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# TRIGGERING EMOTIONAL VALUE THROUGH AESTHETICS OF COMPACT CAR DESIGN IN MALAYSIA

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### Abstract:

The relationship between typicality and novelty was discussed in order to identify the significant emotional value arising in the compact car design of Malaysian manufacturers. Typicality and novelty usually are associated with the aesthetic preference of human artefacts as in this study in compact car design. Considering a typical product is rarely new and, conversely, a novel product often labelled as typical, the positive effects of both features seem incompatible. This paper discusses the history of the Malaysian manufacturer's compact car design according to its timeline and the current market based on its model and achievement. Furthermore, the relationship between compact car design such as the limitation of emotional value arising through typicality and novelty of specific compact car design and how it triggers the user's perception through its aesthetics form. Hence, a pilot study was conducted to validate a set of stimulus and questionnaires as a way to formulate an actual survey. Finally, the outcome of this study will suggest a way forward in exploring typicality and novelty through a reliable method of compact car design.

### Keywords:

Triggering, Emotional Value, Aesthetics, Compact Car

## Introduction

These studies focus on the role of typicality and novelty in aesthetic preferences which is compact car. The focus of these studies is on objects that are used every day. Hung and Chen (2012) give a detailed summary of the literature that focuses on the relationship between typicality and novelty, highlighting the inconsistent results related to the play between

typicality and novelty. There is a lot of acceptance that typicality and novelty affect aesthetic response to designed objects. Typicality can be understood as normality or the range of normal functioning and novelty is an object that has never been experienced before or object consist of a new combination of previously experienced elements.

The increasing of fuel prices has raised sharply over the years is lead to the customers of having more economical cars and manufacturers to reduce car size and weight. Compact car or equivalent to the European which is C-segment or “small family car” are particularly well suited to driving in town and short journey are convenience these days. In Europe, compact cars are increasingly fashionable since Ford introduced the Ford Focus in 1998. The Focus has evolved from a budget-friendly and fuel-efficient to the body styles, engines, and performance variants over the years (Javier Llorente, April 2019).

In Japan, compact car or sub compact car are register under the category that sits between *Kei* cars and regular car and based on the overall size and engine displacement limits. *Kei* cars or Japanese called is *Keijidoshais* “light automobile” category for the smallest highway-legal passenger cars. The *kei* car was created in 1949, on the end of the Second World War when most of the Japanese are not afforded to have a full-sized car but had enough money to buy a motorcycle. For the growth of economy and an alternative of delivery method to small business and shop owners, the *kei* cars were created Peter (Nunn, January 2005).

In Malaysia, manufacturer that produces a compact car is Perodua. Perodua mainly produces compact car or minicars and superminis and does not have models in the same market segments as Proton. They do not design or engineer their main components such as engine and transmission in house. Perodua cars have historically used Daihatsu component designs. Daihatsu held a 20 percent stake in Perodua at the company's launch, increasing this to 25 percent in 2001 and then to 35 percent. In 2004 Perodua started assembling the Toyota Avanza at their plant in Rawang, for sale in Malaysia.

## Literature

The Malaysia's automotive industry plays a significant role in transforming Malaysia from an agricultural to industrial nation, which includes to the high-value economic activities, improved standard of living as well as in education sector. As the sector continues to advance, more high-value jobs will be available and these include production engineers, modeler as well product, process and tool designers. The sector employs thousands of Malaysians in both manufacturing and after sales sectors and creates an important impact on the development of upstream industries.

The beginning of Malaysia's automotive industry predates its independence when Ford Malaya was incorporated in 1926 in Singapore as regional distributor of Ford products. Malaysia's modern-day automotive industry began in 1967 when Volvo Cars established an assembly plant in Shah Alam, Selangor. In 1984, PROTON was set up as a national car project to spur industrialization. Perodua was later established in 1992 to assemble mini and supermini cars. Malaysia's car industry is dominated by two local manufacturers which are heavily supported by the government through National Car Policy which are Proton and Perodua. Proton was officially incorporated on May 7, 1983. The first model, the Proton Saga, was commercially launched on July 9, 1985. The name "Saga" was chosen by Ismail Jaafar, a retired military soldier, and derived from "saga" (*Adenanthrapavonina*), a type of seed commonly found in

Malaysia. He first new market for the Proton Saga was Singapore, right across the Straits of Johor. Proton was founded with the help of Mitsubishi. In 2003, the Malaysian government owned 32 percent of Proton. Mitsubishi which was part Daimler Benz had a 17 percent stake, at that time Mitsubishi was trying to get rid of its shares and Proton was making plans to take on a different foreign partner. The Malaysian government believed that Mitsubishi wasn't transferring technology fast enough to Proton.

Perodua (Perusahaan Otomobil Kedua Sendirian Berhad. English: Second Automobile Manufacturer Private Limited) is Malaysia's second largest automobile manufacturer after Proton. It was established in 1992 and launched their first car, the Perodua Kancil in August 1994. 'M2' refers to the codename which was used when the project to establish Perodua was still Top Secret. The shareholders of Perodua are UMW Corporation Sdn Bhd with 38 percent stake, Daihatsu Motor Co. Ltd. (20 percent), MBM Resources Bhd (20 percent), PNB Equity Resources Corporation Sdn Bhd (10 percent), Mitsui & Co. Ltd (7 percent) and Daihatsu (Malaysia) Sdn Bhd (5 percent) (Jeffrey Hays, 2008).

In the new global economy, Proton and Perodua has been quite successful in its business ventures. Its cars are very popular among Malaysians, such as the Perodua Myvi, which sold 80,327 units in 2006, outselling its rival's best-selling car, the Proton Wira then, which only sold 28,886 units in Malaysia. The Perodua Myvi has been the best-selling car in Malaysia for 8 consecutive years, between 2006 and 2013 respectively. Perodua is set to become the largest manufacturer of compact cars in South-East Asia. Young mentioned that 'cars mediate, not only, the constant dynamic of social relations but also, crucially, the strong emotional relationship of people with country' (Young 2001: 52).

| Brand          | Total Sales |        |        | Passenger Vehicles |        |        | Commercial Vehicles |        |     |
|----------------|-------------|--------|--------|--------------------|--------|--------|---------------------|--------|-----|
|                | Apr-19      | Mar-19 | YTD    | Apr-19             | Mar-19 | YTD    | Apr-19              | Mar-19 | YTD |
| <b>Perodua</b> | 22,141      | 23,286 | 82,800 | 22,141             | 23,286 | 82,800 | 0                   | -      | 0   |
| <b>Proton</b>  | 7,011       | 6,136  | 25,292 | 7,011              | 6,136  | 25,292 | 0                   | -      | 0   |

|              |       |   |       |        |       |   |       |        |       |   |       |       |
|--------------|-------|---|-------|--------|-------|---|-------|--------|-------|---|-------|-------|
| Honda        | 6,175 | ↓ | 8,677 | 28,365 | 6,175 | ↓ | 8,677 | 28,365 | 0     | - | 0     | 0     |
| Toyota       | 5,465 | ↓ | 5,899 | 19,187 | 3,948 | ↓ | 4,712 | 14,607 | 1,517 | ↓ | 1,187 | 4,580 |
| Nissan       | 1,608 | ↓ | 2,050 | 6,774  | 1,268 | ↓ | 1,574 | 5,277  | 340   | ↓ | 476   | 1,497 |
| Mazda        | 1,302 | ↑ | 1,010 | 4,613  | 1,299 | ↑ | 1,000 | 4,539  | 3     | ↓ | 10    | 74    |
| Mercedes     | 974   | ↓ | 1,365 | 3,992  | 945   | ↓ | 1,334 | 3,899  | 29    | ↓ | 31    | 93    |
| BMW          | 760   | ↓ | 920   | 3,325  | 760   | ↓ | 920   | 3,325  | 0     | - | 0     | 0     |
| Isuzu        | 742   | ↓ | 783   | 2,646  | 0     | - | 0     | 0      | 742   | ↓ | 783   | 2,646 |
| Mitsubishi   | 671   | ↓ | 897   | 2,944  | 157   | ↓ | 306   | 913    | 514   | ↓ | 591   | 2,031 |
| Ford         | 451   | ↓ | 547   | 2,046  | 1     | ↓ | 2     | 8      | 450   | ↓ | 545   | 2,038 |
| Hino         | 451   | ↓ | 608   | 1,810  | 0     | - | 0     | 0      | 451   | ↓ | 608   | 1,810 |
| Volkswagen   | 328   | ↓ | 525   | 1,714  | 328   | ↓ | 525   | 1,714  | 0     | - | 0     | 0     |
| Kia          | 314   | ↓ | 402   | 1,640  | 314   | ↓ | 402   | 1,640  | 0     | - | 0     | 0     |
| Subaru       | 228   | ↓ | 232   | 928    | 228   | ↓ | 232   | 928    | 0     | - | 0     | 0     |
| Volvo        | 202   | ↑ | 176   | 632    | 202   | ↑ | 176   | 632    | 0     | - | 0     | 0     |
| Peugeot      | 174   | ↑ | 131   | 577    | 174   | ↑ | 131   | 577    | 0     | - | 0     | 0     |
| Hyundai      | 170   | ↓ | 224   | 768    | 164   | ↓ | 222   | 760    | 6     | ↑ | 2     | 8     |
| Fuso         | 160   | ↑ | 140   | 568    | 0     | - | 0     | 0      | 160   | ↑ | 140   | 568   |
| Sinotruk     | 117   | ↑ | 29    | 248    | 0     | - | 0     | 0      | 117   | ↑ | 29    | 248   |
| Daihatsu     | 112   | ↓ | 117   | 368    | 0     | - | 0     | 0      | 112   | ↓ | 117   | 368   |
| MINI         | 90    | ↓ | 110   | 395    | 90    | ↓ | 110   | 395    | 0     | - | 0     | 0     |
| Scania       | 36    | ↓ | 47    | 138    | 0     | - | 0     | 0      | 36    | ↓ | 47    | 138   |
| Foton        | 33    | ↑ | 0     | 33     | 2     | ↑ | 0     | 2      | 31    | ↑ | 0     | 31    |
| UD Trucks    | 33    | ↑ | 28    | 109    | 0     | - | 0     | 0      | 33    | ↑ | 28    | 109   |
| CAM          | 31    | ↓ | 36    | 120    | 31    | ↓ | 36    | 120    | 0     | - | 0     | 0     |
| Volvo Trucks | 31    | ↑ | 18    | 85     | 0     | - | 0     | 0      | 31    | ↑ | 18    | 85    |
| Lexus        | 28    | ↓ | 57    | 171    | 28    | ↓ | 57    | 171    | 0     | - | 0     | 0     |
| Renault      | 24    | ↓ | 218   | 311    | 24    | ↓ | 218   | 311    | 0     | - | 0     | 0     |
| Porsche      | 21    | - | 21    | 63     | 21    | - | 21    | 63     | 0     | - | 0     | 0     |
| Land Rover   | 18    | ↑ | 16    | 81     | 18    | ↑ | 16    | 81     | 0     | - | 0     | 0     |
| JAC          | 13    | ↑ | 0     | 15     | 0     | - | 0     | 0      | 13    | ↑ | 0     | 15    |
| CAMC         | 9     | ↑ | 8     | 22     | 0     | - | 0     | 0      | 9     | ↑ | 8     | 22    |
| Bison        | 7     | ↓ | 17    | 42     | 0     | - | 0     | 0      | 7     | ↓ | 17    | 42    |
| JMC          | 7     | ↑ | 2     | 17     | 0     | - | 0     | 0      | 7     | ↑ | 2     | 17    |
| Auman        | 6     | ↓ | 8     | 21     | 0     | - | 0     | 0      | 6     | ↓ | 8     | 21    |
| MAN          | 5     | ↑ | 4     | 27     | 0     | - | 0     | 0      | 5     | ↑ | 4     | 27    |
| Chana        | 4     | ↓ | 11    | 42     | 0     | - | 0     | 0      | 4     | ↓ | 11    | 42    |
| Tata         | 4     | ↓ | 8     | 28     | 0     | - | 0     | 0      | 4     | ↓ | 8     | 28    |
| Bei Ben      | 3     | - | 3     | 36     | 0     | - | 0     | 0      | 3     | - | 3     | 36    |
| King Long    | 3     | ↓ | 5     | 20     | 3     | ↓ | 5     | 20     | 0     | - | 0     | 0     |
| Jaguar       | 2     | ↓ | 3     | 8      | 2     | ↓ | 3     | 8      | 0     | - | 0     | 0     |

**Table 1: The Latest Updated Of Total Sales Of Car Based On Brand In 2019 According To Passenger And Commercial Car**

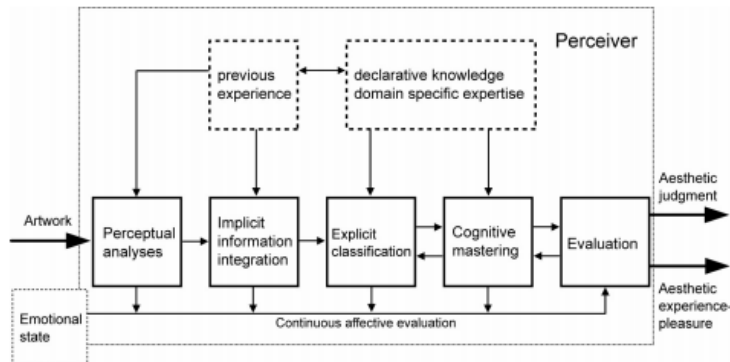
Table 1 shows the latest updated of total sales of the car based on a brand in 2019 in Malaysia according to passenger and commercial car. These total sales are count in April 2019. The highest sales are from Perodua and follow by Proton. Next, in the third place of total sales are from the Honda brand and followed by Toyota and Nissan.

Nowadays, people spending large amounts of time with their vehicles focusing on the exterior and while driving. Perodua became the best-selling car company in Malaysia compared to Proton because of many aspects such as emotional value relation to exterior styling (Desmet, 2002) as well as social aspects of vehicles (Pelly, 1996). The aims of the research are to identify the relationship between compact car design such as the limitation of emotional value arising through typicality and novelty of specific compact car design and how it triggers the user's perception through its aesthetics form. To identify the aesthetic responses, three key were used that have been employed in other study with a wide range of stimuli from concept to commercial design: like, typicality, and novelty (Blijlevens, 2017).

Some of philosophers and psychologists have often claimed that emotions involve appraisals or evaluations. One version of this claim has it that values are the "formal objects" (Kenny) or "correlates" (Husserl) of emotions. People are emotional beings and products can address our emotions in multiple ways. Even Donald Norman, the founding father of usable and understandable has started to stand up for the role of emotion in design (Norman, 2002). It seems no longer sufficient for a product to function properly, to be usable and efficient, or to have an aesthetic appeal especially in car design.

We can be inspired by the shape or design of a new car, frustrated by the multifunctioning of the device, or proud of owning a fancy pair of glasses that provides us with status. In all our encounters with the artificial world, emotion pops up and they strongly contribute to our perception, preferences, and our general well-being. Positive emotions when experienced both psychologically and physiologically, thus forming a powerful emotional attachment between the human user and the product. For emotion-driven design to become a mature design strategy, we need to understand why, when, and how products evoke particular emotions. Emotion evoked by car design underlying human values and values can be useful for predicting emotional responses to new design. Daniel Miller suggested that 'it is this highly visceral relationship between bodies of people and bodies of cars that forces us to acknowledge the humanity of the car in the first place' (Miller 2001b: 24).

The researcher is looking in various aspects of aesthetics, emotion in a compact car in regard to Malaysian automotive industry. Goldman states that, 'Aesthetics' comes from the Greek word *aisthesis*, referring to sensory perception and understanding or sensuous knowledge. In the eighteenth century, the philosopher Baumgarten picked up the term and changed its meaning into gratification of the senses or sensuous delight (Goldman, 2001). Since works of art are (mostly) produced for this reason, i.e. to gratify our senses, the concept has since been applied to any aspect of the experience of art, such as aesthetic judgment, aesthetic attitude, aesthetic understanding, aesthetic emotion, and aesthetic value. These are all considered part of the aesthetic experience and although we can still experience nature or people aesthetically, the phrase is most often used in relation to the arts, especially visual art.



**Figure 1: Schematic Model Of Aesthetic Experience (Adapted From Leder, Belke, Oeberst And Augustin, 2004, BJP)**

The researcher found that the schematic, aesthetic, and experience or is held to cover all processes involved in our interaction with a work of art or design is perfectly illustrated in a recent model by Leder, Belke, Oeberst, and Augustin (2004, Figure 1). In this ‘model of aesthetic experience’, an observer of an artwork starts off with a perceptual analysis of the work, compares this to previous encounters, classifies the work into a meaningful category, and subsequently interprets and evaluates the work, resulting in an aesthetic judgment and an aesthetic emotion. Only the first two (or three) stages would be considered aesthetic in the Baumgarten sense of the word. In these, mostly automatic stages perception is at work and the degree to which our perceptual system manages to detect structure and assesses the work’s novelty/familiarity determines the affect that is generated. At these stages we talk about sensuous delight (or displeasure), whereas at later stages cognitive and emotional processes enter the experience. There is every reason to consider these stages part of the experience of the work of art or design but there is also good reason not to call these stages aesthetic. Aesthetics also can be measured by the group or team of designers with an organization, ‘design teams are powerful within organizations their aesthetic judgments are hard to overrule’ (Vlasic, 2011).

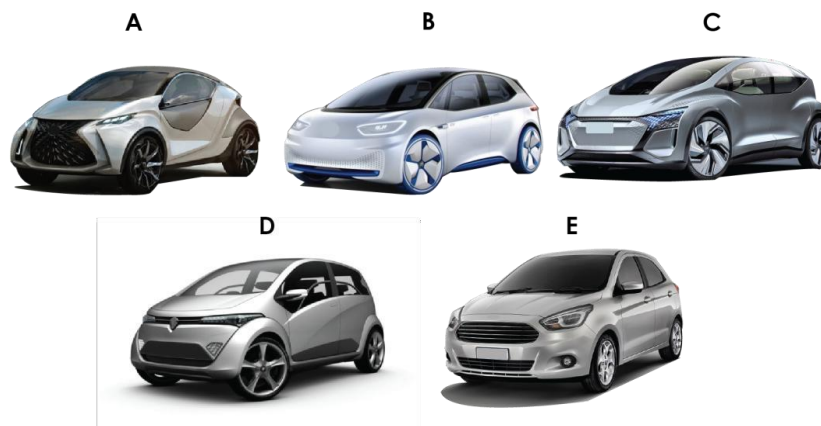
## Method

The small pilot tests were structured stimuli to get the typicality and novelty effect by visual image of seven compact cars, consisting of five new concepts and two are commercially available in the market. No details and specification were given to the participants. For consistency, all of the compact cars were edited on the same view which is a three-quarter front view. Alternative techniques which are *Room Effect* have been used in order to get the result of the pilot test. The most influential theory by Canter, West and Wools called the ‘Room Effect’ strongly suggests that people are also adept at associating the surrounding environment with the person type (Canter, West & Wools, 1974). The methods justified the conclusion that judgement of an individual is influenced by the room in which the person is situated. Carbon and Leder (2005) have proposed that everyday life experiences first have to be simulated before one can measure preferences or liking on a valid basis. Figure 2 shows the images of the five new concepts of compact car followed by figure 3, showing the image of two commercially available compact car designs.





**Figure 2: Five New Concepts of Compact Car**



**Figure 3: Two Commercially Available Compact Cars**

### Result and Discussion

30 participants interviewed are from Malaysia ranging from age 25 to 35 that has professional experience on product and automotive design. 50% were female and 50% were male. Participants were presented with seven images of compact car design. Each image carries the same statement and questions, participant was asked to rate their agreement to the statement on 7-point Likert scales ('Disagree' to 'Agree'). The statements covered the three key scales which are like, typicality and novelty and inclusive of open-ended questions. For the three key measures, validated scales were used from (Blijlevens, 2017): 'typical', 'novel', and for like, 'pleasing to see'.

### Conclusion

Based on the findings done the result concludes that participant are more incline to like as seen in figure 2 which are the new concept of compact car. This is due to the participant perception based on its appearance and shape and which has novelty.

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