



LUND UNIVERSITY
School of Economics and Management

Consumer Perception of Brand Image: Country of Origin and Country of Ownership in Electric Vehicle Brands

by
Linnéa Björck & Meiru Lu

May 2019

Master's Programme in International Marketing and Brand Management

Supervisor: Andrea Lucarelli
Examiner: Annette Cerne

Abstract

Title: Consumer Perception of Brand Image: Country of Origin and Country of Ownership in Electric Vehicle Brands

Date of the Seminar: 2019-06-05

Course: BUSN39 Degree Project in Global Marketing

Authors: Linnéa Björck & Meiru Lu

Supervisor: Andrea Lucarelli

Keywords: Consumer Perception, Country of Origin, Country of Ownership, Brand Image, Electric Vehicles

Thesis purpose: To reveal how consumers perceive the brand image of electric vehicles (EV) in the aspects of COO and COOW. That is to expand the understanding of COO and COOW in consumer perceptions and to offer insights to the EV industry from the consumer's perspective.

Methodology: A digital research was conducted on digital sites to explore consumer perceptions. Six EV brands with different COO and COOW compositions were researched. This study adopted a qualitative research strategy with an abductive approach as it aims to extend understandings of COO and COOW and enhance the theoretical framework in consumer perception.

Theoretical perspective: The study mainly based on theories in the field of brand image, country of origin, country of ownership, and consumer perception.

Empirical data: The data is qualitative and observational, collected from online sites.

Conclusion: Firstly, different mostly-valued perceptions are found among the domestic, mixblood, and foreign brand categories in rational and irrational consumers. Secondly, the perception of COO and COOW varies in the three brand categories and the different perceptions between COO and COOW can be distinguished mainly in mixblood brands. Thirdly, the interrelationship among cognitive, affective, and normative perceptions is observed and varies according to consumer rationality.

Acknowledgements

We would like to express our gratitude to our supervisor Andrea Lucarelli for his valuable suggestions throughout the research process. We are also grateful for the support and encouragement from our family, friends, professors, and classmates who have supported us during this Master's program. I, Meiru Lu want to express a special gratitude to the organization and officers of Swedish Institute Study Scholarship (SISS) for providing such a precious opportunity for me to study in Sweden, where I have gained a lot.

Table of Contents

1. Introduction	1
1.1 Background	1
1.2 Thesis Outline	2
1.3 Problematization	2
1.4 Previous Research	3
1.5 Research Question	5
1.6 Research Aim	5
1.7 Intended Contributions	5
2. Literature Review	7
2.1 Brand Image	7
2.2 Country of Origin	7
2.2.1 Country of Design	8
2.2.2 Country of Manufacture	8
2.2.3 Country of Assembly	8
2.2.4 Brand Origin	9
2.3 Country of Origin Effect	9
2.3.1 Cognitive aspects of COO-effect	9
2.3.2 Affective aspects of COO-effect	10
2.3.3 Normative aspects of COO-effect	10
2.3.4 The Relationship of Cognitive, Affective, and Normative Perceptions	10
2.4 Country of Ownership	11
2.5 Theoretical Framework	11
2.5.1 The Consumer Perception Process	11
2.5.2 Categorization of COO and COOW in EV brands	12
2.5.3 Conceptualization of the Theoretical Framework	13
3. Methodology	14
3.1 Research Philosophy	14
3.2 Research Strategy	15
3.2.1 Digital Research	15

3.2.2 The Research Context	16
3.2.3 Electric Vehicles (EV)	17
3.3 Collection of Empirical Material	18
3.3.1 Sources	18
3.3.2 Selection of Brands	18
3.3.3 Selection of Sites	22
3.3.4 Data Collection	25
3.4 Empirical Material Analysis	25
3.4.1 Coding	25
3.4.2 Theorizing	27
3.5 Ethical considerations	27
3.6 Trustworthiness	28
4. Analysis	29
4.1 Perceived Quality	29
4.1.1 Perceived Quality - Domestic Brands	29
4.1.2 Perceived Quality - Mixblood Brands	32
4.1.3 Perceived Quality - Foreign Brands	33
4.2 Emotional Connotations	34
4.2.1 Emotional Connotations - Domestic Brands	34
4.2.2 Emotional Connotations - Mixblood Brands	35
4.2.3 Emotional Connotations - Foreign Brand	37
4.3 Ethnocentrism & Disidentification	38
4.3.1 Ethnocentrism & Disidentification - Domestic Brands	38
4.3.2 Ethnocentrism & Disidentification - Mixblood Brands	39
4.3.3 Disidentification - Foreign Brands	40
4.4 Analysis Summary	41
5. Discussion	44
5.1 General Discussion	44
5.2 Cognitive Perception	45
5.3 Affective Perception	46
5.4 Normative Perception	46

5.5 Interrelationship of Cognitive, Affective & Normative Perceptions	47
5.6 The Enhanced Theoretical Framework	48
6. Conclusion	50
6.1 Main Conclusion	50
6.2 Contributions	51
6.2.1 Theoretical Contributions	51
6.2.2 Managerial Implications	52
6.3 Limitations and Further Research	52
References	54
Appendix	65

1. Introduction

1.1 Background

In recent years, the industry of electric vehicle (EV) has been discussed widely and it is emerging with high development potential (Hertzke et al., 2018; BloombergNEF, 2019). Global EV sales have been increasing annually since 2010, in particular, it reached a new high of 2.1 million units in 2018, which was 64 % more than that in 2017 (Irlle, 2019). The EV market provides a lot of opportunities and the global EV sales are predicted to increase to 4.5 million units in 2020, accounting for about 5 percent of the overall global light-vehicle market (Hertzke et al., 2018). EV is considered to be more environmentally sustainable as there is no emission of toxic and greenhouse gases compared with traditional diesel or petrol vehicles (European Environment Agency, 2018). Thus, EV is highly promoted and supported by governments and organizations around the world (Zhou et al., 2015), for example, the European Commission (European Commission, 2019).

The fast development and latent potential of the EV market have led to the establishment of a variety of EV brands. Some of the EV brands are created by well-known established players in the traditional automobile industry, while some are new start-ups (EV Rater, 2019; watter2buy, 2019a). Other companies co-create or establish new EV brands together through cross-border mergers and acquisitions aiming to compete in the EV market. For example, the German brand Daimler formed a joint venture with the Chinese automobile manufacturer BYD to create an EV brand, Denza (Denza, n.d.); and National Electric Vehicle Sweden (NEVS), which is a new EV brand founded upon the acquisition of SAAB automobile from Sweden, is now owned by the Chinese company Evergrande (NEVS, 2019a). Research in cross-border mergers and acquisitions (cross-border M&As) shows that cross-border M&As are frequently adopted by a large number of companies as an important strategy to enter a foreign market, to learn dynamically from a foreign culture, and more importantly, to strategically create values (Shimizu et al., 2004). In this way, companies aim to obtain critical resources such as knowledge and technology and gain access to markets (Shimizu et al., 2004). Particularly, in the automobile sector, the accessibility to innovation capabilities can be the critical reason to acquire other companies (Yakob, Nakamura & Ström, 2018).

Furthermore, a large volume of online discussions about EV is ongoing. In particular, the recent news of Evergrande's acquisitions of NEVS and Koenigsegg, and Tesla's new factory in China stimulate a lot of online discussions on the country of origin (COO) and country of ownership (COOW) of EV brands. Evergrande is one of the largest companies in China and it has recently acquired Koenigsegg and NEVS, which are Swedish automobile companies (NEVS, 2019b; Yvkoff, 2019). Meanwhile, Tesla is building a factory in China and aims to operate in the second half of 2019 (Cheng, 2018). The frequent changes and quick development of the EV industry, along with the cross-border M&As are stimulating perceptions and reactions among consumers

towards COO and COOW, making it interesting to look into how consumers perceive the COO and COOW of EV brands.

1.2 Thesis Outline

This research begins with an introduction chapter consisting of the research background, problematization, previous research, the research question and aim, followed by a literature review including brand image, COO, and COOW. Afterwards a theoretical framework is introduced which serves as a ground for the research. This is followed by an introduction of the methodological approach, research strategy and chosen brands. Further, it is explained how the data is collected and analyzed before presenting the research analysis and discussion around it. Lastly, key findings are highlighted in conclusions, where our contributions, theoretical and managerial implications, limitations, and suggestions for further research can be found.

1.3 Problematization

More and more cross-border M&As are taking place in the EV industry. Cross-border M&As are closely related to a brand's COO and COOW as they may cause changes to a brand's COOW and influence consumers perception of the brand's COO (Chung, Youn & Lee, 2014). Brand origin is the place, region or country that a brand is perceived to belong to by its customers (Thakor & Kohli, 1996). According to this definition, COO is one kind of brand origins, and we see COO as the country to which a brand is perceived to belong in this research. On one hand, COO influences the consumer perception of product quality (Li & Wyer, 1994), perceived value (Salzer-Möring, 2010), and brand attitude (Aaker, 1991), while affecting consumer brand evaluation and consumer purchasing behavior (Watson & Wright, 2000; Adina, Gabriela & Roxana-Denisa, 2015). On the other hand, other factors, such as the product category (Roth & Romeo, 1992) and the development status of a brand's origin country have effects on consumer COO perceptions as well (Manrai, Lascu & Manrai, 1998; Batra et al., 2000).

As for COOW, the “owned by...” cue is defined as “who owns the firm that makes the product, and also brings into play the perceived nationality of that firm” (Mort & Duncan, 2003). Based on this definition, we see COOW in this research as the perceived country where a brand's owner(s) come from, meaning that even for brands with bi-national owners, the COOW is the one that consumers perceived to be. Positive or negative attitudes can be developed by consumers towards it depending on the level of brand ownership and consumer-country disidentification (Chang et al., 2014). Cross-border M&As may change a brand's perceived COOW, as the brand has one country of origin but other countries of ownership. In this case, cross-border M&As change the nationality of the brand owner and can alter consumers' knowledge of COO thus brand perception (Chung, Youn & Lee, 2014). When changing the COOW, for example, a premium brand previously has superior COO images but now owned by companies with inferior COO images, highly loyal customers could develop negative perceptions towards the inferior new owner (Chung, Youn & Lee, 2014). Research in the premium automobile sector also shows that when changing COOW, consumers are confused about the perceived brand image (Johansson et al., 2018).

Despite that the existing research in COO and COOW show that the two attributes can affect consumer perception in different ways, there is still a lack of study regarding COO and COOW in the EV sector. Not only that the research of COO and COOW in combination is limited, but also that the research of consumer perception in terms of COO and COOW for EVs is at scarce. Facing the fact that an increasing number of companies adopt cross-border M&As in order to take advantage of a brand's COO while changing its COOW, the EV industry is transforming greatly. As a result, more and more new EV brands are emerging with mixed COO and COOW. Meanwhile, the EV market is blooming and showing its great potential. Although COOW is treated as one area in COO studies, in this situation, the COOW of EV brands should be emphasized, taken out separately, and put alongside with COO to explore how the two are perceived by consumers, in order to provide explanations for the phenomenon and further to offer insights for the development of EV industry. However, no study from the consumer's side has been conducted to see the consumer perception of COO and COOW of EV brands yet.

Further, the context is a significant element in product-country image studies. The image of product-place is highly context-dependent; thus, it should be interpreted in the market context and the consumer culture (Askegaard & Ger, 1998). The context of this research is the chosen Chinese EV market and the Chinese consumers as China's EV market is developing rapidly with a great volume. China is a global leader in the EV segment with a larger EV market than Europe and the United States combined (Hertzke et al., 2018). The Chinese government has been nurturing the EV market through a series of beneficial policies, generous subsidies and incentives, resulting in an estimated more than 500 EV startups in China (Berman, 2019). The Chinese EV market is developing fast and has expanded 72 percent in 2017, with domestic EV brands taking up around 94 percent share and dominating the Chinese EV market. The Chinese EV market is dominated by low-end, entry-level models and most of EVs range from about USD 22,000 to USD 30,000 (Trivedi, 2019). It is predicted that China will lead the global EV market by accounting for almost 50% sales in 2025 (Hertzke et al., 2018; BloombergNEF, 2019). The blooming EV industry in China with a variety of EV brands acts as a good example and the research context, while its relatively developed EV market provides the capacity and possibility to study how COO and COOW influence consumers perception of EV brands.

1.4 Previous Research

Previous COO research reveals that COO affects brand evaluation, perception, and purchasing behavior, and can be analyzed from a three-level perspective: cognitive, affective, and normative (Verlegh & Steenkamp, 1999; Watson & Wright, 2000; Balabanis & Diamantopoulos, 2011; Adina, Gabriela & Roxana-Denisa, 2015). In cognitive perception, COO acts as an indicator of product quality; In the affective aspect, COO provides emotional and symbolic product meanings such as social status enhancement or pride (Adina, Gabriela & Roxana-Denisa, 2015); As for the normative perspective, highly ethnocentric consumers prefer brands that are in line with their own personal values (Watson & Wright, 2000; Adina Gabriela & Roxana-Denisa, 2015). Further, consumers see products differently in terms of quality and social status according to the development status of the origin countries (Manrai, Lascu & Manrai, 1998; Batra et al., 2000). But

a “match” between COO and the product category association is required to avoid negative spillover effects, and the type of product linked with its COO is crucial (Adina, Gabriela & Roxana-Denisa, 2015). In particular, for new products, consumers focus more on COO as an extrinsic cue such as brand name and country of origin, rather than the intrinsic attributes, such as design and outlook of these products (Michaelis et al., 2008). It means that as new brands cannot provide familiarity for consumers, product knowledge and COO familiarity become more significant for consumers and thus for new brands (Adina, Gabriela & Roxana-Denisa, 2015).

Former research shows that COO have an effect on how consumers perceive brands, but how the COO affect consumer perceptions in the EV category is still less known. EV is a rather new sector, although previous COO research has established quite a lot in different product categories, limited research has been conducted to explore if the COO effects, in general, are similar in the EV category.

Further, COOW is a less developed area compared with COO, and there are even fewer studies in COO that takes out the element of COOW then combines with COO. COOW is viewed to belong to the field of COO study and as one of the COO cues (Mort & Duncan 2003; Cheah & Phau, 2015). However, Mort and Duncan (2003) identify the existence and importance of the “owned by...” cue (COOW) in consumer preference formation and its difference from the country of manufacture as a traditional COO cue. They found that some cues appeal to be more valuable to consumers in some segments. With the significance of COOW, they point out that the study of COOW should be shed light upon and be included in the academic field of COO.

The differences between COOW and COO signify a brand’s bi-nationality (Cheah & Phau, 2015), which is the case of different COO and COOW among EV brands nowadays. Moreover, COOW can influence consumer’s attitude of the brand when there are great differences in political and economic systems between the owner’s country and the perceived origin country (Cheah & Phau, 2015). In fact, some major EV brands in the Chinese market have origins from developed countries but owners from developing countries, in which great differences exist in cultural and political systems. However, little research has been conducted to further explore whether COOW influences consumers perception towards EVs and how COOW and COO can affect the brand image in the EV market.

Thirdly, research of EV from the consumer’s perspective is at scarcity, and most of them fall into exploring consumer attitude (Larson et al., 2014) and EV adoption behavior (Rezvani, Jansson & Bodin, 2015; Li et al., 2017; Jansson, Nordlund & Westin, 2017). However, there are various EV brands emerging in the market nowadays while companies actively applying mergers and acquisitions to establish new EV brands, resulting in changing EV brands’ COOW. Given the emergence of EV brands with different countries of origin and ownership, there is still little research to study how COO and COOW can affect EV brands’ image and what is consumers’ perception towards the establishment of EV brands with different COO and COOW. Finding out the rationale from the consumers’ perspectives can be of interest to gain deeper insights of COO, understand the companies’ decisions, and provide implications for the future development of the EV market.

1.5 Research Question

In light of the limitations in previous research and the new circumstances in the EV market, this study takes the EV market of China and Chinese consumers as examples to study the consumer perception of EV brands that consist of different COO and COOW. The question to be researched is:

How do Chinese consumers perceive the image of electric vehicles (EV) brands in terms of country of origin (COO) and country of ownership (COOW) in the Chinese EV market?

1.6 Research Aim

Facing the rise of the EV market, the great potential of EVs, and the blooming emergence of EV brands consisting of varied COO and COOW, this study aims to uncover how consumers perceive the brand image of EVs in terms of COO and COOW. First and foremost, this research targets to expand the understanding of COO and COOW in consumer perceptions; secondly, it aims to offer insights to the EV industry from the consumer's perspective. To reach this aim, this study will: (a) provide comprehensions on how consumers perceive the COO and COOW by choosing EV as studied product category and the Chinese EV market as the study context, (b) uncover the most valued perceptions in each brand category of COO and COOW and reveal the relationships among different types of perceptions, and (c) based on this study, present suggestions to scholars in the field of COO and COOW studies, to high management and marketing professionals in international companies, and to government officers in the area of new energy and sustainable development.

1.7 Intended Contributions

The intended contributions of this study are threefold. Firstly, it intends to contribute to enrich the limited literature of COO and COOW on consumer perception by taking out the COOW element and putting together with COO. Secondly, it will possibly be the first to look into the area of COO and COOW in EV consumer studies, thus, to supply the EV industry with more diversified consumer insights. Thirdly, it can provide specific understandings of the Chinese consumers and the Chinese EV market, which benefit companies that aim to expand into this market.

This research will also offer multiple significant managerial implications. For marketing professionals, this study enhances their understandings of consumer perception in the area of COO and COOW and gives them practical implications of utilizing COO and COOW cues in the conduct of international marketing. For EV brands, the comprehensions of how consumers see their origin country and the owner's country can help them to make full use of the perceived advantages and avoid disadvantages in business strategy making and daily operation. In this way, it further facilitates EV brands to establish a more positive brand image and gain greater brand equity. For the parent companies, it assists them to assess the mergers and acquisitions before making decisions, and evaluate or adjust the decision afterwards, while contributing to facilitate the high

management's strategic thinking. For policymakers, a better understanding of consumer perception conduces to promote the adoption of EVs and the advocacy of sustainable development.

2. Literature Review

This chapter introduce previous research and literature in the field of brand image, COO, COOW, and consumer perception with the research aim to contribute to these fields. Based on the related theories, a theoretical framework is created to guide the data collection and analysis later on.

2.1 Brand Image

Previous research on the brand image has acknowledged the concept as being a central part of marketing (Keller, 1993). Although researchers have had difficulties in defining brand image, Keller (1993) defines it as “perceptions about a brand as reflected by the brand associations held in consumer memory” (Keller, 1993, p. 3). A vital part for brand image creation is that a brand node has been established in consumers’ memory and that the nature of the brand node affect how information can be attached to the brand in the consumers’ memory (Keller, 1993). Both symbolic and functional brand beliefs form the perception of brand image (Dobni & Zinkhan, 1990). These perceptions of brand image can be emotional or reasoned perceptions that consumers attach to a brand (Koubaa, 2008), and the brand image helps consumers to process information and differentiate the brand (Aaker, 1991).

The brand associations held in consumers’ memory are defined as “[...] the category of brand’s assets and liabilities that include anything “linked” in memory to a brand” (Aaker, 1991, p. 15). According to Keller (1993), when the associations are strong, unique, and favorable, a positive brand image evolves. He also points out that brand associations can take different forms and play an important role in the decision-making processes, especially for high involvement purchases. Brand image and country image can differ. Country image is “the overall perception consumers form of products from a particular country, based on their prior perceptions of the country’s production and marketing strengths and weaknesses” (Roth & Romeo, 1992, p. 480). Country image (from where a brand originates or is manufactured) affect consumers’ brand image perceptions (Koubaa, 2008). Previous research has proven the significant effect of COO information on the brand image (Takhor & Kohli, 1996; Manrai, Lascu, & Manrai, 1998; Balabanis & Diamantopoulos, 2011).

2.2 Country of Origin

Consumers are daily faced with various product information through advertising, packaging, branding, and other sources that will help them in their decision making (Verlegh & Steenkamp, 1999). The stimuli form preferences and can also evoke feelings and emotions regarding products. Consumers do not only evaluate products based on their intrinsic attributes such as shape, design, color etcetera, but also on their extrinsic attributes such as price, brand name and country of origin (Manrai, Lascu & Manrai, 1998; Herz & Diamantopoulos, 2017). Country of origin (COO) is a complex stimulus that affects consumer behavior, and Dichter (1962) argues that COO may have a “tremendous influence on the acceptance and success of products” (p. 116). Further, Schooler (1965) defined that the “made in...” label has an effect on product evaluation, and he established

the country-of-origin effect that has been researched to a great extent after that. However, COO is no longer purely the “made in” label but rather a concept consisting of many sub-components such as country of design, manufacturing, and assembly that are evaluated differently by consumers (Essoussi & Merunka, 2007).

2.2.1 Country of Design

The country of design is one part of COO that is valued by consumers, especially for publicly consumed goods as they can serve as status symbols and a way to portray the consumers ideal self (Essoussi & Merunka, 2007). Li, Murray and Scott (2000) argue that it is considered to be the most important part of COO when consumers are evaluating a product’s symbolic and functional attributes. Country of design is also seen to have an impact on perceived quality, particularly noticeable for emerging markets according to Essoussi and Merunka (2007). In the automobile industry, Hamzaoui and Merunka (2006) found that the country of design actually has a significant impact on perceived quality.

2.2.2 Country of Manufacture

The image of the country where a product is manufactured is considered more important than where it is designed, and the country of manufacturing is also seen to be the most influential aspect over a products perceived quality (Essoussi & Merunka, 2007). This can be explained by consumers associating countries with their field of excellence (Niss, 1996) where a match between the country of manufacturing and the country being superior in this field can be beneficial for the evaluation of the product (Hamzaoui & Merunka, 2006). The country of manufacturing information influences the product evaluation to an even greater extent when it is not the same as the country of design, according to Hamzaoui and Merunka (2006).

For automobiles, country of manufacture is the most prominent aspect of COO and has the biggest impact on consumer perception (Fetscherin & Toncar, 2010). Country of manufacture information and brand origin can be congruent or incongruent, hence affecting consumer perception and attitudes differently. If the brand origin and country of manufacture are congruent (e.g. Sony product made in Japan), the brand image is perceived as coherent and influences the attitudes of the consumers positively (Hui & Zhou, 2003). If the information is congruent, adding “made in...” does not add any value to consumers evaluation and attitude towards products (Leclerc et al., 1994). However, if a known brand is manufactured in a less renowned country than its brand origin, the information will result in more negative attitudes and evaluations, especially for brands with high brand equity (Hui & Zhou, 2003).

2.2.3 Country of Assembly

Country of assembly information only communicates the last step in the production process of a product (Li, Murray & Scott, 2000). Although, country of assembly is one aspect affecting consumers’ evaluation of products’ quality dimensions such as reliability, conformance and

performance (Li, Murray & Scott, 2000). The authors further state that country of assembly can affect the perceived “prestigiousness” of a product depending on the assembly country. Acharya and Elliott (2001) concluded in their research that the country of assembly is an attribute of great importance in consumers decision making processes. They also concluded that when companies shift their assembly to a less developed country with lower costs this may result in negative country of assembly effects. Further, they state that for high involvement purchases, such as cars, country of assembly can be considered more important than the brand image (Acharya & Elliott, 2001).

2.2.4 Brand Origin

Compared with COO, brand origin is another concept that is more closely related to the brand itself. Brand origin refers to the origin cues being integrated into the brand image, which means that brand origin does not change with the relocation of manufacturing or assembly (Thakor & Kohli, 1996). With the increasing trend for foreign manufacture, the authors highlight that the “made in” label does not have to be the same as the perceived brand origin. The main difference between COO and brand origin is that COO concerns consumer perceptions regarding country, whilst brand origin refers to the origin cues being integrated into the brand image (Thakor & Kohli, 1996). According to Koubaa (2008), brand origin affects consumers brand image perception.

2.3 Country of Origin Effect

2.3.1 Cognitive aspects of COO-effect

The effect of country of origin can be divided into cognitive, normative and affective evaluation aspects. Cognitively, COO serves as a cue for product quality assisting consumers in evaluating products (Adina, Gabriela & Roxana-Denisa, 2015). In the cognitive level, perceived quality is the key aspect. Perceived quality is “consumer’s judgement of the overall excellence or superiority of a product” (Zeithaml, 1988). According to Adina, Gabriela and Roxana-Denisa (2015), perceived quality includes both design quality and manufacturing quality. They point out that design quality concerns the process from conceptual idea to engineering, and manufacturing quality relates to the product materials and assembling perspectives. The same scholars state that COO is a quality cue for durability, safety, and reliability, and it further decreases the perceived risk of the purchase. They also indicate that as perceived quality involves product attributes as well as external factors such as price and COO etcetera., quality cues can be intrinsic or extrinsic.

The COO effect relies upon the development of the country the products originate from, and the evaluation and perceived quality of products rate the highest in more developed countries (Manrai, Lascu & Manrai, 1998; Verlegh & Steenkamp, 1999). Advanced technology and knowledgeable workforce are examples that make consumers evaluate brands from more developed countries as of higher quality (Manrai, Lascu & Manrai, 1998). Although product quality is perceived as better from developed countries, the quality image and perception can change over time or when in direct contact with a county’s products (Verlegh & Steenkamp, 1999). According to Batra et al. (2000) consumers in less developed countries tend to prefer brands from more developed countries that

serve as social status signals. Further, Roth and Romeo (1992) state that a match between product and country is beneficial for consumers product evaluation, and if a country is perceived to be good at the skills needed for the manufacturing of the product under consideration, that product will be preferred.

2.3.2 Affective aspects of COO-effect

COO not only signals quality but also involves emotional connotations linked with the country. Emotional connotations can be formed through direct experiences or indirect experiences (Verlegh & Steenkamp, 1999), consisting of feelings of social status, pride, power, the expression of specific lifestyle, oneself, one's personality, and the fulfillment of self-esteem etcetera (Adina, Gabriela & Roxana-Denisa, 2015). Consumers bind COO to feelings of "status" and "pride" related to the possession of goods from specific countries, and they use COO as an expressive factor to signal their ideal personality (Aaker, 1999; Verlegh & Steenkamp, 1999; Batra et al., 2000).

According to Aaker (1999), a match between a country's brand personality and consumer personality can result in a feeling of affinity when consumers are evaluating products. The feeling of affinity affects consumers' willingness to buy a product positively, while the feeling of animosity affects it negatively (Aaker, 1999; Adina, Gabriela & Roxana-Denisa, 2015). Research shows that when consumers have a strong feeling of animosity towards the country where a product is manufactured, they tend to be less interested in buying it (Adina, Gabriela & Roxana-Denisa, 2015). The same research reveals that the affinity or animosity feelings towards a country can be personally rooted and is difficult to change.

2.3.3 Normative aspects of COO-effect

The normative aspects of COO refer to social and personal values involving consumer ethnocentrism and disidentification. Consumer ethnocentrism is defined as "the view of things in which one's own group is the center of everything, and all others are scaled and rated with reference to it" (Josiassen, Assaf & Karpen, 2011). Consumer ethnocentrism is a major factor motivating consumers to adopt domestic products and reject foreign ones (Shimp & Sharma, 1987; Balabanis & Diamantopoulos, 2004). According to Watson and Wright (2000), consumers in more developed countries prefer both domestic products and products originating from countries with a similar culture. Disidentification, in contrary to ethnocentrism, is the opposition towards one's own country's products and consumption patterns (Adina, Gabriela & Roxana-Denisa, 2015).

2.3.4 The Relationship of Cognitive, Affective, and Normative Perceptions

According to the means-end theory, personal and social values (personal goals and motivations) are constructed upon benefits (the personal meaning attached to product attributes), which comes from the product attributes (descriptive features) (Keller, Apéria & Georgson, 2011; Adina Gabriela & Roxana-Denisa, 2015). As values are considered as normative aspects, benefits as affective, product attributes as cognitive, there is a connection among the three. Adina, Gabriela

and Roxana-Denisa (2015) point out that normative perceptions are influenced by both cognitive and affective ones, and brand perceptions are moderated by these three aspects in general.

2.4 Country of Ownership

The country of ownership (COOW) is considered to belong to the COO study field and as an extrinsic cue that influences consumer perception (Mort & Duncan, 2003; Cheah & Phau, 2015). According to Mort and Duncan (2003), academicians hold different opinions towards COOW and COO cues. Some consider COOW as important, some find the country of manufacture important, while others consider both or neither to be important. COOW can have a stronger effect on brand image than other COO components when COOW is perceived to be equal to brand origin (Thakor & Lavack, 2003). COOW also influences consumers' attitude towards the brand when political and economic systems differ greatly between the countries (Cheah & Phau, 2015). Moreover, when there is a change of the COOW, consumers can be disoriented in terms of perceiving the brand image (Johansson et al., 2018).

In particular, if there is a difference between the COOW and COO of a brand, it signals the brand's bi-nationality. With the proliferation of bi-national brands and products, research has shown that COOW plays an important role in forming consumer preference, and it is different from the country of manufacture as a traditional COO cue. Specific cues appeal to be more valuable to consumers in some segments, and different countries have different impacts on consumers in relation to their COOW. (Mort & Duncan, 2003) Besides, the influence of COOW differs in various situations. For example, at the time when consumers are in a hostile environment such as economic recession, they tend to value COOW more than other cues and prioritize brands and products that are locally owned (Cheah & Phau, 2015). In this case, bi-national brands that can be associated with foreign countries may not be accepted by consumers according to Cheah and Phau (2015).

Further, the study of COO and cross-country ownership shows that cross-country ownership can greatly influence consumer's perception of a company's COO. Particularly, a foreign company with partial local ownership can significantly ease hostile feelings from consumers (Fong, Lee & Du, 2014). And in a host market with high animosities, such as Japan to China when China is the host market, consumers prefer products that are launched by a foreign company with partial local ownership (Fong, Lee & Du, 2014).

2.5 Theoretical Framework

2.5.1 The Consumer Perception Process

According to Scholderer (2010), perception refers to the process in which information is automatically selected, organized, and interpreted from the memory. Through this process, information is given meaning. When one encounters stimuli, a bottom-to-top perception process

is triggered; when one uses his/her existing memory, the top-to-bottom perception process is identified (Sholderer, 2010).

These stimuli, which can also be called cues, can be categorized as intrinsic or extrinsic cues (Manrai, Lascu & Manrai, 1998). Consumers evaluate products both according to intrinsic and extrinsic attributes (Sholderer, 2010). Intrinsic attributes relate to the product itself, such as shape and design, while extrinsic attributes constitute the product's environment such as brand name and country of origin (Manrai, Lascu & Manrai, 1998; Scholderer, 2010; Cheah & Phau, 2015; Herz & Diamantopoulos, 2017). The country of origin of a product belongs to the extrinsic cue, which can influence consumers' perceptions towards the brand and product (Thorelli, Lim & Ye, 1989). The country of ownership is also part of extrinsic cues (Cheah & Phau, 2015), while "owned by ..." (COOW) is seen as one of the cues that belong to country of origin (Mort & Duncan, 2003).

The intrinsic and extrinsic attributes can arouse associations in consumers' memory, thus create perceptions about the brand and further form the image of the brand (Keller, 1993). Apart from the perception process, another significant element is the context in which the perception is generated, and product-country image, which includes COO and COOW depends on contexts such as market context and consumer culture (Askegaard & Ger, 1998).

2.5.2 Categorization of COO and COOW in EV brands

In order to explore the consumer perception of EV brands with different COO and COOW, firstly there is a need to understand the COO and COOW combinations among EV brands in the Chinese market. The categorization of COO and COOW of EV brands acts as a guiding structure to study the consumer perception of EV brands and helps to logically analyze empirical data. In light of this, the authors utilize self-interpretation based on related literature to identify mainly three kinds of brand categories from the list of EV brands in China (Wattev2buy, 2019b), in terms of their COO and COOW:

1. "Domestic brands" with COO and COOW that are perceived of consumer's home country;
2. "Mixblood brands" that are perceived to originate from a foreign country, but perceived to be owned by the company from the consumer's home country;
3. "Foreign brands" with both COO and COOW that are perceived from foreign countries.

Regarding the "mixblood brands", similar research was conducted concerning hybrid products. Hybrid products have a local manufacturer but a foreign brand or have a local brand but a foreign manufacturer (Czepiec & Cosmas, 1983). Similarly, bi-national products or multi-national products are products that involve two or more countries-of-origin; They can be made in foreign countries but carry a domestic brand name or they can be domestically made but carrying a foreign brand name (Han & Terpstra, 1988). However, these definitions only concern products instead of brands, and the case in brands is different as brands involve owners, and this research looks into the different countries of origins and owners.

Particularly, in the business environment of China, foreign investment in the automobile industry is restricted by law, stating that the Chinese shares should at least account for 50% in the foreign investment when manufacturing complete automobiles, and the joint venture is recommended for foreign investment (Ministry of Commerce PRC, 2012). Although the COOW is a perceived concept, the Chinese policies regulate that mixblood brands should at least majorly be owned by Chinese companies, hence, “mixblood brands” in the China EV market and in this study only refer to brands that are perceived to have Chinese owners but foreign COO, instead of Chinese COO and foreign COOW or other situations. These three categories were created as they reflect COO and COOW in EV brands, and the categorization provides the possibility to logically collect data and to later guide the analysis to see if there are differences in consumer perception depending on the elements of COO and COOW.

2.5.3 Conceptualization of the Theoretical Framework

Depart from the related theories, Figure 1. illustrates the theoretical framework of this research. When consumers get in touch with intrinsic and extrinsic cues of an EV brand, these stimuli might induce associations that are related to the country of origin (COO) and country of ownership (COOW) of the EV brand in consumers’ mind.

To process, the COO and COOW associations constitute consumer perceptions, which can be categorized to cognitive, affective, and normative aspects. The three kinds of perceptions are utilized and classified by the authors based on previous research. Cognitive perception refers to product quality and other intrinsic product attributes, affective perception relates to emotional and symbolic meanings, and normative perception concerns consumer ethnocentrism and disidentification (Watson & Wright, 2000; Adina, Gabriela & Roxana-Denisa, 2015). The authors use such a classification to clarify and organize the various consumer perceptions in the empirical materials collected and then in data analysis. Further, these consumer perceptions contribute to building up the brand image (Keller, 1993).

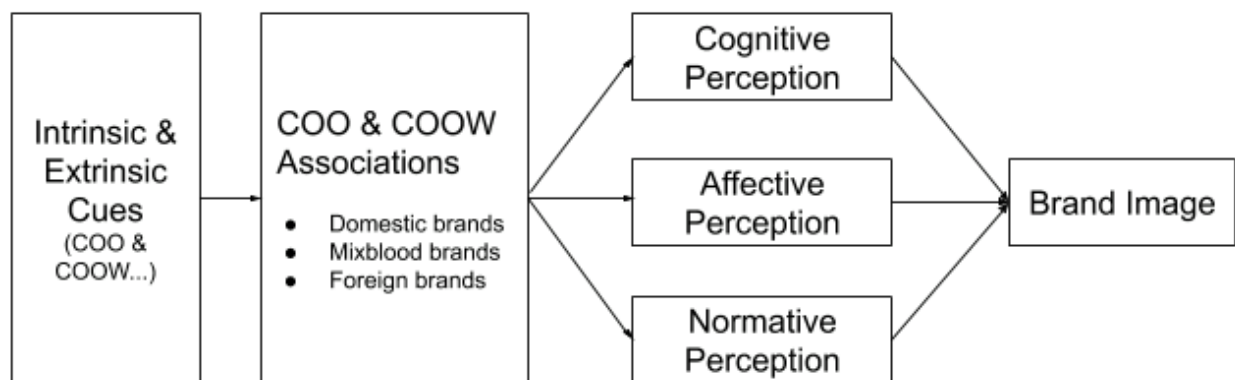


Figure 1. Consumer perception of COO & COOW and brand image

3. Methodology

This chapter will introduce and argue for the methodological approach and explain the research process. Firstly, the ontological and epistemological approaches are introduced where after the research strategy is explained. Secondly, the context and the product category of research are introduced. Thirdly, the process of data collection is explained where sources, selection of brands and selection of sites is detailed described. Fourthly, the coding of the empirical material is explained and demonstrated how the empirical material was analyzed. Lastly, the ethical considerations and the trustworthiness of the research are discussed.

3.1 Research Philosophy

In this research, the researchers acknowledge that there are multiple truths and many perspectives of an issue as perspectives are studied. What is considered to be facts depend on the observer's viewpoint which altogether indicate the adoption of a relativist ontology (Easterby-Smith, Thorpe & Jackson, 2015). Reflection of philosophical assumptions regarding ontology and epistemology is important to ensure the research quality according to Easterby-Smith, Thorpe and Jackson (2015). This study also addresses that social entities are considered to be constructions built upon perceptions and actions of social actors (Bryman, 2012). The social actors' construction of reality is the foundation of multiple facts, truths and realities (Sale, Lohfeld & Brazil, 2002), which are important elements in this research as we aim to capture perceptions that are based on different truths and realities.

A digital research was conducted to capture consumers different perceptions that altogether shape their truths and realities. By conducting a digital research, the risk of change in perception was minimized as material could be collected from the time point the consumer held that opinion. Since reality is socially constructed is constantly changing (Berger & Luckmann, 1966; Easterby-Smith, Thorpe & Jackson, 2015), the material was collected from different platforms to avoid members changing opinions based on others reality. By collecting material from different platforms, we believe that we, in a better way, could capture their initial opinions without biases from others. Perceptions shape realities, and as this research focus to increase understanding for consumer perception, a relativist ontology was needed.

Closely related to the ontology is the epistemological standpoint, which is social constructionism as reality is argued to be socially constructed and determined by people rather than by external factors (Easterby-Smith, Thorpe & Jackson, 2015). The aim of this research is to increase the understanding for how COO and COOW affect consumer perception of EV brands. The researchers acknowledge that, the object of study and the researchers are interactively linked, and that the findings are mutually created throughout the investigation process (Guba & Lincoln, 1994). The "how" in the research question emphasizes the explorative nature of the research which requires a social constructionist standpoint.

3.2 Research Strategy

The aim and purpose reflect the qualitative design of this research. The emphasis lies on people's interpretation of the world and embodies that reality can change depending on individual's construction of it (Bryman, 2012). The research is of explorative nature with a social constructionist stance, and therefore a qualitative research design is naturally adopted, aiming to get a deeper understanding of how consumers perceive the brand image in terms of COO and COOW. Answering the question "how" through interpreted information related to human emotions and perspectives is central for qualitative research (Leung, 2015). Therefore, a qualitative research approach is needed in this research in order to capture consumer perceptions.

The study aims to create new insights and knowledge regarding consumer perception on brand image in relation to the existing theories of COO and COOW and contribute to these theories through empirical findings. The study takes a stance in both existing theories, our theoretical framework, and empirical findings, illustrating the abductive research approach where the inductive and deductive approach is mixed (Alvesson & Sköldbberg, 2009). The theoretical framework was based on previous literature and used as a frame during data collection and analysis, where the model was expanded in line with empirical findings.

3.2.1 Digital Research

Nowadays, research taking place online has increased in popularity (Rokka, 2010) particularly to study consumer culture and communities through computer-mediated communications (Kozinets, 2002). Qualitative research methods for online research can be conducted in various ways and there is a great variety of terms for conducting online studies (Dicks, 2012). Digital methods, online methods, digital ethnography, virtual ethnography, netnography are just some of the terms used for digital qualitative research according to Dicks (2012). This research studies publicly available information from online sites and forums to see how Chinese consumers perceive the image of EV brands in terms of COO and COOW. This study focuses on consumer opinion and perceptions and the researchers acknowledge that online communication can affect how consumers present their opinions and perceptions.

When conducting research online, Caliendo and Gandini (2017) suggest an integrated threefold methodological strategy: follow the things, follow the medium, and follow the natives (p. 70). This refers to that the digital research grounds in a digital object, that the empirical object is followed across chosen online environments, and that the natives of the digital objects are followed in a naturally occurring way. In this research, we followed a topic of discussion around certain brands with COO and COOW elements, with the discussions as digital objects. The discussions were researched on chosen platforms, which was the medium of research. Consumers posted comments and articles on those chosen platforms, and the consumers were the natives of the digital object. By following this threefold strategy without intrusion, we could study the digital object in a natural way. From the different sites a total of 333 comments were collected.

When collecting the online based empirical material, a passive approach was taken. Online based research can be studied passively, actively, or by using the internet as a medium for “traditional” qualitative research (Eysenbach & Till, 2001). According to Lugosi (2008), one advantage of researching passively is that the object being researched is unaware and can therefore not change opinion or behavior accordingly. We particularly favor the passive approach in this study as we minimize potential biases or changes of opinions by not intruding or involving in the discussions taking place. If a researcher acknowledges participants that a research is conducted, participants may withdraw from the conversation or behave in an unnatural way. Also, a passive approach is more beneficial for time-limited research, which is the case in this study with a research period of about two months (Lugosi, 2008). In order to capture consumers’ already existing thoughts in online interactions and discussions in a more authentic way, a passive approach is naturally adopted by us as it’s more suitable for this research. The researchers do not initiate any discussions themselves and this method allows less obtrusiveness as the researchers could study the phenomenon in its natural context without interruption (Kozinets, 2002).

According to Caliandro and Gandini (2017), three different social formations can be distinguished online: crowds, communities, and the public. Crowds are aiming to achieve a common goal, communities share the same identities and values, while online public use a public platform to express opinions and private identities, but those online public do not have to share the same identity (Caliandro & Gandini, 2017). Based on these categorizations, publics have been studied in this research. The data was collected from independent online forums where the members expressed their opinions and not necessarily shared the same opinion.

3.2.2 The Research Context

This research studies the Chinese EV market, from which generalizes insights for the consumer perception of COO and COOW, and the EV industry. The context of this research is the Chinese EV market and the Chinese consumers, and the role of the research context is as one example to provide generalization understandings in brand image perception in terms of COO and COOW.

The research context is mentioned as it is important in different ways and hold some aspects that are significant for the understanding of this research. Askegaard and Ger (1998) advocate that product-country image is context dependent and it must be interpreted by connecting it to the market context and the consumer culture. Product-country image, by their explanation, is the images of products/brands and the multiple places potentially involved in a global production system. They state that the contextualized product-country image is a combination of four dimensions: place, phenomenon, market context, and usage context. Among these, the place is a spatial relationship such as place of a brand, place of production etc., and country of origin (COO) belongs to the place dimension (Askegaard & Ger, 1998). Phenomenon concerns product in a broad sense, while the market context can be the relative meaning of the phenomenon in its environment, such as surroundings and competitors (Askegaard & Ger, 1998). The usage context is further referred to as meanings of the consumption situation or usage of a product. The two scholars see the contextualized product-place image as a narrative story about the place, the

product itself, and the consumer who use the products, reflecting the interface between the individual and society.

The product-country image, which concerns the individual and societal interplay, can be affected by cultural values. In the Asian consumer culture, one of the common cultural values that is seen to influence consumption patterns is “face” (Li & Su, 2007). “Face” is defined by Goffman (2003) as “the positive social value a person effectively claims for oneself by the line others assume he has taken during a particular contact” (p. 5). Li and Su (2017) conclude that western brands and products are viewed by Chinese consumers as name brands, for which they are willing to pay a higher price. They point out that high quality and social status benefits should be emphasized by foreign companies operating in China, as those aspects of “face” are highly valued, and “face” is one reason why Chinese consumers prefer to purchase luxury or foreign goods.

3.2.3 Electric Vehicles (EV)

The product category of this research is electric vehicles (EV), and this product category is chosen because of its newness, great potential, and most importantly the presences of brands with different COO and COOW. The EV product category functions as an industry example to study the consumer perceptions towards COO and COOW in general, while the insights to generated in this research can also contribute to the EV sector.

To conduct this research, there is a need to understand the EV sector and current EV studies. Electric vehicles include vehicles with different technologies and previous research cover both pure electric vehicles and hybrid power vehicles. But this research only focuses on vehicles with batteries, whose only source of power is electricity and can charge from an electric outlet, thus mainly referring to battery electric vehicles (BEVs) (Rezvani, Jansson & Bodin, 2015).

The electric vehicle is a relatively new area to explore. Current research of EV from the consumer’s perspective mainly covers consumer attitude and adoption behavior. Larson et al. (2014) study consumer attitudes towards EV regarding price and find out that the acceptable EV price range is USD 22,000 - 27,500. The majority of consumers are not willing to pay premium prices for EVs even after they are fully informed about future fuel savings, while consumers with experience or has been exposed to EVs are more willing to pay premium prices. The same study also calls for government policies to educate consumers with the knowledge of EV thus to facilitate purchase decisions.

In the selection of cars, mainly referring to conventional cars, Pednekar (2013) points out that consumers consider design/style at the top, followed by performance/efficiency, safety, brand etcetera. However, in the research of reasons for the consumer to adopt EV, the situation is more complicated than that of conventional cars. Rezvani, Jansson & Bodin (2015) identify five main themes on consumer EV adoption behavior: (1) behavior influenced by attitudinal factors, (2) pro-environmental behavior, (3) innovation adoption behavior, (4) symbolic behavior, and (5) emotional behavior. In particular, consumers emotion is an overlooked yet important aspect of car purchase (Steg, 2005). Moons and De Pelsmacker (2012) categorized three emotional processing

levels: visceral, behavioral and reflective. Visceral emotions are instrumental and visual attributes of EVs such as style and design; Behavioral emotions refer to consumer's emotions from using and experiencing driving EVs; Reflective emotions regard to self-image and identity connected to driving an EV. As the COO effect includes cognitive, normative and affective aspects (Adina, Gabriela & Roxana-Denisa, 2015), which might have some overlaps with consumer's EV adoption behavior among the five categories stated above, the brand image in terms of COO and COOW of EV can possibly have an effect on EV adoption behavior.

3.3 Collection of Empirical Material

3.3.1 Sources

The material in this research was collected primarily through the digital research where COO and COOW was studied on the chosen forums passively. Gathering primary data allowed us to collect material adapted for our specific research question, that could help us to answer the research question satisfactorily (Hox & Boeije, 2005). Through the primary data new insights was reached and the outcomes of the research can therefore be presented with greater confidence as the data is adapted to the specific study (Easterby-Smith, Thorpe & Jackson, 2015). The theoretical framework, in combination with the research question, guided our collection of empirical material. After generating and analyzing the empirical material, new insights were generated and resulted in a developed theoretical framework.

3.3.2 Selection of Brands

To better understand how consumers perceive COO and COOW of EV brands, examples of the three brand categories (domestic brands, mixblood brands, and foreign brands) are chosen as cases to illustrate the categories and further answer the research question. The selected brands are existing cases that can be seen in the Chinese EV market and the choice of cases are based on the researchers wanting representative brands for each category. Representative EV brands were selected according to popularity, well-knowingness, and availability in the Chinese market, and sales volume, which possibly indicate the abundance of empirical materials for data collection and analysis. From the selected cases, detailed empirical materials regarding COO and COOW could be generated to analyze and study consumer perceptions.

Representative brands were selected according to the compositions of perceived COO and COOW to represent the three brand categories. These representatives are in the Chinese context with China as the home country and Chinese consumers as studied subjects, and the chosen examples are used to study brand images in terms of COO and COOW among Chinese consumers. In this case, the three brand categories are:

1. “Domestic brands”, which are perceived to originate from China and owned by Chinese companies and shareholders. Selected cases: BYD, NIO, BAIC BJEV.
2. “Mixblood brands”, which are perceived to origin from foreign countries but owned by Chinese companies. Selected cases: NEVS, Denza.
3. “Foreign brands”, which perceived to originate from foreign countries and owned by foreign companies. Selected case: Tesla.

Domestic Brands

For domestic brands, BYD, NIO, and Beijing Auto Industry Corporation (BAIC) are the major producers in China (J.P. Morgan, 2018). As there are a variety of domestic brands in China’s EV market, the three are selected to represent different market positionings as mediate, niche, and low respectively (BYD Auto, n.d.a; NIO, n.d.; BAIC BJEV, n.d.). These brands are chosen as examples of the “domestic brands” because they can represent different consumer perceptions for domestic EV brands with different market positioning, and they have the potential to gain adequate empirical materials for this study.

BYD

BYD Company was founded in China in 1995 as a rechargeable battery business (BYD Auto, n.d.a, 2019). BYD has been using its expertise in batteries and first-mover advantage to gain EV market share in China (Trivedi, 2019). BYD Auto Co., Ltd. is founded in 2003 as an automobile manufacturer of automobiles (including EVs), buses, electric bicycles, forklifts, rechargeable batteries and trucks (BYD, n.d.b). There are a variety of internal combustion, hybrid and battery-electric passenger vehicles under the BYD brand. As for BYD’s EVs, now BYD sells four EV series: Qin, Tang, Song, Yuan, consisting of thirteen EV models in the Chinese market with a price range of around USD 12,000 - 54,000 after government compensation (BYD Auto, n.d.a.). And the sales of BYD EV ranked first in global sales volume from 2015 for three consecutive years (BYD, n.d.c). In 2018, BYD sold 247,811 EVs in China, ranking no.1 and indicating its leading position in the China EV market (InsideEVs, 2019).

NIO

NIO was founded under the name of NextEV in 2014 and changed its name to NIO in 2017. Headquartered in Shanghai, China, NIO manufactures and sells electric automobiles in China, Hong Kong, the United States, the United Kingdom, and Germany (Yahoo, 2019). The Company offers electric SUVs with two models, ES6 and ES8 in the Chinese market, pricing at about USD 53,000 - USD 82,000. NIO positioned itself not only as a car manufacturer but also as a service provider that focuses on providing innovative user-centric services to customers, such as Power Swap, a battery swapping service; Power Mobile, a mobile charging service through charging trucks; and Power Express, a 24-hour on-demand pick-up and drop-off charging service. (NIO, n.d.) NIO sold 11,348 units in 2018 in China, ranking no.11 among EV brands (InsideEVs, 2019).

BAIC BJEV

BAIC Group is a Chinese state-owned enterprise and holding company that manufactures automobiles and machines in China (BAIC, n.d.). BAIC BJEV is a subsidiary of BAIC Motor that belongs to the BAIC group. BAIC BJEV produces and sales electric vehicles in China with an aim to enable consumers to gain access to affordable eco-friendly transportation by providing a range of EV selections at low prices (Pitch Book, 2019). Four models are offered: EX5, EU5, EX360, and EC3, covering mini cars and compact SUV's, along with a swap EV option. The product price ranges from about USD 10,000 to USD 30,000 after compensated with government subsidy. Daimler AG owns 9,55% share of BAIC Motor and 3.93% share of BAIC BJEV. (BAIC BJEV, n.d.a) BAIC BJEV sold 158,012 EV units in 2018, ranking no.2 in China (InsideEVs, 2019).

Mixblood Brands

Denza and NEVS are selected as the representatives of brands that are perceived to have Chinese owners but foreign country origins. The reason to select these two is that after scanning the EV brand list in China, there is a limited amount of mixblood EV brands, while Denza and NEVS are the available ones in the Chinese market.

Denza

The Denza brand was created by a 50:50 joint venture between BYD and Daimler AG in 2010. Denza is positioned as the luxury electric car sold in the Chinese market with a price range of about USD 44,500 to 49,000, which is close in price to Tesla's Model 3. Denza emphasizes the influence and inheritance from Daimler as an experienced automobile manufacturer with advanced technology for over one hundred years. There is one EV model, Denza 500 in the Chinese market as for now. (Denza, n.d.)

NEVS

National Electric Vehicle Sweden (NEVS) was built on the acquisition of SAAB Automobile, a Swedish originated automobile company in 2012. NEVS is a Swedish holding company owned by a Chinese, Kai Johan Jiang, and focuses on developing electric vehicles. (NEVS, 2019a) In 2019, Evergrande Group in China acquired 51% of the shares in NEVS, making it the new major owner of NEVS (NEVS, 2019b). For now, NEVS has manufacturing factories in Sweden and China with only one EV model in the Chinese market, NEVS 93, pricing at around USD 25,000 (NEVS, 2019a).

Foreign Brand

Tesla is selected as an example of a foreign brand by being perceived to have the owner and the origin from America. It is chosen as the representative of foreign brands because it has become one of the most renowned foreign EV brands in the Chinese market (Cendrowski, 2017). What is more, Tesla has started to build a factory in China and aims to partially put it into operation in the second half of 2019 (Cheng, 2018), which has aroused a lot of discussions among the public.

Tesla

Tesla is an American electric-automobile manufacturer that was founded in 2003. The co-founder of PayPal, Elon Musk invests in Tesla and acts as chairman and CEO of the company. In 2008, Tesla launched the Model S, which claimed to be the world's first premium all-electric sedan. Now there are five models of EV in Tesla's product family, including Model S, Model 3, Model X, Model Y, and the Roadster, with a price range of about USD 39,500 - USD 83,000, and about USD as the start price of the Roaster. All of Tesla's EVs are produced in California, America, and the company also expands its business to solar energy products. (Tesla, 2019) Tesla has harvested a lot of successes since its establishment, and it was rated as no.4 on the list of the world's most innovative company (Forbes, 2018).

Table 1. Selected representative EV brands in the Chinese market

Type	Brand Name	Perceived COO	Perceived COOW
Domestic Brand	BYD	China	China
	NIO	China	China
	BAIC BJEV	China	China
Mixblood Brand	Denza	Germany	China
	NEVS	Sweden	China
Foreign Brand	Tesla	America	America

In general, three representatives were chosen for domestic brands, two for mixblood brands, and one for foreign brands respectively. The reason behind the different numbers of representative brands for the three brand categories is the fact that there are more domestic brands than mixblood and foreign brands in the Chinese EV market. Moreover, the domestic brands comprise of EV brands with differed market positionings. In order to fully understand consumer perceptions towards domestic brands, three EV brands are selected as example cases to illustrate the high, medium, and relatively low marketing positionings. As for the mixblood brands, two examples were chosen because the number of newly founded EV brands with a mix of local COO and foreign COOW is limited, and Denza and NEVS are the ones that the researchers could find in the Chinese EV market. For foreign brands, only Tesla was picked because it is the only EV brand with both foreign COO and COOW in China observed by the authors.

3.3.3 Selection of Sites

Kozinets' (2002) points out that there several guidelines in selecting online communities, and he refers online communities as internet-based forums. Although we do not study communities as we study publics, the selection criteria are adapted as they are suitable for internet-based forums. These guidelines are: "(1) a more focused and research question-relevant segment, topic, or group; (2) higher "traffic" of postings; (3) larger numbers of discrete message posters; (4) more detailed or descriptively rich data; and (5) more between-member interactions of the type required by the research question" (Kozinets, 2002, p. 63).

Kozinets' (2002) selection criteria were adopted to choose suitable platforms to study the research question. Chinese online platforms related to automobiles and EVs were scanned with these criteria in mind, and the selected representative brands were guiding the search for relevant forums to study. To identify suitable platforms a variety of keywords was searched for (i.e. major car forums China...) through search engines. When selecting sites, the brand focus was an important aspect taken into consideration to ensure the discussion being brand focused and the community being representative of such a discussion. The chosen platforms were those with high traffic, discussing the topic frequently and where rich material could be collected. To generate deeper insights and ensure accuracy, the material was collected from eleven different sites.

Four different categories of major online platforms that are related to automobile and electric vehicles in China were identified:

1. Online forums that specially focus on automobile, such as Autohome, Xcar, Bitauto;
2. The automobile website of popular web portals, such as PCauto, Sohu, 163.com, Tencent;
3. Websites that only focus on new energy cars, which include electric vehicles, such as D1EV and CNEV;
4. General social media platforms that are open for public discussions, such as Sina Weibo and Zhihu.

These platforms were selected because of the potential to collect relevant empirical material, the wide range of users, and in some cases their specialty in the automobile. To be in consistence with Kozinets' (2002) criteria, they were considered the most appropriate platforms for this research as the material is suitable for studying Chinese consumers' opinions and perceptions on EV brands.

Table 2. Online sites for data collection

(1) Specialized Online Automobile Forums:	
<p>Autohome.com https://www.autohome.com.cn/</p>	<p>A leading online destination for automobile consumers in China, providing professionally produced and user-generated content. It offers a comprehensive automobile library with extensive automobile listing information to automobile consumers (Autohome, 2019). It has 33 million daily active users (Zhang, 2019), and it is the largest and most active online community of automobile consumers in China (Kubala, 2017). The management of Autohome state that they have captured 81% of all traffic on Chinese car forums (Kubala, 2017).</p>
<p>Xcar.com http://www.xcar.com.cn/</p>	<p>China's leading automobile online community, providing car quotation, model information, car forums etc. The total visit on desktop and mobile website as of February 2019 was 10.3 million. (SimilarWeb, 2019a)</p>
<p>Bitauto.com http://baa.bitauto.com/</p>	<p>An automobile website that offers automobile pricing information, specifications, reviews, and consumer feedback (Bloomberg the Company & Its Products, 2019a). The website and its app have total visit traffic of 4.01 million as of February 2019 (SimilarWeb, 2019b).</p>
(2) Automobile Websites of Popular Web Portals:	
<p>PCauto.com https://www.pcauto.com.cn/</p>	<p>Belongs to PConline, an internet portal of IT-related products and services in China. PCauto is now one of the largest automobile portals in China. It provides product information, brand reviews, and testing reviews of domestic and international automobile brands. (PConline, n.d.). According to SimilarWeb (2019c), the average total monthly visit of PCauto from September 2018 to February 2019 is about 12.9 million.</p>
<p>Auto.sohu.com http://auto.sohu.com/</p>	<p>The car section of sohu.com, which is an online media search and game service group company in China (Bloomberg the Company & Its Products, 2019b). Auto.sohu.com provides car quotations, car news, evaluation, and purchase guide etc. As of February 2019, it has a monthly total visit of 2.46 million. (SimilarWeb, 2019d)</p>
<p>Auto.163.com https://auto.163.com/</p>	<p>A subsidiary of 163.com, which is a major web portal in China. Auto.163.com offers consumers a variety of automobile information, including purchase guide, quotation, picture, test drive, and evaluation etc. The total visit of auto.163.com is around 2.82 million in February 2019. (SimilarWeb, 2019e)</p>
<p>Auto.qq.com</p>	<p>Auto.qq.com belongs to qq.com, which is a web portal of Tencent. Tencent is a major Chinese company that provides Internet services (Bloomberg the Company & Its Products, 2019c). Qq.com is China's</p>

http://auto.qq.com/	<p>largest and most used Internet service portal, ranking no.2 in China and is China's most visited Internet portal website (Alexa, 2019a). Auto.qq.com is a one-stop online platform for auto-related information and service. It has an average monthly total visit of about 1 million from September 2018 to February 2019 (SimilarWeb, 2019f).</p>
<p>(3) New Energy Car Websites:</p>	
<p>D1ev.com</p> <p>https://www.d1ev.com/</p>	<p>A new energy electric vehicle website with an abundant library of the brands, products, and models of new energy electric vehicles as well as electric vehicle industry data and reports. There are 1.1 million visits on average per month in the past six months since September 2018. (SimilarWeb, 2019g)</p>
<p>Cnev.cn</p> <p>http://www.cnev.cn/</p>	<p>Provides electric vehicle information regarding models, prices, pictures, data, government policies, rankings, evaluation etc. It is a communication platform for new energy automobiles and electric vehicles. (SimilarWeb, 2019h)</p>
<p>(4) Social Media Platforms:</p>	
<p>Sina Weibo</p> <p>https://www.weibo.com/</p>	<p>China's largest social media network that incorporates the major features of social media channels like Twitter, YouTube, and Instagram (Koetse, 2017). Sina Weibo has 462 million monthly active users and about 200 million daily active users on average in December 2018 (China Internet Watch, 2019). The traffic of Sina Weibo ranks no. 8 in China and no. 16 in global. (Alexa, 2019b) Sina Weibo is a national platform and the platform is open to all registered users. The users of Sina Weibo tend to actively share views and interact with people. (Koetse, 2017)</p>
<p>Zhihu</p> <p>https://www.zhihu.com/</p>	<p>China's most popular Q&A and knowledge sharing platform, which is similar to Quora. According to Shen (2018), Zhihu is a highly popular online platform with good and abundant contents covering a large variety of topics, including EV. Its users are more educated, and they construct high-quality contents, making Zhihu a widely recognized and trusted platform. As of July 2018, Zhihu had 160 million registered users, 26 million daily active users, and over 100 million answers (contents) (Smith, 2019). It has 250 millions of average monthly total visit (SimilarWeb, 2019i).</p>

3.3.4 Data Collection

From the chosen platforms data was extracted through comments and discussions on posts in regard to the chosen brands. The theoretical framework served as guidance when collecting relevant material. When collecting the data, four criteria were set to distinguish material of relevance. In order to understand consumer perception in relation to brand image with COO and COOW as determining factors, the focus was put on collecting subjective words and sentences describing consumers' attitudes and feelings, and the criteria for doing so were:

1. Both posts and comments with the Chinese keyword “electric vehicles”, “electric vehicles country of origin”, “electric vehicles country of ownership”, and the names of representative brands should be considered
2. Posts and comments under the section of each representative brand on the online platforms should be considered
3. Words and sentences that best describe and represent consumers' perceptions should be chosen
4. Important quotes should be abstracted instead of copying whole posts

The data were abstracted from the chosen platforms and translated into English by the Chinese researcher. The representative quotes were directly copied from the computer-mediated communications in order to maintain objectivity and lower the risk of eventual biases. As the material was directly copied, some irrelevant information from each comment has been left out in the analysis.

During the collection of data, the time of the empirical materials that were posted online is not limited, and according to the authors' observation, most of the representative EV brands emerged in the recent years, thus the data to be collected is naturally relatively new.

3.4 Empirical Material Analysis

3.4.1 Coding

Several techniques have been undertaken to code and analyze the empirical material. The cognitive, affective and normative evaluation aspects of COO served as guidance when coding the material. Three levels of codes are used to code the material (see Appendix 1). The first cycle of coding includes descriptive codes closely related to the material, that reflect what is mentioned and talked about in the qualitative passages of extracted text (Saldaña, 2009). The second cycle of coding was conducted to abstract the material and to create more general codes that further could be categorized into the determined themes; cognitive, affective and normative.

Table 3. The codes of empirical materials

1st Codes	2nd Codes	Themes
Reliability (safety, durability, reduce risk, assuring, trust, reliable), knowledgeable workforce, engineering (concept, craftsmanship, quality control, materials, assembling), technology (innovation), design, manufacturing, investment (acquisition, cost), price (value for money), marketing (branding, brand heritage, sales, logo), Environment, driving experience...	Perceived quality	Cognitive
Lifestyle, self-expression, social status (high-class), social pride (good brand name, face), power, self-esteem, personality, military/economic/political events, social norms...	Emotional connotations (Affinity & animosity)	Affective
Culture (spirit), religious, political, ethnic (nation, country), age, interest group (car industry), stereotypes, national pride (Initiative)...	Ethnocentrism & disidentification	Normative

According to Saldaña (2009), a first cycle coding is necessary to build the ground for second cycle coding and further analysis. The first cycle coding utilizes both descriptive coding and emotion coding. The descriptive coding is to use a word or a short phrase as the basic topic of each comment collected online to summarize the core meaning (Saldaña, 2009). In this study, first cycle codes such as design, engineering, self-expression, social status, ethnic, and national pride etcetera. are used. Meanwhile, another paralleled coding called emotion coding is added to express consumer perception as positive, negative, both positive and negative, or neutral. The reason to adopt two coding at the same time during first cycle coding is that consumers not only present varied perceptions but also different emotional attitudes. The combination of descriptive coding and emotion coding help to demonstrate consumer perceptions more thoroughly, and to better facilitate the further interpretation of empirical materials.

In the second cycle coding, terms that are more abstract and with border meanings are used. The terms come from the explanations of theories in previous research, making the second cycle coding belong to the method of theoretical coding. The theoretical coding covers all the first level codes and it accelerates the steps toward achieving theories (Saldana, 2009). The second cycle coding used in this research are (a) perceived quality, which covers intrinsic perceptions such as design and engineering etcetera. (b) emotion connotations, including individual's emotions and feelings

such as self-expression and social status, and (c) ethnocentrism and disidentification, consisting of ethnic perceptions and national pride etcetera.

Lastly, the final coding comes from the terminology of previous research and also utilizes the theoretical coding method. But the final codes are even more abstracted than the second ones, condensing the empirical materials into three codes, or so to say, three categories: cognitive, affective, and normative. Cognitive perceptions mainly refer to the perceived quality; affective perceptions include emotion connotations; normative perceptions comprise ethnocentrism and disidentification. The final coding plays the role as the bridge between the second cycle codes and the existing theory, helping to lay the foundation of generating new findings to complement the existing theories.

3.4.2 Theorizing

Based on the three levels of coding, the theorizing process is conducted by compressing the three final codes into the theoretical framework. The method used to condense and organize the final codes to theories is ‘networks’, which refer to the interacting and interplaying relationship among categories (Saldaña, 2009). The interrelationship of the final codes is observed and used to adjust the previously brought up theoretical framework. Further in the discussion part, we used themes to identify the most valued perceptions of domestic, mixblood, and foreign brands. The themes are extended phrases that function to categorize the lumps of data (Saldaña, 2009). The themes being used originate from the second codes instead of the final codes, because the second codes can better conclude different data groups in an easy-to-understand way without being too abstract.

3.5 Ethical considerations

In this research all material was collected from digital forums where ethical issues can arise as public and private is increasingly blending together (Kozinets, Dolbec & Earley, 2014). To ensure an ethically conducted study this research followed Kozinets (2010) concerns regarding the level of privacy and informed consent.

Level of privacy is related to the material being collected from sites that are either public or private and in this research the majority of the material was collected from public sites where no membership or registration was required. Information that is posted and publicly available is in fact published material and a subject to criticism and quotation according to Kozinets, Dolbec and Earley (2014). Direct quotation was needed in this research to capture consumer perception, although Bruckman (2006) states that when researching digitally the researchers should be careful with direct quotation. We erased the individual’s names and usernames to reduce any risk of harm (Kozinets, Dolbec & Earley, 2014) and invading of privacy, even though the topic was not considered to be of sensitive character (Bruckman, 2006; Lipinski, 2006). The collected material was translated from Chinese into English which further avoid direct connections to certain individuals and need of consent. Registration was only required on the social media platform

Weibo, and the other sites were publicly available which further strengthens that no consent from the individuals taking part in discussions was needed.

3.6 Trustworthiness

To assure quality and trustworthiness in qualitative research, Guba and Lincoln (1985) suggest the criteria credibility, transferability, dependability, and confirmability. These criteria were employed to ensure trustworthiness in the research.

Credibility, which is equivalent to internal validity, is one of the most important aspects of trustworthiness according to Guba and Lincoln (1985). It refers to the congruence of reality and the findings and can be ensured through members evaluating the accuracy. As we decided to take the roles as observers, no member reviewing was considered. However, conducting a digital research enhances the credibility as the researchers observe the information independently from the person posting it, thus minimizing the risk of influencing the accuracy (Kozinets, 2002). As this method allows data collection and interpretation of the material, without affecting the objects being studied, the credibility is further strengthened.

Transferability refers to the applicability of the findings to other contexts and is equivalent to external validity/generalizability (Guba & Lincoln, 1985). The authors further argue that through rich descriptions of the empirical material, and the researcher's interpretation, the transferability is easier to evaluate. Qualitative findings are usually research specific, and the transferability can, therefore, be questioned (Shenton, 2004). Although, collecting material from various platforms may increase the transferability.

Dependability refers to the findings being similar if the research was to be conducted by other researchers in the same context, using the same method and the same participants (Guba & Lincoln, 1985). The authors mean that credibility and dependability are closely related, and that credible research will result in dependability. To strengthen the dependability, each step in the research process is fully described to enable replicate studies ensuring similar results.

Confirmability refers to the findings being representative of the actual material and not the interests, biases and perspectives of the researchers (Guba & Lincoln, 1985). The material was collected from various platforms and the researchers interpreted and analyzed the material jointly which partly reduced biases. The two nationalities of the researchers are also considered to strengthen the confirmability as eventual biases could be questioned.

The assessment criteria have guided this research to ensure trustworthiness throughout the research and its findings. The digital research method and its obtrusiveness is further considered to strengthen the trustworthiness and allowed the researchers to keep their reflexive distance (Bertilsson, 2014).

4. Analysis

This chapter analyzes the empirical materials and introduces the initial findings in a certain structure. The cognitive, affective, and normative perceptions in each brand category of COO and COOW will be shown, while the interactions among the three types of perceptions are also demonstrated throughout the analysis. In the end, a summary of the main points of each brand category and perception type is presented using the form of a table, which helps to summarize and conclude this chapter.

The empirical material is analyzed based on the literature while relating to the research question regarding consumer perception and COO and COOW. The analysis is conducted by abstracting the second cycle coding from the first cycle coding and explaining the process involved. This chapter is organized according to the second cycle codes including perceived quality, emotional connotations, and ethnocentrism and disidentification. Each category of perception includes the three kinds of brands: domestic, mixblood, and foreign.

When processing the empirical material, two types of consumers were identified, rational and irrational consumers. We see rational consumers as those who always choose the feasible alternative that they most prefer (Black, Hashimzade & Myles, 2017), and those who tend to systematically and consistently maximize utility (Zafirovski, 2016). However, many modern economists point out that much decision making is irrational (Greenfield, 2018). Irrational consumers choose an alternative that is not the best (Black, Hashimzade & Myles, 2017) and they systematically fail to maximize utility (Samuelson, 1983). If consumers make choices or conduct actions that are driven by sentiment, instinct, emotion, or passion etcetera, these choices are irrational (Zafirovski, 2016). As such, we call these consumers irrational consumers in this research.

4.1 Perceived Quality

Perceived quality is how consumers judge “the overall excellence or superiority of a product” (Zeithaml, 1988), and it includes design and manufacturing quality that cover the aspects of durability, safety, and reliability etcetera (Adina, Gabriela & Roxana-Denisa, 2015).

4.1.1 Perceived Quality - Domestic Brands

For the domestic brands, China is both the perceived country of origin and country of ownership. The three domestic brands BYD, NIO and BAIC BJEV are analyzed as one entity representing domestic brands as a whole.

Perceived quality is one important aspect of COO. In the empirical material, the components of perceived quality such as safety, technology, and design are mentioned for the domestic brands. The perceptions of perceived quality are quite prominent for domestic brands, and the majority of these comments are more towards negative while some contrasting standpoints are expressed.

The following comments express that the domestic brands BYD and NIO are perceived as quite poor at technology, design, and craftsmanship, which are aspects of perceived quality. These comments illustrate that consumers hold negative perceptions of domestic brands.

[...]BYD is also imitating others... BYD didn't really understand this technology, they may even modify others' program but say that it is self-developed, these are direct evidence of not being good at technology.

BYD as a domestic car brand, the appearance is too ugly, and the craftsmanship is too rough.

[...]The founder of NIO... does not know a thing about the technology... he wants to take shortcuts... he wants to make money but does not willing to spend time, energy, and money on basic research and development. Everything is fast, fast, fast, bragging, bragging, bragging. None of the basic technology belongs to his own company, instead, he buys it from everywhere, then put them together.

Above comments indicate that some quality aspects have to be improved while one comment emphasizes that most aspects of perceived quality should be improved among domestic brands for the people to support them:

I wish domestic brands can be more innovative in design, better in the manufacturing processes, better in technology and functions, more secure and reliable, and providing more confidence for us.

This comment indicates that the domestic brands have to improve many of the components of perceived quality, both design, manufacture, technology and functions, as well as providing reliability and safety before consumers feeling confident enough to actually buy a domestic branded product. For the parts included in perceived quality, technology and design are most commonly mentioned that has to be improved among domestic brands. Although most empirical materials show a negative attitude towards domestic brands with Chinese COO and COOW in terms of perceived quality, some comments are contrasting:

This is the level that a domestic EV should have (quality, design), a car that can replace walking.

In this comment, the design and quality are not perceived negatively as the consumer only expects an EV that can replace walking. But generally, the collected material shows more negative comments than positive ones. This can be explained by that consumers tend to favour products from more developed countries (Verlegh & Steenkamp, 1999). The following comment indicates that Chinese design should not be sold at a high price. Instead, for the money spent a foreign design is favored:

The essence of NIO is that it is designed by Chinese but selling at a price that is designed by foreigners, are you willing to pay for that?

The country of design is especially important for publicly consumed goods (Essoussi & Merunka, 2007) and could be a factor affecting the perception. From this comment, it is visible that consumers think domestic EVs are less favored in terms of design in perceived quality. It shows that consumers hold a negative association towards China as the COO and COOW of the domestic brand.

Although consumers have a tendency to prefer products from more developed foreign countries, this perception can be changed when in contact with a country's products (Verlegh & Steenkamp, 1999). This is illustrated by a comment referring to the domestic car being as visually attractive as a foreign car:

At first I saw that the appearance of this car and it was too eye-catching. If I did not see the label of 'Made by Jianghuai NIO' on the back of the car, I thought it was an imported car! It is still awesome to make a domestic car like this.

This comment indicates that the design of foreign cars is usually better, implying that foreign perceived quality is better. Although, this perception is somewhat changed, as the consumer is happily surprised by the domestic EV brand creating a car with nice design and outlook.

It can be seen that consumers are questioning the design, quality, and value of buying a Chinese brand, and these consumers express their brand perceptions with reasonings and proofs. However, negative perceptions of perceived quality regarding brand image can be changed over time. A brand image is created through the information attached to a brand, and the brand information is formed by brand nodes that previously established in consumers' memory (Keller, 1993). When associations towards a brand is strong and favorable, a positive brand image evolves (Keller, 1993). The following quote implies an initial negative image of the brand that is undergoing a change in terms of associations held to the brand:

BYD is the leader of domestic EV brands. Although BYD used to take the path of low end cars, in the era of new energy, nowadays BYD is not the old BYD anymore!

It can be stated that domestic brands have previously been associated with bad quality, bad design and low value, but now these associations are somewhat undergoing a change as contrasting points are seen in the empirical material. The statement of previous negative connotations can strengthen the fact that the perceived image of domestic EV brands is considered to be improved.

Most comments of the perceived quality aspects mentioned above are rational as the consumers show that they like to choose the feasible alternative that they most prefer (Black, Hashimzade & Myles, 2017) and the views are backed by practical reasons rather than emotional ones.

4.1.2 Perceived Quality - Mixblood Brands

The mixblood brands have a perceived foreign COO and a perceived local COOW regardless of their actual nationality components of COO and COOW. For example, Denza is a joint-venture brand with 50% from BYD and 50% from Daimler, but in the empirical material, the consumers perceive Denza to have a foreign COO and a domestic COOW. The brands representing the mixblood category are Denza, which has a perceived COO of Germany and COOW of China, and NEVS, a perceived COO of Sweden and COOW of China.

In the collected empirical material, most comments are related to both the COO and COOW, and the mother brands behind the mixblood brand as trails of perceived quality. The consumers are positive towards a brand with a foreign background by referring to the mother brand as it provides safety and ensures quality:

Selecting Denza is mainly because of its safety. For example, a pregnant woman bluntly said that the choice of Denza is first of all for the safety, because Daimler's car quality is worthy of trust.

NEVS will continue the spirit of Saab's quality pursuit, it is still very reassuring in terms of quality.

Some consumers value both the foreign and domestic mother brands behind the mixblood brand Denza:

Denza is a pure electric vehicle jointly developed by BYD and Daimler. BYD is mainly responsible for the research and development of the battery system. Mercedes-Benz Daimler is mainly responsible for the design, body, and safety system. It can be said that it is a strong combination.

This comment implies that both foreign and domestic compositions are needed in order to create a strong brand, and that both companies (BYD and Daimler) with different COO contribute to the strengths of Denza.

What is more, the foreign COO of the mixblood EV brand is perceived as assuring the quality. The following comment shows that the “German blood” of Denza is a quality guarantee:

As a "child" of BYD and Daimler, Denza can be said to have the quality guarantee from its German blood from the date of birth.

The perceived quality part of mixblood EV's brand image seem to be positive because, on one hand, consumers relate both its mother brand (e.g. Daimler and BYD) and COO (e.g. Germany) with good quality and safety; on the other hand, the foreign mother brand that has already established positive brand associations among consumers can influence consumers evaluation of the mixblood brand towards a positive perspective. But it's worth to be mentioned that the sample mixblood EV brands are from countries that are more developed than China, thus it can be the reasons that Chinese consumers are more possible to develop positive perceptions of perceived quality.

Further, the comments of mixblood brands in perceived quality is rather rational with examples and explanations. The perceived quality aspect of mixblood EVs is also very prominent among rational consumers.

4.1.3 Perceived Quality - Foreign Brands

Foreign brands are those with a COO and COOW other than the consumer's own country, and Tesla is the representative brand of this category. Generally, the foreign brand mainly receives positive comments regarding the perceived quality. The quality aspects such as technology is frequently mentioned, and they are perceived to be significantly better than that of domestic brands:

Tesla's software technology is like high-speed railway, BYD is like bicycle

It is not only the foreign brand that is positively evaluated, its COO also plays a vital role in the perception of the brand:

We all think of Tesla as a technology company, and America is good at technology.

This quote reflects the technological associations to the foreign brand Tesla, while the COO of Tesla is also perceived to strengthen these associations as there is a match between the product and the country. Roth and Romeo (1992) state that a match between product and country can be beneficial for product evaluation. Apart from the major positive comments, one comment in contrast implying that consumers will not buy foreign products because it's low value for the price:

I still don't think Tesla can replicate its success in US to China. Chinese consumers are different [...] For cars that are more than RMB 300,000, consumers value more about the value/price ratio (high-end, classy), and this is exactly the weakness of model 3.

In terms of brand image, the general perception is favorable both towards the brand Tesla but also towards the COO and COOW, America. The associations towards the brand seem to be "a match" between COO and the product in question, and the foreign brand is favorable in consumer perception of perceived quality. Consumers back their opinions and arguments with some rational

arguments such as how consumers evaluate expensive cars. However, some comments are more emotionally attached where a comparison between Tesla and BYD is made in terms of railway and bicycle.

4.2 Emotional Connotations

Emotional connotations are the emotions that consumers form via direct experiences or indirect experiences towards a country and its brands and products, including the feelings of social status, pride, power, the expression of specific lifestyle, oneself, one's personality, and the fulfillment of self-esteem etcetera. (Verlegh & Steenkamp, 1999; Adina, Gabriela & Roxana-Denisa, 2015).

4.2.1 Emotional Connotations - Domestic Brands

Consumers tend to less often express emotional connotations that include self-expression and social status enhancement etcetera towards domestic EV brands. Among the limited data regarding emotional connotations, there is an obvious pattern of contradiction as both positive and negative comments exist.

Consumers tend to have a negative bias towards products from less developed countries, but this bias may change over time with the advancement of technologies (Adina, Gabriela & Roxana-Denisa, 2015). The empirical material shows that consumers from a less developed country have bias even towards their own country's products, but the development of technology has been changing this bias. For example, some people think affirmatively that domestic EV brands have been developing fast and advanced to a higher class, making them have "face" when driving a domestic EV:

Among those domestic brands, BYD has developed very fast in recent years, especially in EV, as it is one of the best in the country [...] BYD used to have the image of cheap cars in everyone's mind. Now, when driving out a BYD, people feel to have "class" (privileged).

And one consumer even thinks one of the models of BAIC BJEV provides an enhanced social status because the car looks like a foreign car:

EX3 has a feeling of imported and joint venture cars, driving out a car like this makes you have face.

These two examples also show that some consumers construct their emotional connotations on the basis of perceived quality such as technology advancement and design. As the technology of BYD has progressed, consumers feel to have social status when driving a BYD. These consumers are more towards rational consumers as they try to systematically and consistently maximize utility (Zafirovski, 2016) by connecting emotional connotations with perceived quality.

The feeling of affinity can also be developed from the match between a country's brand personality and the consumer's personality (Aaker, 1999). One of the consumers finds resonance between his/her own personality with the edgy EV brand NIO's personality:

I feel that this car (NIO) is like an electronic product. It is suitable for someone like me who is willing to try new things.

Conversely, some of the consumers hold negative perceptions towards domestic EV brands. Even though they think the quality is fine, they still cannot accept the low-end brand image of domestic EV brands. These consumers that value emotions more than utility are irrational consumers. This indicates that in some consumers' mind, the emotional connotations are more important than the perceived quality:

It's not that I don't believe in domestic quality, but the Chinese market is just like this. When people hear that there is a RMB400,000 - 500,000 car from Chery (a low-end domestic car brand), instantly they don't want to buy it [...] Buying a car now must definitely look at the brand. This car (BAIC BJEV) is not such a good brand.

In terms of emotional connotations, it can be concluded that the brand image of domestic EV brands is twofold, and both positive and negative feelings are involved. The positive ones are that domestic brands are developing fast in technology, so the brand image is being improved, while some consumers feel to share the personality with the edgy domestic EV brand. The passive ones mostly concern the general low-end image of domestic brands, and sometimes the emotional connotations can be prioritized over the perceived quality among irrational consumers.

4.2.2 Emotional Connotations - Mixblood Brands

For mixblood brands, the emotional connotations are generally less mentioned by consumers. But among those who express their emotional perceptions, both positive and negative feelings are presented.

Consumers tend to link COO and COOW with the feelings of social status and pride when possessing specific products. In less developed countries, consumers prefer brands from more developed countries as a way to enhance social status, particularly among high social-signaling value products (Aaker, 1999; Verlegh & Steenkamp, 1999; Batra et al., 2000). As EV falls in the product category of high value in social signaling, positively, the empirical material demonstrates that consumer sees the foreign COO as a source to show their social status and to establish social pride:

We Chinese consumers must consider a factor called "face" when buying a car [...] Supported by Daimler's brand, technology, and background that originate from Germany, Denza is 'the second generation of the rich'.

The empirical material also again shows that consumers in general develop emotional connotations, such as the high-class feeling, based on the perceived quality aspects include design and quality of the product:

Choosing Denza is for the quality and the high class [...] When observing the details of Denza, it can see that it really focuses on creating a sense of exquisite luxury [...]

Moreover, the foreign COO can be the source for consumers to express themselves as COO is an expressive factor to signal their ideal personality (Batra et al., 2000). The comment in below demonstrates that consumers detect the personality of the brand from the brand's foreign COO:

There are people in the world who always focus on their careers or hobbies, their lifestyles are different, they like niche products... For the Swedes, they not only love life, but also love nature, and insist on their own unique understanding in building a car [...] (NEVS)

On the contrary, the COO and COOW of mixblood brands can be viewed negatively in the eyes of consumers. Rational consumers think that the combination of foreign COO, which is indicated by the foreign mother brand, and local COOW, which is indicated by the domestic mother brand, do not make the brand itself become high-end, particularly for a newly established brand. Instead, they trace the emotional connotations back to the perceived quality, which include design and logo etcetera:

Denza always gives people a low-end feeling [...] Mercedes-Benz has a high-end feeling right? But Daimler is the parent company of Mercedes-Benz, not the Mercedes-Benz brand itself [...] The Denza brand should be separated from the parent company [...]

It is difficult for consumers to choose a "high-end" brand that was suddenly created out of nothing. The failure of this car is using a new logo that is like BYD at a glance. If the logo is Mercedes-Benz, no one will say anything anymore! [...]

It can be seen that the COO and COOW need to be a match to develop positive emotional connotations. And the simple combination of a well perceived foreign COO and a domestic COOW do not necessarily make consumers perceive the EV brand positively in an emotional perspective. The analysis of emotional connotations also presents that for some rational consumers, they refer to the perceived quality of the EV brand itself before developing emotional connotations. For irrational consumers, they treat the superior foreign COO and mother brand of the mixblood EV as source for emotional connotations.

4.2.3 Emotional Connotations - Foreign Brand

Emotional connotations are quite prominent for foreign brands. Interestingly, “face” is brought up again as one of the significant emotional connotations. Although Chinese consumers think that domestic EV brands are improving in technology, they still prefer EV brands that can give them “face” as a social status enhancer. From the comment below, it can be observed that emotional connotations are more important than perceived quality for some consumers. And these consumers can be called irrational because they put emotions above perceived quality that would maximize utility:

Some of China's rich people look down upon the cars that BYD has made, no matter how good the car is. Those rich people have the money to buy the car (Tesla), so they do not care about money, they just care more about "face" in China.

On the other hand, consumer connects the origin/owner foreign country's image with the EV product and uses the product as an expression of one's lifestyle and attitude. Aaker (1999) stresses the consistency between brand personality and consumer's actual or ideal personality. The similarities in a country's and the target consumer's personality help consumers to develop affinity feeling towards the country and the brand (Adina, Gabriela & Roxana-Denisa, 2015). It is discovered in the data that consumers tend to choose a foreign EV brand because of the brand personality and even the origin/owner country's characteristic:

Choosing Tesla is choosing a life attitude! [...] Tesla provides a product for the new upper class to express and distinguish themselves from others [...] Tesla represents the American spirit of game-changers and interrupters, thus these high-end consumers, who are also game-changers themselves, prefer a brand like Tesla that appears as a game-changer.

In some cases, the emotional connotations are raised up from an individual to a global level. Some people see a bigger picture and they think that supporting the foreign brand Tesla is to help to better change the world:

[...] In my opinion, people need to live in this expectation. If Musk loses, that's his own failure; but if he succeeds, that's the future of the world.

Foreign EV brands are generally favored when it comes to emotional connotations as it is perceived to not only bring “face” and self-expression but also that the established brand nodes in consumers' minds are generally positively towards the COO and COOW for foreign brands with connotations to aspects important for EVs such as technology and design.

4.3 Ethnocentrism & Disidentification

Consumer ethnocentrism is the view of things in which one's own group is centered and referred to (Josiassen, Assaf & Karpen, 2011). Consumer ethnocentrism mainly motivate consumers to adopt domestic products and reject foreign ones (Shimp & Sharma, 1987; Balabanis & Diamantopoulos, 2004). On the contrary, disidentification is identified when consumers oppose to the products and the consumption patterns of their own country.

4.3.1 Ethnocentrism & Disidentification - Domestic Brands

For the domestic brands, there is a strong sense of ethnocentrism and patriotism among consumers. Some consumers say that they simply buy the domestic brands to support the country; some say that they do it not only to strengthen Chinese products in the EV market, but also because they actually like the brand:

Support BYD because BYD is the leader of new energy cars, and because BYD makes Chinese cars strong.

For some consumers, the ethnocentrism can exceed other perception aspects to be the dominant perception. The ethnocentrism is even stronger when it is expressed that they do not favor the foreign brand and they simply reject foreign brands compared with domestic ones:

The domestic brands are supporting the face of the Chinese people all the time. I am not a fan of BYD, but I only buy a national brand car, not that I do not have money, just because I simply do not want to buy joint venture or imported cars.

The comment implies that some consumers place ethnocentrism on top of perceptions. Most comments relate to support China and strengthen its position in the market rather than consumers' preference of a specific domestic brand. The COO and COOW does not bring any specific attributes, nodes or guarantees, but the domestic brands are supported to favor the country. And the consumers who express this strong ethnocentrism perception are more towards irrational consumers given the fact that they have a strong sense of ethnocentrism and value the country more than other practical factors.

In the meantime, rational consumers generate ethnocentrism based on a satisfying perceived quality. The perceived quality is ranked on top of emotional connotations, and when the perceived quality is not acceptable, ethnocentric feelings will be separately evaluated regarding the facts.

Repeated repair, battery mileage suddenly drops to zero, poor customer service, all kinds of small faults... All these make me as a BAIC car owner exhausted! [...] Although I want to support domestic brands, it's too difficult to say love you, BAIC. I can only give up on you. I need a car, not an "ancestor" [...] I can only love others! [...]

Apart from ethnocentrism, disidentification is also demonstrated by some consumers, who question the domestic EV because of technological reasons. But disidentification only accounts for a very small amount of comments in the empirical materials:

All domestic garbage only knows how to use patriotism to deceive consumers' money. Domestic EVs are behind foreign brands more than 100 years! They only know how to brag without having actual technology.

Overall, as the country is more frequently mentioned than a particular brand, the brand image of domestic brands is not only associations to a specific brand, but more importantly how the COO and COOW bring associations to the brand. Rational and irrational consumers develop ethnocentrism differently when rational consumers value ethnocentrism most and irrational consumers value ethnocentrism on the basis of perceived quality.

4.3.2 Ethnocentrism & Disidentification - Mixblood Brands

The ethnocentrism perception is not commonly mentioned among mixblood EV brands. But when brought up, consumers' ethnocentric feelings are concentrated on the domestic COOW of the mixblood brands, and the positive feelings tend to be relatively strong. The ethnocentrism is mainly about what the domestic compositions have achieved through the mixblood EV brand and how can they contribute to make the national industry and the country stronger in the future:

The emergence of this "real joint venture" product (Denza) also reflects that domestic car companies has gained the initiative in car manufacturing [...]

Evergrande's acquisition of NEVS [...] enhance the core competitiveness of China's automobile industry, thus boost the transformation and upgrade of China's automobile industry [...] greatly enlarge the influence of Chinese companies in the global new-energy automobile industry [...] provide more possibilities for China to realize the "car dream", and eventually to realize the "Strong Country's Dream" to become a more powerful country.

From the comments above, it can be observed that consumers track the ethnocentrism from the perceived quality such as technology and manufacturing. It is illustrated that the advancement in manufacturing has enhanced the ethnocentric perceptions. As the domestic part is contributing greatly in the mixblood EV brand's product development, people think this make them feel proud of their country.

But it is worth mentioning that there is still a small part of consumers hold an opposite idea as disidentification. For example, one consumer views the acquisition of a foreign EV brand negatively and points out that this has limited influence towards the development of the country. This type of consumers is quite rational regarding the fact that they emphasize the strength of the EV brand instead of supporting the country pure emotionally:

Buying a foreign company cannot change the characteristic of China: quick, do it, go for it. Always only focus on speed but forget about accumulation.

Generally, the brand image of mixblood brands in terms of ethnocentrism is mainly positive. Emphasis is placed on the Chinese COOW of the mixblood EV brands, while the contribution to the country's EV industry, the nation's own industry, and further the country's power as a whole are stressed. Meanwhile, some disidentifications are also observed among rational consumers.

4.3.3 Disidentification - Foreign Brands

The ethnocentrism and disidentification perceptions coexist among foreign brands. The disidentification perceptions are about recognizing the strength and culture characteristic of the foreign country. Consumers present positive perceptions of foreign EV brand relating to the advantages of its COO and COOW. For instance, Tesla is favored because of the American spirit embedded in the brand and the strong strength of America's industry:

What is the true spirit of the United States? Maybe you will use words like freedom, democracy, openness, etc. What can represent the American spirit? ...For car brands, the most representative is Tesla. It uses pure electric power to refresh our cognition of cars.

Standing behind the 15-year-old Tesla is the century-old American automobile industry, which is the cornerstone of the miracle [...]

COOW can influence consumers' brand attitude if the political and economic systems of foreign country differ a lot compared with their own country (Cheah & Phau, 2015). Previous research explains animosity as "the remnants of antipathy related to previous or ongoing military, political or economic events" (Klein, Ettenson & Morris, 1998, p. 90). We find that animosity exists in Chinese consumers' ethnocentric perceptions towards the foreign EV brands, as the political system varies between China and the US.

Capitalism is all evil, and socialism is superior [...]

Some consumers express their ethnocentrism by referring the admiration of foreign EV brands as blind worship. But such criticisms of blind worship are raised by irrational consumers without valid arguments and seemed like emotions catharsis:

[...] Chinese people are more "strictly demanding" for their domestic brands, but too fond of foreign brands [...] this is such a deep-rooted blind worship towards foreign products.

[...] People who buy this thing only because it is expensive, not because it is good, those people are crazy, there is no need to discuss further.

Moreover, irrational consumers put their ethnocentric feelings before other perceptions by rejecting all foreign brands out of ethnocentrism:

Even Though “foreign farther” (foreign EV brand) is more “handsome”, the biological mother (domestic EV brand) that gives birth to you and raises you up is closer.

Overall, both ethnocentrism and disidentification perceptions are expressed regarding foreign brands. The ethnocentrism perceptions seem to be irrational to some extent. Irrational consumers express their opposition of foreign brands without providing concrete reasons, but simply saying that they just prefer domestic EV brands or criticizing the foreign brand’s country.

4.4 Analysis Summary

To sum up, Chinese consumers’ perceptions towards domestic, mixblood, and foreign EV brands are listed as perceived quality, emotional connotations, ethnocentrism and disidentification in Table 4 as below. In the table, the “+” mark refers to positive perceptions, while “-” refers to negative perceptions.

Table 4. Analysis Summary of Consumer perceptions

	Perceived Quality	Emotional Connotations	Ethnocentrism & Disidentification
Domestic brands	Prominent (-) <ul style="list-style-type: none"> ● Mainly negative ● Perceived quality is very important, particularly among rational consumers ● The quality of domestic brands should be improved ● Low-end domestic EV brand image is being improved 	Not prominent <ul style="list-style-type: none"> ● Both positive & negative perceptions (+) <ul style="list-style-type: none"> ● Have bias, but the technology development of domestic brands is changing the bias ● Resonance with edgy domestic EV brand’s personality ● Rational consumers construct emotional connotations based on perceived quality 	<i>[Most valued perception]</i> Highly prominent (+) <ul style="list-style-type: none"> ● Mostly positive (ethnocentrism) ● Supporting the home country and strengthen its position in the market ● Some consumers like the domestic brand ● Rational consumers generate ethnocentrism based on a satisfying perceived quality ● Irrational consumers place

		(-) <ul style="list-style-type: none"> Irrational consumers reject the low-end brand image even though the quality is fine Irrational consumers put emotions on top of perceived quality 	ethnocentrism on top, they simply reject foreign brands because of ethnocentrism (-) <ul style="list-style-type: none"> A very small number of consumers demonstrate disidentification is demonstrated because of technological reasons
Mixblood brands	<i>[Most valued perception]</i> Prominent (+) <ul style="list-style-type: none"> Mainly positive Consumers refer to both the mother brands and the COO & COOW for their strengths The foreign COO and foreign mother brand perceived as guarantee of quality, safety and risk reducer Rational consumers value the perceived quality 	Not prominent <ul style="list-style-type: none"> Both positive & negative perceptions (+) <ul style="list-style-type: none"> The foreign COO provides social status, social pride, and self-expression Emotional connotations are developed based on perceived quality Irrational consumers treat the superior foreign COO and mother brand of the mixblood EV as a source for emotional connotations The COO and COOW need to be a match to develop positive emotional connotations (-) <ul style="list-style-type: none"> Rational consumers think the foreign COO have limited influence on the brand itself, they trace affective perceptions back to the cognitive aspects (e.g. quality) 	Not prominent (+) <ul style="list-style-type: none"> Mainly positive (ethnocentrism) Positively focus on the domestic COOW The ethnocentrism is mainly about the contribution of the country's EV industry, the nation's whole industry, and the country's power Consumers generate ethnocentrism from the perceived quality Rational consumers emphasize the strength of the EV brand instead of supporting the country pure emotionally (-) <ul style="list-style-type: none"> A small number of consumers express disidentification and view the acquisition of domestic company towards foreign EV brand negatively
Foreign brands	Prominent	<i>[Most valued perception]</i>	Less prominent

	<p>(+)</p> <ul style="list-style-type: none"> Mainly positive General favorable perception towards the foreign COO & COOW A match between the product and the country is important <p>(-)</p> <ul style="list-style-type: none"> One negative perception regarding the low value for money 	<p>Highly Prominent</p> <p>(+)</p> <ul style="list-style-type: none"> Mainly positive “Face” is significant as social status enhancer Irrational consumers value emotional connotations more than perceived quality Connect the foreign COO & COOW with the EV product to express one’s lifestyle, attitude, and personality Affective perception can be raised up to a border global level 	<ul style="list-style-type: none"> Both ethnocentrism & disidentification exist <p>(+)</p> <ul style="list-style-type: none"> Disidentification as recognizing the strength and culture characteristic of the foreign country <p>(-)</p> <ul style="list-style-type: none"> View the foreign COO & COOW negatively because of political and economic differences Irrational consumers regard the support of foreign EV brands as blind worship Irrational consumers put ethnocentrism first by rejecting all foreign brands
--	--	--	--

5. Discussion

The analysis of the consumer perception of COO and COOW among three types of EV brands has been conducted. Some major patterns of consumer perceptions are observed, and the prominent and positive perceptions in each brand category are found. In this chapter, we will further discuss the cognitive, affective, and normative perceptions respectively based on the analysis, and combine the prominent and positive perceptions to find out the most valued perceptions in each brand category. We will also look into the interrelationship of the three perceptions closely. The three perceptions are the main themes that abstracted from the second codes in the analysis and related to the literature.

This discussion aims to provide a deeper understanding of what are the main perceptions of Chinese consumers towards EV brands with different COO and COOW, what are the most valued aspects in each brand category that consumer perceive, and what is the interrelationship among the cognitive, affective, and normative perceptions. After that, an enhanced theoretical framework will be presented based on the critical findings in the discussion. This chapter helps to realize the research aim, which is to reveal how consumers perceive the brand image of EVs in terms of COO and COOW through expanding the understanding of COO and COOW in consumer perceptions and offering insights to the EV industry from the consumer's perspective.

5.1 General Discussion

First of all, generally, the perceived quality, emotional connotations, and ethnocentrism and disidentification appear to be at different levels of significance among the three brand categories. In domestic brands, perceived quality and ethnocentrism are more prominent; In mixblood brands, perceived quality is more obvious; In the foreign brand, perceived quality and emotional connotations are more apparent. Moreover, both positive and negative perceptions are expressed by the consumers in each brand category, within which there are patterns of contradicting perceptions in different degrees. The perceived quality is more towards negative and the ethnocentrism perception is more positive regarding domestic brands; For mixblood brands, perceived quality and ethnocentrism aspects are more affirmative while the emotional aspect is divided into two extremes; For foreign brands, perceived quality and emotional perceptions seem to be more positive, and ethnocentrism that is negative towards the foreign brand is more obvious.

Secondly, combining the level of prominence with the degree of positive/negative, the most valued aspects, which are both prominent and positive in each brand category can be detected. In domestic EV brands, consumers treat ethnocentrism as most valuable; In mixblood brands, the perceived quality aspect is valued most; Regarding foreign brands, emotional connotations are seen as most valued.

Thirdly, the divide of rational and irrational consumers is evident in terms of perceptions. Consumers perceive the EV brands with different COO and COOW differently based on consumers' own viewpoints. Some consumers are rational as they try to maximize utility, some

are irrational consumers because their choices and perceptions are driven by emotions. Rational and irrational consumers value and prioritize different kinds of perceptions, which will be discussed further in each section respectively.

5.2 Cognitive Perception

For the cognitive evaluation, perceived quality with components such as design and manufacturing quality, safety, and reliability are included (Adina, Gabriela & Roxana-Denisa, 2015). The cognitive evaluation is seen among domestic, mixblood, and foreign brands, but is the most valued in the mixblood brands as the perception is both prominent and positive.

Consumers refer to both the mother brands and the COO and COOW for their advantages when perceiving mixblood brands. The foreign COO and domestic COOW both play the role of providing guarantee for perceived quality that forms the cognitive perceptions. But the foreign COO and foreign mother brand are seen more positively as the contributors of cognitive perception. Meanwhile, some consumers also value the domestic contributions to the mixblood brands and the increased perceived quality among domestic mother brands and COOW. Underlying reasons for why the foreign COO are perceived to bring a quality guarantee, could be that consumers tend to favor products from more developed countries or where consumers perceive a match between a country's specialties and the product in question (Roth & Romeo, 1992; Verlegh & Steenkamp, 1999). Also, a match between the foreign COO and domestic COOW needs to be identified before consumers develop positive perceptions towards mixblood brands.

For rational consumers, generally, the cognitive aspect is highly important. The cognitive perception has to be fulfilled or be positively perceived for rational consumers to develop other types of perceptions. And they tend to refer other kinds of perceptions back to the cognitive aspects. Quality is mentioned among domestic brands as rational consumers seek to maximize utility (Zafirovski, 2016), however, the quality is usually not perceived positively, and this can be a reason for rational consumers value mixblood or foreign brands over domestic ones. On the other hand, for irrational consumers, feelings and emotions are drivers for them and perceived quality is not as highly evaluated. Thus, the cognitive aspect is not as important as other perceptions for irrational consumers.

Our findings are in line with previous literature stating that consumers evaluate the brand positively because the brands and products are from more developed countries or there is a perceived match between product and country. What is new is that, how consumers value COO and COOW depend on their rationality. For rational consumers, the cognitive aspects that includes quality is more important than other perceptions, however, the match and established connotations towards a country or a brand still serve as a guarantee of quality.

5.3 Affective Perception

For the affective aspect, emotional connotations such as feelings of status, pride or self-expression are included (Adina, Gabriela & Roxana-Denisa, 2015). The affective perceptions are seen among domestic, mixblood, and foreign brands, but are most valued for foreign brands with prominent and positive presence.

Consumers mention affective perceptions that contain emotional connotations of social status, personality, and “face” as important elements, and these are most commonly seen for foreign brands. Even though consumers think that domestic brands are improving the quality, they still prefer a foreign brand that will give them “face” and social status as emotional connotations in affective perceptions. Consumers also connect the foreign COO and COOW with the EV product to express their lifestyle, attitude, and personality. The reason why consumers prefer foreign COO and COOW could be that there is a match between a country’s brand personality and consumer personality, making them value foreign brands higher (Aaker, 1999). For the domestic brands, the affective aspect is usually perceived negatively. For the mixblood brands, the foreign COO brings affective value to the brand, making the brand perceived much more positively.

For rational consumers who seek for the best alternative that maximizes their benefits, the affective evaluation is less valuable than the cognitive one but still something that they value. If they seek to maximize the benefits of their choice, a foreign brand will give them social status, but the brand has to be of good quality and design for them to value as the social status enhancer. The foreignness of COO and COOW does not always make the brand high-end or act as a social status enhancer, instead rational consumer link affective aspects back to the cognitive ones.

However, for irrational consumers, the affective perception can overwhelm the cognitive perception. Irrational consumers think the feeling of social status and “face” is more important than the quality as emotions drive their choices (Samuelson, 1983).

The findings of affective perceptions are also in line with previous literature regarding emotional connotations. In the Chinese context, the term “face” can also be included in affective perceptions as it relates to the status enhancing perception. In terms of COO and COOW, the foreign brands enjoy most positive affective perceptions as the foreign country or brand gives consumers social status. And the social status is more commonly mentioned among irrational consumers.

5.4 Normative Perception

For the normative aspect, the feeling of ethnocentrism and disidentification is included. The normative aspects refer to personal and social values that ethnocentrism and disidentification build upon. Ethnocentrism motivate consumers to support domestic products and reject foreign ones (Shimp & Sharma, 1987; Balabanis & Diamantopoulos, 2004), while disidentification make consumers resist brands and products of their own country.

Normative perception is most valued among domestic brands as it is both prominent and positive towards consumers' own country. The positive normative perception (ethnocentrism) and negative one (disidentification) are both found in mixblood and foreign brands but are less prominent. The normative aspect is most valued in domestic brands where consumers support domestic brands to support the country or the country's position in the EV market.

Irrational consumers place the support for the country on top of other practical factors and even reject all foreign brands to show their support, thus they see normative perception as most important. For rational consumers, they develop normative perception based on cognitive perception. Rational consumer based the ethnocentrism towards domestic brands on a positive perceived quality, and they evaluate the specific EV brand instead of backing the country pure emotionally.

The normative aspects include ethnocentrism and disidentification in literature is found in our study. Previous research state that consumers in more developed countries tend to prefer domestic products, and this is found true for Chinese consumers in terms of cognitive and affective perceptions. What's new is that the irrational consumers have such a strong sense of normative perception of ethnocentrism, thus they tend to favor domestic brands. The domestic brands are preferred for the sake of them being domestic and not necessarily because of the quality. The irrational consumers dominate the empirical material when it comes to normative values.

5.5 Interrelationship of Cognitive, Affective & Normative Perceptions

How consumers value cognitive, normative or affective among domestic, mixblood and foreign brands depend heavily on their rationality. Different priorities are attached to different perceptions according to consumer rationality, while the interrelationship of the cognitive, affective, and normative perceptions varies accordingly.

Rational consumers provide arguments for choosing the best alternative to maximize their benefits, and this is most commonly related to the cognitive aspects. Rational consumer value the cognitive perception significantly. They generate affective and normative perceptions according to the cognitive aspect, and they also trace the affective and normative perceptions back to cognitive perceptions. Generally, in this research, rational consumers prioritize cognitive perception, over affective and normative ones. There is a leading and tracing relationship between cognitive and affective perceptions, and between cognitive and normative perceptions.

For irrational consumers, they present opinions that are emotionally based, and normative aspects are perceived as most important. Irrational consumers put normative aspects first, then they place affective perception ahead of cognitive. In their perception, the hierarchy from top to down is normative, affective, and cognitive respectively.

But to some extent, irrational consumers also develop affective perceptions from cognitive ones, and trace affective perceptions back to cognitive ones. One example is that they see the superior foreign COO and mother brand of the mixblood EV brand as a source of positive affective perceptions, while the superior foreign COO and mother brand already indicate positive cognitive perceptions. Irrational consumers generate normative perceptions from cognitive perspectives as well. For example, the domestic EV brand BYD with advanced technology makes both rational and irrational consumers feel proud of their country. However, irrational consumers do not track normative perceptions back to cognitive aspects, and they can simply stand by a domestic EV brand out of ethnocentrism even if the domestic brand is perceived as bad quality.

5.6 The Enhanced Theoretical Framework

After analyzing and discussing the empirical material in detail, major complements can be made to expand the original theoretical framework based on the findings. Most importantly, the interplay among cognitive, affective, and normative perceptions is added.

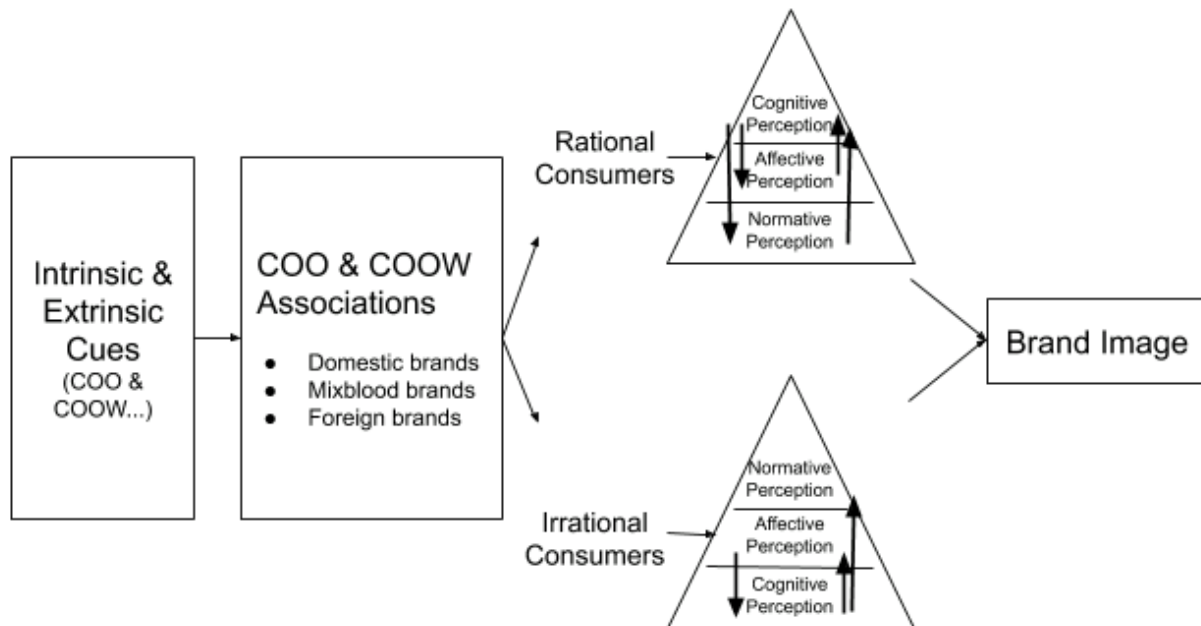


Figure 2. The Enhanced Theoretical Framework

In general, for rational consumers, cognitive perception is most valued, and it is ranked first. Cognitive perception can lead to affective and further normative perceptions, whilst affective and normative perceptions can be traced from cognitive ones. The interaction among cognitive, affective and cognitive perception can be seen and expressed by arrows in both bottom-up and top-down directions.

For irrational consumers, the normative perception can overwhelm affective and then cognitive perception. This makes normative perception on top of the layers, affective ranks next, and cognitive at the bottom. With the fact that consumers develop affective perceptions according to cognitive aspects, and affective perspectives can be traced back to cognitive ones, arrows can be drawn to express these two-way relationships as well. But the relationship between cognitive perception and normative perception is only one-way from cognitive to normative, because cognitive perception can develop the normative one, but the normative perception cannot be traced back to the cognitive one.

However, it needs to be pointed out that this interplay among the three perceptions is not absolute. These interactions are observed as a general phenomenon but not a definite truth in all conditions.

6. Conclusion

This chapter integrates the major findings of this study based on the analysis and discussion of empirical materials. Main conclusions are presented, key theoretical contributions and managerial implications are discussed, while limitations and suggestions for further research are indicated.

This study has explored the consumer perceptions of COO and COOW among EV brands by using the theoretical framework of consumer perception. It has generated new findings to expand the theoretical framework with regards to the research question: How do Chinese consumers perceive the image of electric vehicles (EV) brands in terms of country of origin (COO) and country of ownership (COOW) in the Chinese EV market?

To reach the aim of this study, the empirical material was obtained by conducting digital research in the Chinese context, intending to generalize insights and understandings for consumer perception of COO and COOW. The material was analyzed with the guidance of the related theories. We saw this research as exploratory and focused on expanding the understanding of consumer perceptions towards the COO and COOW and towards the EV sector. In light of the aim, the emphasis was put on providing theoretical and managerial implications to COO and COOW research and to EV consumer studies.

6.1 Main Conclusion

First of all, different significant aspects in different brand categories are found by combining the prominence and the positivity in consumer perceptions. It can be concluded from the analysis that: (a) For the domestic brands, normative perceptions are most valued. The Chinese consumers have a strong sense of ethnocentrism and they support the domestic brands mainly to support the country. (b) For the mixblood brands, the cognitive perception is most salient. Consumers refer to both the mother brand and the COO & COOW for the cognitive advantages. In particular, the foreign components of mixblood brands contribute as guarantee of cognitive evaluations such as quality, design, and manufacturing. (c) Lastly, for the foreign brands, the affective aspects are most valuable. The Chinese consumers like foreign brands because they give them “face” and a sense of social status when using the car. Although these are the most prominent aspects for each brand category, there is a blur boundary of significance. Cognitive, affective, and normative perceptions can be seen in all brand categories but to a varied extent.

Secondly, the perception of COO and COOW varies in different brand categories. In domestic brands and foreign brands, the COO and COOW are almost equivalent respectively, thus they are more or less seen as one by consumers. Mainly in mixblood brands, the different perceptions between COO and COOW can be distinguished. In mixblood brands, the foreign COO is emphasized by Chinese consumers as it greatly influences the perception of the mixblood brand cognitively (e.g. technology, design) and affectively (e.g. face, social status). But the foreign COO is viewed to be most valuable for the cognitive aspects. The domestic owner (COOW) is attached

with great importance mainly in the normative aspect (e.g. ethnocentrism) when consumers think that the presence and contribution of the domestic owner are signs of gaining power for their motherland. However, some perceive a mismatch between the COO and COOW if the image of the origin country differs a lot from the owner country's image, and this is particularly prominent in the affective perceptions. The consumers believe that a "high-end" brand cannot be made by simply combining a superior foreign COO and a domestic COOW, therefore a match between the COO and COOW is needed for the perceptions to stay positive.

Thirdly, the interrelationship among cognitive, affective, and normative perceptions is prominently observed and varies depending on consumer rationality. The interrelationship is twofold. For rational Chinese consumers, the cognitive aspect is attached with the greatest importance. Cognitive perception is placed on top among the three perceptions as it can develop affective feelings, while affective perceptions can be traced back to cognitive ones. Meanwhile, cognitive perceptions can also cause normative perceptions and normative feelings can be returned to cognitive ones. For irrational Chinese consumers, normative perceptions appear to be on top, the next is affective, and then is cognitive perception. Chinese consumers value the support of their own country so much that they put it above other feelings, while affective aspect is also significant as these irrational consumer value social status and self-expression.

In conclusion, different most valued perceptions are found among EV brands with different COO and COOW, while the distinguish between COO and COOW perceptions is observed in mixblood brands. Apart from that, there is an interplay among the perceptions where rational and irrational consumers place different emphasizes and connections.

6.2 Contributions

6.2.1 Theoretical Contributions

Based on the theoretical framework that is generated from previous research of brand image, country of origin (COO), country of ownership (COOW), and consumer perception, this study has explored consumer perception of brand image in COO and COOW by looking into the EV industry in the context of Chinese EV market.

Through the exploration of consumer perceptions in cognitive, affective, and normative levels, this research is the first to study consumer perception towards COO and COOW in the EV category. It provides a deeper understanding of consumer perception in COO by taking out the element of COOW to combine with COO, while bringing forward the interrelationship of the cognitive, affective, and normative perceptions among rational and irrational consumers. Moreover, by putting the research context in China, it adds to the understanding of the Chinese market and Chinese consumers. Therefore, this research contributes not only to enhance the literature of COO and COOW in consumer perceptions, to the EV industry from the consumer's perspective, but also to the Chinese market as a whole. Further, it also produces contributions to the general study of COO, consumer perception, and international marketing.

By analyzing and discussing the empirical material, findings have been proposed to enhance the theoretical framework. The research has developed the theoretical model by introducing the interrelationship of cognitive, affective, and normative perceptions among rational and irrational consumers, stating that rational and irrational consumers have different prioritizations and perception interconnections. In this way, this study has provided a new angle to understand consumer perceptions of COO and COOW and opened new possibilities for scholars to discuss the interrelationship among consumer perceptions in different contexts and different product categories.

6.2.2 Managerial Implications

The managerial implication of this study is threefold. Firstly, through the comprehensions of how consumers perceive the COO and COOW, it helps EV companies and marketing professionals to understand the consumer perception process, and to utilize their COO and COOW cues to facilitate positive consumer perceptions, thus, to improve brand image.

Secondly, by uncovering the most valued perceptions of COO and COOW in domestic, mixblood, and foreign brands, with the interrelationship in consumer perceptions among rational and irrational consumers, this research has provided the possibility for different EV brands to take advantage of consumer perception by putting focus on the aspect that different consumers value most. As this is a generalizing study, the insights can also be adopted by marketing managers, who may use different marketing strategies according to the COO and COOW of their brands to target rational or irrational consumers.

Thirdly, to a wider range, the insights of consumer perception in COO and COOW generated from this research can help governments and public organizations to improve the adoption of EVs, thus, to contribute to emission reduction and sustainable development.

6.3 Limitations and Further Research

Throughout this research, the limitations were shown along with the research methodology. In this study, the researchers' interpretation of the empirical material is the key to select, extract, analyze, and discuss the material. Based on the subjectivity, there is a possibility that not all comments regarding consumer perception towards COO and COOW can be obtained or presented. Besides, risks exist in the researchers' interpretation of the empirical material because consumers' meanings may not be absolutely understood or demonstrated.

What is more, the context of this research provides an environment to study consumer perception, and the empirical material being collected from the Chinese market provides a strength for this particular context. However, the special market environment and consumer culture in China may influence the applicability to all contexts, thus limiting the applicability of the research results to some extent.

Further, the representativeness of chosen EV brands is limited. There are three example EV brands for domestic brands representing high, medium, and low market positioning. However, the representative brands for the mixblood and foreign brand are not so many to represent each market positioning because of the limited number of EV brands established in China. In addition, the example mixblood and foreign EV brands all have the COO and COOW from a more developed country compared with the target consumer's country, this may influence the research results to some extent. The choice of mixblood brands and the foreign brand may also affect the result of this study as particular values are attached to certain countries and brands by Chinese consumers.

Based on the limitations stated above, further research can be conducted to complement or extend this research. In the first place, other EV markets can be studied to testify and enhance the theoretical framework of consumer perceptions towards and COO and COOW. The different development levels of origin country or owner's country compared with the consumer's own country may lead to different research results. Secondly, for mixblood brands, the mother brand, including the mother brands representing the COO and the COOW respectively are frequently mentioned by consumers. As this research only focuses on COOW and COO, and it does not look deep into the mother brand, the consideration of how mother brands interact with COO and COOW in consumer perceptions may be interested to research. Thirdly, with the limitations of representative brands, more consumer insights are possible to be generated along with the growth of EV markets and the emergence of more EV brands with different market positionings. The research of representative brands covering the varying market positionings may provide broader and more thorough understandings of consumer perceptions towards COO and COOW.

References

- Aaker, D. (1991). *Managing Brand Equity: Capitalizing on the Value of a Brand Name*, New York: The Free Press.
- Aaker, J.L. (1999). The Malleable Self: The Role of Self-Expression in Persuasion. *Journal of Marketing Research*, Vol. 36, pp. 45-57. <https://doi.org/10.2307/3151914>
- Acharya, C. & Elliott, G. (2001). An Examination of the Effects of ‘Country-of-Design’ and ‘Country-of-Assembly’ on Quality Perceptions and Purchase Intentions. *Australasian Marketing Journal (AMJ)*, Vol. 9, pp. 46-60. [https://doi.org/10.1016/S1441-3582\(01\)70166-8](https://doi.org/10.1016/S1441-3582(01)70166-8)
- Adina, C., Gabriela, C. & Roxana-Denisa, S. (2015). Country-of-Origin Effects on Perceived Brand Positioning. *Procedia Economics and Finance*, Vol. 23, pp. 422-427. [https://doi.org/10.1016/S2212-5671\(15\)00383-4](https://doi.org/10.1016/S2212-5671(15)00383-4)
- Alexa. (2019a). Qq.com Traffic Statistics, Available Online: <https://www.alexa.com/siteinfo/qq.com> [Accessed 4 April 2019].
- Alexa. (2019b). Weibo.com Traffic Statistics, Available Online: <https://www.alexa.com/siteinfo/weibo.com> [Accessed 4 April 2019].
- Alvesson, M. & Sköldbberg, K. (2009). *Reflexive Methodology: New vistas for qualitative research*, 2nd ed. London: SAGE Publications
- Askegaard, S. & Ger, G. (1998). Product-country Images: Towards a Contextualized Approach. *European Advances in Consumer Research*, Vol. 3, pp. 50-58.
- Autohome. (2019). Autohome Inc. Announces Unaudited Fourth Quarter and Full Year 2018 Financial Results. Available Online: <http://ir.autohome.com.cn/static-files/095ae234-d799-47ba-8a23-6c58ca7710df> [Accessed 3 April 2019].
- BAIC. (n.d.). About BAIC Group. Available Online: <http://en.baicgroup.com.cn/index.php?r=index/default/cate&id=109&tid=104> [Accessed 8 April 2019].
- BAIC BJEV. (n.d.). Available Online: <http://www.bjev.com.cn/index.html> [Accessed 8 April 2019].
- Balabanis, G. & Diamantopoulos, A. (2004). Domestic Country Bias, Country-of-Origin Effects, and Consumer Ethnocentrism: A Multidimensional Unfolding Approach. *Journal of the Academy of Marketing Science*, Vol. 32, pp. 80-95. <https://doi.org/10.1177/0092070303257644>

Balabanis, G. & Diamantopoulos, A. (2011). Gains and Losses from the Misperception of Brand Origin: The Role of Brand Strength and Country-of-Origin Image, *Journal of International Marketing AMA*, Vol. 19, No. 2, pp. 95–116.

Batra, R., Ramaswamy, V., Alden, D., Steenkamp, J. & Ramachander, S. (2000). Effects of Brand Local and Nonlocal Origin on Consumer Attitudes in Developing Countries. *Journal of Consumer Psychology* vol. 9, pp. 83-95. https://doi.org/10.1207/S15327663JCP0902_3

Berger, P. L. & Luckmann, T. (1966). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. New York: Penguin Books Ltd.

Berman, B. (2019). China is Building Too Many Electric Cars. InsideEVs, 18 January, Available Online: <https://insideevs.com/china-too-many-electric-cars/> [Accessed 29 March 2019].

Bertilsson, J. (2014). Critical Netnography: Conducting Critical Research Online, in E. Jeanes and T. Huzzard (eds), *Critical Management Research: Reflections from the field*, London: SAGE Publications, pp.135-152.

Black, J., Hashimzade, N. & Myles, G. (2017). *A Dictionary of Economics* (5th edition). Oxford: Oxford University Press.

Bloomberg the Company & Its Products. (2019a). Bitauto Holdings Ltd. Available Online: <https://www.bloomberg.com/profile/company/BITA:US> [Accessed 4 April 2019].

Bloomberg the Company & Its Products. (2019b). Sohu.com Ltd. Available Online: <https://www.bloomberg.com/quote/SOHU:US> [Accessed 4 April 2019].

Bloomberg the Company & Its Products. (2019c). Tencent Holdings Ltd. Available Online: <https://www.bloomberg.com/quote/TCEHY:US> [Accessed 4 April 2019].

BloombergNEF. (2019). Electric Vehicle Outlook 2018, Bloomberg, Available Online: <https://about.bnef.com/electric-vehicle-outlook/#toc-download> [Accessed 29 March 2019].

Bryman, A. (2012). *Social research methods*, 4. ed. Oxford: Oxford University Press.

Bruckman, A. (2006). Teaching Students to Study Online Communities Ethically, *Journal of Information Ethics*, Vol. 15, no. 2, pp. 82-98.

BYD Auto, n.d.a. Available Online: <http://www.bydauto.com.cn/> [Accessed 8 April 2019].

BYD, n.d.b. About the Company. Available Online: <http://www.byd.com/en/CompanyIntro.html> [Accessed 8 April 2019].

BYD, n.d.c. Passenger vehicles. Available Online: <http://www.byd.com/en/car.html> [Accessed 30 March 2019].

Caliandro, A. & Gandini, A. (2017). *Qualitative Research in Digital Environments: A Research Toolkit*, New York/London: Routledge.

Cendrowski, S. (2017). Tesla Takes Off in China, *Fortune*. 7 June 2017. Available Online: <http://fortune.com/2017/06/07/fortune-500-tesla-china/> [Accessed 26 April 2019].

Czepiec, H. & Cosmas, S. (1983). Exploring the meaning of made in: a look at national stereotypes, product evaluations, and hybrids, paper presented at Annual Meeting of the Academy of International Business, San Francisco, CA.

Chang, H., Kwak, H., Puzakovac, M., Park, J. & Smite, E.G. (2015). It's no longer mine: the role of brand ownership and advertising in cross-border brand acquisitions. *International Journal of Advertising*, Vol. 34, No. 4, pp. 593-620.

Cheah, I. & Phau, I. (2015), "Effects of 'owned by' versus 'made in' for willingness to buy Australian brands", *Marketing Intelligence & Planning*, Vol. 33 No. 3, pp. 444-468.

Cheng, E. (2018). Tesla's China factory is set to begin production late next year, Shanghai government says, *CNBC*. 5 December 2018. Available Online: <https://www.cnbc.com/2018/12/06/teslas-china-factory-set-to-begin-production-late-next-year.html> [Accessed 26 April 2019].

China Internet Watch. (2019). Weibo monthly active users grew to 462 million in Dec 2018, 93% on mobile, 6 March 2019, Available Online: <https://www.chinainternetwatch.com/28566/weibo-fiscal-2018/> [Accessed 4 April 2019].

Chung, K., Youn, C. & Lee, Y. (2014). The Influence of Luxury Brands' Cross-Border Acquisition on Consumer Brand Perception. *Clothing and Textiles Research Journal*, Vol. 32, No. 4, pp. 219-234.

Denza. (n.d.). Denza Brand. Available Online: <https://www.denza.com/portal/page/index/id/8.html> [Accessed 31 March 2019].

Dichter, E. (1962). The World Customer. *Harvard Business Review*, Vol. 40, pp. 394-397.

Dicks, B. (2012). *Digital qualitative research methods*. Los Angeles: SAGE

Dobni, D. & Zinkhan, G.M. (1990). In Search of Brand Image: A Foundation Analysis. *Advances in Consumer Research*, Vol. 17, pp. 110-119

EV Rater. (2019). The Electric Vehicle List. Available Online: <https://evrater.com/evs> [Accessed 29 March 2019].

Easterby-Smith, M., Thorpe, R. & Jackson, P.R. (2015). *Management and Business Research*, 5th ed. Thousand Oaks: SAGE Publications.

- Essoussi, H.L. & Merunka, D. (2007). Consumers' product evaluations in emerging markets: Does country of design, country of manufacture, or brand image matter? *International Marketing Review*, Vol. 24, pp. 409-426. <https://doi.org/10.1108/02651330710760991>
- European Commission. (2019). Electric vehicles. 7 April, Available Online: https://ec.europa.eu/transport/themes/urban/vehicles/road/electric_en [Accessed 7 April 2019].
- European Environment Agency. (2018). EEA report confirms: electric cars are better for climate and air quality. 22 November 2018, Available Online: <https://www.eea.europa.eu/highlights/eea-report-confirms-electric-cars> [Accessed 7 April 2019].
- Eysenbach, G., & Till, J.E. (2001). Ethical issues in qualitative research on internet communities. *BMJ: British Medical Journal*, Vol. 323 (7321), pp. 1103-1105
- Fetscherin, M. & Toncar, M. (2010). The effects of the country of brand and the country of manufacturing of automobiles: an experimental study of consumers' brand personality perceptions. *International Marketing Review*, Vol. 27, pp. 164-178. <https://doi.org/10.1108/02651331021037494>
- Fong, C.M., Lee, C.L. & Du, Y.Z. (2014). Consumer Animosity, Country of Origin, and Foreign Entry-Mode Choice: A Cross-Country Investigation. *Journal of International Marketing*, Vol. 22, No. 1, pp. 62-76.
- Forbes. (2018). The World's Most Innovative Companies. Available Online: <https://www.forbes.com/innovative-companies/#708cc2c01d65> [Accessed 26 April 2019].
- Goffman, E. (2003). On Face-Work: An Analysis of Ritual Elements in Social Interaction. *Reflections*, Vol. 4, pp. 7-13
- Greenfield, H. (2018). On Rationality (or Lack Thereof) in Economics. *Academic Questions*, Vol. 31, No. 4, pp. 522-523.
- Guba, E. G. & Lincoln, Y. S. (1985). *Naturalistic Inquiry*, Newbury Park, CA: SAGE Publications.
- Guba, E. G. & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In: N. K. Denzin & Y. S. Lincoln (eds), *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage, pp. 105-117.
- Han, C.M. & Terpstra, V. (1988). Country-of-Origin Effects for Uni-National and Bi-National Products, *Journal of International Business Studies*, Vol. 19, No. 2, pp. 235-255.
- Hamzaoui, L. & Merunka, D. (2006). The impact of country of design and country of manufacture on consumer perceptions of bi-national products' quality: an empirical model based on the concept of fit, *Journal of Consumer Marketing*, Vol. 23 No. 3, pp. 145-155.

- Hertzke, P., Müller, N., Schenk, S. & Wu, T. (2018). The global electric-vehicle market is amped up and on the rise. McKinsey & Company, May, Available Online: <https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/the-global-electric-vehicle-market-is-amped-up-and-on-the-rise> [Accessed 29 March 2019].
- Herz, M. and Diamantopoulos, A. (2017). I use it but will tell you that I don't: consumers' country-of-origin cue usage denial. *Journal of International Marketing*, Vol. 25, pp. 52-71. <https://doi.org/10.1509/jim.16.0051>
- Hox, J. & Boeije, H. (2005). Data Collection, Primary vs. Secondary, *Encyclopedia of Social Measurement*, Vol. 1, pp. 593-599
- Hui, M.K. & Zhou, L. (2003). Country-of-manufacture effects for known brands. *European Journal of Marketing*, Vol. 37, pp. 133-153. <https://doi.org/10.1108/03090560310458664>
- InsideEVs. (2019). Which Chinese Automakers Hit EV Sales Targets In 2018? 4 February 2019, Available Online: <https://insideevs.com/news/342552/which-chinese-automakers-hit-ev-sales-targets-in-2018/> [Accessed 30 March 2019].
- Irle, R. (2019). Global EV Sales for 2018 – Final Results. EV-volumes.com, Available Online: <http://www.ev-volumes.com/country/total-world-plug-in-vehicle-volumes/> [Accessed 29 March 2019].
- Jansson, J., Nordlund, A. & Westin, K. (2017). Examining drivers of sustainable consumption: The influence of norms and opinion leadership on electric vehicle adoption in Sweden. *Journal of Cleaner Production*, Vol. 154, pp. 176-187
- Johansson, U., Koch, C., Varga, N. & Zhao, F. (2018). Country of ownership change in the premium segment: consequences for brand image, *Journal of Product & Brand Management*, Vol. 27, No. 7, pp.871-883.
- Josiassen, A., Assaf, A.G. & Karpen, I.O. (2011). Consumer ethnocentrism and willingness to buy: Analyzing the role of three demographic consumer characteristics. *International Marketing Review* vol. 28, pp. 627-646. <https://doi.org/10.1108/02651331111181448>
- J.P. Morgan. (2018). Driving into 2025: The Future of Electric Vehicles. 10 October 2018, Available Online: <https://www.jpmorgan.com/global/research/electric-vehicles> [Accessed 7 April 2019].
- Keller, K.L. (1993). Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. *Journal of Marketing*, Vol. 57, pp. 1-22
- Keller, K.L., Apéria, T. & Georgson, M. (2011). Strategic brand management - A European perspective, 2nd ed. Pearson Education Limited.

- Klein, J., Ettenson, R. & Morris, M. (1998). The Animosity Model of Foreign Product Purchase: An empirical test in the People's Republic of China. *Journal of Marketing*, Vol. 62, No. 1, pp. 89-100.
- Koetse, M. (2017). An Introduction to Sina Weibo: Background and Status Quo, What's on Weibo, April 2017, Available Online: <https://www.whatsonweibo.com/sinaweibo/> [Accessed 4 April 2019].
- Koubaa, Y. (2008). Country of origin, brand image perception, and brand image structure. *Asia Pacific Journal of Marketing and Logistics*, Vol. 20, pp. 139-155.
<https://doi.org/10.1108/13555850810864524>
- Kozinets, R.V. (2002). The Field Behind the Screen: Using Netnography for Marketing Research in Online Communities. *Journal of Marketing Research*, Col. 39, pp. 61-72.
<https://doi.org/10.1509/jmkr.39.1.61.18935>
- Kozinets, R.V. (2010). Netnography: Doing ethnographic research online, London: SAGE Publications.
- Kozinets, R.V., Dolbec, P-Y. & Earley, A. (2014). Netnographic Analysis: Understanding Culture Through Social Media Data in Flick, U (eds) *The SAGE Handbook of Qualitative Data Analysis*, London: SAGE Publications, pp. 262-275.
- Kubala, M. (2017). Autohome: The Road To Becoming The No. 1 Automotive Portal in China, Seeking Alpha, 28, February, Available Online: <https://seekingalpha.com/article/4050358-autohome-road-becoming-1-automotive-portal-china> [Accessed 3 April 2019].
- Larson, P., Viáfara, J., Parsons R. & Elias, A. (2014). Consumer attitudes about electric cars: Pricing analysis and policy implications. *Transportation Research Part A*, Vol. 69, pp. 299-314.
- Leclerc, F., Schmitt, B.H. & Dubé, L. (1994). Foreign Branding and Its Effects on Product Perceptions and Attitudes. *Journal of Marketing Research*, Vol. 31, pp. 263-270.
<https://doi.org/10.2307/3152198>
- Leung, L. (2015). Validity, Reliability, and Generalizability in Qualitative Research, *Journal of Family Medicine & Primary Care*, Vol. 4, No. 3, pp.324–327
- Li, J.J., & Su, C. (2007). How face influences consumption: A comparative study of American and Chinese consumers, *International Journal of Market Research*, Vol. 49 (2), pp. 237-256
- Li, Z.G., Murray, L.W. & Scott, D. (2000). Global Sourcing, Multiple Country-of-Origin Facets, and Consumer Reactions. *Journal of Business Research*, Vol. 47, pp. 121-133.
[https://doi.org/10.1016/S0148-2963\(98\)00061-7](https://doi.org/10.1016/S0148-2963(98)00061-7)

- Li, W. & Wyer, R. (1994). The role of country of origin in product evaluations: informational and standard-of- comparison effects, *Journal of Consumer Psychology*, Vol. 3 No. 2, pp. 187-212.
- Li, W., Long, R., Chen, H. & Geng, J. (2017). A review of factors influencing consumer intentions to adopt battery electric vehicles. *Renewable & Sustainable Energy Reviews*, Vol. 78, pp. 318-328.
- Lipinski, T. (2006). Emerging Tort Issues in the Collection and Dissemination of Internet-Based Research Data, *Journal of Information Ethics*, Vol. 15, no. 2, pp. 55-81.
- Lugosi, P. (2008). Covert Research. In Given, L. M. (Ed.) *Encyclopedia of Qualitative Research Methods*, Vol. 2, pp. 133-136, Thousand Oaks, CA: Sage
- Manrai, L.A., Lascu, D.N. & Manrai, A.K. (1998). Interactive effects of country of origin and product category on product evaluations. *International Business Review* vol. 7, pp. 591-615. [https://doi.org/10.1016/S0969-5931\(98\)00026-2](https://doi.org/10.1016/S0969-5931(98)00026-2)
- Michaelis, M., Woisetschlager, D.M., Backhaus, C. & Ahlert, D. (2008). The effects of country of origin and corporate reputation on initial trust - An experimental evaluation of the perception of Polish consumers. *International Marketing Review*, Vol. 25, No. 4, pp. 404-422.
- Ministry of Commerce, People's Republic of China. (2012). Catalogue for the Guidance of Foreign Investment Industries (Amended in 2011). February 21, Available Online: <http://english.mofcom.gov.cn/article/policyrelease/aaa/201203/20120308027837.shtml> [Accessed 11 April 2019]
- Moons, I. & Pelsmacker, P. (2012). Emotions as determinants of electric car usage intention. *Journal of Marketing Management*, Vol. 28, No. 3-4, pp. 195-237.
- Mort, G. & Duncan, M. (2003). 'Owned by ...' country of origin's new Cue. *Journal of International Consumer Marketing*, Vol. 15, No. 3, pp. 49-69.
- NEVS. (2019a). About us, NEVS, Available Online: <https://www.nevs.com/en/about/> [Accessed 27 March 2019]
- NEVS. (2019b). Evergrande Group new main owner in NEVS AB, NEVS, 15 January, Available Online: <https://www.nevs.com/en/media/press-releases/evergrande-group-new-main-owner-in-nevs-ab/> [Accessed 27 March 2019]
- NIO. (n.d.). About NIO. Available Online: <https://www.nio.com/about> [Accessed 25 April 2019].
- Niss, H. (1996). Country-of-origin marketing over the product life cycle: a Danish case study, *European Journal of Marketing*, Vol. 30, No. 2, pp. 6-22

PConline. (n.d.). About PConline. Available Online: <https://corp.pconline.com.cn/english/index-online.htm> [Accessed 4 April 2019].

Pednekar, A. (2013). Empirical Study of Consumer Perception Towards Select Car Brands. *Journal of Commerce & Management Thought*, Vol. 4, No. 4, pp. 837-842.

Pitch Book. (2019). BAIC BJEV Profile Reviews. Available Online: <https://pitchbook.com/profiles/company/184805-74> [Accessed 8 April 2019].

Rezvani, Z., Jansson, J. & Bodin, J. (2015). Advances in consumer electric vehicle adoption research: A review and research agenda. *Transportation Research Part D*, Vol. 34, pp. 122-136.

Rokka, J. (2010). Netnographic inquiry and new translocal sites of the social, *International Journal of Consumer Studies*, Vol. 34, No. 4, pp. 381-387.

Roth, M.S. & Romeo, J.B. (1992). Matching Product Category and Country Image Perceptions: A Framework for Managing Country-Of-Origin Effects [corrected title: Matching Product Category and Country Image Perceptions: A Framework for Managing Country-Of-Origin Effects]. *Journal of International Business Studies*, Vol. 23, pp. 477-497.

Saldaña, J. (2009). *The Coding Manual for Qualitative Researchers*, Thousand Oaks, CA: Sage

Sale, J.E., Lohfeld, L.H. & Brazil, K. (2002). Revisiting the Quantitative-Qualitative Debate: Implications for mixed-methods research, *Quality and Quantity*, Vol. 36, No.1, pp. 43-53.

Salzer-Mörling, M. (2010), "Consumption of brands", in Ekström, K. (Ed.), *Consumer Behavior: A Nordic Perspective*, pp. 531-547, Lund: Studentlitteratur

Samuelson, P. (1983). *Foundations of Economic Analysis*. Cambridge: Harvard University Press.

Schooler, R.D. (1965). Product Bias in the Central American Common Market. *Journal of Marketing Research (JMR)*, Vol. 2, pp. 394–397. <https://doi.org/10.2307/3149486>

Scholderer, J. (2010). Perception and Information Processing, in Ekström, K. (Ed.), *Consumer Behavior: A Nordic Perspective*, Studentlitteratur, Lund, pp. 233-246.

Shen, X.M. (2018). What is Zhihu. 12 October 2018. Available Online: <https://www.abacusnews.com/who-what/zhihu-where-people-china-go-ask-questions-and-get-answers/article/2168312> [Accessed 4 April 2019].

Shenton, A.K. (2004). Strategies for Ensuring Trustworthiness in Qualitative Research Projects, *Education for Information*, Vol. 22 (2), pp. 63-75

- Shimizu, K., M.A. Hitt, D. Vaidyanath & V. Pisano. (2004). Theoretical foundations of cross-border mergers and acquisitions: A review of current research and recommendations for the future. *Journal of International Management*, Vol. 10, No. 3, pp. 307-353.
- Shimp, T.A. & Sharma, S. (1987). Consumer Ethnocentrism: Construction and Validation of the CETSCALE. *Journal of Marketing Research (JMR)*, Vol. 24, pp. 280-289.
<https://doi.org/10.2307/3151638>
- SimilarWeb. (2019a). Xcar.com.cn. Available Online:
<https://www.similarweb.com/website/xcar.com.cn> [Accessed 4 April 2019].
- SimilarWeb. (2019b). Bitauto.com. Available Online:
<https://www.similarweb.com/website/bitauto.com#overview> [Accessed 4 April 2019].
- SimilarWeb. (2019c). Pcauto.com. Available Online:
<https://www.similarweb.com/website/pcauto.com> [Accessed 4 April 2019].
- SimilarWeb. (2019d). Auto.sohu.com. Available Online:
<https://www.similarweb.com/website/auto.sohu.com> [Accessed 4 April 2019].
- SimilarWeb. (2019e). Auto.163.com. Available Online:
<https://www.similarweb.com/website/auto.163.com#overview> [Accessed 4 April 2019].
- SimilarWeb. (2019f). Auto.qq.com. Available Online:
<https://www.similarweb.com/website/auto.qq.com#overview> [Accessed 4 April 2019].
- SimilarWeb. (2019g). D1ev.com. Available Online:
<https://www.similarweb.com/website/d1ev.com> [Accessed 4 April 2019].
- SimilarWeb. (2019h). Cnev.cn. Available Online:
<https://www.similarweb.com/website/cnev.cn#search> [Accessed 4 April 2019].
- SimilarWeb. (2019i). Zhihu.com. Available Online:
<https://www.similarweb.com/website/zhihu.com> [Accessed 25 April 2019].
- Smith, C. (2019). Interesting Zhihu Statistics and Facts (2019). 26 January 2019. Available Online: <https://expandedramblings.com/index.php/zhihu-statistics-and-facts/> [Accessed 25 April 2019].
- Steg, L. (2005). Car use: lust and must. Instrumental, symbolic and affective motives for car use. *Transportation Research Part A: Policy and Practice*, Vol. 39, No. 2-3, pp. 147-162.
- Tesla. (2019). About Tesla. Available Online: <https://www.tesla.com/about> [Accessed 26 April 2019].

- Thakor, M.V. & Kohli, C.S. (1996). Brand origin: conceptualization and review. *Journal of Consumer Marketing*, Vol. 13, No. 3, pp. 27-42.
- Thorelli, H.B., Lim, J. & Ye, J. (1989). Relative importance of country of origin, warranty and retail store image on product evaluations. *International Marketing Review*, Vol. 6 No. 1, pp. 35-46.
- Trivedi, A. (2019). Buffett's China ride is losing power with investors. Bloomberg Opinion, 19 February, Available Online: <https://www.bloomberg.com/opinion/articles/2019-02-19/china-s-byd-backed-by-buffett-is-losing-its-electric-car-edge> [Accessed 30 March 2019]
- Verlegh, P.W.J. & Steenkamp, J.-B.E.M. (1999). A review and meta-analysis of country-of-origin research. *Journal of Economic Psychology*, Vol. 20, pp. 521-546. [https://doi.org/10.1016/S0167-4870\(99\)00023-9](https://doi.org/10.1016/S0167-4870(99)00023-9)
- Watson, J.J. & Wright, K. (2000). Consumer ethnocentrism and attitudes toward domestic and foreign products. *European Journal of Marketing*, Vol. 34, pp. 1149-1166. <https://doi.org/10.1108/03090560010342520>
- Wattev2buy. (2019a). Electric car list. Available Online: <https://wattev2buy.com/electric-vehicles/> [Accessed 29 March 2019]
- Wattev2buy. (2019b). Complete List of all Chinese electric cars and EV car brands from China. Available Online: <https://wattev2buy.com/list-chinese-electric-cars-list-chinese-ev-car-brands/> [Accessed 29 March 2019]
- Yahoo. (2019). NIO Inc. Available Online: <https://finance.yahoo.com/quote/NIO/profile?p=NIO> [Accessed 25 April 2019]
- Yakob, R., Nakamura H.R. & Ström, P. (2018). Chinese foreign acquisitions aimed for strategic asset-creation and innovation upgrading: The case of Geely and Volvo Cars. *Technovation*, Vol. 70-71, pp. 59-72.
- Yvkoff, L. (2019). With A \$170 Million Investment, Koenigsegg Gains A Competitive Edge In Growing Hypercar Segment. *Forbes*, 30 January 2019. Available Online: <https://www.forbes.com/sites/lianeyvkoff/2019/01/30/with-a-170-million-investment-koenigsegg-gains-a-competitive-edge-in-growing-hypercar-segment/#30f11ded6131> [Accessed 5 April 2019]
- Zafirovski, M. (2016). Rational Choice Theory at the Origin? Forms and Social Factors of "Irrational Choice". *Social Epistemology*, Vol. 30, No. 5-6, pp. 728-763.
- Zeithaml, V.A. (1988). Consumer perceptions of price, quality and value: A means-end model and synthesis of evidence. *Journal of Marketing*, Vol. 52, No. 3, pp. 2-22.

Zhang, Y.S. (2019). Autohome Dives 13.8% After Major Chinese Dealers Ditch Website, Yi Cai, 15 January, Available Online: <https://www.yicaiglobal.com/news/autohome-dives-138-after-major-chinese-dealers-ditch-website> [Accessed 3 April 2019]

Zhou, Y., Wang, M., Hao, H., Johnson, L., Wang, H.W. & Hao, H. (2015). Plug-in Electric Vehicle Market Penetration and Incentives: A Global Review. *Mitigation and Adaptation Strategies for Global Change*, Vol. 20, No. 5, pp. 777-795.

Appendix

Appendix A. The coding of empirical materials

The first cycle of descriptive coding such as design, engineering, social status, technology etcetera. were used to sort the collected material with labels close to the material. The raw material either explicitly used some of the first cycle codes or implied the importance of such aspects. Each post/comment in the raw material were described with suitable first coding labels of a word or a short phrase to summarize the core meaning of the text. Based on the first cycle coding, the second cycle coding was conducted where the aspects of the first cycle were abstracted to a more general level, not as close to the empirical material as the first coding was. Alongside of the first and second coding, an emotional coding was used where each of the collected comments were rated as positive, negative, both positive and negative, or neutral. Positive was marked as green, negative as red, and both positive and negative and neutral as white. This emotional coding distinguished the emotional attitudes while the descriptive coding showed the consumer perception. And in the discussion chapter, the emotional coding was combined with the prominent perceptions to showcase the most valued perception of each brand category. Lastly, the second cycle coding was categorized into cognitive, affective, and normative to link to the literature.

An example of the coding process is presented in the table *Coding Example 1* below. In this example, the raw material in Chinese firstly is translated into English. As technology is mentioned, the first cycle of descriptive coding of this comment is “technology”. According to literature, technology is a part of perceived quality, and “perceived quality” is the second code for this comment. As the comment implies a positive attitude towards the domestic brand BYD, the emotional coding is green, indicating positive attitude. Lastly, the comment is categorized under cognitive as perceived quality is related to cognitive aspects of COO according to the literature.

Coding Example 1.

Comment	1st Codes	2nd Codes	Positive/ Negative/ Neutral	Cognitive Affective Normative
With the arrival of such a EV with strong sense of technology , there is no need to look at Tesla anymore. Our BYD car is quite good enough.	Technology	Perceived Quality	(Green)	C

Some comments include a mix of first codes that are related to: perceived quality, e.g. technology; emotional connotations, e.g. face; and ethnocentrism and disidentification, e.g. national pride. As most empirical material holds one or two aspects, a comment that hold both cognitive and affective perception as example is illustrated in the table *Coding Example 2*.

Coding Example 2.

Comment	1st Codes	2nd Codes	Positive/ Negative/ Neutral	Cognitive Affective Normative
As a new brand, Denza has its strength. Supported by Daimler's brand, technology, and background that comes from German, Denza is the second generation of the rich. The positioning of luxury electric vehicles is very close to the taste of Chinese consumers. But the sales are still poor.	Brand Technology Social status	Perceived quality Emotional connotations	(Green)	C A

Appendix B. Autohome.com Homepage

The screenshot shows the homepage of Autohome.com. At the top, there is a navigation bar with the logo '汽车之家' (Autohome) and '看车·买车·用车' (View cars · Buy cars · Use cars). A search bar contains '名爵h5'. Below the search bar, there are various navigation options like '文章', '评测', '车家号', '视频', '行业', '车型对比', '图片', '报价', '车商城', '降价', '经销商', '二手车', '金融', '论坛', '问答', '口碑', '车品'. A row of car icons represents different categories: 新能源 (New Energy), 微型 (Micro), 小型 (Small), 紧凑型 (Compact), 中型 (Medium), 中大型 (Medium-Large), 大型 (Large), SUV, MPV, and 跑车 (Sports Car). Below this is a large banner for 'EXEED 星途' (EXEED Xingtu) with the slogan '生来超越 世界智造 EXEED星途全新上市' (Born to surpass, world-made EXEED Xingtu is newly launched). Another banner for '北京汽车' (Beiqi) features the slogan '百城万人拼购会火热报名中' (100 cities, 10,000 people hotly participating in the group purchase event). At the bottom, there is a search filter section with '新车' (New Car) and '二手车' (Used Car) options, and a list of car models categorized by SUV, 紧凑型车 (Compact Car), and 中型车 (Medium Car). The SUV section includes models like 星越, 汉兰达, 普拉多, 本田CR-V, 宝马X3, 哈弗H6, RAV4荣放, and 奔驰GLE. The Compact Car section includes 思域, 朗逸, 轩逸, 速腾, 福克斯, 卡罗拉, 雷凌, and 名爵6. The Medium Car section includes 宝马3系, 雅阁, 奥迪A4L, 凯美瑞, 帕萨特, 亚洲龙, 迈腾, and 奔驰C级.

Appendix C. Xcar.com Homepage

北京车市 ▾ 我的爱卡 ▾ 登录 注册 爱卡论坛导航 ▾ 手机爱卡 ▾

爱卡汽车 XCAR.COM.CN 新车 导购 试驾 车型库 商城 报价 用车宝典 特卖 活动 精选 问答 赛事 摩托 选车 视频 车图 SUV 新能源 买车 二手车 4S店 用车 用车工具 百科 社区 热帖 游记 XBB 文化 发现 视觉

微型 小型 紧凑型 中型 中大型 豪华型 SUV MPV ^{HOT} 电动 更多

热门车 SUV 新车 5万以下 5-8万 8-12万 12-18万 18-25万 25-35万 35万以上 用途选车 违章查询 降价行情 | 汽车论坛

朗逸 报价 图库 论坛	奥迪A4L 报价 图库 论坛	帝豪 报价 图库 论坛	凯美瑞 报价 图库 论坛	英朗 报价 图库 论坛	科鲁泽 报价 图库	亚洲龙 双擎 报价 图库 论坛	推荐理由: 空间表现比肩高级别车型
卡罗拉 报价 图库 论坛	宝马5系 报价 图库 论坛	逸动ET 报价 图库 论坛	思域 报价 图库 论坛	福克斯 报价 图库 论坛	雷克萨斯ES 报价 图库 论坛	途昂X 报价 图库	 <p>思域</p> <p>11.59-16.99万元</p> <p>报价 图库 论坛</p>
轩逸 报价 图库 论坛	雅阁 报价 图库 论坛	速腾 报价 图库 论坛	起亚K3 报价 图库 论坛	奔驰E级 报价 图库 论坛	明锐 报价 图库 论坛	阿特兹 报价 图库 论坛	

搜索 请选择品牌和车系 ▾ 请选择车型(可不选) ▾ 找新车 品牌找车 二手车

RAV4荣放 思域 途昂X 星越 宋MAX 奥迪A4L 奇骏 别克GL8

Appendix D. Biauto.com Homepage

重新加载此页 手车 易车惠 | 一成首付 | 易车福利 | 移动应用 ▾ | 本地车市 北京 ▾ 登录 注册 | 第3方登录 ▾ | 网站地图 ▾

点击即可启用 Adobe Flash Player

易车 购车直降1万 输入 "@ " 试一试 搜索

车型 图片 视频 易车号 新能源 ^{HOT} 文章 评测 导购 报价 降价 经销商 口碑 社区 众测 ^{NEW} 裸车价 二手车 贷款 购车 ▾

社区首页 | 车型社区 | 地区社区 | 主题社区 | 易车游戏 | 手机看帖

社区试运营

招募首批体验官

千元补贴 海量京东卡 等你拿

易车app社区试运营 招募首批体验官

超越运动Battle款用车感受

开车上高速前要做哪些检查

Appendix E. PCauto.com Homepage

太平洋网络 全国 [切换] 新车 车型库 经销商 论坛 车问答 全国 北京 上海 广州 深圳 成都 武汉 济南 >> 登录 注册 进入论坛 移动应用

太平洋汽车网 PCauto.com.cn

新车 导购 技术 电动车 选车 评测 视频 图片 查报价

行情 商城 经销商 买车 优惠 车贷 二手车

养护 试用期 轮胎 用车 车品 用品库 车险

行家 科技 改装 精选 赛事 行业 文化

精选日报 论坛 论坛导航

Q 昂科威 搜索

品牌找车 汽车报价 汽车排行 购车计算 分期购车

猜你喜欢 SUV 新车 8万以下 8-12万 12-18万 18-25万 25-40万 40万以上 二手车 皆电新能源

点击即可启用 Adobe Flash Player

热门车系

- SUV
- 两厢轿车
- 三厢轿车
- MPV
- 新能源

实拍全新一代大众Polo Plus 低配车解析

奔驰GLC L对比宝马X3

line.com.cn 的响应...

Appendix F. Auto.sohu.com Homepage

搜狐首页 新闻 财经 娱乐 体育 房产 汽车 科技 时尚 教育 健康 文化 军事 美食 旅游 更多 登录 注册

搜狐汽车 专注车 只为你 北京

您有一个现金红包待领取

车型库 新闻 新车 图片 视频 直播 销量 降价 特惠车 经销商 车贷 自媒体 E电园 二手车

微型 小型 紧凑型 中型 中大型 豪华 MPV SUV 跑车 新能源

长安凌轩 搜索 选品牌 选车型 找车

车型大全 精准选车 查经销商 购车计算 爱车估价

推荐	热门	新车	SUV	7万以下	7-12万	12-18万	18-30万	30万以上	新能源	二手车
30.78-47.48万元	30.09-50.59万元	10.78-15.88万元	22.98-35.48万元	35.99-35.99万元	39-57.5万元	18.69-26.99万元	25.08-37.48万元			
85.68-122.08万元	43.58-60.48万元	35.99-41.99万元	30.98-35.98万元	24.68-30.18万元	12.78-16.28万元	55.8-84.18万元	10.98-16.78万元			
39.28-49.8万元	36.29-46.99万元	12.88-18.98万元	56.98-81.98万元	14.18-17.88万元	22.99-44.99万元	10.2-14.68万元				

选车 买车 用车 图片 视频 资讯 反馈

Appendix G. Auto.163.com Homepage

新闻 体育 NBA 娱乐 财经 股票 汽车 科技 手机 数码 女人 直播 视频 旅游 房产 家居 教育 读书 本地 健康 海淘 艺术

05月23日 星期四

网易汽车

首页 购车 新车 试驾 降价 报价 导购 用车 网号 车型库 新能源 行业 经销商 直播 视频 排行 图库 未来车生活

降价榜 雅阁 优惠价: **13.98万** 14.6-98万 探岳 优惠价: **14.99万** 14.8-59万 奕歌 优惠价: **8.98万** 12.98-98万
 北京车市 欧蓝德 优惠价: **11.48万** 15.98-98万 传祺GS8 优惠价: **10.38万** 16.38-98万 哈弗H6 优惠价: **6.4万** 10.2-98万

看车团 楼兰可降价优惠3万元 科鲁泽最高让利1万元

选择品牌 选择车系 **选车** **询价** 请输入品牌或车系 **搜车** 新能源 看车选车 请点我!

热门车型 SUV 新能源 6~10万 10~16万 16~25万 25~35万 35万以上 明星车型

途岳 配置 报价 图片

谈心社 年轻人谈心的地方

今日热点 网友都爱看 降价:帕萨特最高优惠5万元

Appendix H. Auto.qq.com Homepage

腾讯汽车 轻松驾驭车生活 奥迪 搜索 腾讯汽车App 汽车商城 汽车视频

首页 新车 视频 选车 导购 评测 行情 报价 降价 商城 用车 科技 行业 图库 养车

微型 小型 紧凑型 中型 中大型 豪华型 SUV MPV 跑车

品牌选车

选择品牌 选择车系(可不选) 选择车型(可不选) **找新车** 汽车商城 车型对比 购车计算

品牌选车	热车	SUV	紧凑型	中型	中大/豪华型	跑车	新能源	新车
焦点车型	起亚KX5	沃尔沃XC90	奔驰E级	宝马3系	沃尔沃V40	蒙迪欧	凯美瑞	标致3008
人气高	途观L	沃尔沃S90	荣威eRX5	奔驰GLC级	悦纳	华晨宝马X1	哈弗H6	蔚来EP9
受欢迎	蔚领	帝豪GL	科沃兹	新帝豪	帕萨特	北京BJ20	奥迪Q5	保时捷718
养车	美孚	嘉实多	壳牌	美国胜牌	日本出光	爱信	雪佛兰	3M

福特Puma/迈巴赫GLS 这些假想图很靠谱

新车 | 全新奔驰S级曝光 | 718 Cayman GT4谍照
 探岳征途版5月25日上市 | 起亚KX5四驱版将上市
 全新锐界内饰曝光 | 江淮全新轿车路试谍照
 导购 | 对面的女孩看过来 高颜值小型SUV海选

腾讯出品 洞察者 | 五问广汽蔚来

Appendix I. D1ev.com Homepage

10万以下 10-20万 20-30万 30-50万 400公里续航 热门品牌

请选择品牌 请选择车系 找车

元	北汽EC系列	奔奔EV	长安CS15EV	云100	江铃E200L	路盛 S1	知豆D2S
续航85-410km	续航156-206km	续航180-301km	续航300km	续航155-255km	续航152-252km	续航255km	续航155-255km
8.99 - 13.99万元	5.58 - 6.18万元	9.58 - 14.48万元	7.99 - 8.99万元	9.88 - 16.99万元	8.28 - 9.08万元	6.58 - 9.58万元	5.98 - 18.88万元

快讯 更多 >

- 纯电续航85km 现代领动PHEV将7月上市
2小时前
- Immense Simulations融资460万美元 打造自动驾驶仿真软件
2小时前
- 自动驾驶汽车+机器人协同送货, 福特吃了一螃蟹
2小时前
- 碳酸乙烯酯吨价再涨1000元 较去年旺季价格接近翻倍

Appendix J. Cnev.cn Homepage

中国电动汽车网 www.cnev.cn 行业有价值的媒体

请输入关键词 搜索

中国电动汽车网 官方app下载

首页 资讯 车型 测评 视频 企业 展会 数据 专题 采购 代理

10万以下 10-20万 20-30万 30万以上 超长续航 插电混动 SUV 微型车 商用车 专用车 新车上市

比亚迪元EV	奇瑞EQ1	比亚迪E1	欧拉R1	欧拉IQ	瑞虎3xe	众泰E200	长安CS15EV	北汽EC3	云度n1Pro
续航:305-410公里	续航:200-305公里	续航:300-305公里	续航:310-351公里	续航:360-401公里	续航:350-401公里	续航:250-301公里	续航:300-351公里	续航:200-301公里	续航:301-426公里
8.99-13.99万	5.98-16.79万	5.99-7.99万	5.98-7.98万	8.98-12万	9.38-10.68万元	6.99万元	7.99-9.88万元	7.38-7.98万元	7.58-11.08万元

企业

- 福建: 加快新能源汽车发展 聚力打造“电动福
- 海南全力推广清洁能源汽车, 建设绿色文

Appendix K. Sina Weibo Homepage

Appendix L. Zhihu Homepage