TEACHING STRATEGIC PRODUCT STYLING: AN EDUCATIONAL APPROACH TO THE USE OF CONSUMER DATA IN DESIGNING BRAND RECOGNITION

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ABSTRACT
Historically, design education on styling focused on the design of products with aesthetic, functional and symbolic appeal to consumers. Today with increased interest in the commercial role of design, design educators also place considerable emphasis on the skills associated with establishing visual brand recognition through styling. While there is undoubtedly much to learn from the various approaches educators use when teaching these skills, design literature has not provided many examples of the educational approaches used for establishing visual brand recognition through styling. In this article, we report on such an approach that aimed to familiarize design students with the collection and usage of quantitative consumer data when seeking visual brand recognition through styling.

Keywords: brand management, consumer research, design education, design research, product styling

1 INTRODUCTION

Designers' work on the visual appearance of new products (i.e. styling) can provide companies a non-neglectable advantage in the marketplace [1]. In particular, to establish visual brand recognition through styling is recognized as strategically important for companies [2, 3]. Consequently, the strategic importance of establishing visual brand recognition through styling sets new challenges for design education. In the past, education on styling focused on the design of products with aesthetic, functional and symbolic appeal to consumers. Design students acquired their theoretical skills in readings on topics such as product semantics and form giving. The practical skills were taught in courses on aesthetics and sketching, and students refined their styling skills through applied design projects. Today, along with an increased interest in the commercial role of design, design educators also place emphasis on the skills associated with strategic product styling, and, in particular, the design of visual brand recognition [4-7].

There is much to learn from the ways design educators teach styling from the viewpoint of brand recognition. For educational interest, insights into the various ways design educators teach styling for visual brand recognition can provide inspiration for course

development and educational benchmarking. As many educational institutes seek to expand their focus on the commercial role of design, such insights could provide a valuable starting point. Educational approaches can also improve the methods that companies use and support the lifelong learning of designers working in industry practice.

Despite the potential benefits of communicating the educational approaches used in teaching styling, they have been rarely reported in the design literature. In this article, we report on an approach that aimed to familiarize design students with the collection and usage of quantitative consumer data when seeking visual brand recognition through styling.

2 VISUAL BRAND IDENTITY AND MARKET ANALYSIS

Since the integrated Bachelor/Master program in Industrial Design Engineering was introduced at Chalmers University of Technology (Chalmers) in 1999, emphasis has been placed on developing the students' analytical and strategic skills when styling new products. In teaching these skills, Warell's design format analysis [8] was early introduced in the curricula, and over the years this method has established itself as a prominent component in the teaching in the Industrial Design Engineering and Automotive Industrial Design Engineering programs at Chalmers [5, 6].

Initially the teaching on visual brand recognition was integrated in courses on design theory and methodology, and the students incorporated/tested their skills in design projects throughout their bachelor and master studies. Since the *Visual Brand Identity and Market Analysis* course (7.5 ECTS, master level) was introduced in 2004, teaching on visual brand recognition has been given a more pronounced position in the educational curriculum. The goal of the course is to provide students with an understanding of how visual identity can be achieved through design. The course consists of a series of lectures and a larger design project, and gives students a comprehensive view on the use of product design in branding. In the lectures, students are confronted with design and branding theories as well as practical insights given by high-level professionals from the industry. Design managers from Volvo, Saab and Electrolux lecture regularly in the course. In the accompanying design project, students apply the conceptual skills in analysis of automotive and consumer product brands, followed by a brand building exercise for a co-branding alliance between two different brands. Students have for instance been challenged with the task of developing a new brand and design philosophy for a theoretical alliance between Toyota and Nokia (for more details about the course outline see [5]).

3 INTEGRATING QUANTITATIVE CONSUMER DATA

For the academic year 2007/2008, we sought to expand the objectives of the course by familiarizing the students with the collection and usage of quantitative consumer data. The course already had a consumer/user focus, and the students often made use of secondary data sources about consumers (such as newspaper articles) during the analysis phase of their projects. Furthermore, they made use of various qualitative methods. However, the collection and usage of quantitative user data had not been addressed as such. With many companies relying on quantitative data when designing new products, we felt there was room for a new quantitative exercise during the analysis phase.

As a first experiment, we focused this exercise on the analysis of the car brands and structured it around three assignments. First, the student groups performed a

questionnaire study to collect quantitative consumer data about the perception of their car brands. Second, the groups translated their findings from the questionnaire study to infographics. Third, the groups reflected on their experiences in a short essay.

3.1 Collecting quantitative consumer data

Whilst the skills associated with the collection of quantitative consumer data have been included in disciplines such as ergonomics, human factors and marketing, the development of such skills have typically fallen outside the scope of design education. At the same time, it is not uncommon for designers to be heavily influenced by quantitative consumer data when designing new products. Companies often guide the styling of new products by acquiring data about consumers' visual perception of a brand. Design concepts regarding the styling of new products are also often assessed quantitatively prior to product launch [9]. We therefore saw an opportunity to strengthen the students styling skills by familiarizing them with the underlying principles behind collecting and using quantitative consumer data.

The data was collected through a questionnaire that was distributed among students at Chalmers. Each student group was asked to prepare pictures of two different car models of their brand for the questionnaire. The pictures were then combined with those of other groups so that each group could compare the perception of their own brand in relation to a set of competitors. Altogether, each group compared the perception of five car brands. Each group was then asked to collect responses from 30 students. The comparison was made on a number of dimensions (scales) including beauty, typicality, novelty and product personality. The scales had all been tested in scientific studies on design [10-12]. The respondents' background was assessed through a number of demographical questions as well as questions regarding their automotive knowledge.

With a majority of the students having limited (or no) experience with collecting quantitative consumer data, many of the groups had valuable learning experiences while collecting the consumer data. First, many of the students experienced that it was highly time-consuming to collect answers from respondents. Second, not all respondents seemed to understand the meanings of the words used in the scales. Third, the students also noted that how the products were depicted in the questionnaire influenced the respondents' ratings. In particular, many of the groups commented that the colour of the cars seemed to have a pronounced effect.

3.2 Producing infographics

Consumer data in the form of text and numbers is often depicted as ill-suited for designers who are seen as more visually oriented. Bruseberg and McDonagh [13], for instance, found that designers thought the documentation of consumer data from market research often is tedious and long-winded. Instead, the designers in their study called for more concise forms for presenting consumer data. To make the collected consumer data more attainable for the students in their projects, each group was instructed to translate the findings of their questionnaire study into a so-called infographic chart. An infographic is a visual form of representing complex data in a synthesized and easily comprehendible manner. In newspapers, infographics are often used to capture readers' attention and convey information about everything from bio-technology to politics to sports. They are particularly suitable in the design process, while meeting the needs of more visual orientated designers [14]. In developing the infographics, we stressed that the charts (1) should be a visual explanation of their collected data, (2) could contain pictures, diagrams, text and numbers, (3) should be self-explanatory, and (4) should

synthesize the key findings of the questionnaires. This exercise resulted in a number of interesting suggestions for how to visualize quantitative consumer data (see Figure 1).

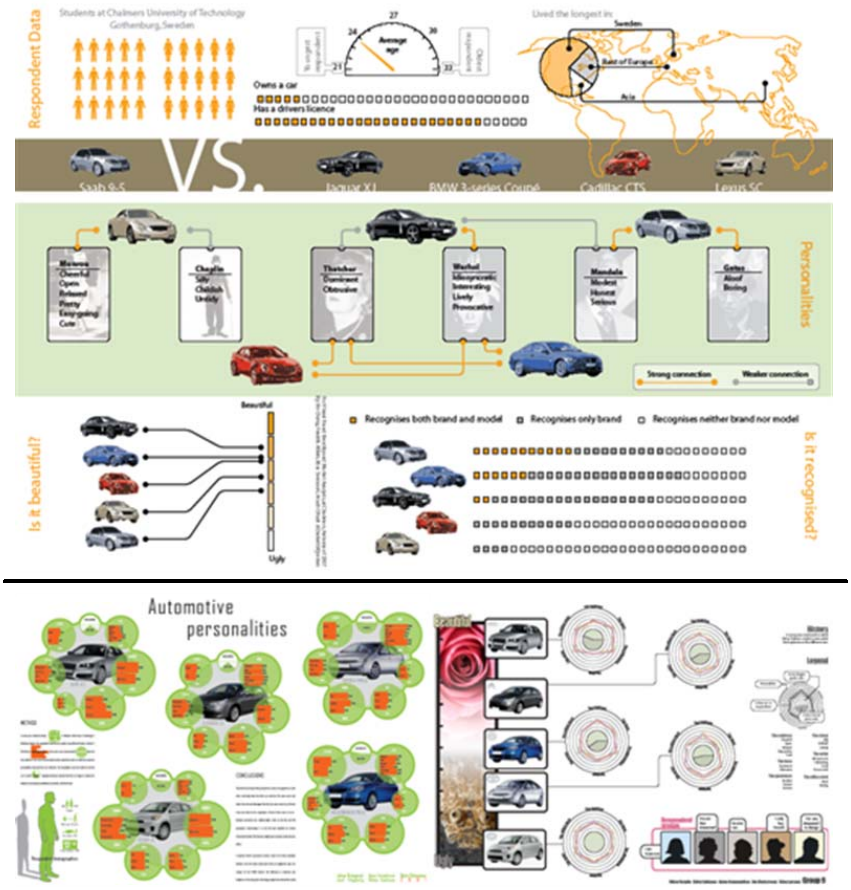

Figure 1 Examples of infographics produced by the students groups

3.3 Reflecting on the experience

In reflecting on their experience with collecting and using quantitative consumer data in their projects, the students reported on a number of experiences. The groups expressed both positive and negative remarks regarding the use of quantitative data when styling new products. They had found it beneficial to experience how quantitative consumer data can be collected and translated for use in the design process. Many groups also reflected on problems that can emerge for designers when collecting quantitative data such as problems with recruiting respondents, the difficulty to select suitable visual material and keeping respondents motivated while filling in the questionnaire.

In the students' reflections, we also found a number of suggestions for improvements of the exercises and their relation to the project in the course. To carry out the questionnaire study should not be more time-consuming than 10-15 min per questionnaire. The wording in the scales needs to be considered carefully. Finally, the principal set-up of the questionnaire and the pictures was revealed as the most important precondition to produce valuable information for the projects.

4 DISCUSSION

Over the years, we have experienced great success with the *Visual Brand Identity and Market Analysis* course. The student evaluations have been high both in terms of interest and relevance. As one result of the course, more and more students decide to refine their skills on visual brand recognition in subsequent graduation projects in collaboration with industry partners. The quantitative exercise reported in this paper was tried for the first time and proved to be a valuable supplement to the other methods used in the course.

Prior to performing the quantitative exercise, many students thought it would be easy to differ between allegedly well-known car brands. However, after analyzing their data, many of them realised that without any brand badge (providing them with a sign of feelings/values) attached to their car the evaluations was much more uncertain. In fact, it was even in some cases considered hard to talk about brand values without knowing what brand they were evaluating. This experience did not only raise the students' awareness of the importance of brand strategies in design, but also offered a good qualification in starting their own project work in creating a new brand and designing a product for it.

The collected quantitative data was integrated in the projects during the analysis phase. During this phase, it helped to provide the students with a good overview of the car market. In the synthesis part, it worked more as a pre-conditioning instrument for the branding-focus of the design work. The fact that visual qualities had to be translated in verbal attributes was certainly most problematic. It would therefore be interesting to explore the possibilities of a more visualised, non-verbal form of questionnaire for checking perception of visual, non-verbal formal parameters. Another improvement could be to combine the collection of quantitative consumer data with personal constructs and "repertory grid" techniques [15] to create new forms of visual questionnaires.

While such improvements are for the future, we hope to have inspired further educational work on how to address quantitative consumer data when styling new products.

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