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AUTOMOTIVE GRAPHIC STICKER DESIGN: VARIATION, INTERACTION AND PERCEPTION

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AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

This research explored the impact of car design sticker application to the external body surface. Frequently the manufacturer or consumer used sticker to beautify, differentiate and means of communication. The design of the cars has been viewed for its function either as a sedan, hatchback, station wagon or others. Within the model produced, manufacturer tend to diversify the target audience of the similar model by having different painting treatment, little changes on bumper, grille or the skirting. These have been done to demonstrate the appearance of sporty, elegance, rugged, feminine or even the norm plain model. The cost, timeframe, machine, expertise and consumer perception unnecessarily will deliver positivism impact value to the new car design. It is believe that the Car Graphic Sticker Design (CGSD) factor reflects new value design perception in the design process by creating new appearance to the external body surface. The investigations seek for the possibilities on how CGSD able to differentiate the similar model range to meet the specific consumer and possibilities of a potential alternative material application for manufacturers instead of painting or body changes (bumper, skirting, grille and others). The mixed method of qualitative and quantitative employed in this research were used to get information to assess CGSD as potential alternative material application for five purposive main automotive manufacture in Malaysia. The 26 structured survey in Likert Scale, with 158 fractioned questionnaires and car model in production with CGSD in visual observation. 32 cars divided in mini, sedan, sport, luxuries and sport utility vehicle as standard production segmentation models indicated design theme from CGSD design experiment with semantic visualization by the clustering approach were explored in specific graphic sticker design in selected production. The purposive participation from automotive designers, managerial in manufacturers and consumer been interviewed based from 11 content themes and questionnaires. The survey examined the graphic applied on external car body surface demonstrated 94.7% as a design factor of the car differentiation in mass production. The application as body paint replacement indicated 79.6% and 67.2% as factor of the reduce environment issue. Interview method clustered, manufacture and consumer examined the content analysis through themes structured in design value, purpose of sticker, function, value and sticker as an alternative to the car design on body surface appearance. Nevertheless, interview demonstrated different content analysis value which *Respondents 7, 8, 9, 10, 11* and *12* explained the vital and precise to the sticker as model differentiate from body surface appearance and paint replacement. *Respondents 1, 2* and *3* explained principle value content on existence of the graphic. While, *Respondents 4, 5* and *6* examined inconsistence descriptive valued to the sticker. The data provided a rigorous input and findings contribute to the knowledge in method of external car body surface changes process. These enable to differentiate appearance for a target consumer with maintaining the brand image and identity as holistic design point of reference for automotive design practice, design education and policies maker that reflects to the design environment concern in automotive manufacturer.

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CHAPTER ONE

INTRODUCTION

1.1   Research Background

Chapter 1 presents the understanding and significant annotation towards the impact of design satisfaction in car design from viewer's perception. Design value in car form a silhouette asterisk character in car as an impact factor satisfaction from viewer. It contributes as core role in expression index in car design. Therefore one of the specific value interactions is on central visual of the car design which will increase potential creation value and require specific research to explore.

Millions of design compartments in the car have been presented from either inventor or car designers to achieve design perfection (Jindo & Hirasago, 1997; Tumminelli, 2014). It is a critical process, either manufacturer tends to design or redesign the car to achieve recognition and finally as constructed achievement in brands, image and identity (Glancey, 2007; Foster, 2009). The 'Fordism' as an example have faced the critical design situation in early car design to achieve one of the great finding in automotive industry as mass production in 1910s (Kraus, 2009). The forms and color appearance composition on the Ford's 'T' model have delivered dissatisfaction from customer. With limitation on the principle surface black color have been painted on the external car body surface and performed unpleasant perception to the organization as well as customer satisfaction. Most early car models have delivered and examined as rare design principle such form shape and colors to produces potential design expression to specific location on car design surface (Furman, 2010). Nevertheless, as described by Lewin (2011) design sustainability with systematic and strategic ownership approach from before rare finished to current car brands from automotive manufacturers. This have performed evolution and revolution with structured car design perfection globally. Above descriptions certainly have never hindered the expression of human emotion trend changes in car design.

External car body surface appearance presents impact factor with relationship to the novelty of the car body structure (Smith, 2006; Chang, 2006). Based from this