Incorporating The Influence of Regional Culture in Tableware Design: The Case Study of Chaoshan Area

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Published online: 29 September 2023

To cite this article: Li Zhuopeng and Muhammad Jameel Mohamed Kamil. 2023. Incorporating the influence of regional culture in tableware design: The case study of Chaoshan area. *Wacana Seni Journal of Arts Discourse* 22: 17–33. https://doi.org/10.21315/ws2023.22.2

To link to this article: https://doi.org/10.21315/ws2023.22.2

ABSTRACT

Tableware has traditionally played a significant part in China's food culture and has a high usage rate as a product directly tied to everyday life. Therefore, designing tableware with local cultural characteristics may aid in the education of people to appreciate local culture. However, there is a considerable shortage of research on tableware with Chaoshan cultural elements. Hence, this research will include both Chaoshan culture and tableware design. It is recommended that Chaoshan culture be employed as a design element in tableware design, and that the viability of using tableware as a carrier to express regional culture be explored. The significance of this study will aid in improving the Chaoshan region's cultural production, boosting cultural confidence, and increasing local revenues.

Keywords: Chaoshan, culture, tableware, product design

INTRODUCTION

The operational income of enterprises in the cultural and related sectors is projected to reach 9,851 billion RMB in 2020, according to research by China's National Bureau of Statistics. The increase of 2.2% over the previous year, with the cultural manufacturing sector accounting for 39.7%, is sufficient to demonstrate China's expanding culture-based products industry and innovation. Furthermore, based on statistics from China's report hall, the added value of national culture and allied businesses is expected to reach six trillion RMB in 2022 and 6.65 trillion RMB in 2023 (see Figure 1).

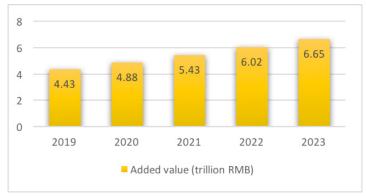


Figure 1 Statistics and forecast of National Cultural and Related Industry added value in 2019–2023. Source: Adapted from State Statistics Bureau (2021).

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However, the growing tendency of globalisation has passed a detrimental impact by obliterating the distinctiveness of national and regional cultures. As a result, cultural features in everyday products have converged and hardly identified, particularly in the design of tableware. As mentioned by Chen Junhua et al. (2020), through examining the general situation of folk culture and innovative products in the Chaoshan region, it was found that 81.3% of Chaoshan people's knowledge on Chaoshan culture comes from a food culture, followed by the religious culture at 14.8% (see Figure 2). The study established that there is acknowledgement for Chaoshan food and religious culture, both of which are cultural characteristics that reflect the Chaoshan region. According to a study conducted by Chen Junhua et al. (2020), the majority of Chaoshan residents have a good understanding of the Chaoshan culture through food culture, and tableware is strongly tied to food culture. The study also notes that Chaoshan residents' grasp of other Chaoshan cultural settings, such as architectural, handicraft, and theatre culture, is alarming. Tableware design that incorporates culinary culture and other cultural features, therefore, is very significant for disseminating Chaoshan culture.

According to Li (2015), tableware design has a lengthy history similar to human food culture, and it has evolved in perfect sync with food culture. Li (2015) also indicates that in recent years, the domestic market has steadily warmed up, and a set of elegantly designed tableware has evolved into a functional piece of art in the realm of household goods. Han and Zhou (2014), on the other hand, argue that China's tableware design is presently in a precarious position. Further research on the design of tableware inspired by Chinese culture is required. Tableware design in Chinese culture should absorb cultural elements and reinforce cultural values in order to compete on an international level. Furthermore, according to survey input from project team members in Jiangsu and Beijing provinces, the present business phenomena has overlooked the potential of tableware design (Zhou 2008). This situation is unquestionably improving but maintaining the attractiveness of the distinctive local culture will be difficult. According to Jia (2019), tableware design in China should increase the expression of design languages, cultural connotation, emotion, creativity, and innovation. Jia (2019) also emphasised the importance of designers being able to extract cultural features and elegantly incorporate them into tableware design. The cultural features were merely duplicated and incorporated as a decoration in the tableware in the conventional procedure of making cultural tableware design, which failed to elicit a sense of refinement of the cultural value.

Hence, in innovative culture-based design, the production of cultural and creative products with regional cultural features has become a popular issue. The research of tableware with cultural features based on the Chaoshan area, on the other hand, is clearly insufficient, and will not be effective enough in promoting the local culture. Therefore, the purpose of this research is to explore the Chaoshan culture as a design element in tableware design, as well as to provide the framework for a future empirical study. The significance of this study will help to improve the cultural output of Chaoshan region by enhancing the appreciation of Chaoshan culture and boost up the local profits.

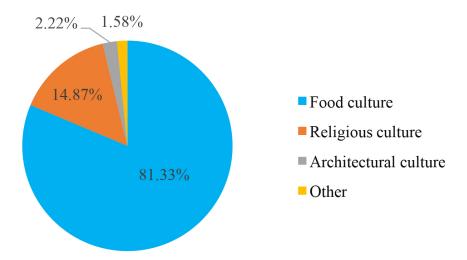


Figure 2 Percentage of cultural understanding among Chaoshan residents. Source: Adapted from Chen Junhua et al. (2020).

LITERATURE REVIEW

Chaoshan Culture

Chaoshan culture is a regional culture that arose through the fusion of ancient indigenous culture in South Guangdong, central plains culture, and international culture (Tan 2016). With a total land area of 10,362 km and a population of 13.5 million, the Chaoshan region is located in the east of Guangdong Province. Chaoshan has a tropical environment and a lengthy coastline, giving it a great supply of food. Since Chaoshan has abundant food resources, thus the simplest cooking methods, such as white searing and steaming, are utilised to bring out the taste of the food (Su and Chen 2004). Chaoshan citizens are more concerned with the freshness of their food, delicate knife skills, and intricate meal preparation than with the strength of the dish's flavour. The range of spices used in Chaoshan cuisine is another distinguishing feature. The condiments were presented on distinct sauce plates by diners in order to preserve the flavour of the cuisine. Different sauce dishes are required for different foods, such as steamed fish with soy sauce, fried tofu with minced garlic, and so on. Men are in charge of field work, while women are in control of domestic affairs, due to the large population yet little land in the Chaoshan area. Hence, women seldom worked in the fields and had more time to process food, resulting in a wide range of snacks and desserts. The most frequent and traditional snack is a broad range of flour-based guo, such as pingpong guo, shuqu guo, spring guo, red peach guo, etc. Different guo are prepared during different festivals throughout the year, according to Chaoshan tradition. Residents will, for example, make the shuqu guo during the spring festival. The guo is prepared by combining flour with shuqu grass and printing good luck phrases and designs on it. These snacks are used as tributes in sacrificial rituals as well as being consumed during regular meals.

Chaoshan's diverse geographical setting has also nurtured a thriving tea culture. *Kungfu* tea culture is another aspect that represents the Chaoshan region. The climate in the Chaoshan region is relatively humid and hot as a result of its geographical position. Tea can help to cool down and avoid heat stroke by reducing the body temperature. *Kungfu* tea has become popular among Chaoshan citizen as a result of these advantages. The majority of households in the Chaoshan area have a *Kungfu* tea set. People in Chaoshan like drinking *Kungfu* tea with their families while discussing family matters, conducting business, or entertaining visitors (Hao and Zheng 2013). Furthermore, Chaoshan citizens are picky about the tea sets they build, the brewing techniques they employ, and the manner in which they consume their tea. As a result, the tea culture, which includes integrated spirits, brewing procedures, and the art of inspection, has been preserved in order to maintain cultural etiquette (see Figure 3). Nonetheless, Chaoshan culture is rich not only in food culture, but also in religious culture, opera culture, and handcraft culture.





Figure 3 Traditional Chaoshan snacks and *Kungfu* tea. Source: Photo by authors.

Religious culture

People of Chaoshan have strong religious beliefs. Many Buddhist aspects may be seen in Chaoshan culture. Chaoshan culture reveals numerous Buddhist elements, such as vegetarianism in food culture, temple and tower (architecture), Buddhist idioms in dialect culture, Buddhist music in folk art, Buddhist burial customs in etiquette culture, and Buddhist festival culture, according to Zheng (2013). Buddhism increasingly adapted to the local context and actively engaged in the formation of social culture, having a significant effect on the moulding of Chaoshan culture. At the same time, folk gods among Chaoshan households. Chaoshan people, for example, are passionate about worshipping the sun, moon, mountains, and other natural elements. They place a strong priority on filial piety and the concept of the clan, honouring their ancestors numerous times a year to pray for family unity, health, and wealth (Yu 2011). With this strong folk religion, the Chaoshan people treat the village as a whole, and on a certain day each year, the entire village participates in a large-scale sacrifice ritual, similar to a ceremonial for greeting the gods (see Figure 4). Nonetheless, the ritual is being honoured by the community like a carnival, with opera being performed as well.

Opera culture

In the Chaoshan region, Ying Ge dance, one of the region's folk arts, is a popular folk dance (see Figure 5). The Ying Ge dance began as a ritual to ask the gods for their blessing. Nonetheless, as civilisation has progressed, it has become an indispensable way of commemorating ritual activities. According to Zahng and Xu (2009), Ying Ge dance has a lengthy history, distinct style, and widespread popularity. Ying Ge dance is a type of folk square dance that combines dancing, boxing routines, and acting abilities. The front shed, middle shed, and back shed comprise the entire Ying Ge dance performance technique. The front shed is a dance performance and the major component of the team, which consists of 24 to 36 persons on a modest scale. The majority of the front-end performers wore ancient hero costumes, while the others wore ancient warrior costumes. The opera art performance in the centre shed frequently performs operas based on folk tales. The back shed is a





Figure 4 Religious worship sites. Source: Photo by authors.





Figure 5 The *Ying Ge* dance is performed by a group of young people. Source: Photo by authors.

martial arts performance, with 16, 24, or 36 performers carrying various swords and halberds and forming a large martial arts team that takes turns executing martial arts to demonstrate the team's strength (Yi 2008). *Ying Ge* dance has expanded and evolved in the social hierarchy as a result of its aesthetic attractiveness and social influence. It may still be found in religious rituals, joyful festivities, square performances, and group exercises today, and it has become a treasure of Chaoshan folk art.

Chao Opera, according to Huang and Zeng (2020), is one of China's top 10 drama types, with a 500-year history. Chao Opera has become a vital connection in the relationship of Chaoshan people all over the world, and it is an essential carrier of Chaoshan culture. Chao Opera combines aspects of performance, dance, and costume, and is performed in Chaoshan dialect and accompanied by Chaoshan music. Furthermore, the concept of Chao Opera is primarily based on regional traditional tales and folklore. Therefore, Chao Opera has become a key representative of local opera (see Figure 6).

Architectural culture

Zheng (2014) argues that the rural areas in Chaoshan are mainly inhabited by clans, and the coastal plain areas along the river are economically developed. Many prominent clans live in these areas. Therefore, both urban and rural residents have a powerful concept of a clan. It was embodied that the village's structures were based on the ancestral temple and extended to encompass the entire layout. Due to the long influence of religious culture, geomantic science deeply influenced Chaoshan traditional architecture. The theory of balance of *Yin Yang Wu Xing* is widely used in the appearance, location, and interior design of buildings. As indicated by Lin (2016), Chaoshan traditional folk houses have absorbed the architectural style of the Central Plains, including the local version of quadrangle dwellings combined with the local conditions of the Chaoshan area, in various planar forms. The architectural features are called *Sidianjin* and *Xiashanghu* (see Figure 7).



Figure 6 Chao Opera performance. Source: Photo by authors.

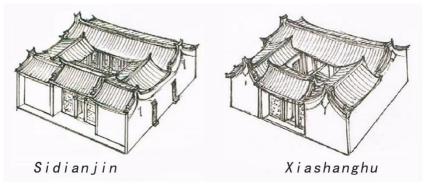


Figure 7 Sketch form of *Sidianjin* and *Xiashanghu*. Source: Adapted from Lin (2013).

- 1. *Sidianjin*: The architectural style is a square courtyard with a well in the middle and a room in each of the four corners of the courtyard, which is connected by four halls. Due to the similarity of the roof shape of each room to the Chinese character for *Jin*, hence the name *Sidianjin*.
- 2. *Xiashanghu*: The architecture is similar to that of the *Sidianjin*, but the well-positioned closer to the courtyard's gate rather than in the middle. Moreover, two houses in the front part of the courtyard change orientation and are smaller in size, the overall shape resembling a tiger grovelling on the ground.

In order to pursue the luxurious and elegant decorative effect, the Chaoshan people ensured the artistic quality of the building to reach the acme. Within the exterior and interior appearance, the local craftsmanship cultures were reflected everywhere. Gold lacquer wood carving, craft stone carving, and porcelain inlaid art are the main expression elements in architectural decoration. In some temples and ancestral halls, the roof beams are covered with elaborated wood carvings, mostly in the shape of various flowers, plants, and animals, combined with elements of metalwork, calligraphy, and painting to achieve a perfect integrating of architecture and art (see Figure 8).

Crafts culture

Chaoshan wood carvings can broadly be classified according to their purpose into four categories: architectural decoration, furniture decoration, artefact decoration, and ornamental decoration. Chaoshan wood carvings were closely related to actual life. Most shapes come from elements that people know and favour, such as folklore, historical stories, dramatic novels, animals, fish, flowers, etc. Because the lion symbolises power and fierceness in old culture, wooden decorations with lion designs are the most frequent. They were intended to ward off evil spirits and provide good luck. As indicated by Wu and Deng (2012), the biggest difference between Chaoshan wood carving and other wood carving schools in China is carving techniques, especially the multi-layered carving with crisscrossing carving features (see Figure 9).





Figure 8 Decoration of traditional Chaoshan buildings. Source: Photo by authors.





Figure 9 Wood carving decoration of traditional building. Source: Photo by authors.



Figure 10 Dawu clay figurines. Source: Photo by authors.

According to Zhou et al. (2017), Dawu clay figurines inherit the "delicacy" of Chaoshan culture. The artistic expression techniques are also rich and varied, including carving, pinching, sticking, moulding, carving, colour. The figure in the clay sculpture wears various clothing to give a realistic look, and the craftsmen must paste the appropriate number of outfits (see Figure 10). Affected by local culture, the clay sculptures also include a strong local "cultural atmosphere." Dawu clay figurines' work mainly focuses on traditional Chaozhou opera and folklore.

The Elements in The Design of Tableware

According to Ma (2014), the design of cultural tableware must take into account the embodiment of traditional culture, as well as promote culture and suit daily necessities. Food culture is intertwined with tableware design, but it also includes cultural components. The combination of regional cultures and tableware design has a considerable impact on the region's cultural output. It can also boost cultural confidence, understanding, and appreciation at the same time. The enjoyment of Chaoshan region's cultural arts and food may be preserved by combining tableware design and regional culture, which is in accordance with the previous research's notion that seeking for the optimal combination in such a topic (Li 2015; Han and Zhou 2014; Jia 2019; Zhou 2008; Ma 2014; Bai 2016). There are eight significant elements to be explored when designing the Chaoshan tableware items: colour of the cutlery; tableware design form; material of tableware; function; texture; environmental conditions; product packaging; and emotional and etiquette.

Colour of the cutlery

According to Zhou (2008) and Ma (2014), in order to create distinctive food, colour plays an important role. A polished sensation cannot be achieved by using harsh colour in dinnerware design. Hence, when matching the colour of the tableware, the colour of the dishes should be taken into account first, followed by the cooking technique of the dishes. This pairing works well in soups, porridges, and stir-fried foods. The popular Chaoshan cuisine oyster omelette and rice *guo*, for example, are generally fried and golden yellow in colour. The tableware design should be combined with black to increase the contrast if the dinnerware is meant to emphasise such items.

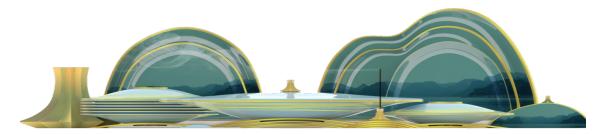


Figure 11 Landscape of Guilin (2018) by Jia Jing. A famous attraction in Guangxi Province, China. Source: Designers.org (2023).



Figure 12 One-Bai (2019) by Xu Xiaoqi, Cheng Yongsheng, and Zhou Tao. Simple white ceramic.

Source: Image courtesy of the artist.

Tableware design form

Cultural elements presented in the form of tableware design, as Zhou (2008) points out, create a sense of experience and recognition. Smooth curves in a symbol, the turning relationship of harsh lines, or the expansion and distortion of traits, for example, may all be utilised to tableware design (see Figure 12). The eaves form in Chaoshan's architectural culture is usually sharp and upward, it can be partially dimensioned, and applied to the corners of plates or the edges of lids.

Material of tableware

Tableware is mostly determined by the qualities of the dishes. Fried and dry-stir-fried dishes without soup, for example, might be served with bamboo or wood. Meanwhile, ceramic or stainless-steel tableware may be used to serve soups like oatmeal and Chinese soup. Mixing numerous materials in the overall material selection of tableware will help produce distinct visual, psychological impacts and connections, as well as making the design appealing (Bai 2016). Bamboo and pottery, for example, are abundant in the Chaoshan region and may be used to make tableware. Bamboo may be woven to give layers to the overall appearance of the tableware. Meanwhile, as illustrate in Figure 13, the combination of pottery and bamboo weaving may provide a unique look.



Figure 13 Gui Chao (2018) by Yang Hao. Purple sand tea set. Source: www.shejijingsai.com (2018).



Figure 14 *Eatsy* (2017) by Jexter Lim. Special tableware designed for the visually impaired. Source: Jexter Lim (2017).

Function

According to Wang and Tang (2009), utensils must be effectively blended with the functioning of the meal presentation. While assuring the fundamental dish display function, some other practical features, such as a convenient placement, space-saving features, and water filtration, can be added as needed. Furthermore, it is beneficial to consider the demands of specific groups of people (see Figure 14). Designer's ability to solve user difficulties with ingenious functionality defined the successful piece of tableware.

Texture

Emphasising the material's texture aids in evoking the appropriate cultural connotations (Zhou 2008). The texture pattern can be derived from well-known local products such as the pomegranate flowers (see Figure 15), which in the Chaoshan region symbolise the warding from evil spirits. The texture creation might come from the same or a distinct material group.



Figure 15 *It's my match* (2019) by Helena Boddenberg. Source: Image courtesy of the artist.



Figure 16 *Ruo Shui* (2020) by Hong Meilian. Source: Image courtesy of the artist.

Environmental conditions

According to Fu and Zhang (2016), the design of tableware must accept various uses and environments. Due to the obvious strong religious convictions in the Chaoshan region, for example, the Chaoshan people have placed a greater emphasis on the festive meal environment. Hence, tableware may be utilised to accentuate the ambience in the area during religious rituals and festivals to depict the fortunate red and yellow. When it comes to VVIP guests, the proper design style can project an impression of maturity and stability (see Figure 16). Tableware that is environmentally friendly allows customers to feel distinct psychological shifts and contributes to a better overall experience.

Product packaging

Successful product packaging is an essential component in attracting customers' attention (Liu and Lin 2008). Packaging design must be addressed during the product design phase to make the product more attractive. The subject of the product, which includes decorative visuals and typography, must be reflected in the packaging design. For example, embellishing the tableware design with auspicious phrases popular among Chaoshan residents is suitable for festivals and can increase the tableware's cultural worth (see Figure 17).



Figure 17 *Gu Pu* brand tableware packaging design by Jiang Ping. Source: Shanghai Maritime University (2018).



Figure 18 Homesickness hot pot tableware by Jia Jing. Source: Image courtesy of the artist.

Emotional and etiquette

Emotional components and folk etiquette must also be taken into account throughout the design process. Dining enjoyment is derived not only from the taste of the meal, but also from the aesthetic and emotional experience of utilising the tableware. Chinese people pay close attention to etiquette during traditional feasts. A set of auspicious tableware is yet another way to improve the banquet's ambience (see Figure 18). Traditional Chinese architecture, for example, inspired the design of Homesickness hot pot tableware. The distinctive eaves form is reorganised and conceptualised in the Homesickness hot pot tableware design to complement the square glazed tile shape. Furthermore, the dinnerware is white and gold in colour, which is derived from the colour of the traditional building's roof tiles. Traditional Chinese architectural features were included into the tableware design to elicit a sensation of homesickness when dining.

METHODOLOGY

The nature of the study is to investigate Chaoshan cultural connotation and the implementation in tableware design. In this study, the independent variables are as follows: (1) the variety of identification in Chaoshan cultural connotation; and (2) the variety analysis of elements in design based on Chaoshan culture. These independent variables, obtained throughout the research work, acts as an element that influenced the innovative design of Chaoshan cultural-based tableware (dependent variable).

This conceptual framework (see Figure 19) will be implemented through the research inquiry; a rational process for resolving doubt, which leads to the identification of important factors to be explored. Exploration helps to clarify the structure of the research effort, which is based on implementing the problem statement, the development of the research question and goal, and the methodology required. Therefore, there are two specific objectives of research questions, as well as ways to achieve and answer these questions (Table 1).

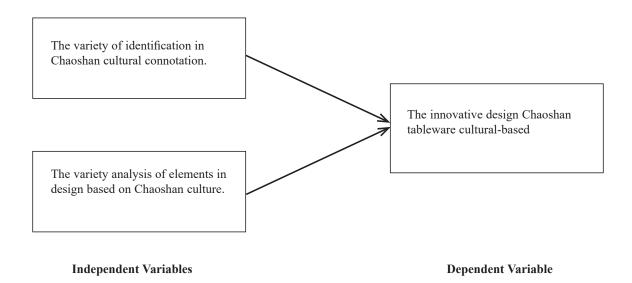


Figure 19 The conceptual framework.

 Table 1
 Research questions, research objectives, and proposed methodologies.

Research Questions	Research Objectives	Proposed Methodology
Which elements in Chaoshan culture can be integrated in tableware design process?	To analyse elements in Chaoshan culture that can be integrate in tableware design process.	Selection and extraction: Choose the most suitable element among the collected cultural elements before they can be applied. Then, the designer applies the symbolic and aesthetic parts of the selected cultural elements to the tableware design in the most appropriate way through his design process.
How the recognition of Chaoshan cultural elements in the designed tableware can be assess by users?	To evaluate user's recognition of Chaoshan cultural elements in the designed tableware design.	Design syntactic analysis: Evaluating users' identification on Chaoshan cultural elements in the designed tableware design.

Research Design

This study aims to investigate the combination of tableware design and local culture in the Chaoshan area. Hence, this study is qualitative, and the investigation stage of this research is ethnographic research methods. According to Hendryx-Bedalov (1998), in ethnographic research, the researcher must account for social and cultural phenomena through participatory observation and interviews by conducting field research on people and events in the selected environment. Therefore, the researcher observed the food culture, opera culture, architectural culture, religious culture, and handicraft culture in the Chaoshan region. The data collection was conducted in the city of Jieyang, Chaozhou, and Shantou. Moreover, video recording was used as well for the observations. The observation was conducted in a selected area at Chaoshan (such as restaurants, shops, and architectural buildings), to extract the available cultural elements. The data from the observations study were analysed to obtain an understanding of Chaoshan culture. It should be emphasised that not all extracted cultural elements are suitable for tableware design. Zhou (2008) stated that cultural elements can be extracted from historical sites, artefacts, and non-material types in a region. Hence, the determination of cultural elements in tableware design requires two steps:

- 1. Selection: Choose the most suitable element among the collected cultural elements before they can be applied.
- 2. Extraction: The designer applies the symbolic and aesthetic parts of the selected cultural elements to the tableware design in the most appropriate way through his design process.

FINDINGS AND ANALYSIS

The Extraction of Chaoshan Culture Elements

The culture of an area was categorised into categories using this method. Then, from the selected cultural categories, particular categories were subdivided, followed by specific objects included inside the subdivided categories, and ultimately, the elements extracted from the specific objects. The Chaoshan representation culture is chosen throughout the process, and the following option can be made. When looking at the opera culture (in the cultural category), for example, *Ying Ge* dance is selected as a specific culture for the category under study (see Table 2). The facial masks are identified as a specific object utilised throughout the dance in *Ying Ge* dance, and the colour decorating of the facial masks is identified as an extracted element.

 Table 2
 Extraction of Chaoshan culture elements.

Cultural Categories	Specific Categories	Specific Objects	Extracted Element
Food culture	Kungfu Tea	Tea set; tea leaf	Shape; colour of tea leaf; teapot
	Snack	Shuqu guo; oyster omelette	Snack colours; appearance of form
Religion culture	Buddhism	Buddha statues; Buddhist scriptures	The Buddha's shape (outline); colour (gold, red) matching
	Folk religion	Religious activities; religious figures: King of Sanshan, Lord Siming	Statues of religious figures (outline); colours of sacrificial offerings
Opera culture	Ying Ge dance	Facial masks of heroes; dancer's posture; movement	Facial masks of various heroic characters; costume colours (black, white, blue, green); decorative forms
	Chao opera	Facial masks; costume; performance props	The colour scheme of the costumes of the characters in Chao opera
Architectural culture	Traditional residence (Xiashanhu, Sidianjin)	Eave; (house) beam	The shape of the eaves; the form of the decorations (wooden carvings)
		Structure of house	The outer contours of the house
Craft culture	Wood carving	Architecture; furniture; artefact decoration	Form of plants; animal wood carvings; colour (gold); texture of the surface of the wood carvings
	Dawu clay sculpture	Sculptural tools; sculpted figures; scenes	Sculpted figures; colours of costume

Design Syntactic Analysis of Tableware Design Studies

Design syntactic analysis can reveal how to consistently dispose of visual composition, form functionality, and design format in product design. Furthermore, it aids in the correct, clear, and obvious expression of all details in the product design, leaving no ambiguity as to what the designer means to depict (Abidin et al. 2016). Hence, designers may convey an inference about the form entity of their goods by knowing and implementing these form entity analysis methodologies. The internal functions (structural, transformational, and additional functions) and interaction functions of prior product designs may be analysed using form functionality analysis (ergonomic, syntactic, and semantic functions). The design format specifies which form elements are accessible and how they should be used. Design formats may be thought of as forms-designing templates that can be utilised when designers are looking for conceptual forms and can help with planning and direction (Warell 2001).

According to Mohamed Kamil and Abidin (2015), before beginning with the design of the tableware, the formal entity of the tableware can be examined. The three layers of design form analysis are as follows: (1) Superior gestalt level (outer shape): The product is viewed in its entirety; (2) Intermediate level (form features): Product distinguishing features and form elements; (3) Lower level (product component): Composition forms distributed throughout the product. For example, a teacher at Jingdezhen Ceramics Institute named Jia Jing designed a collection of tableware based on the scenery of Guilin. Figure 21 depicts the outside shape of the tableware sets, as well as the purposes and meanings of the items. It next examines the product's properties, such as a curve, an angle, and a function analysis. After that, it examines the product's components, such as the lid handles and the pan's body.

Superior gestalt level (outer shape)

A and H: The shape of the outer contours of the pan and plate, the relationship between the size of the plate and pan are interlinked to form a balanced syntactic function. It illustrates the form entities of the outer shape of the Guilin landscape as a focus inspiration in the design of the tableware sets.

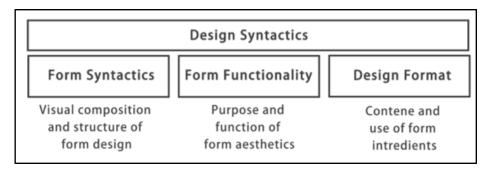


Figure 20 The theoretical framework of Design Syntactic. Source: Adapted from Warell (2001).

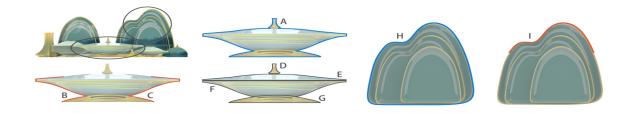


Figure 21 Example of design syntactic analysis of a series of tableware based on the landscape of Guilin.

Source: Illustrated by the authors.

Intermediate level (form features)

B, C, and I: The intermediate level analysis helps to identify significant characterised shapes and form elements (features) of product form (inner shape), which justified the styling reasoning of the designers. Through the interaction of curves, B and C creates significant characterised shapes and form elements (features) of product form (inner shape). Curves B and C serve as the shoulder lines of the pan, and the shapes of the vertical extensions indicate an external contour of the mountain's reflection in the water; curve I of the pan shows the concave and convex features of Guilin's mountain peaks, following the design theme.

Lower level (product component)

D, E, F, and G: Lower level analysis helps to identify significant curves distributed across the product form, which justifies certain functions within the forms. The handle D of the lid has a trapezoidal shape, and the size and position of the handle inform the user that it has a holding function. Furthermore, the lid E and body F of the pot is trapezoidal to punctuate the theme of mountains and water, and the elongated state of the pan serves the purpose of gripping and preventing scalding, available with ergonomic functionality. The bottom foot G has a supporting function for the pot, and its curvature points to the theme of the mountain.

Based on the analysis, it can be concluded that the design form analysis helps to understand the form entity relations that reveal a consistent treatment of visual composition, design format, and syntactic function in the tableware sets inspired from the landscape of Guilin. Moreover, the syntactic function included can be expand through the process as follows:

- 1. Discerning: separating one form entity from another.
- 2. Connecting: creating visual couplings between form entities.
- 3. Referring: relating visually to form solutions found in other products, e.g., of a common product family.
- 4. Uniting: relating visually to other form elements present in the design by giving them a common gestalt.
- 5. Balancing: harmonise by visual counteraction.

The study of product design semantics will benefit from the design syntactic analysis. Design semantics, in theory, aid in the expression of a product's connotation through its visual design (Qiu, Yang, and Wan 2012). In other words, it enables the consumer to rapidly comprehend the product's purpose and application based on its design. As a result, while creating a product's appearance, the purpose of the product should be justified, and the function should be as simple as possible. For instances, the purpose of a pot's handle and lid. The design of the handles, as well as the location of the lid once it has been pushed off, should be easy to grip. In general, the product shape should be designed in accordance with the design concept, resulting in a form that combines visual image, connotation, and practicality.

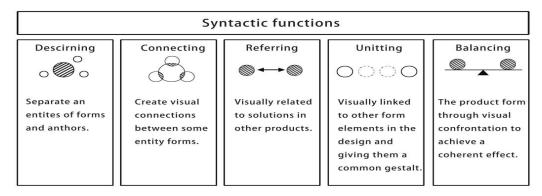


Figure 22 Syntactic functions. Source: Adapted form Warell (2001).

CONCLUSION

Based on the findings and discussions, the objectives of this study have been met; to analyse elements in Chaoshan culture that can be integrate in tableware design process, and to evaluate user's recognition of Chaoshan cultural elements in the designed tableware design. Generally, it can be concluded that a new concept of tableware design from the perspective of the Chaoshan region can be obtained by analysing the culture of the Chaoshan region, syntactic analysis of the tableware design, and the main elements of tableware design. Through the literature study, it is worth noting that Chaoshan culture has a long and glorious history. Moreover, practical functionality, visual aesthetics, and cultural emotion were found to be perfectly combined in the process of designing tableware featuring Chaoshan culture.

As a result, the combination of regional culture and art help to enhanced enhancing people's sense of cultural identity and adding value to Chaoshan culture, which not only strengthens the region's cultural output but is also important for the promotion of Chaoshan culture. In general, the significance of this study will aid in improving the Chaoshan region's cultural production, boosting cultural confidence, and increasing local revenues. The contribution of the study is hoped to attain a greater cultural legacy and development in the context of global economic growth through extensive design process.

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