

# A Study on Mobile Telephone Design and Application with Chinese Cultural Characteristics

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## Abstract

Considering the globalization and the development of regional culture, culture and design become more and more closely connected. It is obvious that every country, based on politics, economy, society, industry, has a different understanding to the design.

With the popularity of mobile phone, it has been in close contact with our lives. Mobile phone is changing our way of life, it also has become a culture, and is reflected in a period in different countries and different ethnic' s cultural traditions and lifestyle.

In this paper, the study is about the impact of culture on mobile telephone design and application, especially for appearance and input for mobile telephone.

## I. Introduction

### 1. background

Definition of culture: Culture is created by the human being, and it can be acquired through learning. In addition, culture is the unique property of human being, and it is shared by groups. In a word, culture is the result of human being' s conscientious practices and one kind of living style.

Against the backdrop of internationalized and technology-oriented development in the 21st century, rising of internationalized enterprises helps accelerate cultural exchanges, and the globalization process enables us to have more understanding to diverse regional cultures instead of leading to homogeneity (the so-called "being

national is being global" ). At present, lots of countries attach importance to the issue of cultural homogeneity, thus they start to protect cultural characteristics. The development of cultural originality industry represents the sustainable competitiveness of a country.

### 2. Purpose

Culture features collective characteristics. In the event of being received and shared by most people, one behavior or value may become culture, and they will be retained or spread generation by generation. Therefore, culture is valuable. During the process of cultural spread, the language, expression, characteristics, and tools were invented, and these signs become the channel for learning about the past culture.

Mobile phone is the outstanding outcome of modern science and technology, and it is light, thin, and has small design and diverse functions. In terms of the development process of mobile phone, mobile phone design depends on its function and simple operation. Along with the development of science and technology, mobile phone design will focus on cultural characteristics when certain functions have been met.

## II. Connection of design and cultural characteristics

### 1. Analysis of the design and cultural characteristics of mobile phone.



**Figure 1.** Sony Ericsson T658c: the grain-style keyboard design originates from doornail of ancient China, and the natural and fresh color embeds eastern mystery into the mobile phone.



**Figure 2.** Motorola V70: its design originates from the Chinese traditional folding fan.



**Figure 3.** 'Ming' Mobile phone, one kind in Motorola mobile phone series, features the style of Chinese painting, and its black outline and semi-transparent clamshell design bring a fresh feeling to users.



**Figure 4.** Sony Ericsson W660i boldly integrates with charming eastern elements (traditional Chinese red color and noble golden color), with outline being decorated with elegant patterns.



**Figure 5.** Nokia 6108 mobile phone's touch pen is inserted into the back, and such design originates from "Terracotta Warriors and Horse of the Mausoleum of Emperor Shihuang of the Qin Dynasty".

According to the market survey from the Strategy Analytics, clamshell mobile phone's sales volume in 2004 made up 37% of the global total, and such proportion increased to 40% in 2005. In 2007, Clamshell mobile grabbed a lion's share. Over the past two years, the sales volume of clamshell mobile phones continued increasing, which should be attributed to customers' more interest in clamshell mobile phones. Due to delayed marketing of the clamshell mobile phone, Nokia witnessed declining sales volume. For this reason, Nokia firstly marketed clamshell smart mobile phone N71; also, Motorola once implemented one important strategy adjustment, namely, it focused on clamshell mobile phone in the outline design.

Due to the difference in ideology and culture, easterners and westerners are different in apperception, cognition, and behavior. To be specific, westerners prefer bar phone due to their simple operation procedures and simplex"act display", which is consistent with their linear way of thinking featuring"direct way and definite objective". However, easterners are interested in clamshell mobile phone. In general, the mobile phone can only complete the simplest functions (such as ID display and call answer) in the event that the clamshell is closed. Users must unfold the clamshell if they need send messages, play games, or start hand-free functions. The clamshell design is linked with easterner's intrinsic Yin-Yang ideological mode. For instance, the well-known "Tai ji Diagram" exemplifies Chinese Yin-Yang ideological mode, with Yin and Yang being integrated in the diagram. Therefore, easterners are used to the logical mode integrating open ideology and conservative ideology while identifying and cognizing things. In a word, mobile phone's outline design highlights Chinese people's reserved culture.

## 2. Analysis of the application and cultural characteristics of mobile phone.

SMS is a kind of mobile phone services, and short message technology was firstly applied in the European GSM system. In 2004, the volume of short messages in the world totaled 510 billion, and the short message sent in China made up one third of the global total. However, the messages sent by 150 million mobile phone users in America were less than that sent by Chinese users in one week, which should be attributed to the following reasons: communication through short message is the reasonable choice of Chinese people due to China's national characters, and affected by Chinese traditional culture, the national cultural psychology is introverted, harmonious, closed, and compliant. Therefore, Chinese people are comparatively introverted and reserved, and they will not directly express their emotion. In addition, Chinese people prefer implicative language, and they will leave sufficient imagination space for others during daily communication. Compared with westerners, Chinese people are weak in individual awareness, and they are implicative during communication, thus they will not straightforwardly express their ideas. However, American people would like to directly call the opposite due to their straightforward character.

A	B
520	I Love You
1314	Lifelong"
88	Bye Bye
55	Crying
3x	Thank You

Figure 6. 'A' is similar to 'B' in Chinese pronunciation, thus it can substitute 'B' in short message.

C	D
: D	Happy
: (	Sad
::>_<::	Crying
→ _ →	Doubt
\ ( _ ) /	Reluctant

Figure 7. 'C' is similar to 'D' in appearance, thus it can substitute 'D' in short message.



Figure 8. Chinese input method in mobile phone Chinese input method indicates the handset input method for short message and directory. Apart from the English input method, other Chinese input methods in mobile phone cover T9 intelligent input method, Chinese character input method, ITAP input method, and Chinese stroke input method. Chinese input method mainly adopts Pinyin input method, namely, to sift out different corresponding characters through inputting Chinese Pinyin. Chinese Pinyin is a kind of tool for supporting the pronunciation of Chinese characters, and the pronunciation of one Chinese character can be expressed through Chinese Pinyin. In Chinese characters, the regular characters total the number of 850 and sub-regular characters amount to the number of 1,600, and their total using frequency reaches 99.5%. Therefore, the input method of sifting out corresponding Chinese characters by Pinyin is very practical. As such, mobile phone short message's popularization highlights Chinese people's reserved personality. Meanwhile, due to similar

pronunciation, to express meanings by digits is becoming a new culture.

### III. Conclusion

Mobile phone is altering our living style, which will accordingly exert profound influence on the society and culture.

Culture centers on human being, so does the design. Design aims to create new living style, but the change of any living style depends on in-depth ideological and spiritual factors. Mobile phone design and application means are closely associated with local cultural characteristics, and they will exert interactive influence on each other. Therefore, a successful product differentiates itself from other products due to the influence by its designer's regional background, local market consumption form, and continuous image promotion. As time goes by, consumers are bound to show interest in the cultural characteristics of the source region; consequently, the cultural characteristics will become the standard for identifying the product. For instance, Walkman of Sony is closely associated with Japanese culture, and iPod of Apple implies the American culture. In addition, B&O stereo can mirror the simple style and living attitude of North Europe, and LV handbag shows French-style living quality and tourist spirit.

Design is the originality activity of a culture, and its ultimate goal is to foster living culture and create human-oriented living environment. At present, culture is closely linked with design industry, and culture helps enrich the core value of the design industry and the design industry helps promote the development of culture.

## ■ Reference ■

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