries to further clarify the specific objectives and constraints that frame these design activities within different industries and companies. In the essay in Chapter Six, I reported one such exploration of the link between styling strategies and business strategies in the automotive industry. Styling has long fulfilled a pivotal role in the automotive industry. However, the automotive industry does not necessarily use styling in the same way as other industries. Future studies should therefore be directed towards understanding the specific role styling plays in other industries in order to provide managers with more actionable results for the management of styling.

Third, in contributing to an emerging body of literature on the management of design, future studies should address the implementation of styling strategies. I grounded my studies in both the design and management literatures. I also incorporated theories on style in art and architecture in creating a foundation for studies on design styles. In doing so, I focused my studies on the expression of products – distinguishing styling strategies as decisions on similarities and differences between products. I also pointed to the origin and strategic relevance of these

similarities and differences for companies and designers. That said, the manner in which similarities and differences in products are achieved was outside the scope of my inquiries. Future studies should therefore address how stylistic effects are practically embodied in products, and the processes by which designers and companies establish such effects in products. In doing so, a key question concerns how companies (and their designers) determine what 'stylistic' effects to keep and emphasize in products. An equally important question concerns how they determine (locate) which stylistic references to incorporate when changing the expression of their products.

IMPLICATIONS FOR THE MANAGEMENT AND EDUCATION OF DESIGN

Numerous studies show that companies reap profits from investments in industrial design. However, while investments in design may pay off, the exact scope of these investments is unclear. Designers engage in an ever-broadening range of activities. Moreover, what is meant by design versus product development and innovation seems increasingly blurred in both theory and practice (Marxt & Hacklin, 2005). As a consequence, scholars have bickered over definitions of the scope of industrial design.

For the management of design, the unclear scope of design is problematic. The reason for this is that cultivating equity from design involves not only investments in design but also how these investments are used within companies (Chiva & Alegre, 2009) – raising the issue of what to manage as a topical issue for the management of design. Furthermore, as societal interest in design grows (see e.g. Heskett, 2009), the unclear scope of design also poses a problem for education, because the broadening of the design profession means that it is becoming increasingly unclear what should be taught. This thesis was motivated by the desire to not only establish a business logic for the management of styling activities, but also to understand designers and their work.

For the management of design, I distinguished distinct value contributions of styling activities for companies and designers. I

highlighted that not only sales but also market visibility and professional acknowledgment of individual designers are relevant goals for styling. I also delineated the main strategic paths companies can follow in styling new products. This said, the thesis also suggests that managing styling activities effectively is a challenging management task that depends on decisions concerning not only design, but also areas such as engineering, marketing and strategy. The thesis also suggests that the success of styling activities often lies outside the control of individual managers, designers and companies. These findings are similar to earlier claims in the literature where the look and feel of products are embraced by a broader cultural fabric which extends beyond direct commercial interests (see e.g. Verganti, 2009). Thus, in managing styling activities effectively, managers and designers need to locate the main contextual objectives and constraints that frame the expression of new products and style products with these in mind.

In the final chapter, drawing on the design tradition with which I am most familiar, I exemplify the above claims by describing how Scandinavian design brands reap profits by strategically managing the historical legacy of their products and, by extension, the broader contributions of following a Nordic tradition on design. Scandinavian design is often viewed from an artistic viewpoint – elaborating on simplicity, composition, selection of material, etc. – with the overall goal of comprehending the expressive qualities of individual products. It is also often discussed from a societal viewpoint – elaborating on the link between products and societal events – with the overall goal of comprehending how Scandinavian design embraces cultural ideals. However, while this is often overlooked, Scandinavian design can also – as has been the overarching scope of this thesis – be discussed from a commercial perspective; i.e. how expressiveness adds value to new products and contributes to the bottom-line profit and long-term success of companies.

From a commercial perspective, as argued in this thesis, it is important for designers and managers to understand the expressive character of the style in which they operate. However, it is not easy to retrospectively define a certain way of working in the expressiveness of

products. The ambivalent character of style implies that not only the outcome of this process, but also the knowledge, interest and ambitions of the viewer need to be acknowledged. In the final essay, I exemplify this inherent complexity facing designers and managers. I do this by trying to define the main design traits that make Scandinavian design relevant from a business perspective. Scandinavian design brands jointly profit from commonalities in their joint style and, by extension, the broader cultural meanings of their styling efforts as supported by societal institutions. In the final essay, I explore these commonalities of Scandinavian design, and how they provide value for companies and designers today.

As argued in the essay, Scandinavian design brands manage to nurture creative equity, mitigating commoditization in design by turning the expressiveness of their designs into a prime asset. However, their success has not come easy. Rather, it is the fruit of prolonged investment in design by both companies and institutions, a process in which designers, managers and educators have played an important role in fostering a specific culture of design. In doing so, the success of their choices has hinged on the core design traits of products on the one hand and the market properties of these traits on the other. With an origin in a master-apprentice system in design, Scandinavian design brands do not merely nurture financial profitability and market visibility; following the Nordic tradition of design, they also place great emphasis on maintaining recognition for the artistic and crafts qualities of their products. To this end, Scandinavian design brands exemplify the commercial context in which styling activities can occur, and the importance of not being blind to other value contributions than those pertaining directly to financial performance. While styling is intrinsically entwined in commercial interests, it is equally entwined in a wider social interest in design, including institutions such as schools. This is a fact that managers need to acknowledge in seeking to profit from styling in the longer term.

The success of Scandinavian brands opens up discussions on the education of design. Although it is essential to teach style and styling in preparing future managers and designers to reap profits from design, issues of style and styling are often taboo in the education of design.

Educators often distance themselves from the notion of designers as 'stylists' who through their work shape the expression of products. The reason for this partly originates in the fact that there have been periods during which many influential design institutions have nurtured an aversion towards commercial interests in design. This may be particularly true of Scandinavian design institutes (see e.g. Ask, 2004). This in itself can have made the notion of designers as stylists operating in the interests of commerce a questionable topic for scholarly inquiry. However, the duality between commercial and cultural interests often becomes evident when designers set out to shape the expression of products and, in doing so, need to balance the interests of their clients with their own (sometimes personal) ambitions and aspirations. Therefore, styling is a critical activity for education on design in helping designers reflect on the position of their work within companies and society at large. Through studies in styling, students are confronted with the materiality of design and the unique capabilities of their profession to shape the expression of products.

To conclude, while styling is often met with scepticism in the field of design, the thesis shows that styling fulfils an important role for companies and designers. The results of the thesis also suggest that managers and educators need to consider how factors in the internal and external environment frame styling decisions in extending the scope of styling beyond superficial changes in form. Strategic styling is not a standard solution but rather a carefully managed activity targeted at fulfilling specific roles for companies and designers, most of which are commercial, and some genuinely social. The reason for this is that when designers and managers are considering which styling strategy to follow, they could relate this question to the broader business strategy of their company as well as their (potentially personal) ambitions for excellence and "goodness" in design. Companies and designers both profit from styling. Thus, the choice of which styling strategy to follow is not a question of picking from a range of standard solutions, but rather a carefully managed and negotiated business endeavour targeted at fulfilling specific roles for companies and designers. How managers and designers address this endeavour will determine the relevance of styling in the future.

Educators often distance themselves from the notion of designers as artists who through their work shape the expression of products. The perspective this partly originates in the fact that there have been periods during which many influential design institutions have nurtured an aversion towards commercial interests in design. This may be particularly true of Scandinavian design institutes (see e.g. Ash 2004). This in itself can have made the notion of designers as artists appealing to the interests of commercial and cultural interests over business (which often comes a questionable topic for a publicly financed, however, the quality between commercial and cultural interests often becomes evident when designers set out to shape the expression of products and in doing so need to balance the interests of their clients with their own (sometimes personal) ambitions and aspirations. Therefore, styling is a critical activity for education on design in helping designers reflect on the position of their work within companies and society at large. Through studies in styling, students are confronted with the possibilities of design and the unique capabilities of their profession to shape the expression of products. To conclude while styling is often not well recognized in the field of design, the thesis shows that styling fulfills an important role for companies and designers. The practice of the thesis also suggests that managers and educators need to consider how factors in the internal and external environment frame styling decisions in companies. Styling is not a standard beyond superficial changes in form, practice styling is not a standard solution but rather a carefully

Scandinavian design brands are often celebrated for the expressiveness of their style. However, while the literature grants the creators of this style and the design of individual (often iconic) products considerable attention, less is usually said about the broader commercial challenges facing managers in profiting from the Scandinavian style today. In this essay, I exemplify the managerial implications of my thesis by describing how Scandinavian design brands reach commercial success by turning their historical style legacy into a strategic resource for design. As an example of the strategic relevance of styling, I explore the expressive character of Scandinavian design, and what turns this expressiveness into a strategic resource for design and styling. In doing so, I point to the main design traits that make the products of Scandinavian design brands alike (and potentially different from those produced in other national styles). I also describe what market properties make these traits profitable for companies. With an origin in a master-apprentice view on design, Scandinavian design brands do not merely nurture financial profitability and market visibility. They also often place great emphasis on maintaining recognition for the artistic and crafts qualities of their products.

CHAPTER 8

CULTIVATING CREATIVE EQUITY IN SCANDINAVIAN DESIGN BRANDS⁶⁶

The past decade has seen several icons of Scandinavian design change hands. For example, in 2005 retail entrepreneur Torsten Jansson and his New Wave Group acquired a majority holding in the illustrious Swedish glassmakers Orrefors Kosta Boda. In 2007, banker Mika Ihamuotila astonished the design world when he invested his personal fortune in the textile firm Marimekko and became its president and CEO.

What inspired Jansson and Ihamuotila to put their money on the line? Certainly, these brands enjoy strong recognition and a loyal clientele that many would kill for in today's competitive market. However, we believe that an even more compelling reason drove their decision—the creative equity associated with these companies. Consider Orrefors Kosta Boda, which has been identified with excellence in design for centuries. The company has produced designs by some of Sweden's finest glass artists and played a major role in fostering glassmaking in the region of southern Sweden known as the Kingdom of Crystal. Marimekko is equally iconic. Established in the 1950s, the company boasts a portfolio of distinctive, high-quality patterns, and it has become synonymous with Finnish textile design. Marimekko is a source of national pride.

⁶⁶ This essay is an adaptation of Person, O. and Schoormans, J. (2010). Cultivating Creative Equity in Scandinavian Design Brands. *Design Management Review*, Vol. 21, No. 3, p. 48-57.

THE MANAGEMENT OF DESIGN STYLES

It is true that design has come to the fore in numerous industries; many companies now rely on it as a source of differentiation and innovation. However, this comes at a price: Today's consumers are surrounded by good design. Design is becoming a visual, or even perceptual, commodity in the marketplace. At the same time, many companies have found it hard to secure intellectual property protection for their design innovations. Brand theorist Jean-Noël Kapferer (1995), for instance, notes that it is often hard for companies to legally claim they have sustained damage from an imitator because to do so they must prove consumers have mistaken an imitator for the original—a considerable challenge. Some Scandinavian design companies — Orrefors Kosta Boda and Marimekko among them— seem to have mitigated the commoditization of design and sustained the value of their design innovations over time by turning the footprint of their designs into their prime asset. In other words, these firms have successfully cultivated creative equity. Creative equity, as we define it, is what differentiates a brand's product design styles on the market. Creative equity builds market value over time and opens up avenues for future success.

Many firms worldwide boast creative equity and reap profits from it. Their brands have an identifiable design style that consumers associate with quality. Such firms not only appear in the arts and crafts industries, but also in technology industries, such as computers (Apple), cars (Porsche), and home electronics (Braun). Many organizations are also exploring how to strategically develop creative equity as an asset. However, little attention has been devoted to the origins of creative equity, or to how to strategically manage it in order to profit from it over time.

In this article, we would like to present a model for harnessing creative equity. We will outline some of the main characteristics of brand designs with high creative equity, and show how these characteristics can serve other companies in their efforts to nurture and manage creative equity. We will discuss four core design traits that have a direct bearing on the inherent value of design in products that have the potential to yield high creative equity. We will then present three market properties that will transform product design traits into assets for an organization.

THE FOUNDATION OF CREATIVE EQUITY

Clearly, creative equity gives companies a competitive edge. It increases the consumer appeal of their products and provides market differentiation. However, like the management of brand equity (see e.g. Keller, 1993), creative equity does not come easily. Typically, it is the fruit of prolonged investment in design. It needs to be managed prudently and deserves careful attention. In developing creative equity, design managers play an important role in fostering and screening designs on the basis of their potential market value. When they cultivate and harness creative equity, the success of their choices hinges on the core design traits of the products on the one hand and the market properties of these traits on the other.

Creative equity is an organizational asset expressed in a company's product designs and fostered by the market reception of these products. However, we should not forget that creative equity stems from the work of designers who challenge and reinterpret the current norms and conventions of both the market and technology. In other words, designers translate ideas into design inventions. It is up to companies to transform these inventions into successful products by discovering, facilitating, and producing the work of designers.

Consider the legendary Scandinavian designers Alvar Aalto and Bruno Mathsson. Although they came up with such touchstones of Scandinavian design as the Paimio armchair (Aalto) and the Jetson armchair (Mathsson), they relied on corporate muscle to facilitate the translation of their personal creativity into commercially appealing designs. The same is true of contemporary designers like Harri Koskinen, Fredrik Mattson, and Cecilie Manz, who maintain the Scandinavian design legacy in collaboration with design companies such as Artek, Vivero, and Lightyears. The management practices used by companies that profit from such talented designers can therefore provide lessons in the successful transformation of personal designs into commercially appealing products.

A TWO-FACTOR CREATIVE MODEL

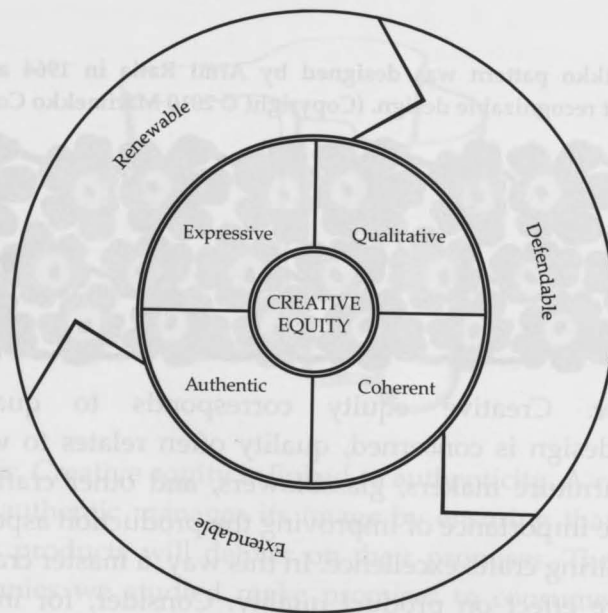
Our model (Figure 5) makes two distinctions that have relevance for management: 1) a fourfold classification of core design traits typically seen in products of brands with high creative equity; and 2) a set of three market properties describing how these traits are forged into an asset in the market. The core design traits provide a means of selecting and managing designs, thereby establishing a basis for building creative equity. These traits are applicable to many kinds of products. That said, some designs incorporating these traits are more valuable than others, from a company's perspective.

We base our model on an analysis of Scandinavian design companies whose products embody high creative equity. The brands we analysed included firms with centuries of history (for example, Orrefors Kosta Boda), firms established after World War II (for example, Marimekko), and Younger firms from the 1970s and later (for example, Polarn O. Pyret and Norrgavel).

FOUR ESSENTIAL TRAITS OF CREATIVE EQUITY DESIGNS

We uncovered four basic traits that describe the designs of these brands: expressive, qualitative, authentic, and coherent. These traits would seem to be equally applicable to the designs of companies with high creative equity in other industries. In the heavy machinery industry, we have for instance seen how Caterpillar incorporates some of these traits in managing a distinct design style. This indicates that the traits may be relevant to design management in general.

Figure 5: The two-factor creative equity model depicts four core design traits typically seen in products of brands with high creative equity, and three market properties describing how those traits are forged into an asset in the market. The traits provide a means of selecting and managing designs in order to establish a basis for building creative equity. They are applicable to many kinds of products.

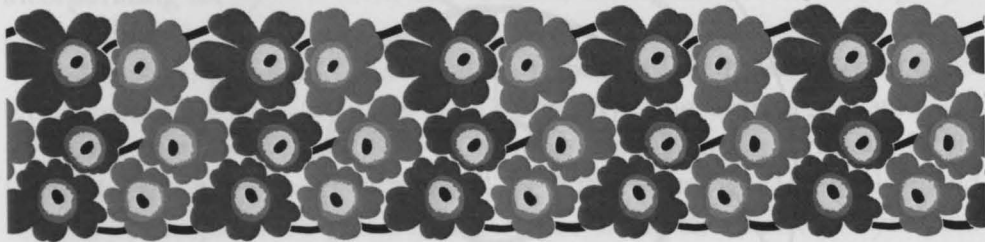


Expressive. The products of the different brands included in our study are renowned for their expressiveness—the stylistic verve that makes them stand out in the marketplace. The expressive designs of these brands reference many social and cultural phenomena, infusing the products with both symbolic and functional meanings for consumers. Scandinavian design organizations have promoted the expressiveness of Scandinavian design for decades. The promotional materials of the firms we have studied echo this message.

One example of a brand that scores high on this trait is Marimekko. Its Unikko pattern, designed by Armi Ratia in 1964 (see Figure 6), is particularly distinctive. The story goes that Ratia was asked to design an ordinary decorative pattern featuring detailed ornamental flowers. Instead,

she conceived a bold constructivist pattern, which can be thought to make reference to a new kind of Finnish style. She made this creative design choice because she realized it was vital for Marimekko to be different in order to succeed.⁶⁷ The Unikko pattern has successfully been used on a range of products, and it is now arguably Marimekko's most recognizable design.

Table 6: The Unikko pattern was designed by Armi Ratia in 1964 and is arguably Marimekko's most recognizable design. (Copyright © 2010 Marimekko Corporation.)



Qualitative. Creative equity corresponds to quality. Where Scandinavian design is concerned, quality often relates to workmanship. Historically, furniture makers, glassblowers, and other craftspeople have emphasized the importance of improving the production aspects of design, as well as acquiring crafts excellence. In this way, a master craftsman can have a massive effect on product quality. Consider, for instance, Kosta Boda's product portfolio, which offers many examples of workmanship and its impact on quality. In the past, glassblowers such as Jan-Erik Ritzman and Sven-Åke Carlsson put their personal touch on the brand by producing everything from everyday glass objects to unique pieces of art, and glass artists such as Bertil Vallien and Ulrica Hydman-Vallien continue this tradition through the design of tableware products, as well as works of art. But that personal touch and workmanship must be able to be applied to production on a larger scale. Iittala's legendary Savoy Vase, by Alvar Aalto and Aino Marsio (see Figure 6), could never have been produced if Iittala had not had the technical means to translate this fluid design into a

⁶⁷ For more information about the significance of Armi Ratia's work in establishing the success of Marimekko, see e.g. Rousi (2007).

reproducible product. Quality is thus the outcome of the skills of both designer and company.

Figure 7: Scandinavian firms share certain distinct features unlike those from other nations (Italy, for example). A case in point: New York's MoMA store now markets Iittala's Savoy Vase as the Finlandia Vase. (Photo courtesy of Iittala.)

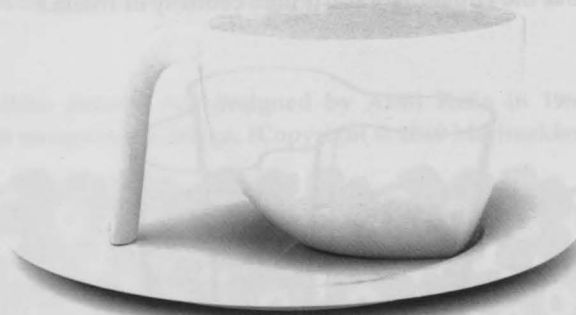


Authentic. Creative equity is linked to authenticity. A company that is perceived as authentic manages its image by ensuring that its customers know that its products will deliver on their promises. The Scandinavian design companies we studied make promises to consumers about what they can expect from the brand and its products. Iittala, for instance, suggests that its designs retain their value over time, thanks to its minimalist design ethos (see Figure 7). In its marketing, the company states that its designs are “everlasting” and “against throwawayism.”

Many Scandinavian design companies link their heritage to the professionalization of design in Northern Europe, where design transitioned from a master-apprentice system to an academic discipline during the twentieth-century. This allows firms to claim a rich heritage while being well-poised to innovatively break away from tradition. The fact that their design work has its roots in the master-apprentice system allows many Scandinavian design companies to claim authenticity in terms of workmanship. Their position at the universities gives them an aura of

modernity, because the university environment, with its search for and dissemination of knowledge, stands for innovation.⁶⁸

Figure 7: Iittala's Ego cup, designed by Stefan Lindfors. (Photo courtesy Iittala.)



Coherent. The fourth trait is the coherence of design. Design coherence makes the most of a company's designs by giving them a family resemblance that raises the profile of all the products, across the board. If the company's designs are sufficiently expressive, they will differentiate the firm from its competitors. Design coherence also allows the company to benefit from design investments in one product by using the design in other products. This generates creative equity across the brand's product portfolio.

Scandinavian design companies are particularly fortunate in this regard, since they are able to draw on a widely recognized Scandinavian style and to promote its shared use. Scandinavian firms share certain distinct features that are unlike those from other nations (Italy, for example). A case in point: New York's MoMA store⁵ now markets Iittala's Savoy Vase as the Finlandia Vase. Even as they draw from the same pool, these companies are actively seeking to reinterpret the meaning of Scandinavian design as a way of setting themselves apart from their Scandinavian peers. Swedish furniture producer Norrgavel, for instance,

⁶⁸ For more information about the origin and commercial value of this duality, see Hansen (2004).

differentiates itself by reinterpreting a number of the classic forms of Swedish furniture design (Figure 8), while maintaining the classic Scandinavian focus on workmanship and adhering to the basic tenets of Scandinavian design.

Figure 8: Norrgavel's Länstol, by designer Nirvan Richter. Almost all the companies we examined subscribed to the idea of design coherence, but Swedish furniture producer Norrgavel illustrates its value particularly well. Norrgavel was founded in the early 1990s, making it one of the youngest companies we analysed. The firm consciously adopted a coherent style for its product range and then actively promoted it. (Photo courtesy Norrgavel.)



THREE MARKET PROPERTIES OF CREATIVE EQUITY DESIGNS

We now turn to three strategic properties of creative equity: defensibility, extensibility, and renewability. The properties serve as criteria for assessing design traits in the market and for selecting valuable ones. Harnessing them can enable managers to introduce designs with larger potential market value.

THE MANAGEMENT OF DESIGN STYLES

Defensibility. The core property of brands with high creative equity is that they can shield design traits against competition, making these traits serve as a differentiating factor. Examples include the forms found in Iittala's Savoy Vase and Norrgavel's furniture designs. However, defensibility does not automatically mean that a design has to be unique. Polarn O. Pyret's classic striped shirts from 1976 are seen by many as being quintessentially Swedish, even though they resemble Marimekko's Tasaraita T-shirts from 1967, which others consider typically Finnish (see Figures 9 and 10). Similar examples exist in other industries, too. The novel candy-coloured and translucent style of the Apple iMac in 1998 has been said to have similarities with everything from domestic appliances (the Rowenta Surfline iron) to office furniture (Herman Miller's Aeron chair). In this sense, creative equity and defensibility are not so much a question of artistic uniqueness as of being able to successfully introduce a design in an industry by claiming a perceptual position in the market. The rise of Polarn O. Pyret and Apple partly depends on their ability to launch designs in the market successfully. The scope of design management thus includes seeking, discovering, experimenting, developing, and adapting and introducing styles to the market.

Figure 9: Polarn O. Pyret's classic sweater, designed by Gunnila Axén. (Photo courtesy Polarn O. Pyret.)



Figure 10: Marimekko's Tasaraita pullover shirt, designed by Annika Rimala. (Copyright © 2010 Marimekko Corporation.)



The traits of a defensible design may be legally protected. For example, the novel use of candy-coloured translucent plastic in the iMac enabled Apple to take a number of its competitors to court for allegedly styling their products to resemble Apple's. But perhaps more important, Apple had in a sense already defended its designs by establishing them as prototypes in the minds of consumers. Consequently, by the end of the 1990s, any product featuring candy-coloured casing ran the risk of being perceived as an Apple clone, and inferior.

Extensibility. One important aspect of creative equity is that the design can be extended to new products. This means that basic traits are not only recognizable and defensible, but also remain socially relevant and meaningful to today's consumers. Put differently, creative equity provides firms with a source of innovation for seeking new and profitable products. Marimekko, for instance, has made licensing agreements with a range of producers. In 2008, H&M designers tapped the fun and joyful spirit of Marimekko's vintage patterns from the 1950s, 1960s, and 1970s to create a highly sought-after summer collection that included everything from tunics, skirts, and shorts for women to shirts and shorts for men. Although some critics were sceptical about the collection prior to launch, worldwide

consumer response made the collection a massive hit. The value attached to the Marimekko style has also made the company a highly attractive partner to other companies. Kone, Piironen, and FatBoy, for instance, have launched products featuring Marimekko patterns—products ranging from elevator interiors to office furniture and lifestyle products, such as oversized beanbags.

Extensibility is valuable not just for fashion companies. In fact, many companies have profited from being able to extend their design heritage to new products. Porsche is one example. With the Cayenne, the company set out to design “a 911 on steroids.” Not only has the Cayenne become a benchmark for SUVs, but it has also given a boost to Porsche sales at the opening of the new century.

Renewability. The design traits of the brands we studied were typically renewable, meaning they can sustain and develop creative equity over time. The existing designs of a brand should be socially relevant and meaningful not just today, but also in the future—embracing new designs to round out the range. This is a challenge for many Scandinavian design companies. Their products have their roots in the past. In order to grow, they need to introduce new designs into their portfolios. Iittala, Kosta Boda, and Marimekko understand that they seek to launch new designs alongside their classics. They turn to new designers to sustain their expressiveness in the market. But what this means is that the creative equity associated with a brand must continue to be interesting to skilled designers, for it is they who can renew the brand and cultivate its creative equity in the future. In short, if they are to attract new talent, companies have to ensure that the appeal of their design traits is not limited to consumers.

Creative equity requires long-term investment and needs to be managed carefully. Creative equity yields high symbolic and functional value in a market in which design commoditization is increasingly common. Companies face a variety of challenges in managing their product designs. But regardless of how they set out to tackle these challenges, design managers should not allow their organizations to believe that creative equity emerges by chance.

EPILOGUE

"Are you really going to publish this? You know that it will reveal part of the magic of design..."

Styling is plagued by prejudice in the field of design. At the same time, in comparing design with other professions, styling emerges as one of the most defining activities undertaken by designers. In fact, most non-designers would probably mention styling in describing the work of designers. Managers talk about styling and designers as stylists in delineating the strategic importance of design, recognizing styling as critical for making or breaking new products. They also describe styling as elusive and hard to manage strategically, making styling topical for research on the management of design. However, the fact remains: most designers would not define themselves as stylists and few would readily frame their work as styling. Therefore, a research interest in styling seems doomed to be met with across-the-board rejection among designers.

While styling is controversial, it is intrinsically entwined in the practice of design. Historically, it has also played an important role for companies in profiting from the work of designers. Alfred Sloan early recognized the importance of managing styling strategically. He devised strategies for styling for the brands in General Motors' portfolio. He also established the first industrial design department, the Styling Staff, within the automotive industry, and placed it under the direct control of senior management to underscore its strategic importance for General Motors. As a historical footnote, students of design hear about Sloan and the Styling Staff in learning about the origin of their profession and the strategic importance design has played for companies in the past. They are also likely to learn how designers as stylists have been lured to help companies to reach quick profits by dressing up products of inferior quality to the detriment of ordinary consumers, and why a functional ideal dominates design today. As such, in learning the skills needed to work as a designer today, styling emerges as a tainted topic for the student of design.

At first glance, it makes sense to think of styling as tainted. Much has changed since the early days of General Motors. Today, designers are found not only in the design department, but also in other areas such as engineering, marketing and strategy, all of which profit from design in a multitude of ways. Companies do not only refer to designers as stylists, but also as facilitators, thinkers and strategists. Given this grander position within companies, styling (and the notion of designers as stylists) emerges as an outdated view on design, merely encompassing the historical attempts of companies to profit from design by producing products of inferior quality. As such, it is not surprising that designers have chosen to follow the critique of modernism and eliminated the terms styling and stylists from the field of design.

However, as we begin to question the undisputed logic behind this, the reasons for downplaying (or even eradicating) styling from design become increasingly unclear. First, many designers recognize that there are problems in disconnecting design from commerce; some would even argue that it is commercial interests that separate the work of the designer from the artist. Most scholars on design would also argue that the work of designers is infused by commercial interests, which designers need to take into consideration in their daily work in one way or another. Second, the rational ideal of modernism is irrevocably a thing of the past, as few designers today would argue that products should be produced in a single design style, even if some dream of this rational ideal. History also tells us that the expression of products reflects the people who use, produce and design them. As products address the widely different needs, wishes and desires of consumers, companies and designers, they therefore come in a variety of styles. Finally, few designers would occupy themselves with trying to limit their work to either form or function. Form and function entwine, and designers work on both when shaping the look and feel of new products. So, is an aversion to styling rooted in the present, or do designers uncritically restate the critique on styling of the past? And, by avoiding the terms styling and stylist, do designers resolve or rephrase the ethical dilemmas (and ambitions) they see in their profession?

Reports from practice indicate that the ability to shape the look and feel of products continues to be one of the main reasons why companies contract designers. With an aversion to styling in design, companies frame this work in a variety of terms, none of which is as prevalent and universally understood as the term styling. The growing body of non-design literature addressing the styling work of designers also suggests that it is an important topic for scholars with an interest in the strategic relevance and management of design. To this end, styling continues to represent a key contribution of designers in practice and, by avoiding it, we may overlook an important contribution of design. Moreover, by dressing up this work in new terms, we in many cases unnecessarily cloud the scope and importance of styling as well as our theoretical and historically founded understanding about the meaning of design.

In working on the thesis, my interest was directed towards the strategic relevance of styling for companies and the managerial decision-making surrounding the formation of design styles. The results show that companies and designers continue to profit from styling. The equity of styling is not confined to financial profitability but also extends to creative equity in terms of market visibility and professional acknowledgment. These results suggest that styling is important for both companies and individual designers. This means that the importance of styling should not be downplayed in thinking about the value of design. So, while styling may be plagued by prejudice in the field of design, I hope that the arguments presented in this thesis will contribute to re-establishing styling in design – helping managers to approach this work more strategically and designers to feel proud of their work – even if it were to reveal a small part of the magic of design.

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In working on this thesis, my interest was directed towards the strategic relevance of styling for companies and the managerial decisions relating to the formation of design styles. The results show that companies and designers continue to profit from styling. The equity of styling is not confined to financial profitability but also extends to relative equity in terms of market visibility and professional advancement. These results suggest that styling is important for both companies and individual designers. This means that the importance of styling should not be downplayed in thinking about the value of design. So while styling may be viewed by pundits in the field of design, I hope that the arguments presented in this thesis will contribute to re-evaluating styling in design practice. To approach this work more strategically and designers to feel proud of their work - even if it were to reveal a small part of the magic of design.

Form and function are distinct but not separate. Form and function to feel and look the same when they are well designed and well executed. So it is an aversion to styling in the present or to do by and to repeat the latter in the past. And, by avoiding it, we may overlook an important contribution of design. Moreover, by dressing up this work in new terms, we in many cases unnecessarily cloud the issue and importance of styling as well as our theoretical and historical foundations about the meaning of design.

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SUMMARY

In this doctoral thesis, I propose a business logic for the strategic relevance of styling for companies. Styling – roughly defined as providing products with a particular look and feel – has long been advocated as one of the most basic capabilities of industrial design. Many investments in industrial design equate with investments in styling. Strategies for design typically also include strategies for styling, in which companies outline the basic principles underlying the style of their products.

My central argument is that styling is manageable and that companies can reap profits by taking a more strategic approach to managing the style of their products. To advance this argument, I present six essays organized in three parts. The first part of the thesis provides a foundation for studies on styling by addressing the concept of design styles. The second part of the thesis addresses the strategic relevance and managerial challenges associated with managing styling activities through theory development, interviews and case studies. It also focuses on demonstrating the effects of environmental factors and business strategies on strategic styling decisions by surveying the behaviours of professionals and companies in the market. In the third part of the thesis, I discuss the overall contribution of the thesis – opening up future discussion on the management of design styles – using Scandinavian design as an example.

The first part of the thesis consists of an introduction (Chapter One) and a first essay (Chapter Two). In the first essay, I appropriate Ackerman's (1962) work on styles in art and architecture to the field of design. I conceptualize brand styles as the outcome of reoccurring problem-solving activities, which bring about noticeable effects (or a conspicuous lack thereof) in the expression of products. I also separate the production of design styles from their reception in the market – stressing that both deliberate and accidental effects should be the point of interest for studies on styles in design. In doing so, I acknowledge that what we notice in the design of branded products also depends on what we seek and, by extension, the style we see it being part of.

The second part of the thesis addresses the strategic relevance of styling for companies today and consists of four more essays. In the second essay (Chapter Three), I present the main strategic paths that companies can follow in styling new products. I perform interviews with managers and designers and review the extant literature on issues of styling in design and (marketing) management. Specifically, I identify three main objectives (goals) for styling: (1) drawing attention, (2) establishing recognition, and (3) creating symbolic meaning. Building on the work of the Swedish design theorist Monö (1997), I also discuss three dimensions on which styling decisions take place: (1) between a new product and the present product portfolio, (2) between a new product and the succession of product generations, and (3) between a new product and the competition.

In the third essay (Chapter Four), I describe how companies evaluate the value of styling activities. I present a model for the assessment of styling activities. The model summarizes three domains of managerial interest in assessing the contribution of styling in both the short and long term: (1) financial profitability, (2) market visibility and (3) professional acknowledgment. I also extend the managerial reasoning on styling by describing how the value of styling changes depending on how companies make decisions on the expression of their products.

In the fourth essay (Chapter Five), I analyze how similar or different a group of design professionals wanted to style a new product given different market situations. The results show that environmental factors influence strategic styling decisions together with an individual's educational background and experience.

In the fifth essay (Chapter Six), I extended these results by studying the link between styling strategies and business strategies, positioning styling and the expression of products in relation to how companies in general manage their competitive environment. Specifically, I study the relation between styling strategies and business strategies in the German passenger car market – integrating the expertise of automotive design students in assessing the styling strategies of automotive brands with the expertise of industry experts in assessing the business strategies of these brands. The results of the study show that a company's business strategy

shapes the expression of its products. The results also suggest that the expression of products may stem from both intentional and unintentional strategies for styling. Moreover, they also show that styling strategies link differently to financial profitability, market visibility and professional acknowledgment.

In the final part of the thesis, I conclude the theoretical and practical implications of the thesis. In doing so, I discuss the broader cultural significance of styling and how companies – along with other institutions such as educational programs in design – profits from styling. The first Chapter in this part (Chapter Seven) looks back to the results of the thesis. In the final Chapter (Chapter Eight), I exemplify the business context of my thesis and its position within creative industries through a final essay on Scandinavian design. Scandinavian design brands jointly profit from commonalities in their joint style and, by extension, the broader cultural meanings of their styling efforts as supported by societal institutions. In a final essay, I explore how these brands have reached success by turning their historical style legacy into a strategic resource for design.

In proposing a business logic for styling, I answer calls for research on the management of styling activities as well as on the relation between design and strategy. First, I contribute to the literature on the management of design. Until now, few studies have addressed the strategic relevance of styling. Studies on style and styling are few. They use different conceptual frameworks. They are also decidedly noncumulative both within and across disciplinary borders in design and management.

Past research on styling often involves a separation between form and content where styling involves (superficial) changes to the form of a product that do not alter its content (functionality or underlying technology), and which can be replicated in other products. In this view, styling is of limited strategic relevance for companies. Following-up on a re-appreciation of style in art, I propose that the expressions of products stem from a reoccurring set of solutions to a problem or challenge facing designers of commercial goods. When analysing the design products as the outcome of problem-solving activities, the point of interest is the possibility of a class of related solutions to a problem (or set of problems), which

brings about noticeable effects in the expression of products. Following this line of reasoning, a separation between form and content is not important; what is important is how similar (and dissimilar) products are to each other. To this end, departing from the common view, I delineated the scope of styling as the (conscious) activity of shaping the expression of solution sets. In doing so, styling activities are seen to produce noticeable effects on both form and function in a design.

Styles as problem-solving also point to the fact that the expression of a company's product may emerge inadvertently through decisions and practices in areas other than styling. As a result, a reassessment of style and styling allows for more informed studies on the role of designers and their work by more accurately capturing the scope of styling activities within companies and the potential effect designers have on the 'total' expression of products.

The second contribution of the thesis concerns the strategic relevance of styling for companies in practice. I outline the main strategic paths that companies can follow in styling new products. Although companies spend significant resources on styling to secure effective designs for their products, the strategic relevance of these investments is debatable. While a wealth of consumer studies have investigated the aesthetic and symbolic outcomes of industrial design, comparatively few (empirical) studies in the management literature have addressed the process by which such effects are formed by designers (and the companies they work for). Styling is often considered to be based on the "soft," creative capabilities of designers, with the results hinging largely on the skills and connections of individual designers. Studies also suggest that designers feel their work is underappreciated within companies, being sometimes perceived as something that could be executed by almost anyone with a bit of common sense. Furthermore, while a number of different styling strategies are mentioned in the literature, there are few studies addressing when different styling strategies are more or less relevant.

In the thesis, I conclude that different styling strategies are viable under different conditions. Specifically, I show (1) how styling is used to fulfil a range of different product development and company objectives

and (2) how companies reap different benefits from value contributions in the market through styling. I also address the organizational positioning of styling activities and how the market environment shapes the expression of a company's products. Specifically, I show how factors in the market environment as well as business strategies shape the expression of products. I also describe how contextual objectives and constraints frame how companies make decisions on the expression of their products. These results suggest that different styling strategies are viable under different circumstances.

Mijn centrale stelling is dat styling beheersbaar is en dat bedrijven winst kunnen behalen uit een meer strategische benadering van hun productvormgeving. Ter ondersteuning van deze stelling presenteer ik zes essays, ingedeeld in drie delen. Het eerste deel van het proefschrift biedt een basis voor studies naar styling middels een historische en theoretische verhandeling over het begrip 'stijl' en de bruikbaarheid van dit begrip voor het industrieel ontwerpen. Het tweede deel van het proefschrift betreft de strategische relevantie van styling voor bedrijven. Door middel van interviews, case studies en kwantitatief onderzoek wordt onderzocht hoe men de stylingbeslissing van bedrijven kan beschouwen als strategisch relevant, en welke omgevingsfactoren en bedrijfsstrategieën een invloed hebben op strategische stylingbeslissingen. In het derde deel van het proefschrift bespreek ik de algehele bijdrage van het proefschrift, uitmondend in een bredere discussie over de management van vormgeving in de creatieve industrie, met als leidend voorbeeld de vormgevingspraktijk in de Scandinavische landen.

Het eerste deel bevat een introductie voor het gehele proefschrift (Hoofdstuk 1) en een eerste essay (Hoofdstuk 2) over het begrip 'stijl' en de relevantie van dit begrip voor het industrieel ontwerpen. In dit essay vertrek ik vanuit de theorie van Ackerman (1962) over stijlproductie in kunst en architectuur en pas dit toe op het gebied van het industrieel ontwerpen. Ik definieer stijl als de uitkomst van zich herhalende probleemoplossende activiteiten, die gewild of ongewild leiden tot een merkbaar effect op de expressie van producten (of op een opmerkelijk

and (3) how companies reap different benefits from different styling strategies. The thesis also addresses the organizational positioning of styling activities and how this may be determined through the analysis of companies' products. Specifically, I show how factors in the market environment as well as judgments of style affect the development of products. I also describe (inconsistent) objectives and constraints that lead how companies make decisions on the expansion of their product lines. Results suggest that different styling strategies are viable under different circumstances through their ability to address a company's specific practices in a given market. As a result, a reassessment of style and styling allows for more informed studies on the role of designers and their work by more accurately capturing the scope of styling activities within companies and the potential effect designers have on the 'total' expression of products.

The second contribution of the thesis concerns the strategic relevance of styling as a design tool in practice. I outline the main strategic paths that companies may follow when styling new products. Although companies spend significant resources on styling to secure effective designs for their products, the strategic relevance of these investments is debatable. While a wealth of academic studies have investigated the aesthetic and symbolic outcomes of the use of style, comparatively few (empirical) studies in the management literature have addressed the process by which such effects are formed by companies and the companies they work for. Styling is often considered to be based on the "soft," creative capabilities of designers, with the results hinging largely on the skills and connections of individual designers. Studies also suggest that designers' and their work is undervalued within companies, being commonly perceived as something that could be executed by almost anyone with a bit of common sense. Furthermore, while a number of studies in styling strategies are mentioned in the literature, there are few studies addressing when different styling strategies are more or less relevant.

In the thesis, I conclude that different styling strategies are viable under different conditions. Specifically, I show (1) how styling is used to fulfil a range of different product development and company objectives

SAMENVATTING

In dit proefschrift stel ik een nieuw standpunt voor ten opzichte van de strategische relevantie van styling voor bedrijven. Styling wordt hier ruwweg gedefinieerd als producten voorzien van een 'look & feel,' ofwel een bepaalde expressie in hun vormgeving. Veel investeringen in industrieel ontwerpen staan gelijk aan investeringen in styling. Ontwerpstrategieën omvatten meestal ook strategieën voor styling, waarin bedrijven de basisprincipes schetsen die ten grondslag liggen aan de expressiviteit van hun producten.

Mijn centrale stelling is dat styling beheersbaar is en dat bedrijven winst kunnen behalen uit een meer strategische benadering van hun productvormgeving. Ter ondersteuning van deze stelling presenteer ik zes essays, ingedeeld in drie delen. Het eerste deel van het proefschrift biedt een basis voor studies naar styling middels een historische en theoretische verhandeling over het begrip 'stijl' en de bruikbaarheid van dit begrip voor het industrieel ontwerpen. Het tweede deel van het proefschrift betreft de strategische relevantie van styling voor bedrijven. Door middel van interviews, case studies en kwantitatief onderzoek wordt onderzocht hoe men de stylingbeslissing van bedrijven kan beschouwen als strategisch relevant, en welke omgevingsfactoren en bedrijfsstrategieën een invloed hebben op strategische stylingbeslissingen. In het derde deel van het proefschrift bespreek ik de algehele bijdrage van het proefschrift, uitmondend in een bredere discussie over de management van vormgeving in de creatieve industrie, met als leidend voorbeeld de vormgevingspraktijk in de Scandinavische landen.

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gebrek hieraan). Styling kan dan worden gezien als de formele activiteit die als doel heeft om bepaalde effecten in de expressie van producten te creëren. Daarnaast maak ik onderscheid tussen stijl productie en de receptie hiervan op de markt. Dit doe ik om te benadrukken dat ontvangende partijen hun eigen interpretatie kunnen hebben over wat opmerkelijk is aan de vormgeving van producten, en dus tot welke stijl zij behoren.

Het tweede deel van het proefschrift gaat over de strategische relevantie van styling voor bedrijven en bestaat uit 4 verdere essays. In het tweede essay (Hoofdstuk 3) presenteer ik de belangrijkste strategieën die bedrijven kunnen volgen voor de styling van hun producten. Mede op basis van interviews identificeer ik drie hoofddoelstellingen voor styling: (1) aandacht wekken, (2) herkenning oproepen en (3) symbolische betekenis creëren. Gebaseerd op het gedachtegoed van de ontwerper en design theoreticus Monö (1997), beschrijf ik drie dimensies waarop besluitvorming over de styling van een nieuw product plaatsvindt: (1) de relatie tussen het nieuwe product en de huidige productportfolio, (2) de relatie tussen het nieuwe product en voorgaande generaties van het product en (3) de relatie tussen het nieuwe product en de producten van concurrenten.

In een derde essay (Hoofdstuk 4) onderzoek ik middels case studies hoe bedrijven waarde toekennen aan hun stylingactiviteiten. Ik presenteer een model voor de waardering van stylingactiviteiten. Dit model geeft een overzicht van de drie domeinen van het strategische belang van styling voor bedrijven, zowel op de korte als langere termijn: (1) financieel rendement, (2) zichtbaarheid op de markt en (3) professionele erkenning. Verder laat ik zien dat de waarde van styling voor bedrijven afhankelijk is van hun eigen besluitvoering en prioriteiten.

In een vierde essay (Hoofdstuk 5) presenteer ik een kwantitatief onderzoek onder design professionals waarin gekeken wordt naar de invloed van marktfactoren op strategische beslissingen over styling. De resultaten laten zien dat een aantal marktfactoren een invloed hebben op stylingbeslissingen, en dat deze invloed groter of kleiner wordt afhankelijk

van de opleidingsachtergrond en het aantal jaren ervaring van de design professionals.

In een vijfde essay (Hoofdstuk 6) breid ik het kwantitatieve onderzoek uit naar de relatie tussen stylingstrategieën en de meer algemene bedrijfsstrategieën die bedrijven hanteren ten opzichte van hun concurrenten. De studie kijkt naar de merken voor personenwagens op de huidige Duitse markt en laat de styling- en bedrijfsstrategieën voor de merken beoordelen door experts op het gebied van autostyling en marktexperts. De resultaten van de studie laten zien dat stylingstrategieën sterk samenhangen met meer algemene bedrijfsstrategieën. De resultaten suggereren ook dat de expressiviteit van producten niet altijd het resultaat hoeft te zijn van intentioneel strategisch handelen. Tot slot laten de resultaten zien dat afzonderlijke stylingstrategieën gerelateerd kunnen worden aan doelen ten aanzien van financieel rendement, zichtbaarheid op de markt en professionele erkenning.

Het laatste deel van het proefschrift bespreekt de directe implicaties van het proefschrift voor theorie en praktijk, uitmondend in een discussie over de bredere culturele betekenis van styling voor de maatschappij, en de wijze waarop bedrijven zorg dragen voor deze betekenis, samen met andere instituties, en in het bijzonder met de ontwerpopleidingen die ontwerpers opleiden voor de arbeidsmarkt. Het eerste hoofdstuk in dit deel (Hoofdstuk 7) kijkt hierbij vooral terug naar de resultaten van het proefschrift. Een laatste, zesde essay (Hoofdstuk 8) gaat hierop verder en beschouwt de management van styling binnen het bredere kader van de creatieve industrie, met als leidend voorbeeld de stylingpraktijk in de Scandinavische landen. Het laat zien hoe Scandinavische designmerken succes hebben behaald door hun historisch gevormde stijl te vertalen naar een strategische hulpbron voor hun verdere stylingactiviteiten.

Een nieuwe, meer strategische blik op styling speelt in op een groeiende behoefte aan onderzoek naar de relatie tussen design en strategie. In de eerste plaats draag ik bij aan het onderzoek naar de management van design. Tot op heden zijn er weinig studies uitgevoerd naar de strategische relevantie van vormgeving en styling. Deze studies liggen ver uiteen in de tijd, gebruiken verschillende conceptuele kaders

voor hun studies, en er wordt weinig naar elkaar verwezen. Daardoor bouwen deze studies nauwelijks op elkaar voort en er is ook geen sprake van vooruitgang in het denken over styling en stylingpraktijk.

Voorgaand onderzoek naar styling maakte veelal een onderscheid tussen vorm en functie in design, waarbij styling alleen de vorm betrof, alsof dit los gezien kon worden van de functie. Door deze benadering is het ook moeilijk om styling als anders te zien dan een vluchtige en oppervlakkige activiteit van weinig strategische waarde. Voortbouwend op een herwaardering van stijl in de kunst, opper ik dat de expressie van vormgeving te herleiden is naar een terugkerende set van oplossingen voor de problemen die ontwerpers van producten tegenkomen. Het zijn de merkbare effecten in de vormgeving van producten die leiden tot een bepaalde expressie, en dus een bepaalde stijl. Volgens deze conceptualisatie van stijl is een onderscheid tussen vorm en inhoud niet belangrijk. Wat wel van belang blijft is de mate waarin ontwerpers en bedrijven zich bewust zijn van de expressie van hun producten, en in welke mate die producten een gelijkenis of verschil tonen met ander producten. Om deze reden beschrijf ik styling als de (bewuste) activiteit van probleemoplossen waardoor een merkbaar effect op producten wordt gecreëerd. Mijn beschrijving van styling wijkt daarom af van de algemene opvatting, omdat stylingactiviteiten merkbare effecten kunnen hebben op zowel de vorm als de functie in een ontwerp.

Een laatste onderzoeksimplicatie van mijn benadering van styling is dat ontwerpers niet altijd expliciet in een bepaalde stijl ontwerpen. Een herwaardering van het belang van styling, en het besef dat styling impliciete (en soms onbewuste) effecten kan hebben, maakt een diepgaander onderzoek mogelijk naar het bereik van stylingactiviteiten binnen bedrijven en het potentiële effect van ontwerpers op de expressie van producten.

Een tweede contributie van dit proefschrift gaat over de praktijk van styling in bedrijven. Ik schets de belangrijkste strategische richtingen die bedrijven kunnen volgen bij het vormgeven van nieuwe producten. Veel bedrijven investeren veel in styling om zich te verzekeren van succesvolle producten maar de strategische relevantie van deze investeringen staat ook

ter discussie. Uit consumentenonderzoek blijkt weliswaar het grote belang van styling voor consumenten (voor een overzicht zie bv. Veryzer, 2000), maar er is weinig kennis over het proces dat de voorwaarden schept voor zulke effecten, en over de stylingactiviteiten van ontwerpers en de bedrijven waar zij voor werken. Styling wordt hierdoor vaak gezien als een creatieve, onstuurbare activiteit gebaseerd op 'zachte' criteria, waarbij de resultaten grotendeels afhangen van de vaardigheden en connecties van individuele ontwerpers. Managers ondervinden hierdoor problemen met het sturen van het stylingproces en ook om stylingactiviteiten prioriteit te geven bij de ontwikkeling van nieuwe producten en de ontwikkeling van (merk)strategieën. Uit eerder onderzoek blijkt ook dat ontwerpers vaak het gevoel hebben dat hun werk onvoldoende wordt gewaardeerd binnen bedrijven, en wordt gezien als iets dat door iedereen met gezond verstand gedaan kan worden.

In de literatuur worden verschillende stylingstrategieën genoemd (en geadviseerd), maar er is weinig kennis over de omstandigheden waarin verschillende stylingstrategieën relevant zijn. Het proefschrift laat zien dat stylingactiviteiten verbonden zijn aan een breed scala van bedrijfsstrategische doelen. In het bijzonder wordt getoond (1) hoe styling gebruikt kan worden voor uiteenlopende productontwikkelings- en bedrijfsdoeleinden en (2) welke strategische voordelen stylingactiviteiten kunnen hebben voor de positie van producten op de markt. In dit proefschrift wordt ook getoond dat de algemene strategie van een bedrijf en bepaalde marktomstandigheden gerelateerd zijn aan de styling van producten. Dit suggereert dat verschillende stylingstrategieën levensvatbaar zijn onder verschillende omstandigheden.

In de literatuur worden verschillende stijlrichtingen genoemd (zie bijvoorbeeld de tabel op pagina 100). Het is duidelijk dat er is weinig kennis over het proces dat de voorkeur aan een stijl geeft. Dit artikel richt zich op het onderzoek van ontwerpers en de individuele ontwerpers. Maar ook ontwerpers die voor individuele ontwerpers werken worden hierbij betrokken. Het artikel richt zich op het onderzoek van ontwerpers en de individuele ontwerpers. Maar ook ontwerpers die voor individuele ontwerpers werken worden hierbij betrokken. Het artikel richt zich op het onderzoek van ontwerpers en de individuele ontwerpers. Maar ook ontwerpers die voor individuele ontwerpers werken worden hierbij betrokken.

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APPENDIX A: CURRICULUM VITAE

Date of Birth: 13 May, 1980

Place of birth: Enslöv, Sweden

Oscar Person is a researcher at the Department of Product Innovation Management, Delft University of Technology, the Netherlands. He holds a M.Sc. in Strategic Product Design (with honours) from the same university and a M.Sc. in Industrial Design Engineering from Chalmers University of Technology, Sweden. His research focuses on the strategic relevance of styling and how companies gain an edge on the competition by managing the style of their products. Oscar has published on these topics in *Design Issues*, *Design Management Review*, *Design Studies* and the *Journal of Marketing Management*, as well as in several peer-reviewed conference proceedings. His work has been presented at international conferences and seminars in design and management, such as: *Cambridge Academic Design Management Conference*, *EIASM International Product Development Management Conference*, *European Marketing Academy Conference*, *IASDR World Conference on Design Research*, *International Conference on Engineering and Product Design Education*, *Nordic Network for Research on Communicative Product Design*, and the *Nordic Design Research Conference*. He has also been invited to lecture on the strategic relevance of styling and the management of style at design and business schools across northern Europe.

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Place of birth: Enslöv, Sweden

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APPENDIX A: FACTORS INFLUENCING DECISIONS ON STYLING

Internal factors	External factors
Brand/Company age	Brand strength in comparison to competitors
Company location (e.g. being a Finnish firm)	Degree of competition
Company reputation of innovativeness	Market size
Company size	Price sensitivity among consumers
Expected product lifetime	Seasonality effect (e.g. summer and winter collection)
Importance of being perceived as a designer/art brand ^a	Stage in product lifecycle (market maturity)
Manufacturing capabilities	Trend consciousness among consumers
Number of products in portfolio	
Number of targeted market segments	
Price positioning (low or high end of market) ^a	
Production volumes	
Resources for (product) design	
Resources for marketing activities	
Time for product development	
Time of market entry	
Type of product (high-tech or low-tech) ^a	
Use of external or in-house designers	

^a In the main study, these factors were translated to a product's value for its consumers

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Company size	Price sensitivity among consumers
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Importance of being perceived as a designer and brand*	Stage in product lifecycle (market maturity)
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Number of products in portfolio	
Number of targeted market segments	
Price positioning (low or high end of market)	
Production volumes	
Resources for (product) design	
Resources for marketing activities	
Time for product development	
Time of market entry	
Type of product (high-tech or low-tech)*	
Use of external or in-house designers	

* In the main study, these factors were translated to a product-specific list for the consumers.

APPENDIX B: BUSINESS STRATEGY STATEMENTS

Prospector

This brand operates within a broad product-market domain. It is frequently the first-to-market with new product (or service) concepts. It also does not hesitate to enter new market segments where there appears to be an opportunity. The brand reaches business success by focusing on offering products that push performance boundaries. Its proposition is an offer of the most innovative product (or service), whether based on dramatic performance improvements or cost reductions.

Analyser

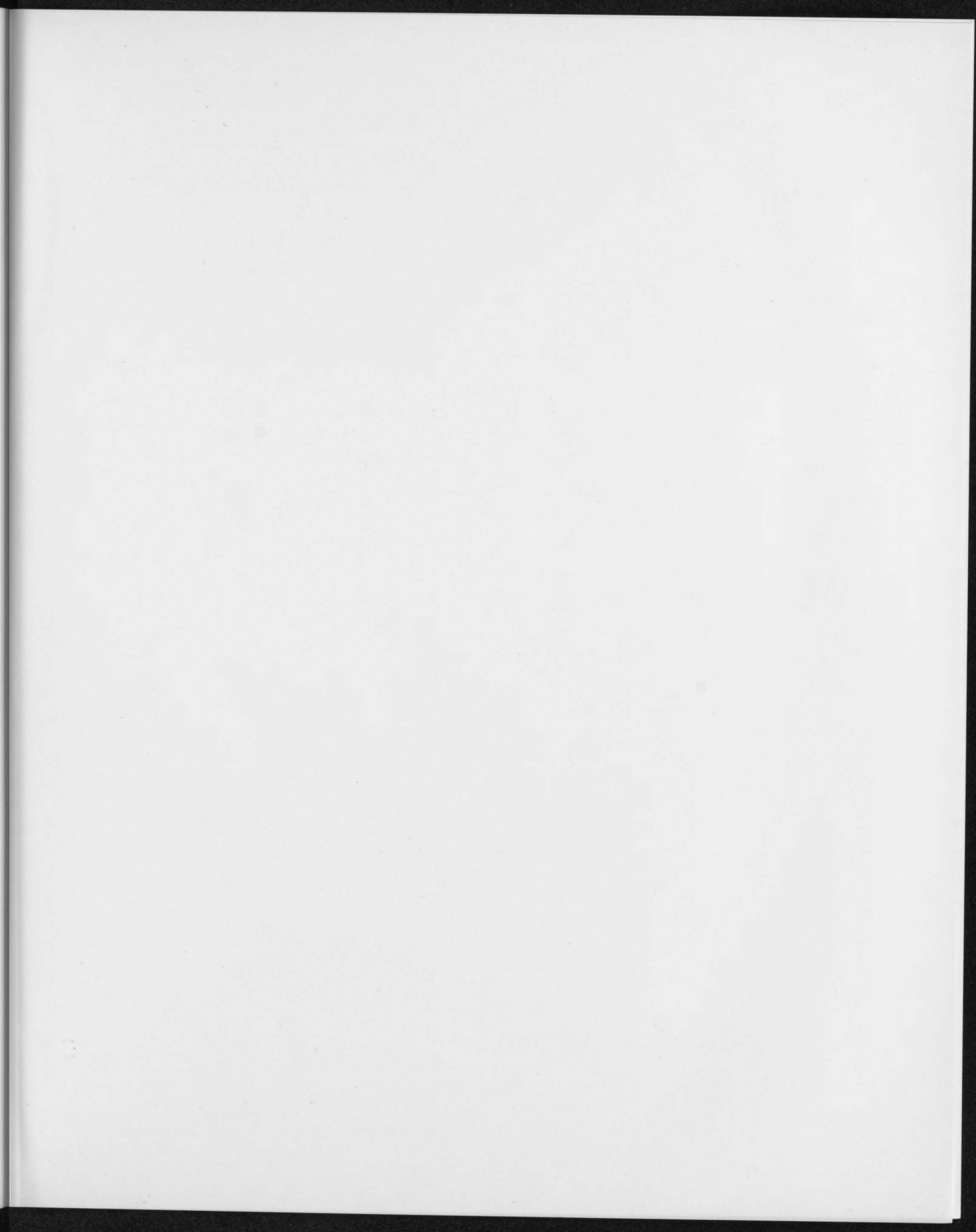
This brand is seldom 'first-in' with new products (or services), or to enter emerging market segments. However, by carefully monitoring competitors' actions and customers' responses to them, they can achieve business success as an 'early-follower' with a better targeting strategy, increased customer benefits, or lower total costs.

Low-cost Defender

This brand attempts to maintain a relatively stable domain by aggressively protecting its product-market position. It rarely is at the forefront of product (or service) development. Instead, the brand reaches business success by producing products (or services) as efficiently as possible. As such, it focuses on increasing its share in existing markets by providing products at the most competitive prices.

Differentiated Defender This brand attempts to maintain a niche by aggressively protecting a stable product market position. It is rarely at the forefront of product (or service) development. Instead, the brand reaches business success by providing superior levels of product (and/or service) quality. As such, its prices are typically higher than the industry average.

Adapted from Slater and Olson (2000)



Differentiated Defender

This brand position is to maintain a niche or
apparel, preserving a niche product market
position. It is a result of the constraint of product
line rationalization. Instead, the brand
maintains its market success by providing superior
value in quality (and/or service) quality. As
a result, margins are typically higher than the
market average.

Adapted from Slater and Olson (2000)



