

Chapter #3

THE APPLICATION OF EXPERIMENTAL AESTHETICS IN SOCIAL PSYCHOLOGY TO MARKETING RESEARCH IN THE MOTORCYCLE INDUSTRY

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ABSTRACT

Consumers' emotional response is derived from their perception towards a product. This response undoubtedly plays a significant role in the visual appearance of motorcycle design. This object possess to communicate the aspects of our personality, group membership, and aspirations. Likewise, symbolism is obviously in related to the motorcycle industry plays as a major role and perceives as a symbol of social status, power, and rebellion. The propose chapter will look further in the area of social psychology as it is discussed the scientific study of how people's thoughts, feelings, and behaviors are influenced by the actual, imagined, or implied presence of others. Limited information about product personality and user's image within the motorcycle design demonstrates a lack of understanding of how people judge the objects and how the objects bestow values upon users. It is mainly focused on the judgment of the product itself rather than how products bestow values upon users. The complexity of the problem arises from the market such varied demographic, the choice of name and colour, and the styling segmentation can be only solved and improved by using an efficient method. The chapter will discuss the studies which were done in order to formulate an experimental aesthetics to a marketing research method in the motorcycle industry. The discussion is then drawn upon psychology effect and possible explanation of the result following to the empirical method of investigation.

Keywords: experimental aesthetics, innovative method, product transference.

1. INTRODUCTION

The appearance of automotive design strongly influences the consumers' perceptions in the global market. Consumers' perceptions response is derived from their emotional plays a significant role in the visual appearance of motorcycle design. These responses are gathered through market research data collection techniques by company to formulate and develop an effective marketing research method. This technique improves their marketing strategies for new motorcycle development and increases sales for the company. With current globalisation and trade liberalisation, traditional research techniques are no longer efficient in generating sales in motorcycle market. An exploration of new techniques is crucial and important for the motorcycle industry. Despite the various methods and techniques that have been applied to the investigation of the emotional relationship of consumers with automotive design, there is a lack of publication devoted specifically to the consideration of the value a product bestows upon the user. Limited information about product's personality and user's image within the automotive design field demonstrates a lack of understanding on how people judge the objects and how the objects bestow values upon users. At the moment, market research methods are mainly focused

on the judgment of the product itself rather than how products bestow values upon users (Md Hashim, 2012b).

Consumers' reaction to products strongly influences automotive sales in the market. According to Isac and Rusu (2014), customer satisfaction or dissatisfaction is not an emotion, but rather the evaluation of an emotion. This consumer's response of the product's styling appearance is fundamental to a design and more so to the company. Formulating an effective market research method is important for companies to explore their strategies. In order to achieve this, the appearance of a vehicle is a critical factor in the profitability of automotive industry. Automotive forms are more complex and subtle than any other types of product. In order to achieve this, establishing the style of automotive is crucial and been given high priority in the development resources (Tovey, 2002).

Nowadays in the automotive industry, user satisfaction became a major determinant in designing any strategies of a company. In relation to this, user satisfaction relies on the values that are driven by the emotions response from: 1) the used of product; 2) symbolic values referring to the product's reflection on its user; and 3) character values relating to the personality of the product (Demiröz, 2007). According to Demiröz (2007), products carry two different kind of symbolisms; self-expressive, which relies on the user's identity and expression of group membership, social position or status. Thus, symbolism plays as a major role in the automotive industry. Cars tend to be said as an extension of ego and personal lifestyle (Demiröz, 2007).

Theories approaches in consumer satisfaction were used to explain the relationship between disconfirmation and dissatisfaction. These approaches can be seen as variations of the consistency theories and focused on the nature of the process of comparing the consumer's post-usage (Isac & Rusu, 2014). Theories of consumer satisfaction include the Assimilation theory (Anderson, 1973), the Contrast theory, the Assimilation-contrast theory (Hovland, Harvey, & Sherif, 1957), the Negativity theory (Carlsmith & Aronson, 1963), and the Hypothesis testing theory were achieved under the theories of consistency. The theories of consistency suggest that when the expectations and the actual performance of the product do not fit, the consumer will accept a certain amount of tension. To avoid this, the consumer will try to adjust both expectations and perceptions on the actual performance of the product. However, consumer's satisfaction is dominated by the paradigm of disconfirmation. As suggested by Isac and Rusu(2014), disconfirmation can be achieved through several methods, offered its advantages and disadvantages according to studies.

'Religious, economies or erotic desire can be displaced to an object. One way that an object's social value is over determined is through the demonstration of excess capability that suggests a latent property to deliver human qualities. A car can have an excess of power that cannot actually be used on the road but a powerful car makes the driver powerful' (Green & Jordan, 2002 p. 78). By exploring the aesthetic responses to automotive design, it suggests to designers to create an automotive personality which will satisfy consumers. As a result, designers concentrate on visual impact and visual research methods (Kälviäinen & Miller, 2005). According to Kälviäinen and Miller (2005), in order to achieve this task, it is a need to develop other research technique that is important to produce suitable products for user experience. This study suggests the needs for the development of visual experience studies and analysis into design research. To achieve this, it is important to combine research design into two former traditions of visual research: 1) supporting the designer in creation and analysis to produce meanings, and 2) providing the means to anticipate and test how user will interpret and experience the visual messages in products (Kälviäinen & Miller, 2005).

Within the automotive industry, a wide range of market research methods have been adapted by companies. In addition to this, design market research which is increasingly

integrated knowledge from other disciplines such as human factors/ergonomics, social sciences and market research (Langford & McDonagh, 2002). Research, therefore, is absolutely necessary to uncover the emotional responses to the design of products. The fields of interest include aesthetics, psychology, consumer research, sociology, marketing, and semiotics (Crilly, Moultrie, & Clarkson, 2004). The complexity of the problem arises from the market such varied demographic, the choice of name and colour, and the styling segmentation can be only solved and improved by using an efficient method (Md Hashim, 2012a). In response to this, a range of method and techniques have been adapted and applied in the automotive industry. Hence, motorcycle industry is adopting and applying these methods and techniques.

1.1. Value a product bestows upon the user

The characteristics of the product onto the owner can be overt or more subtle. In the overt category, owner of a new Rolls Royce will indicate wealthy status, and this crosses national boundaries. Ownership of such vehicles confers wealth and status that impose an image of success on its owner. In addition, status of success is also apparent in the ownership of a Bentley, Lamborghini, Ferrari, and down to the second level of Mercedes and BMW. Similarly in the developing nations, these characteristics are indicated by ownership of certain vehicles.

The objects we possess communicate aspects of our personality, group membership, and aspirations. Like wise, symbolism is obviously in related to the automotive industry and plays as a major role in it. It typically perceives as a symbol of social status, power, and rebellion (Graves-Brown, 2000). Thorsten Veblen in his classic book, 'The Theory of the Leisure Class' articulated this aspect invented the term 'conspicuous consumption', where he described the role of possessions in the definition of our social identity (Veblen, 2005).

In this study, symbolism is identified in the presence of motorcycle. Currently, market research methods are more focused on judgment of the product itself, overlooking a key feature of products, namely the capacity of the product to confer its characteristics to the owner.

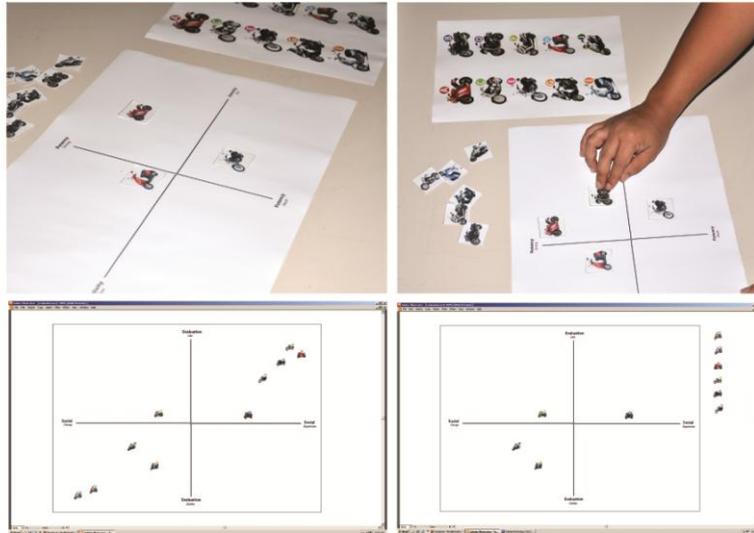
2. METHOD

An experimental aesthetics technique has been conducted in this study. In order to assess user requirements and to establish how they perceive competing motorcycle models, methods are required that could be cost effective and adaptable in various markets. Participant in this study were chosen from university students from non-design courses in such that prior knowledge of similar research would not affect their responses (Wilson & Mackenzie, 2000). Since it is known that product judgment can be influenced by background factors such as age, education and socio-economic status, students were selected to form a relatively homogenous group (Babbie, 1990; Punch, 1998). This experimental aesthetics technique resulted in two methods: 1) visual positioning task; and 2) room affect method in assessing the capacity of the product to confer its characteristics to the owner.

2.1. Visual Positioning Task

For the visual positioning task, a qualitative approach had been applied derived by combining two methods of the Semantic Differential (Osgood & Suci, 1955) and Multidimensional Scaling (MDS) (Antikainen, Kälviäinen, & Miller, 2003).

Figure 1. Motorcycle positioning task



This method uses a visual field format whereby participants maneuver and position products relative to one another in a visual space. Essentially, it adopts the format of Multidimensional Scaling (Schiffman, Reynolds, & Young, 1981), whereby products are positioned in a proximities space: the closer together in the space, the more similar the products. However, unlike Multidimensional Scaling, the dimensionality of the proximities space is predetermined. And it is here that the dimensions commonly identified in Semantic Differential studies can be used. Alternatively, different dimensions can be imposed according to the interests of the designer-researcher. While the above may sound complex, in practice it is extremely easy to set up and analyse, participants also find it is easy to use. From the standpoint of both the designer and the participant, it requires neither verbal articulation nor an understanding of numbers-statistics. In addition, it will generate a visual output (Md Hashim, Effendi, Allan, & Jackson, 2009).

The method conducted which participants from different nationality were given one task involving motorcycle. The participants were asked to position the product pictures on the visual axis of a plot that was proved. The first plot used an Evaluation axis consisting of like – dislike and a Social axis consisting of cheap – expensive, positioned orthogonal to one another. The second plot used a Potency axis, strong – weak and an Activity axis, slow – fast. The results from each participant were combined into the mean position for each of the stimuli.

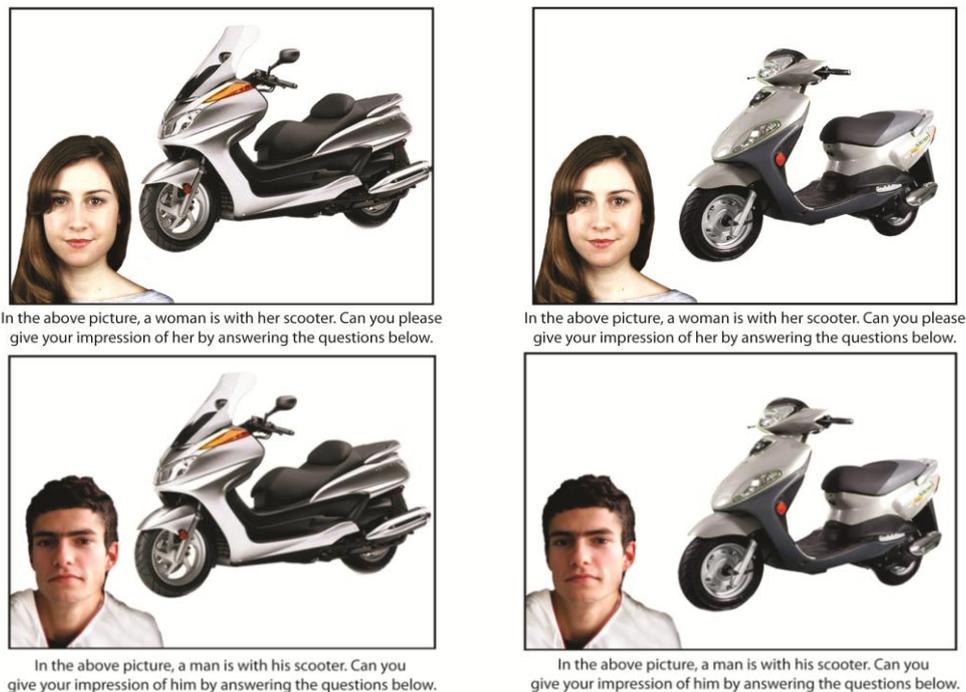
2.2. Room Affect

For the second method, a quantitative approach has been applied and derived by combining two methods of Room Affect (Canter, West, & Wools, 1974) and Personality Traits (McCrae, R.John, & Oliver, 1992). The Room Affect is derived from environmental psychology. In 1974, Canter, West and Wools (1974) found that the characteristics of a room were transferred to its prospective occupant (Canter et al., 1974). A warm room would equate with a warm occupant and a powerful room with a powerful occupant. Earlier, in 1956, Maslow and Mintz (1956) observed a similar Room Affect, whereby the characteristics of the room impacted upon judgments of people's faces associated with the room (Maslow & Mintz, 1956). For example, faces in a 'beautiful' room were rated higher

in 'energy' and 'well-being' levels than those in an 'average' room, which in turn were rated higher than those in the 'ugly' room. Campbell (1979) also found an association between the design of a professor's room and the presumed characteristics of the professor who would be found there.

Participants in this study were given a paper based questionnaires. In order to test for possible effects, the clear different products were paired and shown in every page of the questionnaires. These pictures consisted of Vespa against Modenas motorcycles. Each of these pictures was positioned similarly to the vehicle, and the motorcycles were digitally modified to be as similar in size, orientation and colour as possible. Participants then evaluate the pictures by answering the 9 likert scale questions derived from a standard five-factor model of personality traits covering Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience (McCrae et al., 1992). The result then had been analysed by using statistical analysis software SPSS, which is now known as PASW.

Figure 2. Stimuli picture of room affect method



3. FUTURE RESEARCH DIRECTIONS

The purpose of these studies was to assess the feasibility of using these techniques to gain insights into products in particular motorcycle models. An experimental aesthetic was conducted to give an insight judgment of respondents for both methods. Further directions of this study will focus on the data analysis on visual representations. The possible technique by using internet applications will create an easy and sophisticated application to test this possibility. The output therefore will consist both qualitative and quantitative approach that will enable more specific questions to be answered in social psychology.

4. CONCLUSION/DISCUSSION

Visual positioning task method was conducted to investigate the effectiveness of task for participants in position products within a two-dimensional space characterised by two orthogonal scales. Furthermore, are these methods effective cross-culturally and cross gender? If the design appearance of the tested products fails to influence the participants' judgment of the products', then these would be. From the inspection of the results, this is apparent for participants; that is, the spread within the space is less for the Potency-Activity factor than for the Evaluation-Social factor. The above effect gives further confirmation in the meaningfulness of the task. The presence of such effects for the two distinct nationalities lends further weight.

Room Affect task method was conducted to investigate the possible carry-over of the Room Affect into products. Would the product influence perceptions of the person associated with it? The results reveal some distinct product effects and also both gender and nationality differences in such effects. Initially, the application of statistical analysis software SPSS with ANOVA test was performed to determine where differences lay and then t-tests to isolate such differences. The results prove confirmatory. However, highly significant differences were observed for some of the measures used, with indications of strong cross-cultural agreement of difference nationalities for some and less for other participants. Nevertheless, the results suggest that the Product Effect was more pronounced for the females associated with the motorcycles, reflecting a gender effect. These findings are supported by the research of Baker and Churchill (1977), which indicated that automobile advertisements using female models resulted in the car design being perceived as more appealing, lively, youthful, and better designed. Their work also concluded that the physical attractiveness of the model was positively related to the evaluation of the product, such that a more attractive model would result in the car being rated more favourably (Smith & Engel, 1968).

Adapting a combination of manipulation of visual images with the Five-Factor Model of Personality traits, in supporting the Room Affect method, possibly served the purposes. The psychology effect in measuring human personality is believed to be the best representation by using the Five-Factor Model of Personality traits. The study concluded that it would be reasonable to extend the concept of the Room Affect into the Product Effect. Given the empirical verification of the method from the results, the study confirms that association with a product involves transference of product qualities to the person associated with it. Aside from the specific findings from this study, investigations of the Product Effect could be extended to other designed products, with the potential to generate new knowledge in social psychology.

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