

# Influence of Visual Communication Used in Designing Cultural Products on the Purchase Behavior of Consumers: A case of Chengde Mountain Resort Museum

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## Abstract

Visual communication attributes significantly enhance the perceived values of products in the market economy. However, the effectiveness of the strategies on influencing purchase intentions in the context of museum cultural products calls for in-depth research. The research paper aims to analyze the influence of the visual communication attributes, when used in designing museum cultural products, on visitor experiences and purchase intentions towards their replicas. The study utilizes the backdrop of the deconstructed theory of planned behavior to analyze the data from existing literary sources and visitor reviews. The study employs the qualitative research design, whereby the case study strategy has guided the research findings. The study undertakes the case of the Chengde Mountain Resort Museum to trace the influence that the visual communication strategy used in designing the cultural products has on purchase behavior. To that end, the thematic analysis of the findings indicates that the visual communication attributes used in designing the cultural products of the Chengde Mountain Resort Museum have a significant and positive impact on visitor experience and purchase intentions. The study deduces that visual communication strategies not only include the designing of cultural products but also the use of other factors, such as the incorporation of VR technology and natural elements as well. The attributes, such as signs that resemble the historical, imperial, or regional identity of the public, influence the cognitive and normative faculties of human personality. These persuade the visitors to desire the replicas of cultural products. However, the study is limited to being conducted at a small scale and is indicative of extensive and comparative research in the future.

**Keywords:** visual communication, attributes, semiotics, deconstructed theory of planned behavior, Chengde Mountain Resort Museum

## 1. Introduction

Chinese cultural products hold a significant value as an intangible heritage of the country, embodying the legacy of Chinese Civilization. The Convention for Safeguarding the Intangible Cultural Heritage has been ratified by UNESCO (2003), aiming for an increased concern for the value and nature of cultural products in recent times. The growing prominence of cultural confidence has heightened concerns about the development of cultural products to induce more visitor engagement, leading to a higher rate of purchase (Yingqing et al., 2024). Here, cultural products refer to the antique museum design along with the artifacts that represent the rich cultural heritage of China. Meanwhile, museums have developed different design and development techniques to preserve and increase the prominence of cultural products to attain economic benefits. The Chengde Mountain Resort Museum holds a high historical significance for representing the cultural standards of China. Chengde Mountain Resort Museum, located in the palace zone of the Chengde Mountain Resort, is a classic imperial museum representing the history of the Qing Dynasty (Fu Lv, 2019). The museum has been a cultural heritage site for preserving the cultural products belonging to the Qing Dynasty. Zhao et al. (2023) argue that the museum of Chengde Mountain Resort has a simplistic and ancient style of architecture, integrating multi-ethnic architectural shapes and symbols with nature. However, the study has further noted that museums have been facing the threat of weakening the prominence of culture and art in recent times. Hence, it suggests including innovative visual designs to disseminate the cultural history of the museum. This is done through the

amalgamation of art, culture, and technology. The arguments signify the vitality of visual communication in enhancing the prominence of museum cultural products. It is noted by Li (2024) that museums have transcended from being "object-centered institutions" to "audience-centered spaces," highlighting the emphasis on visitor perceptions and experiences in the "visual" spaces. The arguments indicate the need for in-depth research on the influence that visual communication attributes have on the visitor perceptions when used in designing museum cultural products. Even though the literary studies provide a clear account of the influence of visual communication on consumer purchase intentions, there lies a dearth in research as far as the research on the need for visual communication for designing and developing cultural products of the Chengde Mountain Resort Museum is concerned. The present research study will attempt to fill this gap by examining the influence of visual communication attributes in developing cultural products of Chengde Mountain Resort Museum on the purchase decisions of visitors for their replicas sold by the museum.

The present research attempts to explore the ways in which visual communication attributes, such as cultural symbols and aesthetics, influence the purchase decisions of consumers towards their replicas. The research assesses the role of the cultural symbols and narratives constructed by the designs of the products in enhancing visitor experiences in the 'visual' space. The case of the cultural products of the Chengde Mountain Resort Museum will be assessed in this context. Accordingly, the paper aims to examine the influence that Visual communication used in the design and development of cultural products has on the visitor experiences and purchase decisions towards their replicas.

The present paper will endeavor to assess the influence of the visual communication strategies of the Chengde Mountain Resort Museum on visitor perceptions and purchase decisions in China. To that end, the paper endeavors to achieve the following Research Objectives:

RO 1: To trace the influence of Visual Communication on visitor experiences and purchase decisions for replicas

RO 2: To understand the role played by cultural signs and symbols in shaping the visitor preferences for museum cultural products

RO 3: To identify the effectiveness of visual communication strategies used by museums to enhance visitor experiences in the visual space

## **2. Literature Review**

### *2.1 Problem Conceptualization*

In the modern economy, cultural products can be observed as a representative of the cultural identity and heritage of a region. According to Dayton-Johnson (2000), cultural goods are 'different' from regular merchandise as recognized by UNESCO, emphasizing the unique value of cultural products. On a similar note, Klammer (2003) argues that "cultural goods are discursive constructions," emphasizing the notion of people treating the goods as "cultural" in the context of "valuation, evaluation and valorisation". The idea that emanates from the arguments is that cultural products hold significant value in the modern economy, with the products being of unique value. However, preservation of cultural products has been a major concern in recent times of digital technology, whereby traditional art and culture are losing their prominence. It has been noted by scholars that the digital age has brought about a threat to the preference of consumers for artworks and cultural products. As Zhao et al (2023, p. 1) state, "If museums merely mark and display artifacts according to traditional concepts, the goal of museum communication may be superseded." The study stresses the enhancement of the visual communication strategies for the museum products to increase the prominence as well as preferences of the visitors towards the museum products. The aim to maintain the cultural significance of the museum's cultural products could be achieved through cultivating the roots to visually convince the visitors to engage with the cultural products. As Kundu et al. (2017) put it, 'people are the ultimate consumers of visual information'. Drawing upon this context, it is required for museum cultural products to adopt visual communication strategies that enhance the visual experiences and preferences of the visitors, leading to purchasing decisions among the consumers. Hence, the visual communication strategies when applied in designing and developing museum products have been observed to enhance visitor engagement with cultural products.

### *2.2 Influence of Visual Communication Attributes on the Visitor's Purchase Decisions*

Visual communication attributes contribute to visitor engagement and affect purchase decisions towards replicas sold by museums. As opined by Karkonen (2014), visual communication examines the ways in which messages, ideas, and information can be conveyed through visual images and symbols. The author further argues that visual communication strategizes the use of colors, symbols, signs, metaphors, and humor based on cultural and psychological contexts in order to influence consumer purchase decisions. It can be analyzed that consumer perceptions are influenced by the cultural contexts embedded in the visual communication strategies that can raise the desire among consumers to purchase a commodity. On a similar note, Tilak (2020) emphasizes the persuasive role played by visual communication in influencing the purchase decisions of the consumer. The author notes that visual communication through infographics,

motion graphics, or interactive content influences the conception and visualization of ideas. The idea, when conceived appropriately, might lead to undertaking purchase decisions among consumers. The idea that emanates from the arguments is that visual communication strategies directly influence purchase decisions among consumers by influencing their cognitive structures. The arguments also indicate that both psychological and cultural contexts play an integral role in shaping the narratives constructed by the consumers of the commodity. The idea could be applied to the context of museum cultural products, whereby the cultural notions embedded within the museum products, when enhanced successfully through visual communication, can increase the rate of purchase by visitors. Drawing from the argument, it is evident that even though visual communication is an integral aspect of enhancing viewer experience and preferences for cultural products, it is yet to be fully explored in the field of research.

### *2.3 Effectiveness and Need for Visual Communication Strategies for Museum Cultural Products*

In the digital era, museums face competitive threats from the leisure market as well as local museums, and cultural signs or symbols play an integral role in making cultural products attain a competitive advantage. According to Yu (2024), museums should be actively participating in the development of cultural products in order to transform intangible products into tangible, memorable experiences. Interestingly, a survey conducted by the American Alliance of Museums (2024) states that museums face lower rates of visitor engagement due to various factors such as "outdated content" and "non-inclusive and non-interactive" experiences subjected to the visitors. The arguments pose the idea that museums lack the scope for visitor engagement, and the integration of cultural symbols, signs, and values in the development of cultural products can be an innovative way in which visitors could be emotionally engaged with the cultural products. Annechini et al. (2020) argue that the visual drawings, galleries, domes, and bridges contribute highly to enhancing the visual experiences of the visitors. On a similar note, Antón et al. (2017) argue that in order to make the visitor experience more culturally immersive, it is required by the museum to imply sensorial and contextualized visual space. This can contribute to enhancing the experience of escapism for visitors. Li (2024) stresses that the architectural and exhibition designs encode cultural narratives that highly signify the historical cultural identity. The idea that emanates from the study is that the attributes of visual communication using signs and symbols, when applied in designing the cultural products, influence the purchasing decisions of the visitors. Hence, by employing visual communication strategies, the museums can effectively counter the threat of competition from leisure markets and local museums. Visual communication strategies, hence, emerge as the competitive advantage of the cultural products in museums.

### *2.4 Role of Cultural Signs and Symbols in Shaping the Visitor Preferences for Museum Cultural Products*

Visual communication strategies imply the use of elements and components that can instill memories among the visitors, emerging as the most effective form of communication. As argued by Han (2022), semiotic cues, when used in marketing products, influence the purchasing decisions and engagement of the visitor with the product. The idea could be related to the application of semiotic cues in designing museum cultural products to enhance visitor engagement and influence purchase decisions. Similarly, Liu and Zhao (2024) stress that metaphor designs using cultural symbols influence the purchase decisions among consumers for cultural products. The study further notes that the application of dominant metaphors, such as visuals and colors, along with recessive metaphors such as cultural signs and symbols, strengthens the sensory and emotional attachment of visitors, enhancing visitor engagement. Similarly, Dayton-Johnson (2000) and Klammer (2003) also support the idea by arguing that signs, colors, and symbols act as effective resources to enhance visitor engagement for cultural products. The signs and symbols act as the semiotic resources that guide the interpretative processes as well as the engagement levels of the visitors. Worakittikul et al. (2024) argue that semiotics impacts the customer's subconscious decision-making faculties and hence improves brand communication. Meanwhile, Khan (2022) argues that semiotics are integral in the digital age as well, for symbols and icons contribute to effective visual communication. The arguments, hence, indicate that semiotic resources act as the traditional and cultural factors that can emotionally attach the visitors when applied to designing and developing cultural products. The studies emanate the idea that the development of the cultural products of museums using metaphorical designs, which integrate visitors and influence their cognitive structures to adopt the purchasing behavior. It is noted that historical and cultural identity attached to the cultural products, when enhanced with the use of colors and patterns, can visually persuade visitors and instill long-lasting memories of the museum visits.

## 2.5 Theoretical Underpinning

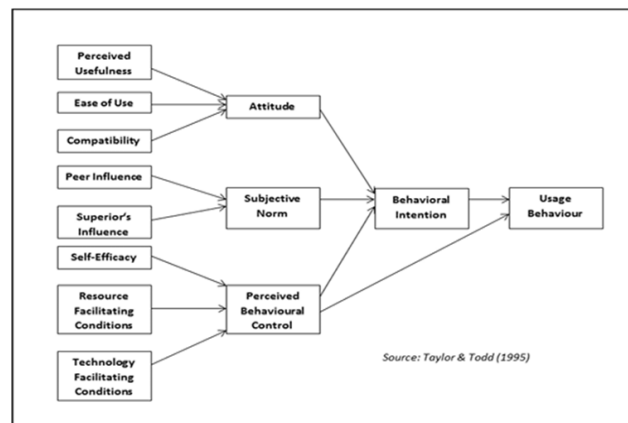


Figure 1. Decomposed Theory of Planned Behavior

(Source: Taylor & Todd, 1995)

Understanding the influence of visual communication on the purchasing behavior of the visitors in the context of designing and developing museum cultural products could be traced under the deconstructed theory of planned behavior. The deconstructed theory of planned behavior proposed by Taylor and Todd (1995) provides the deconstruction of the theory of TPB into three sub-components of cognitive, affective, and normative categories to provide a better insight into the influence on the purchasing behavior of consumers. The deconstructed theory of planned behavior could be effectively applied to the study of the influence of the visual communication attributes on visitor purchase decisions. The application of colors, symbols, and imagery in the design of the cultural products applies to each component of the constructed theory of planned behavior. For instance, the compelling visuals of the cultural products can increase the pace of consumers' processing of the historical and cultural significance of the cultural products. This can relate to the component of cognitive influence on the consumer that ultimately leads to purchasing decisions among consumers. Similarly, the use of colors such as warm and cool tones along with the maintenance of authenticity in developing cultural products can enhance the nostalgic and emotional attachment to the museum cultural products, which can ultimately lead to affecting purchase decisions for replicas. Also, the cultural identity when attached to the museum products through the specific tailoring of designs as per demographics corresponds to the normative component of the deconstructed theory of planned behavior. Overall, the factors corresponding to the three components imply the formation of desires and memorability among the visitors, which can lead to purchasing intentions among the consumers. Hence, it could be stated that the deconstructed theory of planned behavior models the influence of visual communication on the purchasing intentions of consumers. However, Semiotics theory can also be used to analyse the present case. As per Yakin and Totu (2014), Saussure's theory of semiotics is the study of signs that implies a dichotomous model of signifier (physical object) and signified (context). Based on this context, the cultural products of the museum become the signifier that signifies the representation of the cultural heritage of China, which leads to emotional attachment and intended consumer behavior. Hence, the semiotics theory also becomes significant in understanding the impact of visual communication strategies in the present study.

## 2.6 Conceptual Framework

The main concepts that emerge from the present study are those of visual communication, visitor engagement, cultural products, purchasing behavior, semiotic resources, and cultural and historical identity. The main concepts that could be operationalized as dependent variables for the present research study are those of visitor engagement, cultural and historical identity, and purchasing behavior. The independent variables identified through the literary study are those of cultural product designing, visual communication, and semiotic resources.

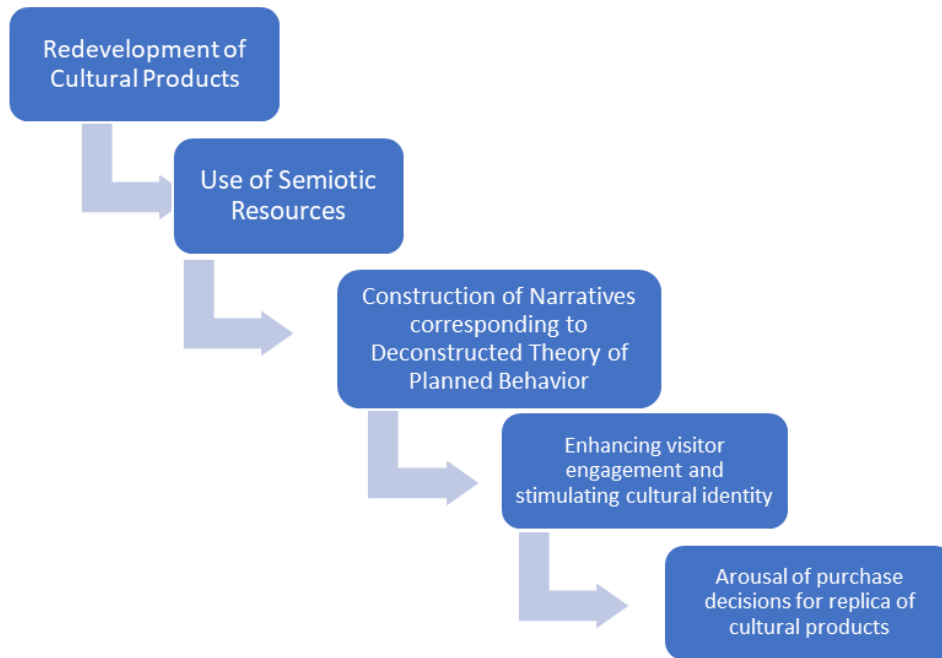


Figure 2. Conceptual Framework

(Source: Self-created)

### 3. Methods

#### 3.1 Research Design

Considering the aim to evaluate the influence of Visual communication on purchase intentions for replicas, a qualitative study design has been employed in the present study. According to Bryman (2016), qualitative research strategy rejects the norms of positivism and emphasizes the ways in which individuals interpret their social world. Under the research paradigm of interpretivism, the qualitative research strategy embodies the view that social reality is a constantly shifting property of an individual's creation. Based on this notion, the present study adopts the qualitative research strategy to interpret the influence that visual communication strategies, when employed in designing cultural products, have on the purchasing decisions of the visitors. The study employs the case study method to draw upon the observations in the context of the Chengde Mountain Resort Museum. Under the case study method, the paper focuses on collecting secondary data, focusing on the design and development of the cultural products of Chengde Mountain Resort Museum. Based on the backdrop of the deconstructed theory of Planned Behavior, the study deduces the influence of semiotic attributes of the Museum products on the normative beliefs, attitudes, and perceived behavior of the visitors. The secondary data collected is analyzed using the thematic analysis method.

#### 3.2 Data Collection

Following the case study method, the research is conducted based on the secondary data in the context of the Chengde Mountain Resort Museum. The relevant data in context to the Museum is traced from different databases such as Google Scholar, Scopus, Government websites such as ChinaDaily, along with other authentic websites and archives, using the keyword search strategy. Literary sources such as journals, books, and articles, along with relevant databases such as Museum catalogs, visitors' generated content such as reviews and blogs, visual archives, and map layouts of the museum, have been collected. The search strategy used in different databases employed the use of keywords along with Boolean operators to deduce the relevant datasets and scholarly resources. Keywords such as 'Chengde Mountain Resort Museum', 'Semiotics', and 'Visual Communication', accompanied by boolean operators such as 'AND/OR', have been used to derive the secondary data from the databases. A document analysis of all the collected data in the context of the case has been presented in the study. The study has interpreted both scholarly resources along with visual archives, visitor reviews, and blogs in context to the museum to understand in detail the influence that the visual attributes of the museum products have on the visitor perceptions and the ways in which they influence their purchasing intentions.

#### 3.3 Data Analysis

Interpretation of the collected data is an integral step for a research study to be successful in achieving the research

objectives. The present study employs thematic analysis for interpreting the findings deduced from the collected data. As opined by Scharp and Sanders (2019), thematic analysis implies the identification, analysis, and reporting of patterns from a data corpus. Drawing on this assumption, the present research employs the thematic analysis method to interpret the collected secondary data from different documents in context to the case of Chengde Mountain Resort Museum. The thematic analysis has been conducted following Braun and Clarke's (2006) steps of data familiarisation, generation of coding categories, generation and reviewing of themes, naming the themes, and locating exemplars. The steps allowed for developing the patterns from the collected data on the attributes of the cultural products, along with visitor reviews, which were later developed into codes and relevant themes. The main themes derived pose towards the major findings of the research, indicating the influence of the semiotic attributes used in designing the cultural products of the Chengde Resort Museum on the purchase intentions of the visitors. The analysis method is suitable for the present research as it allows for deriving an in-depth understanding of the collected data in the context of the case study.

### 3.4 Ethical Consideration

The research employs the use of secondary data in the context of the case of the Chengde Mountain Resort Museum of China. Hence, all the collected data have been appropriately credited for their contribution towards the research study using the academic integrity guidelines. All the government and non-government website datasets have been used in their authentic form. The privacy policies of different websites have been adhered to while tracing the reviews of the visitors. Anonymity of the visitors has been maintained in the research study to maintain the ethics of data privacy in research practice. The research also acknowledges the different historiographical approaches undertaken by historians while interpreting the design of museum cultural products. The same is evident for maintaining neutrality towards interpreting the cultural narratives presented through the semiotic cues used in designing the cultural products, without reinforcing any potential biases.

## 4. Results

The secondary data collected in the context of the Chengde Mountain Resort Museum brought about the scope for developing a range of themes. The codes and generated themes are as follows:

Table 1. Review of Secondary Sources

Source	Objectives	Findings
1. Zhao et al. (2023) <i>Designing virtual reality-based 3D modeling and interaction technologies for museums</i>	The study details the impact of the VR technology on visitor experiences and engagement	<ul style="list-style-type: none"> <li>● VR employed in the museum enhances the visitor experience</li> <li>● Human-computer interaction is effective for multi-perspective object visualization</li> <li>● Real-time interaction and emotional engagement developed due to VR</li> <li>● Digital immersion through VR implies a deeper appreciation of the cultural relics of the museum</li> </ul>
2. Foret (2000), <i>Mapping Chengde</i>	The study explores the use of Chengde as a symbolic as well as strategic landscape project of the Qing Dynasty	<ul style="list-style-type: none"> <li>● Temples (Waiba Miao) as cultural products symbolising Han, Tibetan, and Mongolian architecture represent not only religious but also the performative symbols of the Multi-cultural ruling of the Qing Dynasty.</li> <li>● Cultural products are not limited to museum artifacts, but also the landscape and architecture, which altogether represent the imperial ideology.</li> <li>● Designing of pavilions and Gardens, such as the thirty-six vistas landscaped and named to represent the Chinese literary and culture.</li> <li>● Cultural products designed to evoke emotions and pride in culture in viewers</li> <li>● Imperial cartography and poetry engraved and illustrated work as non-tangible semantic artifacts.</li> <li>● Overall, Chengde represented the spatial narrative of Qing ideologies, referred to as a 'living museum'.</li> </ul>

Table 1 (continued).

Source	Objectives	Findings
3. Chen (2016) <i>A RESEARCH ON CHINESE TRADITIONAL ARCHITECTURAL LANDSCAPE IMAGE</i>	The study aims to explore the ways in which traditional Chinese architectural landscapes tend to convey values of the culture through space and symbolism.	<ul style="list-style-type: none"> <li>● Chengde Mountain Resort is a tectonic landscape that represents imperial power in harmony with nature</li> <li>● Archetypal imagery depicted by poetic names of gardens and Tibetan-style temples that depict cosmology and multicultural rule of the dynasty</li> <li>● Architectural landscape serves as cultural memory as well as historical identity for viewers</li> </ul>
4. Chunlan et al. (2025) <i>Advancing cultural heritage: a decadal review of digital transformation in Chinese museums</i>	Aims to review the digital transformation of Chinese Museums	<ul style="list-style-type: none"> <li>● Appraises the virtual reality technology employed by Chengde Mountain Resort Museum</li> <li>● VR is an interactive and immersive storytelling method used for transmitting the cultural heritage</li> <li>● Enhanced educational motives of the museum</li> <li>● Stresses that VR provides participatory observation for visitors</li> </ul>
5. Hevia (2001) <i>World Heritage, National Culture and the Restoration of Chengde</i>	Aims to examine the intersection between the Restoration of the Chengde Mountain Resort and the cultural politics and state narratives	<ul style="list-style-type: none"> <li>● Restoration of the Museum and resort as a strategy of the government of China for symbolizing the unity of the nation and multicultural harmony.</li> <li>● The museum depicts the political history in the form of cultural exhibits</li> <li>● Restoration made the design of cultural products to disseminate the state-managed narrative through visuals</li> </ul>
6. Whiteman (2023) <i>On uncertain ground: lost landscapes, digital mediation, and site-based research at early Qing Chengde</i>	The study aims to explore the ways in which the use of digital tools, such as GIS, can aid in reconstructing the layered spatial history of the Chengde Mountain Resort..	<ul style="list-style-type: none"> <li>● Chengde is not only a museum piece but a layered spatial landscape representing the modern restorations, along with imperial history and state politics.</li> <li>● Chengde is recognized as a spatial archive that represents imperial cosmopolitanism through the rituals, topography, and architecture.</li> <li>● Digital tools can enhance understanding of the fragmented cultural histories in detail.</li> </ul>
7. Koerts (2015). <i>Tourism in China: representing the nation to English-speaking tourists: A historical study of the development of tourism and the interpretive media encountered at five Beijing tourist sites</i>	Aims to explore the construction of the national identity by China through tourism and interpretive media	<ul style="list-style-type: none"> <li>● Tourism sites as curated spaces to disseminate state-sanctioned narratives</li> <li>● Tourism sites such as Chinese museums serve as soft power and a tool for nation branding</li> </ul>
8. Fu Lv. (2019). <i>Chengde Mountain Resort Museum</i>	Online guide to government services	<ul style="list-style-type: none"> <li>● The Chengde Museum has 170,000 artifacts depicting the treasures of the Qing Dynasty.</li> <li>● The museum consists of 15 curated displays and exhibitions</li> <li>● The Hall of Pine and Crane is named to depict longevity and tranquillity</li> <li>● Chengde Museum captures the grandeur of imperial palaces, blending it with allure of Chinese gardens</li> <li>● Provides visitors with a dive into the imperial heritage of the country</li> </ul>
9. ArchDaily (2020)	Provides an account of the architectural design of the Chengde Resort Museum	<ul style="list-style-type: none"> <li>● The museum roof is designed as a viewing platform, allows visitors to see relics and heritage from a distance</li> <li>● Trapezoidal Window depicts Tibetan Architecture.</li> <li>● Outdoor horseshoe-shaped courtyard with pine trees depict the blend of environment with imperial heritage</li> </ul>

Table 2. Visitor Reviews

Serial Number	Review
Visitor 1	<i>"You entered the main campus through what felt like a village and a museum like area with artifacts. We did not spend a lot of time here because it was incredibly crowded. Then you walked down a hill and the beauty opened up to you. ....It was so peaceful and relaxing as we walked along the waters edge. The temple is a long way over, so plan for walking shoes, but the walk is beautiful....As we approached the palace, we chose to climb up to it along a rock path in the back and among the trees.....The main entrance was packed on the holiday week and you could hardly move, so our access point made getting to the top fairly easy....highly expensive"</i>
Visitor 2	<i>"We have been to the Mountain Resort, Putuo Zongcheng (Potala Palace) Temple, and Puning Si Temple in Chengde, and I definitely preferred the temples over the Mountain Resort, although only a slight bit. Very nice place for taking a stroll and admiring the buildings in harmony with nature and the lakes."</i>
Visitor 3	<i>"Very nice place to walk and enjoy nature. Suitable for kids and a trolley"</i>
Visitor 4	<i>"I wouldn't recommend visiting the Summer Resort in winter. Especially right now, as there are construction sites everywhere, with digging and wires scattered around...There is ice skating on the lake."</i>
Visitor 5	<i>"The museum has many exquisite old items, such as clocks and cloisonné; there are many interesting things to see. Museum products are informative keepsakes, aesthetic, and worthy for gifting.... Products are replicas of Qing-era artifacts."</i>

(Source: Wanderlog, 2018; Chinatripedia, 2023)



Table 3. Thematic Table

Themes	Sub-Themes	Description	Codes
Narrative construction	Storytelling through visuals and spatial architecture	The cultural narratives represented in the cultural products and spatial environment depict the imperial culture of the Qing Dynasty and national harmony	"exhibits and architecture depicting imperial ideology," "soft-power," "national unity," "multicultural rule" "replica of the Qing Dynasty"
Semiotics representing Culture	Aesthetics and cultural integration: Integration of Qing Dynasty Imperialism	Representation of the culture of the Qing Dynasty and the regional multi-ethnic unity of China	"Trapezoidal Windows", "Horse-shoe shaped Courtyard", "Imperial Garden", "Imperial Courtyard"
Visual Engagement Strategies	Lighting, Virtual Reality Integration in the display	Integration of the technology of Virtual Reality to display products. Requirement of digital tools for increasing effectiveness	"Storytelling through VR" "GIS enhances narrative reconstruction"
Integration of Nature	Integration of authentic natural materials	Integration of environmental elements as a representative of unity with nature	"Pine Trees depicting the imperial garden" "Location of Museum in between the garden" "harmony of nature and imperial heritage"

(Source: Self-created)

#### 4.1 Theme 1: Construction of Narratives Through Visual Elements

Visual elements used in designing the cultural products of the museum depict historical and cultural narratives that attract visitors. The findings of the study indicate that the cultural products are not limited to the artifacts only, but the landscape and architecture, altogether, have been strategically designed to represent the cultural and imperial identity of the Qing dynasty. The studies of Foret (2000), Koerts (2015), Whiteman (2023), and Hevia (2001) support the idea that the visual attributes symbolise the cultural and historical narratives. The narratives constructed by the artifacts and landscapes depict the harmony and national unity within the country. The findings support the view that the narratives constructed by the Chengde Museum and Resort have always been a centre for depicting state-centred narratives and cosmopolitanism. From the era of rulers Qianlong and Qing to the current Chinese government, the restoration of the Chengde Mountain resort and Museum has always been a subject to depict the political shifts and state-centred narratives. However, Whiteman (2023) contradicts the state-centred narratives constructed to be partial and requires the reconstruction of the narratives to represent the fragmented stories of the eras, such as that of Kangxi. Meanwhile, Koerts (2015) points out that Chengde, along with other museums and heritage sites, becomes the soft power resembling the cultural diplomacy of China. Hence, it could be understood that the cultural elements visualized through the design of the cultural products depict the state-centred narratives.

#### 4.2 Theme 2: Representation of Culture and Historical Identity Through Semiotics

The semiotics used to design the landscapes, architecture, and other cultural products of the Chengde museum and Resort symbolize the cultural and historical identity of the Imperial era and Chinese tradition. The semiotics and visual strategies used in the design of the cultural products, both tangible and intangible, represent the multi-ethnic unity of the country. The different ethnic backgrounds, such as those of Tibetan and Mongolian cultures, are represented through the semiotics and signs used in designing the products. For example, the scholars and websites such as ArchDaily state that the trapezoidal windows, the horseshoe-shaped courtyard, and the pine trees, altogether depict the blend of imperial legacy of the Qing Dynasty with the Tibetan culture. The studies, as well as the visitor reviews, depict the cartographies symbolizing the Chinese literary tradition. Visitors identify it as their historical identity. Semiotics, such as poetic names of gardens, contribute to the grandeur and cultural identity of the place. Overall, the findings depict that the visual communication through semiotics used to be effective in persuading the visitors and engaging them with the cultural products.

#### 4.3 Theme 3: Effectiveness of Visual Engagement Strategies

The Chengde Mountain Resort Museum employs visual communication strategies ranging from traditional symbols to

digital tools to engage visitors and enhance their experience. It is evident from both scholarly studies and visitor reviews that the visual communication strategies, such as semiotics are accompanied with Virtual Reality technology within the Museum. The study by Zhao et al. (2023) and Chunlan et al. (2025) depict that digital tools such as VR technology are used within the museum to enhance the visitor experiences of the museum's cultural products. Reviews of the visitors also depict that the haphazard wires being spread in the museum grounds indicate the digital restoration of the museum and resort. It is evident from the findings and reviews of visitors that the visual communication strategy used by the museum is effective in persuading the visitors towards emotionally engaging them with the cultural reminiscence, which, irrespective of the price of the products, can lead to purchasing intent among the visitors. Corresponding to the component of cognitive and affective categories of the deconstructed theory of Planned Behavior, the engagement might lead to purchasing intent among the visitors. However, a study by Whiteman (2023) depicts the need for the application of GIS in order to reconstruct the narratives represented by the cultural products in order to provide a more immersive experience for the visitors.

#### 4.4 Theme 4: Integration of Natural Aesthetics as a Strategic Attraction to Cultural Products

Scholars have depicted nature as a strategic element that has been deliberately incorporated by the state to visually attract viewers. Several studies, along with visitor reviews, have indicated that nature and environment add to the grandeur of the imperial museum and resort. Visitor reviews indicate that "harmony of the cultural products with nature" depicts the blend of nature with architectural designs and artifacts. As evident in the study of Chen (2016) and the report by Fu Lv (2019), the environmental elements like pine trees, stone pathways, and the serenity of the mountains add to the visual imagery of the imperial historical grandeur of the Qing Era and the Chinese culture. The studies have depicted nature and landscapes as strategic tools for enhancing the beauty of the museum and resort of Chengde. The integration of natural elements is highly appreciated by visitors as well, who prefer the enjoyment of nature over the artifacts of the museum. Hence, natural elements such as the pine trees could be viewed as a part of the visual communication strategy of the museum to increase visitor engagement.

## 5. Discussion



The period room of the Hall of Refreshing Lake Mists [Photo/Official WeChat account of Chengde Mountain Resort Museum]

Figure 3. Cultural Products in Chengde Mountain Resort Museum

(Source: Fu Lv, 2019)

#### 5.1 RO1: To Trace the Influence of Visual Communication on Visitor Experiences and Purchase Decisions

Based on the above analysis, it is evident that visual communication attributes, when applied in designing and developing the cultural products of museums, enhance visitor engagement. In the context of the case of Chengde Mountain Resort Museum, the integration of various elements, such as environmental factors, landscapes, architectural designs, along the design of artifacts, contributes to the enhancement of visitor experiences. The themes 1 and 4 directly correspond to answer RO1, whereby the natural elements, along with the visual storytelling depicted by the cultural products, contribute to engaging the visitors. It is evident from the research that the visual communication attributes have a long-lasting impact on the visitors. This corresponds to the affectual and cognitive components of the

deconstructed theory of Planned Behavior, which leads to the desire and intent of purchase among the visitors for replicas. Supported by the findings from the scholarly studies, theoretical background, and visitor reviews, this research finds a direct and positive relationship between the use of visual communication strategies with the enhancement of visitor experiences and purchase intentions.

### *5.2 RO 2: To Understand the Role Played by Cultural Signs And Symbols in Shaping the Visitor Preferences for Museum Cultural Products*

Drawing upon the main findings of the research, it is evident that cultural symbols and signs play an integral role in shaping the preferences of the visitors for the museum's cultural products. The study concludes upon the notion that cultural products are not limited to the artifacts but also the landscapes and architectural buildings as well. It is noted that visitors appraise the historical and cultural identity represented by the cultural products of the museum and resort. The symbolism of the multi-ethnic unity of the country, along with representing the traditional culture and imperial heritage, contributes to the building of soft power for the country of China. The national unity and strength are identified by the semiotics used in designing the cultural products. The state-centred narratives depict the soft power and cultural pride of China. These factors act as the emotional and cognitive components that persuade the visitors to engage with the products irrespective of their prices, hence leading to the intent of purchase for their replicas.

### *5.3 RO 3: To identify the effectiveness of visual communication strategies used by museums to enhance visitor experiences in the visual space*

Drawing upon the main arguments of the scholarly studies, it is evident that visual communication strategies have been a part of designing and restoration of the Chengde Mountain resort Museum for a long time. The studies have depicted that the visual communication strategies employ the integration of various non-digital and digital tools for restoring the cultural heritage of the Museum and resort. The idea that emanates from the visitor reviews is that the Government of China is in a continuous process of developing the site. The visual communication strategies employing the digital tool of VR technology have enhanced the visitor experiences in the museum. The immersive experience provided by the natural elements, when combined with the digital elements, gives the visitors the intent to engage with the cultural products emotionally. The visual communication strategy of the museum is developed not only for influencing purchase behavior among visitors but also to increase the soft power of the country.

### *5.4 Further Research Direction*

The research findings indicate that the visual communication attributes, when used to design museum products, contribute to the enhancement of visitor experiences in a museum. This leads to the development of purchase intentions among the visitors. Drawing upon this context, researchers can undertake a further in-depth analysis of the research problem utilizing a mixed-methods research strategy. This can contribute to further extensive findings on the detailed visual communication strategies that can actually contribute to the enhancement of visitor experiences. Also, the findings of the present study can be used by Museums to increase their revenues by implementing visual communication strategies in redeveloping museum products.

## **6. Conclusion**

### *6.1 Conclusion*

The research aimed at tracing the influence of visual communication, when used in designing cultural products, on the visitor experiences and purchase intentions. To that end, the research concludes on the finding that visual communication attributes, when utilized in designing cultural products in context to museums, result in positively influencing the visitor preference for the cultural products, enhancing the experience, and leading to purchase intentions for their replicas. The research study by employing the theoretical assumptions of the deconstructed theory of planned behavior, delineates the influence of the attributes of visual communication and semiotics on the visitor experiences and purchase intentions. It is deduced from the study that the dependent variable of visitor experience and purchase intentions for replicas identified within the study is directly proportional to the design of cultural products using semiotics and visual communication strategies. The research findings have been able to trace the answers to the research questions. It has been found that when studied in context with the cultural products in the Chengde Mountain Resort Museum, the visual communication attributes positively enhance the visitor experiences that might lead to purchase intentions for replicas sold by the resort. Deducing from the deconstructed theory of planned behavior, it is observed that the enhanced visitor experiences influence the cognitive faculties of the individual, which persuades the visitors to desire the cultural products. The research deduces the finding that visual communication strategies are not limited to cultural products or artifacts alone but also include landscapes and architectural components that altogether enhance the viewers' experience. The research study in the context of the Chengde Mountain Resort Museum concludes upon the finding that various symbols and components, such as cultural signs, cartographies, along natural elements such as trees

and stones, contribute to enhancing visitor experiences in museums, providing them with an immersive experience. Answering the second research question, the study finds that the cultural and historical identity attached to the cultural and national signs used in designing the cultural products provides a sense of reminiscence and pride among the public. This sense of pride and resemblance to national identity provides an immersive experience for the visitors that leads them to prefer replicas of museum cultural products irrespective of their prices.

The theoretical assumptions provide the insight that the influence of the visual communication attributes on the cognitive as well as normative components of the individual's personality leads to the purchase behavior among the visitors. Based on this context, this study answers the third research question that the visual communication strategy of the Chengde Mountain Resort Museum is effective in enhancing visitor experiences, influencing their purchase intentions. However, the study finds that there are factors other than cultural symbols and artifact designs that equally contribute to providing an immersive experience to the visitors. These factors include natural elements such as the pine trees, stones, and architectural designs, which, when they resemble the historical, imperial, and regional culture, along with the digital tools such as VR technology, provide an enhanced experience for the visitors, influencing their engagement with the cultural products. The study concludes on the notion that effective visual communication strategies can influence visitor experiences. However, the study also deduces from visitor reviews that the Chengde Mountain Resort Museum needs to incorporate more digital tools along with reducing the ticket prices in order to increase the number of visitors and, in turn, increase engagement and purchase of replicas of cultural products.

### *6.2 Limitations and Future Scope*

The present study is limited to the fact that it has been conducted on a small scale due to time and cost constraints. A more extensive and large-scale study can provide a deeper insight into the influence of the visual communication strategies on the visitor purchase behaviour and intentions. The study limits itself to being based on secondary research findings only, whereby the incorporation of both primary and secondary data, under the pragmatic research design, could have provided the scope for understanding the visual communication attributes and strategies in detail. The study, however, is an indicator of more extensive research in the future, whereby the incorporation of a pragmatic research design along with a comparative approach can enhance the reliability and scope of generalization for the research findings.

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### **Authors contributions**

Conceptualization: L.Y; Methodology: L.Y; Data Collection: L.Y; Data Analysis: L.Y, W.C; Writing - Original Draft; Preparation: L.Y, W.C; Writing - Review and Editing: L.Y, W.C; Visualization: L.Y, W.C; Supervision: W.C.

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### **Data availability statement**

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

### **Data sharing statement**

No additional data are available.

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