

# The application of 24 solar term elements in APP design

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**Abstract:** With the rapid development of digital technology and the popularity of mobile Internet, APP, as an emerging media platform, provides new opportunities for inheriting and promoting the culture of the 24 solar terms. This paper discusses the application of the cultural elements of the 24 solar terms in APP, and combined with case analysis, puts forward the existing problems and relevant suggestions. The aim is to rationally apply the cultural elements of the 24 solar terms, enhance the functionality of the APP, improve the user experience, and promote the spread of the 24 solar terms culture.

**Key words:** APP design; The 24 Solar Terms; User experience

## Introduction

In recent years, with the rapid development of mobile Internet technology, APP has become one of the indispensable tools in People's Daily life. As an important part of traditional Chinese culture, the 24 solar Terms are rich in folk customs, customs and scientific knowledge. Integrating the elements of the 24 solar terms into the APP platform can not only facilitate People's Daily life, but also effectively promote and inherit this important cultural heritage. This paper discusses the application of the elements of the 24 solar terms in APP design, and puts forward existing problems and suggestions to help the culture of the 24 solar terms better integrate into People's Daily life, promote cultural dissemination and radiate new vitality.

## 1. Analysis of the 24 Solar Terms elements

### 1. Visual elements

Natural scene type visual elements. 24 solar terms, 24 kinds of beautiful scenery. In the 24 solar terms culture, the description of natural scenery is very rich, and each solar term has a symbolic natural landscape. Such as the folk proverb: "spring rain surprise spring clear valley day": including the beginning of spring, rain, Awakening of insects, spring equinox, Qingming, grain rain six solar terms, the spring equinox presents the return of the swallow, the bank willow green, flower on the slope and other visual elements; Qingming is drizzle one after another, clean bright and clean elements; "Grain rain three look at peony", refers to whenever the grain rain season, peony will be in full bloom, so peony is its representative visual elements.

Visual elements of farming and folk customs. Different solar terms have different symbolic elements. Actions, clothing, customs and food in festival folklore and farming scenes can be extracted and used as symbolic elements. For example, the folk customs of eating noodles on the summer solstice, eating Qingtuan on Qingming, eating lotus root during Minor Heat, boiling plum in grain in ear, and eating bitter vegetable on Xiaomanman are often used in artistic creation and design as representative folk elements of the 24th section.

### 2. Value function

Agricultural climate guidance. "Gold, pearls and jade, hunger cannot eat, and cold cannot clothe, are better than grain and silk and linen." Agriculture is the foundation of human survival. As the precious wealth of traditional Chinese culture, the 24 solar terms can help farmers master weather changes and farming time, such as the spring equinox and the autumn equinox, which are important time nodes for sowing and harvesting. At the same time, the 24 solar terms are also one of the important bases for weather forecasting, which can predict seasonal weather changes.

Diet and daily living guidance. The 24 solar terms have the function of guiding diet and daily living, which is closely related to the human physiological cycle and health maintenance. The so-called "eat in season, eat in nature" means that the food you eat should match the seasons and seasons. For example, in the summer solstice, the heat is unbearable, the diet to clear heat and cool blood, spleen and stomach, can eat more rice, purslane and other food; And the winter solstice, because of the cold weather, it is necessary to supplement as the main purpose, you can eat more sheep liver, pine nuts, garlic and other foods. In addition, according to the characteristics of different solar terms can help people to guide the work and rest, for example, in the summer six solar terms, people should go to bed late and get up early, the heart does not keep depression anger, summer heat relief; In the six solar terms in winter, people should go to bed early and get up late, and they must avoid cold and wet.

Leisure and entertainment guidance. People can choose different forms of recreation according to the climate characteristics. For example, when the sun reaches its highest point in the summer solstice, people can choose to get up early to watch the sunrise and enjoy the beautiful sunset at night. On the beginning of winter, they can go to hot spring areas or resorts for hot spring baths, cold water baths and massages to relieve physical and mental fatigue. Light snow can go to the ski resort for skiing sports and enjoy the fun of snow and ice brought by winter.

### 3. Cultural connotation

The 24 solar terms not only have a profound impact on the cultural development of various regions in China, folk customs, food culture, festival activities and artistic creation, but also have a rich cultural connotation, which carries the spiritual sustenance of the Chinese

people and affects the way of thinking of the Chinese people.

Emphasize the relationship between man and nature. The 24 solar terms emphasize the relationship between man and nature and reflect the concept of nature in traditional Chinese culture. This concept that human beings should respect nature and live in harmony with nature makes people more deeply aware of the interdependent relationship between nature and human beings, so that people can continue to learn and explore nature, and better adapt to and use the natural environment.

It is rich in religious and philosophical implications. The 24 solar terms embody the philosophical speculation and religious spirit of traditional Chinese culture. For example, on the Start of Spring, people offer sacrifices to their ancestors and the gods of the land to express their respect and gratitude to them and the land. During the Tomb-sweeping Day, people will visit cemeteries, mourn deceased relatives, and express their thoughts and emotions about life and death and the family. The expression of these religious and philosophical emotions enables people to have a deeper understanding of the nature of the world and the meaning of life, and brings people the inspiration of strength and power.

## 2. The application status of the cultural elements of the 24 solar terms in APP design

### 1. The extraction of visual symbols

The special symbols are simplified and deformed. The author has collected and analyzed a large number of apps that use solar term elements, and found that most of the apps of the 24 solar term elements tend to directly simplify or transform visual symbols, while some solar term apps directly combine pictures, text and audio. For example, the “24 solar terms health” mobile phone APP mobile icon and mobile home page interface, the icon will be “nourishing” combined with ink painting effect for simple changes, the icon color is mainly yellow grain, and combined with crops and other content processing, in addition, such as “perpetual calendar”, “Solar term time”, “solar term calendar” and other apps also only stay in the visual symbols for simple deformation.

The abstract things visual presentation. Instead of simplifying symbols, these apps pay more attention to digging deeper into the culture itself in the application of elements. For example, in the game “There is a family in Taoyuan”, solar term restriction activities are added to the game, and abstract folk customs are concretely presented. During the Grain in Ear season, players can not only plant special crops, but also receive limited buildings by doing tasks, such as “velvet flowers and red tassels”, “Grain in Ear send flowers stone”, which is quoted here is the custom of sending flowers God in Ear, through velvet flowers, red tassels and other concrete elements to express the abstract folk customs of the grain in Ear season.

### 2. Application of value and function

As the precious wealth of traditional Chinese culture, the 24 solar terms can help guide people’s diet and daily living, master weather changes and guide crop cultivation. These features are widely used in apps to guide people’s life and production practice. Among them, the most common apps are health and wellness apps, such as “healthy life partner”, “daily life” and “health and wellness calendar”, etc. The functions of such apps mainly include providing users with diet suggestions, work and rest guidance, and putting forward health suggestions and health programs for different solar terms. This is followed by life service apps, such as the “24 Solar Terms Calendar” APP, which provides detailed information about the 24 solar terms, including the date and time, characteristics, customs and related traditional activities of each solar term. Through the app, users can learn about the origin and significance of the 24 solar terms, view the calendar of the solar terms, and set reminders to participate in celebrations or learn about specific solar terms in time.

### 3. The exploration of cultural connotations

By excavating the cultural connotations and characteristics of the 24 solar terms, combining with digital technology and using new platforms to reinterpret them, users can present richer cultural information and visual feelings, generate emotional resonance for users and make the solar term culture glow with lasting vitality. However, most apps mainly focus on visual and functional aspects in the application of elements, while only a small number of apps pay attention to the extraction and expression of their cultural connotations. For example, “Knowing the Season APP” focuses on popularizing science in the 24 solar terms and showing the beauty of their cultural connotations. The interface changes according to the characteristics of the season, and provides detailed introduction of the 24 solar terms, explanation of traditional customs, and recommendation of related activities in its functions. It also designs scenes and white noise according to climate, phenology, and folk customs, so that users can experience the atmosphere and meaning of the solar terms and feel the charm of traditional culture more deeply.

## 3. The problems and suggestions of the application of the 24 solar terms elements in APP design

### 1. Existing problems

Single form of expression. Although these apps provide the dates and related information of the 24 solar terms, they are usually presented in text, images, audio and video, and are designed with only simple transformations of graphic symbols, lacking an understanding of the nature of culture, and not cultural inheritance through a more specific, richer and interactive way. This may result in users’ understanding of the 24 solar terms remaining only on the surface, lacking real in-depth experience and participation.

The lack of regional characteristics and personalized content. The 24 solar terms are a unique cultural phenomenon in China, and the customs and activities for celebrating each solar term may be different in different regions and ethnic groups. However, the content of the solar term apps on the market is seriously homogenized, and the regional characteristics and individual needs are not fully considered when

displaying the solar term culture, resulting in high universality of content and lack of local characteristics.

The exploration of cultural connotation is insufficient. Most apps only stay at the visual and functional level, lack a deep understanding and mining of the cultural connotation of the 24 solar terms, and fail to find the emotional resonance with users. Although many apps provide the function of querying the solar term date and watching relevant information, the interaction and participation of users are low. The lack of interaction and participation mechanism prevents users from actively participating in the experience of celebrations and traditional customs, thus limiting their in-depth understanding and feelings of the 24 solar terms culture.

## 2.Design Suggestions

Innovate presentation. Whether it is in the interface, function, interaction design, you can use a variety of expressions, to avoid direct representation of elements or symbols. We can start from enhancing the interaction, for example, we can appropriately increase the interactive solar term games, so that users can learn and experience the solar term culture through interactive participation. Virtual reality technology can also be combined to create immersive solar term scenes, allowing users to experience traditional celebrations and customs. In addition, the application can vividly display the historical background and cultural connotation of the solar term through artistic forms such as story interpretation, music and dance.

Provide personalized services. Apps can provide personalized services, taking into account the interests and preferences of different users. For example, local solar term celebrations, special food and so on can be recommended based on users' geographical location and personal preferences. At the same time, the app can continuously provide customized recommendation content based on users' feedback and participation records, so that users feel personal attention and care. In addition, the app can also provide a solar calendar function to help users understand the date and related customs of each solar term, so that they can easily participate in it. Based on the user experience research, the innovation and breakthrough of the APP in the transmission of solar term culture are analyzed.

By digging deeper into the cultural connotation of the 24 solar terms, users can better understand and appreciate the meaning of the solar terms. More detailed introductions of the solar terms can be added to the content, including historical origins, traditional celebration methods, and related poems. Experts and scholars can also be invited to write articles or give explanations to analyze the philosophical thoughts, natural observations and humanistic values of solar terms. In addition, the app can also encourage users to participate in community discussions and sharing, so that they can explore the rich connotation of solar term culture from multiple perspectives.

## The Conclusion:

At present, the development speed of intelligent mobile devices is rapid, and the application of the elements of the 24 solar terms in APP design is more frequent. Through the case analysis of the application of the elements of the 24 solar terms, it can be found that there are still some shortcomings, which need to be further improved in the form, function and content. Only continuous improvement and innovation can better combine traditional culture with modern science and technology to realize the inheritance and development of the 24 solar terms culture.

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