Designing a Passenger Car with Styling for Both City Life and Recreation Purpose

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ABSTRACT

In Taiwan, the automobile market trend normally follows those of Europe, America or Japan without considering local life styles, which are different from those areas. While American families can afford to buy a sedan for work and a RV (Recreation Vehicle) for leisure purpose, crowded population and finite parking space in Taiwan do limit most families to own two cars for different purposes. Considering one-car life style in domestic market, this study tried to survey how customers perceived the fitting of styling image of passenger car with the surrounding environments. Subjects were asked to place photos of thirty car models in between image panels representing city and recreation environments. Five-point ratio scale was used to describe the extent that each model could fit in between. Subsequently, geometric parameters, including length, height, wheelbase, height of waist line, height of roof line, hood angle, windshield angle, hatchback angle etc were analyzed and compared. Geometric features of car model that could fit city life and recreation purpose were proposed.

Keywords: Car; Style; Image; Geometric Features

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REFERENCES

一、中文部分 1. 陳鴻源,2000,汽車輪廓形態意象與區分特徵關係之研究,成功大學工業設計研究所碩士論文。 2. 徐福興、陳玲鈴,2007,汽車型種之平均形研究,中華民國第十二屆設計研討會論文集。 二、英文部分 1. PARK Seong hwan, Mitsuo KAMAIKE, Toru NAGAO, 2006, A Study of the Expression in the Front View Design of a Passenger Car, Car aesthetics annotation. 2. Chiara E. Catalano, Franca Giannini, Marina Onti, and Giuliana Ucelli, 2007, A framework for the automatic annotation of car aesthetics, Artificial Intelligence for Engineering Design, 21, pp 73 – 90. 3. Chiara E. Catalano, Franca Giannini, Towards an automatic semantic annotation of car aesthetics, 2005, Car Aesthetics Annotation . 4. Wright, Curtis, 2002, Aesthetics and the urban road environment, INIST-CNRS, Proceedings of the Institution of Civil Engineers. vol 151, no2, pp 145-150. 5. Curtis, 2005, Reshaping the motor car, Transport Policy [Transp. Policy]. Vol. 12, no. 1 三、網站部分 1. 行政院主計處,2007,http://sowf.moi.gov.tw/stat/month/m1-06.xls 2. 交通部公路總局,2006,http://www.thb.gov.tw/