A Study on How Side-View Proportion Influences the Beauty of Passenger Cars

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ABSTRACT

Designing a beautiful form to attract customers is very important for car manufactures in competitive marketplace. While environment protection becomes inevitable consideration nowadays and technologies have helped improve the durability of mechanical parts, aesthetic durability of passenger car may be another important issue worthy of further studying. Borrowing the idea from facial attractiveness based on averaging rule, this research tried to investigate the possibility to generate an attractive side-view profile of passenger car by taking average of existing models. Thirty middle-size passenger cars with ten of each from American, European, and Asian car manufacturers were chosen as samples. Average side-view profile was obtained by averaging the normalized coordinates of control points of sample cars. Two surveys were conducted. First, twenty subjects were asked to evaluate the attractiveness of side-view profiles of average car and four exiting models. Then sixty subjects were invited to evaluate the attractiveness of average profile and six different profiles derived from average profile by varying proportion of front end an d rear end. The results all indicate that average side-view profile was considered as the most attractive one.

Keywords: Automobile, Side-View, Average, Aesthetics, Proportion

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