

# Research on the Development of Advanced Automobile Culture in China

Yu Ning<sup>1</sup>, Qiao Yingjun<sup>2</sup>, Hu Weiguo<sup>1</sup>, Yang Yanping<sup>1</sup>, Chen Zhiling<sup>1</sup>, Huang Wei<sup>1</sup>

1. School of Mechanical and Transport Engineering, Hunan University, Changsha 410012, China

2. The CAE Centre for Strategic Studies, Beijing 100088, China

**Abstract:** As China enters automobile society with the intention of becoming an automobile power, it urgently needs an advanced automobile culture. In addition to analyzing and discussing the importance of developing an advanced automobile culture, this study also dissects the current situation and existing problems of China's automobile culture and clarifies the objectives and guiding principles of implementing this kind of culture in China. This study offers a procedure to develop an advanced automobile culture that will benefit China.

**Keywords:** automobile culture; advanced culture; Chinese characteristics; development path

## 1 Introduction

Automobiles have transformed society's manner of travel, production, living, and leisure, and have significantly enriched people's spiritual and cultural lives. Automobile culture refers to a collection of lifestyles, modes of thinking, behavioral norms, customs, regulatory systems, and value concepts formed by considering the automobile as a carrier, and is the sum of the material and spiritual wealth created during the historical practice of designing, producing, and utilizing automobiles.

China has entered automobile society and proposed a strategic goal of building automobile power. The status and role of automobile culture are becoming increasingly important. Advanced automobile culture is an important symbol of the comprehensive competitiveness of the automobile industry and automobile society's maturity. Therefore, it is urgent and necessary to thoroughly understand the importance of developing China's advanced automobile culture and propose countermeasures for its development.

## 2 The importance of developing China's advanced automobile culture

### 2.1 Advanced automobile culture is the inevitable choice for China to become an automobile power

Automobile culture provides the impetus and guarantee for the sustainable development of the automobile industry. The United States, Germany, Japan, and other traditional automobile powers all possess a mature automobile culture. China must ensure the common support of its industry and culture to become an automobile power. The development of advanced automobile culture is also conducive to building automobile power and cultivating China's cultural confidence. General Secretary Xi Jinping has indicated that it is difficult for a nation to operate independently without spiritual strength and that a cause cannot survive without cultural support [1].

**Received date:** January 15, 2018; **Revised date:** February 8, 2018

**Corresponding author:** Yang Yanping, Hunan University, Professor, Doctoral Supervisor. Major research fields include automobile life cycle evaluation, and automobile technology and industrial development. E-mail: yyp71@vip.163.com

**Funding program:** CAE Advisory Project "Research on Automobile Power Strategy"(2015-XZ-36)

**Chinese version:** Strategic Study of CAE 2018, 20 (1): 139-143

**Cited item:** Yu Ning et al. Research on the Development of Advanced Automobile Culture in China. *Strategic Study of CAE*, <https://doi.org/10.15302/J-SSCAE-2018.01.020>

## 2.2 Advanced automobile culture is an important point of building a harmonious automobile society in China

Public yearning for automobile life has changed from a focus on the number of cars to better quality of automobile life. However, since China has entered automobile society, environmental problems and challenges, energy, and safety have become increasingly serious issues. In 2015, the total emission of four pollutants from motor vehicles in China was preliminarily calculated as 45.322 million tons [2]; it is predicted that China's oil dependence on other countries will reach 67.5% by 2020 [3]. The development of China's advanced automobile culture is conducive to meeting people's needs for a better automobile life. Zhang Xingye, the honorary chairman of the Automobile Culture Committee emphasized that, "*The task of building automobile culture is to arouse people's latent awareness of automobile culture, so as to create a harmony of people, cars, and environment.*"

## 2.3 Advanced automobile culture is an effective carrier of advanced culture construction for China

China's advanced culture is towards modernization, embracing the world, future, nation, science, and the public. The development of advanced automobile culture effectively promotes China's advanced culture construction and is reflected in the following aspects: first, the in-depth integration of the Internet, big data, and artificial intelligence with automobile industry creates automobile cultural products, forms of automobile transformation, and the direction that development should take towards modernization and the future. Second, as China's automobile industry "goes out," China will provide the world with excellent automobile cultural achievements. Third, China's automobile culture has distinct national characteristics due to differences in people's lifestyle, national conventions, geographical environment, and historical traditions. Fourth, a new series of innovations in scientific and technological revolution, production concepts, operation rules, and service concepts, have made our automobile culture scientific. Fifth, automobiles have become a part of life for average families in China, and automobile culture has become an important aspect of typical mass culture.

## 3 Analysis of current situation and problems of automobile culture in China

### 3.1 The basic status quo of Chinese automobile culture

3.1.1 The development history of automobile culture in China is short

The first Chinese automobile factory was established in 1953 and has little more than 60 years of history. However, the European, American, and Japanese automobile industries have existed for over a hundred years of history. In 2012, the number

of cars owned by 100 households in China exceeded the international automobile society standard of 20 [4]. In the United States, by the beginning of the 20th century, the number of cars owned by 100 households had exceeded 20, reaching 60 in 1925 [5]. China's automobile industry has a relatively short history compared to those of foreign automobile powers, causing China to lag behind other countries in the development of its automobile culture.

3.1.2 The development of Chinese automobile culture is significantly influenced by foreign culture

China's automobile culture lacks its own characteristics and foreign automobile brands have dominated the passenger car market for a long time, resulting in a significant influence of foreign culture on Chinese automobile culture. Currently, the enterprise and brand cultures of foreign automobiles have infiltrated automobile life, affecting people's ideology.

3.1.3 The automobile culture of China is undergoing new changes

The global automobile industry is developing towards the regular incorporation of elements such as electrification, intelligence, networking, and sharing. These elements are reflected in the following aspects: the emergence of a new product modality characterized by innovative energy and an intelligent network; the application of the intelligent manufacturing production method of mass customization; the engendering of several new participants, production concepts, and thinking modes based on the new approaches prompted by elements of value, innovation, and industry chains; ensuring a more relaxed, safe, and convenient travel experience for drivers by sharing car rentals, driverless cars, and other travel experiences facilitated by automobiles. Thus, the traditional concept of automobiles as a means of transportation will be reversed, and people will have a new understanding of automobiles with which they may form a new value concept, which will generate new demands within automobile culture and will cause rapid changes in automobile culture.

3.1.4 China's automobile culture industry is thriving

Along with the rapid development of China's automobile industry, the automobile culture industry has gradually evolved, and several cultural industry carriers have emerged, including automobile exhibitions, museums, clubs, competitions, and other cultural industry carriers. Currently, the content and form of the automobile culture industry have been consistent with international standards, and will develop more rapidly in the future.

### 3.2 The main problems existing in Chinese automobile culture at present

3.2.1 The automobile cultural value orientation of China is not sufficiently advanced and needs improvement

Various regressive phenomena of automobile culture in

society highlight the necessity of improving the standards of right and wrong, as well as beauty and unattractiveness, to understand and evaluate automobile culture. For example, owing to the influence of feudal ideology, people assigned “automobiles” several hierarchical symbolic meanings, including power, status, and wealth; likewise, owing to the influence of the concept of appearance, people are keen to buy luxury and high emission cars. Some are superstitious and spend excessive amounts of money on so-called special numbers for their license plates.

### 3.2.2 The self-consciousness of Chinese automobile culture is insufficient and must be revitalized

The self-consciousness of automobile culture refers to the consciousness and awakening of automobile culture, including the profound understanding of status and role in the historical process and an accurate understanding of the laws which govern its development [6]. However, there is still a lack of cultural consciousness in the construction of automobile culture in China, an inadequate understanding of the laws which govern the development of automobile culture, and other key problems in automobile culture. Former vice-minister of the Machinery Industry Department Shao Qihui indicated that, “*It is impossible for China’s vast automobile industry to develop continuously and healthily without advanced cultural guidance and influence.*”

### 3.2.3 China’s automobile culture has a weak influence on people and needs to create its own distinct set of characteristics

The reputation of the self-owned brand of automobiles needs further improvement, and its cultural influence is weak, which are reflected by the following aspects: first, the cultural atmosphere that encourages original innovation is not sufficiently strong. Many automobile enterprises tend to adopt reverse development that is primarily based on imitation, and there is insufficient precipitation and accumulation of forward research and development technology. Second, although the manufacturing hardware of Chinese automobile enterprises is very well-known, there is a significant lack of automobile designs with uniquely Chinese characteristics. Few traditional Chinese elements exist in brand creativity, logo design, body visual design, and interior decoration design. Third, Chinese automobile enterprises lag behind other well-known foreign automobile companies in the construction of their own automobile culture.

### 3.2.4 The civilization of Chinese automobile culture is not sufficiently high and must be elevated

After entering the automobile society, the conflicts between people, cars, and roads have intensified in China. There is an absence of traffic etiquette, and uncivilized or unharmonious phenomena are quite common. In terms of Chinese drivers, behaviors such as disobeying the rules, cutting other drivers off, and drunk and aggressive driving are common, although technically prohibited. In terms of pedestrians, uncivilized behaviors, such

as disobeying traffic rules, jaywalking, and jumping red lights are still common.

## 4 Concept and development guiding principle for China’s advanced automobile culture

### 4.1 The connotation and extension of China’s advanced automobile culture

Automobile culture can be divided into advanced culture and stagnant culture. Advanced automobile culture includes aspects such as health, science, civilization, and future development direction. The construction of advanced automobile culture in China should be guided by socialist core values, aimed at building a sustainable and harmonious automobile society. It should develop a car culture that is oriented towards modernization, the world, and the future, reflecting Chinese characteristics and resulting in a scientific and advanced automobile culture.

The extensional definition of the advanced automobile culture in China primarily consists of an advanced automobile product, its usage, and derivative cultures. Automobile product culture primarily includes the aspects of design, production, and brand cultures. Automobile usage culture primarily includes consumers, travel, and service cultures. Automobile derivative culture is the combination of automobile culture and other cultures, such as automobile exhibition, self-driving travel, automobile club, and automobile competition.

### 4.2 The goal and guiding principle of developing China’s advanced automobile culture

The goal of developing China’s advanced automobile culture is to provide a sustainable development impetus for the automobile industry, meet people’s increasing demands of automobile culture, and promote the formation of a harmonious automobile society [7]. This is reflected in the following aspects: first, advanced automobile design culture is people-oriented, devotes attention to independent innovation, is particular about Chinese characteristics, and advocates low-carbon usage, environmental protection, and resource conservation. Second, advanced automobile production culture promotes entrepreneurship and craftsman spirit, builds famous brands, and pursues excellence in quality. Third, advanced automobile consumption culture objects to extravagance, advocates frugality, and calls for rational and green consumption. Fourth, advanced automobile travel culture obeys traffic regulations, respects etiquette, pays attention to safety, and enjoys sharing the road. Fifth, advanced automobile service culture is honest, courteous, and customer-oriented.

To achieve the development goal of China’s advanced culture, we must establish the scientific guiding principles to ensure that socialist values constitute its core, the excellence of tradi-

tional Chinese culture is the root, new development concepts are the guiding principles, “civilization, harmony, characteristics, and sustainability” are the basic requirements, there is adherence to cultural consciousness, and cultural self-confidence is established, which will result in the development of advanced car culture in China.

## **5 The development path of China’s advanced automobile culture in the new era**

### **5.1 Execute the top-level design for the development of advanced automobile culture**

To promote the formation of China’s advanced automobile culture, it is necessary to execute a top-level design for national development of the automobile culture. Conversely, the long-term development plan of China’s automobile culture should be clarified, systemic, and mechanical obstacles that restrict the formation of advanced automobile culture should be resolved. In addition, we should study the influence of the new development trends of the automobile industry with regard to automobile culture, and proactively plan and deploy measures in advance.

### **5.2 Take the road of independent innovation and shape a car culture with Chinese characteristics**

To develop China’s advanced automobile culture, we must adhere to independent innovation to cultivate an automobile culture with Chinese characteristics and its own advantages [8]. In automobile product design, we should explore the quintessence of over 5000 years of Chinese culture and incorporate those cultural elements. To reform traditional automobile culture, we should anticipate the future, attach importance to systemic and mechanical innovation, and ensure that the new mechanical and systemic innovations are adaptable to the new development context.

### **5.3 Take the ecofriendly road and guarantee the sustainable development of automobile culture**

Adherence to the concept of green development is the only way to build a harmonious automobile society and guarantee the sustainable development of automobile culture. We should vigorously advocate for ecofriendly design concepts and intensify the research and development of low-carbon, green automobile products. We should promote green production and reduce the negative impact of production behavior on the surrounding ecology. We should pay attention to resource conservation and recycling, and reduce the over-exploitation of natural resources. Additionally, we should promote the concept of green consumption, and increase consumer acceptance of automobiles with small output volume, as well as electric automobiles. We should

actively guide people to travel using a low-carbon means of transportation.

### **5.4 Take the road of openness and integration to build a harmonious automobile culture**

Openness and integration can not only reduce automobile culture conflict and promote respect for differences and a tolerance for diversity; they also facilitate the ability for all involved to learn from each other and promote the formation of advanced automobile culture. Conversely, China should adhere to the principle of “absorbing the essence and discarding the dregs,” and learn and draw lessons from excellent foreign automobile cultures, such as the artisanship culture of German automobile enterprises, the cultural focus on striving for excellence of Japanese automobile enterprises, and the innovation culture of American automobile enterprises. In addition, we should encourage the automobile culture of China to “go out.” Through cultural exchange, we should integrate foreign cultural elements and create an automobile culture that is well-received by other countries.

### **5.5 Take the road of marketization to revitalize automobile culture industry**

To develop China’s advanced automobile culture, it is necessary to ensure the market plays a decisive role [9], market resources are thoroughly utilized, and various development modes of the automobile culture industry are explored. First, the development of China’s advanced automobile culture must rely on the mode of large enterprises and employ an industrial cluster effect to derive a series of cultural industries, such as museums, exhibitions, and automobile culture festivals. Second, developing advanced automobile culture should combine with urban leisure to launch a series of automobile leisure culture products, such as automobile restaurants, cinemas, and motels. Third, industry cross-boundary cooperation must be executed, for example, by uniting the tourism and sports industries to build the self-driving automobile culture industry.

### **5.6 Take the road of rule of law and build a civilized automobile culture**

The rule of law is the primary requirement for establishing a civilized automobile culture. Moreover, to develop an advanced automobile culture, China should standardize its moral ideas, behaviors, and the habits of the people using the rule of law. In terms of legislation, the relevant laws and regulatory systems related to automobiles should be further improved, including traffic laws, automobile emission regulations, and automatic driving regulations. With regard to law enforcement, the cost of illegal acts should be increased; for example, information relat-

ed to a traffic violation information should be recorded in the driver's electronic file and made to affect his or her credit rating. From the judicial perspective, China should realize a "seamless connection" between law enforcement and justice, and highlight the impartiality and justice of the rule of law. With regard to the popularization of the law, China should intensify the publicity and education for its citizens, advocate the civilized concept of "consciously abiding by traffic regulations, give precedence to others when going out," and encourage a general sense of traffic morality throughout all of Chinese society.

Essentially, during the critical period of transformation from a big automobile country to an automobile power, and against the backdrop of a new round of scientific and technological innovations, China should not only reshape the automobile industry but also reconstruct its automobile culture [8]. Advanced automobile culture is the direction of development, its content is extensive, profound, and complex, and has a large scope. The development of an advanced automobile culture is a vast, systematic project; to ensure its effectiveness, the government, China's enterprises, and all members of Chinese society must to perform their respective functions and responsibilities.

## References

- [1] Fan Y G. A cause without cultural support is difficult for a long time [N]. *Guangming Daily*, 2014-01-08(02). Chinese.
- [2] Ministry of Environmental Protection of the PRC. Report on China motor vehicle environmental management, 2106 [EB/OL]. (2016-06-02) [2017-09-26]. [http://www.zhb.gov.cn/home/jrtt\\_1/201606/t20160602\\_353154.shtml](http://www.zhb.gov.cn/home/jrtt_1/201606/t20160602_353154.shtml). Chinese.
- [3] Gu H B, Zhang S. A forecast of the combination model of energy consumption during China's 13th five-year period—and also a quantitative study of the impact on economic security [J]. *Jiangsu Social Sciences*, 2017 (4): 66–76. Chinese.
- [4] Wang J X. Automobile social blue book: China auto social development report [M]. Beijing: Social Science Literature Press, 2011. Chinese.
- [5] China Automotive Technology Research Center, National Information Center, Volkswagen (China) Investment Co., Ltd. China automotive social development report [M]. Beijing: China Machine Press, 2016. Chinese.
- [6] Ren Z W. Awakening · mission · undertake—Eighteen talk on cultural consciousness [M]. Beijing: People's Daily Press, 2011. Chinese.
- [7] Li D S. On the concept of cultural development and the reform of China's cultural system [J]. *Journal of Cultural Studies*, 2006 (1): 7–16. Chinese.
- [8] Zhao F Q, Su R Q, Liu Z W. Exploring the strategy of automobile power [M]. Beijing: China Machine Press, 2017. Chinese.
- [9] Liu Z M, Chen G Y. The development mode and path of Suzhou auto culture industry [J]. *Jiangsu Commercial Theory*, 2013 (36): 41. Chinese.