Using Content Analysis to Probe the Cognitive Image of Intangible Cultural Heritage Tourism: An Exploration of Chinese Social Media

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Abstract: The industry of intangible cultural heritage (ICH) tourism continues to grow, and social media can serve as an essential tool to promote this trend. Although ICH tourism development is outstanding in China, the language structure and restricted use of social media render ICH difficult for non-Chinese speakers to understand. Using content analysis, this study investigates the structure and relationships among cognitive elements of ICH tourism based on 9074 blogs posted between 2011 and 2020 on Weibo.com, one of the most popular social media platforms in China. The main analysis process consisted of matrix construction, dimension classification, and semantic network analysis. Findings indicated that the cognitive image of ICH tourism on social media can be divided into seven dimensions: institutions, ICH and inheritors, tourism products, traditional festivals and seasons, tourism facilities and services, visitors, and regions. This network vividly illustrates ICH tourism and depicts the roles of organizers, residents, inheritors, and tourists. Among these elements, institutions hold the greatest power to regulate and control ICH tourism activities, and folklore appears to be the most common type of ICH resource that can be developed into tourism activities. Practically, the results offer insight for policymakers regarding ways to better balance the relationships among heritage protection, the business economy, and people’s well-being. Such strategies can promote the industrialization of ICH tourism. In addition, through content analysis, this paper confirms the effectiveness of social media in providing a richer understanding of ICH tourism.

Keywords: intangible cultural heritage; tourism; cognition; social media; big data; semantic network analysis

1. Introduction

According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), intangible cultural heritage (ICH) includes traditions or cultural expressions inherited from our ancestors and passed on to our descendants, such as social practices, expressions, knowledge, handicrafts, and cultural spaces [1]. In recent years, the Chinese government has placed the protection and inheritance of ICH in an important strategic position. This policy guidance has encouraged government departments at various levels to provide ICH tourism activities through conservation associations, museums, characteristic towns, and cultural events. ICH elements such as traditional dance, music, drama, and folklore have come to represent spiritual and cultural treasures of mankind. These activities also function as valuable resources that can be developed into tourism products. ICH tourism products and services have, thus, become key means of sharing cultural connotations and values. However, in prior decades, research on ICH tourism mainly focused on applied countermeasures to address common problems. Such efforts often included insufficient empirical analysis, rarely incorporating visitors’ feedback on ICH tourism products. Related research also lacks comprehensive evaluations of tourists and their thoughts on ICH tourism development.
ICH tourism development, as a process featuring “tangible” and “intangible” or “material” and “non-material” attributes, includes several elements such as decision makers, visitors, tourist facilities, activity venues, and events. Cognitive perspectives involving intangible resources, services, and relationships have converged to form a new dominant logic in marketing, which can reveal locations’ core competitiveness and tourist interaction [2]. Cognitive viewpoints also shift the focus of development from producers to consumers and services; doing so can help resolve marketing dilemmas such as the visibility of value creation as well as the customer experience and the features thereof.

The main objective of the present study was to analyze the cognition of ICH tourism by examining the implications of unstructured blogs posted on social media. The use of big data can lead to a deeper understanding of the interaction between “resource–visitors” and “visitors–organizers” in ICH tourism. This article consists of the following four parts. The first section presents a review of relevant literature on ICH tourism, cognition, social media, and content analysis. The second section provides an overview of our case selection, data collection, and analysis processes to achieve the study aims. Then, the data and methodology are discussed along with the results of content analysis. Finally, the fourth section highlights the study’s main conclusions and offers suggestions for future research. Findings offer meaningful insight for government departments, business associations, and other decision makers in navigating the evolving landscape of ICH tourism. These results can help stakeholders strike a balance among heritage protection, visitors’ well-being, and destinations’ economic development.

2. Literature Review

2.1. Current Status of ICH Tourism

Since the Convention for the Safeguarding of Intangible Cultural Heritage was adopted at UNESCO’s general conference in 2003 [1], ICH has attracted increasing attention in cultural and social domains. Following this trend, tourism has been recognized as a key aspect of market utilization; the World Tourism Organization (UNWTO) [3] has even provided specific recommendations to promote ICH tourism. These proposals include creating cultural spaces or constructing facilities to display ICH; merging or bundling tourist attractions to create thematic sets and enhance the appeal of ICH products; developing new tourist routes or heritage networks as well as using existing ones or restoring them, such as pilgrimage routes; and using or restoring traditional festivals.

ICH tourism is a complex topic tied to cultural heritage tourism [4]. Depending on the research context, ICH can be considered both a tourism product [5] and a tourism resource [6]. Among various types of ICH, traditional music, dance, and folklore are the most popular resources and have emerged as hotspots in ICH tourism research [7–9]. Related studies have addressed topics such as stakeholders, destinations, tourism products, heritage value, attractiveness, authenticity, tourist loyalty, and motivation [10–13].

Amid ongoing digitalization and globalization, the sorting, classification, and digital application of information resources have become important aspects of ICH protection and inheritance [14,15]. However, ICH has largely been identified on the bases of politics, industrialization, technologism, capitalism, modern media, and politicians. The power of discourse is therefore controlled by official institutions. In line with service-dominant logic and customer-dominant logic, ICH tourism can contribute to evolving perceptions by shifting the focus of tourism products from a producer perspective to a consumer and service view [16,17]. The notion of cognitive image offers a starting point to understand the organization, structure, and quality of ICH tourism.

2.2. Importance of Cognitive Research on ICH Tourism

Cognition, as the first step toward forming ICH tourism intention [18], is a process entailing thought and memory based on proactive information search behavior [19]. Several classic theories have identified cognition as an essential part of behavior formation [20,21]. For example, in as early as 1972, Newell and Simon’s [20] theory of problem solving framed
cognition as the information process of the human brain and served as the theoretical foundation of the cognition–attitude–behavior model. At the start of the 21st century, Dolan [21] verified the relationships among emotion, cognition, and behavior based on neurobiological substrates. Apart from the above-mentioned problem solving model and cognition–emotion–behavior model, cognition is also a key component of tourism destination image [22,23]. For instance, Gartner [22] proposed that a tourism destination’s image is composed of three distinct, but well-defined, and interrelated images: cognitive, affective, and conative. In this sense, cognitive image comprises the beliefs and attitudes that lead to internal recognition of objects. Similarly, Baloglu and Mc Cleary [23] posited that the construct of destination image includes three basic dimensions: cognition, affect, and overall image. The cognitive–affective–conative model and cognition–affect–overall image model have paved the way for subsequent research on tourism-related cognition and image. In particular, the cognition–affect–overall image framework—as a standard of destination image research—has spawned different scales and been adopted by scholars around the world.

Put simply, positive cognition about a destination leads to positive behavior. For example, using structural equation modeling, Lee [19] found that tourists’ cognition of battlefield tourism positively influenced their willingness to visit war sites. However, cognitive biases contribute to suboptimal decisions [24]. Behavioral factors such as personal dispositions and emotional reactions can also prevent tourists from making rational choices.

Current cognition research has primarily focused on broad categories, specifically heritage tourism rather than ICH tourism. Advances in modern technology have led user-generated content on social media to become a popular information source when examining tourism products’ cognitive image. This type of content is applicable to cognitive research on ICH tourism as well. User interaction behaviors including verification, promotion, entertainment, personalization, negotiation, and communication [25] can reflect visitors’ cognition and consumption preferences, thus helping industry organizers identify and develop the core competitiveness of ICH tourism products.

2.3. Social Media: A Valuable Data Source

In the field of cultural tourism, technology has permeated three types of platforms: informative platforms, which provide information about areas of interest; connection platforms, which are used as mediation tools; and integrated platforms, which are single platforms offering information management, booking activities, and direct purchases [26]. Popular social media sites such as Facebook and Instagram are gradually becoming more than information-sharing platforms by integrating business management functions to capture the benefits of technology platforms.

Social media sites provide many ways to communicate without embodied actors [27] and enable users to express opinions freely online. These platforms, hence, embody the characteristics of participation, personalization, and independence [28]. Exploring firm–customer interactions on social media has become a topic of scholarly interest in recent years [25,29]. For instance, Brejla and Gilbert [30] explored guest-to-guest and guest-to-staff interaction on cruise ships using a content analysis of 34,000 tourist reviews collected from cruise ship websites. Oliveira and Panyik [31] identified the importance of information communication technology for destination marketing in Portugal after selecting 20 travel-oriented online publications for content analysis; findings highlighted the role of user-generated content in building a destination brand. Ge and Gretzel [25] collected 680 destination management organizations’ posts and 3960 Weibo responses to develop and apply a taxonomy via qualitative empirical-to-conceptual analysis. These examples indicate that social media is a valuable information source when considering tourism activities, especially in terms of cognitive image.

However, access to common social media sites such as Facebook, Twitter, and YouTube is restricted in China. The structure of the Chinese language (compared with languages such as English) further obscures knowledge of Chinese social media. Therefore, although
social media can be a suitable research tool, choosing an appropriate platform is a key aspect of data collection.

2.4. The Use of Content Analysis

Content analysis offers several noteworthy advantages when analyzing social media data. In the last century, content analysis began to be regarded as a flexible and valuable approach to text processing, especially when scarce theoretical or literature support is available for a phenomenon [32]. Content analysis has since been widely adopted in the tourism field by using literature as a data source. This approach is akin to partial bibliometric analysis, which is applied to unveil research trends around topics of interest. For instance, Mohammed and his co-authors [33] analyzed 292 full-length articles in the hospitality literature and found that economics-related research tended to focus on empirical studies and microeconomics. Similarly, Sánchez-Cañizares and colleagues [34] identified research trends in sustainable tourism by analyzing 985 articles. López-Bonilla and his co-authors [35] performed content analysis on 46 articles and discerned five lines of golf tourism research: environmental management, environmental impacts, conflicts of interest, environmental attitudes and behavior, and sustainable management and planning. Extending this trend, content analysis has become increasingly common when deriving theoretical models and structural relationships between visitors and organizers from review data on social media. In addition to analyzing social media and relevant literature, other materials subjected to content analysis in tourism include newspaper articles [36], posts on tourism forums [37], and policy and planning documents [38].

Tourism case studies involving content analysis also feature steps to remove “noise” from data and the use of algorithms for comparison. These methods can uncover hidden rules and themes in textual data to render the analysis process more efficient, objective, and robust [39]. Many software programs have been developed to facilitate content analysis as well (e.g., CiteSpace [40,41], Leximancer [42], and ROST [43]). CiteSpace is often used to analyze bibliometric data and identify potential mechanisms via visualization. Results can depict the patterns, structure, and distributions of research topics as well as connections between authors, countries, and institutions [44]. Leximancer is adopted to analyze complex textual data using qualitative and quantitative approaches. The program applies clustering algorithms to display associations between major themes and concepts [42]. CiteSpace and Leximancer are suitable for processing English-language data, and results are displayed directly in the software. However, when there is no space between two words in the Chinese language, word segmentation must be carried out prior to content analysis. The ROST program was thus created for Chinese-language text processing; the software includes functionalities for word segmentation, word frequency analysis, sentiment analysis, and social network analysis. However, ROST has certain limitations; for example, sentiment analysis findings are not always accurate, and social network analysis must be completed with support from external applications such as Ucinet and NetDraw. Therefore, content analysis cannot be performed with ROST alone.

The invention of these analysis software programs and related operating procedures has eliminated the need for manual code screening. These developments have also simplified data processing to alleviate difficulties in content analysis, ultimately making big data more compatible with academic research. Social media, as a main source of big data, can objectively reflect consumer–producer interaction. Content analysis can adequately parse text data patterns and structures by selecting key characteristics and categorizing summary functions [45]. Based on these research trends and the method’s current status, this article takes social media as its data source and applies content analysis to study the cognitive image of ICH tourism.

More specifically, in this study, content analysis was used to mine user-generated data and reveal the current organizational structure of tourism activities, popular types of ICH, and relevant products from a tourist perspective. The chosen data source can also shift
the discourse power of ICH tourism from institutions to consumers, thus highlighting consumer opinions when evaluating the rationality of activities.

3. Methodology
3.1. Study Case

ICH is thought to express the essence of Chinese traditions and holds great historical, aesthetic, economic, social, educational, and spiritual value [18]. The definition of “ICH tourism”, which combines the concepts of “ICH” and “tourism”, is quite general in China: the term reflects “the journal of people who have been motivated (and decided) to visit ICH and attend ICH events”. Under the policy orientation of cultural and tourism integration, national governments and enterprises at all levels have striven to attract investment to develop ICH tourism.

In this context, new business patterns can emerge when ICH is combined with poverty alleviation, education, e-commerce, and finance (Table 1). For example, the Ministry of Culture and Tourism of the People’s Republic of China [46] published a government document entitled “Notice of the General Office of the Ministry of Culture and Tourism on Vigorously Revitalizing Traditional Crafts in Impoverished Areas and Helping Targeted Poverty Alleviation” in 2018. This policy encourages traditional craft companies and workshops to actively recruit local poor laborers. Outstanding representative inheritors and craftsmen can also receive funding to present lectures in impoverished areas. Additionally, platforms have been built to promote the design, display, and sales of traditional handicraft products in poverty-stricken areas. These types of policies continue to be implemented in China and more ICH tourism photos can be found in Appendix A. Therefore, given vast human and financial resources, ICH tourism can develop rapidly. Chinese ICH tourism was chosen as the focal case in the present study due to related industry support.

| Region   | Case                                             | Pattern                                      | ICH Theme                        |
|----------|--------------------------------------------------|----------------------------------------------|----------------------------------|
| Sichuan  | Chengdu International ICH Industry Park          | ICH + tourism                                | Comprehensive                    |
|          | Lushan ICH Industrial Park                       | ICH + tourism                                | Folklore                          |
|          | Rangtang County ICH Learning Pioneer Park        | ICH + tourism + poverty alleviation          | Traditional handicraft            |
|          | Anren Ancient Town                               | ICH + tourism                                | Folklore                          |
|          | China (Chengdu) International ICH Festival       | ICH + tourism                                | Comprehensive                    |
| Zhejiang | Ninghai ICH Industrial Park                      | ICH + education + tourism                    | Traditional handicraft            |
|          | “Tianzun Gongya” Industrial Park                 | ICH + e-commerce + tourism                  | Traditional handicraft            |
|          | Longquan Celadon Museum                          | ICH + tourism                                | Traditional handicraft            |
| Shandong | China Grass Willow Cultural Creative Industry Park| ICH + e-commerce + finance + tourism         | Traditional handicraft            |
|          | Shihu Garden Cultural District                   | ICH + e-commerce + tourism                  | Traditional handicraft            |
| Jiangsu  | Puling Cultural Industry Park                     | ICH + tourism                                | Traditional handicraft, traditional music |
| Yunan    | Lijiang (Fuhua) ICH Industry Demonstration Park  | ICH + tourism                                | Traditional handicraft            |
| Henan    | Luoyang Wendeng Tower ICH Industrial Park        | ICH + tourism                                | Traditional handicraft            |
| Hunan    | “Phoenix Window” Cultural Tourism Industrial Park| ICH + tourism                                | Traditional handicraft            |
| Guizhou  | Dong Minority Big Song Ecological Museum         | ICH + tourism                                | Traditional music                 |

Source: Authors searched and sorted results on Baidu.com using keywords such as “intangible cultural heritage park”, “intangible cultural heritage festival”, and “intangible cultural heritage museum”. 
3.2. Data Source and Collection

As noted, access to common social media platforms such as Facebook and Twitter is restricted in China. Therefore, the authors gathered data from Weibo.com (Weibo), a website, which holds the largest market share in terms of user usage time and the number of active users in China. Weibo is a social media platform enabling users to share brief posts with their personal networks in real time. The site facilitates relationship-based information sharing, dissemination, and acquisition. In terms of content sharing, Weibo allows users to post about their travel experiences and to interact with followers in a timely and random manner. In essence, the authors selected Weibo as their data source given the site's market share, popularity, and textual characteristics.

Data were collected using Houyicaiji (http://www.houyicaiji.com/, accessed on 6 April 2021), an open-access web crawler (i.e., spider). This crawler automatically retrieves a large number of hypertext documents according to a set of rules beginning with a set of Uniform Resource Locators. For the purposes of this study, the terms “intangible cultural heritage (Fei yi)” and “tourism (Lv You)” were selected as keywords. Houyicaiji returned a total of 10,949 posts published between 22 February 2011 (the date of the first relevant Weibo post) and 22 April 2020. ICH tourism data from 1 December 2013 to 17 March 2014 could not be searched due to platform limitations. Photos were excluded from the dataset, leaving textual data only.

Prior to engaging in data preprocessing, the authors manually removed duplicate Weibo posts. The final dataset contained 9074 valid posts totaling 1,554,142 words (effective collection rate: 82.88%). Figure 1 presents a graphic depiction of the number of Weibo posts and words by year across the study dataset. Once Weibo removed the 140-word limit per post in late 2016, the number of posts related to ICH tourism tended to increase dramatically.

![Figure 1. Number of Weibo posts and words by year in study dataset.](image.png)

3.3. Sentiment Analysis

The authors used GooSeeker (https://www.gooseeker.com/, accessed on 6 April 2021) to identify the emotions expressed in selected Weibo posts. The authors integrated each post into a complete sentence and imported GooSeeker’s sentiment dictionary for textual analysis. The emotional judgment results were then reviewed manually to enhance the accuracy of findings.

3.4. Preprocessing Phase and Content Analysis

After sentiment analysis, the authors used ROST.CM6 (ROST), developed by Wuhan University, for data preprocessing. First, the authors constructed a filtering dictionary (highfreinvalid.TXT) consisting of 691 invalid words including “intangible cultural heritage”, “tourism”, and other verbs, adjectives, and adverbs. Then, an ICH list (user.TXT)
containing 720 reserved words was created to cover specific forms of ICH such as “Cantonese opera”, “Mazu”, and “Lion Dance”. Finally, the two lists and all data were uploaded to ROST; 3000 meaningful nouns, ranked by word frequency, were encoded for subsequent analysis. The preprocessing phase is illustrated in Figure 2. Every post in the dataset was presented as noun codes in this step.

![Weibo data preprocessing flowchart.](image)

After obtaining the codes of 3000 meaningful nouns, content analysis proceeded in three phases:

1. Classify high-frequency nouns into dimensions and determine the rationality of tourists’ cognitive framework: The classification of these cognitive elements was based on noun attributes. Following previous studies, high-frequency words were placed into different categories. This step unveiled the cognitive classification framework of ICH tourism on social media, complementing prior work on different types of tourism activities.

2. Import noun codes from the preprocessing phase into “ROST Social network and semantic network analysis”: The authors used ROST’s default settings and automatically generated a semantic network figure depicting ICH tourism via NetDraw software. The “Analysis-K-cores” function was employed to differentiate the core and edge structure of the cognitive network. A co-occurrence matrix, which was automatically generated in ROST, was then imported into Ucinet 6. Using the “Network-Centrality-Degree” and “Network-Centrality-Closeness” functions, the authors obtained the centrality degree and closeness degree of the network; these attributes indicated which network elements were closely connected with others and identified those features possessing the greatest influence.

3. Construct the ICH tourism cognitive framework and use tourist reviews from other social media sources to test its reliability and validity: This step confirmed that the developed framework included all relevant ICH tourism cognition content.
4. Research Results
4.1. Emotion Recognition in ICH Tourism

The authors imported all textual material into GooSeeker’s sentiment analysis tool, after which Weibo posts were classified as expressing positive, negative, or neutral emotions. Reviews of ICH tourism on social media were mainly positive, accounting for 88.20% \((n = 8003)\) of the dataset. Another 11.13% \((n = 1010)\) of reviews expressed neutral emotions, and 0.67% \((n = 61)\) contained negative emotions. Keyword analysis of negative sentiment reviews (Figure 3) highlighted “expensive product”, “lack of inheritor”, “COVID”, and “too commercial” as the top reasons for a negative ICH tourism image. These results provide evidence that the cognition classification framework and network of ICH tourism identified in this study were mainly based on positive and neutral reviews.

![Figure 3. Keyword analysis of negative sentiment reviews.](image)

4.2. High-Frequency Words and Categories of ICH Tourism Cognition

Drawing upon the classification of high-frequency nouns extracted from Weibo posts, basic theoretical elements and dimensions were summarized into a cognitive framework. The authors specifically identified seven dimensions: institutions, ICH and inheritors, tourist products, traditional festivals and seasons, tourist facilities and services, visitors, and regions (Table 2). To assess the reliability and validity of these dimensions, Shenzhen was taken as the focal city. The authors gathered 26 tourist reviews from China’s two major domestic travel platforms, Ctrip (www.ctrip.com, accessed on 6 April 2021) and Qunar (www.qunar.com, accessed on 6 April 2021), for content analysis. Results indicated that these 26 tourist reviews reflected the same dimensions, demonstrating the reliability and validity of the authors’ initial classification.
Table 2. High-frequency words, theoretical elements, and dimensions conveying cognitive attributes of ICH tourism.

| Dimension (Word Frequency) | Theoretical Element (Word Frequency) | Examples of High-Frequency Words Extracted from Text (Word Frequency) |
|----------------------------|--------------------------------------|---------------------------------------------------------------------|
| Institutions (5903)        | Government (3924)                    | Tourism bureau (1553), Protection agency (357), Government (301), etc. |
|                            | Enterprise and association (576)     | Enterprise (319), Tourism association (51), ICH protection Association (17), Culinary association (12), etc. |
|                            | News media (1025)                    | News (691), Daily (334), etc. |
|                            | Research base and personnel (378)    | Expert (301), Research institute (31), Research base (14), etc. |
| ICH and inheritors (16,037)| Representative people (1897)          | Inheritor (1281), ICH person of the Year (207), Artist (78), etc. |
|                            | Folk literature (31)                 | Folk tale (17), etc. |
|                            | Traditional music (652)              | Music (275), Folk song (103), Mong minority big song (103), etc. |
|                            | Traditional dance (276)              | Dance (151), Lion dance (64), etc. |
|                            | Folklore (2864)                      | Folklore (1806), Temple fair (360), New year’s eve (307), Ceremony (168), etc. |
|                            | Traditional drama (207)              | Shadow play (129), Puppet show (42), Lantern play (19), Jin opera (9), etc. |
|                            | Traditional handicraft (4826)        | Skill (940), Traditional handicraft (473), Paper-cutting (470), etc. |
|                            | Traditional medicine (62)            | Traditional medicine (40), etc. |
|                            | Traditional sports, entertainment, and acrobatics (471) | Physical education (329), Tai Chi (72), Kung Fu (38), etc. |
|                            | Quyi (303)                           | Quyi (267), Crosstalk (20), Traditional Chinese opera (12), etc. |
|                            | Traditional art (185)                | Arts and crafts (95), Traditional fine arts (46), Colored painting (32), etc. |
|                            | Ethnic characteristic culture (908)  | Miao (338), Dong (209), Ethnic culture (169), Li (72), etc. |
|                            | General type (3355)                  | Art (967), History (821), The silk road (74), etc. |
| Tourism products (19,108)  | Cultural event (2579)                | Tourism festival (1423), Cultural and natural heritage day (468), Cultural event (413), etc. |
|                            | Display form (5505)                  | Performance (949), Exhibition (712), Expo (705), etc. |
|                            | Holding place (9152)                 | Scenic area (1947), Countryside (999), Museum (766), Cultural center (455), etc. |
|                            | Natural environment (304)            | Nature (85), Lotus (48), Sunshine (40), Natural Heritage (32), etc. |
|                            | Specialty (1568)                     | Food (1415), Souvenir (65), Special snack (42), etc. |
| Traditional festivals and seasons (1312) | Traditional festival and season (1312) | Spring festival (608), Dragon boat festival (178), Winter (121), Lantern festival (103), etc. |
| Tourism facilities and service (1319) | Transportation (273) | Transportation (178), Airport (53), etc. |
|                            | Hotel (125)                          | Hotel (125) |
|                            | Catering (13)                        | Catering (13) |
|                            | Information (832)                    | Tourism information (289), Information (243), Television (161), Internet (54), etc. |
|                            | Other facilities (76)                | Toilet (45), Medical treatment (16), etc. |
| Visitors (3556)            | Visitor (3556)                       | Tourist (1256), People (416), Audience (303), Friend (157), etc. |
| Regions (12,145)           | Region (12,145)                      | Guizhou (1543), Chengdu (1248), Southeast Guizhou (924), Zhejiang (790), etc. |

Note: Due to space limitations, only some high-frequency words are shown.
The terms “scenic area” (1947), “folklore” (1806), “tourism bureau” (1553), “Guizhou” (1543), and “tourism festival” (1423) were the five most frequently mentioned words on Weibo. Each term is outlined briefly here. Scenic areas represent the main venues for ICH activities, hence “scenic area” was the most common term related to ICH tourism. The second most popular keyword, “folklore”, embodies the type of ICH that can be most easily converted into tourism products. Tourism bureaus from different regions of China represent the main government institutions that organize ICH tourism activities in the country. The fourth most popular keyword, “Guizhou”, refers to Guizhou Province; this region is home to rich ICH resources and showcases eye-catching ICH tourism activities on social media. Finally, tourism festivals constitute a typical event that can attract a large number of tourists and display traditional Chinese culture.

Among the cognitive dimensions of ICH tourism, the terms “tourism products” (19,108) and “ICH and inheritors” (16,073) appeared most frequently in the study dataset. On Weibo, users’ descriptions of ICH tourism products (whether posted by consumers or organizers) referred to types of cultural events, display forms, venues, natural environments, and specialty products. First, as a unique tourism resource, ICH cannot occur without various cultural spaces, scenic spots, villages, museums, ancient towns, and other locations as carriers. Consumers visit these settings directly. Second, ICH is a tourism attraction in itself, which its inheritors bring to life through performance. Both ICH and inheritors are, thus, promoted by organizers, representing the second highest-ranked cognitive dimension. Tourist facilities and services, as necessary conditions of every tourism activity, were less recognized in ICH tourism. Similarly, although traditional festivals and seasons are major determinants of when tourists choose to travel, tourists did not tend to acknowledge these aspects of ICH tourism activities.

4.3. Division of Cognition Dimensions

ICH tourism–related cognition on social media represents a system of associated influences and interaction among multiple subjects. Through content analysis, the authors obtained novel insight regarding the cognitive elements of ICH tourism activities. The seven dimensions identified in this study have appeared separately in prior work, but no single paper mentioned has all these elements in relation to tourism. As listed in Table 3, some elements were frequently cited in earlier literature (e.g., institutions, tourism products, tourism facilities and services, visitors, and regions).

Table 3. Comparison of cognitive elements extracted from previous literature and Weibo.

| Researcher                  | Institutions | Tourism Products | Facilities and Services | Visitors | Regions | ICH and Inheritors | Traditional Festivals and Seasons |
|-----------------------------|--------------|------------------|-------------------------|----------|---------|-------------------|----------------------------------|
| Iordanova E                 | +            | +                | +                       | +        |         | +                 |                                   |
| Bishop B, Vaske JJ, Bath AJ | +            | +                | +                       | +        | +       | +                 |                                   |
| Lee K-H, Kim D-Y            | +            | +                | +                       | +        | +       | +                 |                                   |
| Zhang Y-l, Zhang J-l, Zhang H-l, Cheng S-w, Guo Y-r, Ma J-h, Sun J-r | + | + | + | | |
| Tai Y-N                     | +            | +                | +                       | +        | +       | +                 |                                   |
| Qiu Q, Zheng T, Xiang Z, Zhang M | + | + | + | | |

References: Iordanova [47]; Bishop, Vaske, Bath [18]; Lee, Kim [49]; Zhang, Zhang, Cheng, Guo, Ma, Sun [50]; Tai [51]; Qiu, Zheng, Xiang, Zhang [18]; Qiu, Zheng [52].

Besides the first five common dimensions, ICH and inheritors were unique in terms of cognition. To classify the theoretical elements of ICH in Table 2, the authors referred to the classification of China’s Intangible Cultural Heritage Digital Museum and divided ICH into multiple categories: folk literature and traditional music; traditional dance; traditional drama; folk art; traditional sports, entertainment, and acrobatics; traditional art;
traditional handicrafts; traditional medicine; folklore; and other types of ICH. Because one type of ICH can apply to several domains (and individuals can describe ICH using terms outside these official classes), the authors created categories labeled “ethnic characteristic culture” and “general type” to describe cognitive elements related to ethnic features and in general. In addition, Chinese tourists’ holidays often coincide with traditional festivals or certain seasons, which can guide how cultural events and custom activities are organized. Therefore, “traditional festivals and seasons” were identified as another category.

4.4. Core and Peripheral Structure of ICH Tourism Cognition

In social network/semantic network analysis, the K-core analysis algorithm can simplify complex networks and reveal core subnetworks. The K-core findings from a graph reflect the subgraphs left after repeatedly removing nodes with a degree of less than k, such that all remaining nodes have the degree k. Thus, the K-core algorithm can extract highly relevant substructures (such as communities, groups, affiliated companies, etc.) from complex relational networks [53].

The resulting NetDraw graph (Figure 4) displayed the semantic network of ICH tourism cognition as an 8-core structure (only 100 high-frequency words were chosen when constructing the network). In particular, the graph revealed nine elements in the 8-core layer of the ICH tourism semantic network, representing the core of tourists’ cognition. Three elements were additionally identified in the 6-core layer along with two elements in the 5-core layer, one element in the 4-core layer, six elements in the 3-core layer, five elements in the 2-core layer, six elements in the 1-core layer, and no elements in the 7-core layer.

Next, to discern the core and peripheral structure of ICH tourism cognition, the authors combined the 1-, 2-, and 3-core layers into the network periphery (blue) based on the layers’ connections. The 4-, 5-, 6-, and 8-core layers were then converted into the network core (red). As shown in Figure 5, the core part (red) of the semantic network was mostly composed of 15 elements: “art”, “folk”, “inheritor”, “museum”, “visitor”, “food”, “folklore”, “history”, “tourism festival”, “performance”, “tourism bureau”, “citizen”, “scenic area”, “show”, and “exhibition”. These nodes were in the center of the semantic network and were closely connected. However, several nodes such as “temple fair”, “cultural and natural heritage day”, “traditional handicraft”, “cultural center”, “countryside”, “program”, “expo park”, “opening ceremony”, “Ministry of Tourism”, “news”, “Guizhou”, “southeast Guizhou”, “Zhejiang”, “Sichuan”, “Chengdu”, “Spring festival”, and “Miao”
constituted marginal facets of ICH tourism cognition (blue), indicating that they were less connected to the network.

Figure 4. Semantic network results of ICH tourism cognition based on K-core analysis.

Next, to discern the core and peripheral structure of ICH tourism cognition, the authors combined the 1-, 2-, and 3-core layers into the network periphery (blue) based on the layers’ connections. The 4-, 5-, 6-, and 8-core layers were then converted into the network core (red). As shown in Figure 5, the core part (red) of the semantic network was mostly composed of 15 elements: “art”, “folk”, “inheritor”, “folklore”, “history”, “tourism festival”, “performance”, “tourism bureau”, “citizen”, “scenic area”, “show”, “exhibition”. These nodes were in the center of the semantic network and were closely connected. However, several nodes such as “temple fair”, “cultural and natural heritage day”, “traditional handicraft”, “cultural center”, “countryside”, “program”, “expo park”, “opening ceremony”, “Ministry of tourism”, “news”, “Guizhou”, “southeast Guizhou”, “Zhejiang”, “Sichuan”, “Chengdu”, “Spring festival”, and “Miao” constituted marginal facets of ICH tourism cognition (blue), indicating that they were less connected to the network.

Figure 5. Semantic network of ICH tourism cognition after hierarchical merging.

Finally, the authors placed these semantic network nodes into a core/periphery framework and compared the dimensions (Table 4). Among the 32 network nodes, 15 appeared in the core part of the semantic network, involving three dimensions (ICH and inheritors, tourism products, and visitors). These three dimensions exhibited the highest correlations; that is, ICH tourism cognition reflected on social media focused on ICH and inheritor selection, tourism product creation, and the quality and quantity of visitors. Network connections among institutions, regions, and traditional festivals and seasons were relatively loose. The K-core analysis results also showed that the “tourism facilities and services” dimension did not appear in the semantic network.

Table 4. Dimensional distribution of ICH tourism cognition under the core–periphery structure.

| Dimension                  | Core                                              | Periphery                                         |
|----------------------------|---------------------------------------------------|---------------------------------------------------|
| ICH and inheritors         | “art”, “folk”, “inheritor”, “folklore”, “history” | “Miao”, “temple fair”                             |
| Tourism products           | “museum”, “food”, “performance”, “scenic area”, “show”, “exhibition”, “tourism festival” | “cultural and natural heritage day”, “traditional handicraft”, “cultural center”, “countryside”, “program”, “expo park”, “opening ceremony” |
| Visitors                   | “tourist”, “citizen”                              |                                                   |
| Institutions               | “tourism bureau”                                  | “Ministry of Tourism”, “news”                      |
| Regions                    |                                                   | “Guizhou”, “southeast Guizhou”, “Zhejiang”, “Sichuan”, “Chengdu” |
| Traditional festivals and seasons |                                                   | “Spring festival”                                  |

4.5. Centrality of ICH Tourism Cognition

When analyzing the centrality of ICH tourism cognition, only 100 high-frequency words were chosen to construct a word matrix. Findings revealed 32 cognitive terms, similar to the K-core analysis results (Table 5). In terms of degree centrality, the larger a node’s value, the more direct connections it has, and the more central its position in the network. Regarding closeness centrality, the larger a node’s value, the easier access it has to integrate other nodes.
Table 5. Centrality analysis results of ICH tourism cognition.

| ICH Tourism Cognition | Degree Centrality | Ranking | Closeness Centrality | Ranking | ICH Tourism Cognition | Degree Centrality | Ranking | Closeness Centrality | Ranking |
|------------------------|-------------------|---------|-----------------------|---------|------------------------|-------------------|---------|-----------------------|---------|
| Folklore               | 3651.000          | 1       | 3.226                 | 24      | Museum                 | 505.000           | 17      | 3.699                 | 14      |
| Scenic area            | 2781.000          | 2       | 3.444                 | 20      | Southeast Guizhou      | 572.000           | 18      | 3.125                 | 26      |
| Tourism bureau         | 2678.000          | 3       | 8.289                 | 1       | Zhejiang               | 516.000           | 19      | 3.563                 | 17      |
| Tourist                | 2291.000          | 4       | 5.236                 | 4       | Expo park              | 487.000           | 20      | 4.282                 | 8       |
| Performance            | 2118.000          | 5       | 4.539                 | 7       | Show                   | 464.000           | 21      | 3.330                 | 21      |
| Exhibition             | 2053.000          | 6       | 3.846                 | 12      | Spring festival        | 384.000           | 22      | 4.144                 | 9       |
| Food                   | 1783.000          | 7       | 4.144                 | 9       | Countryside            | 373.000           | 23      | 3.563                 | 17      |
| Tourism festival       | 1449.000          | 8       | 5.794                 | 3       | News                   | 313.000           | 24      | 3.563                 | 17      |
| Art                    | 1416.000          | 9       | 3.571                 | 16      | Program                | 236.000           | 25      | 4.690                 | 6       |
| Inheritor              | 1396.000          | 10      | 3.995                 | 11      | Miao                   | 232.000           | 26      | 3.808                 | 13      |
| History                | 1216.000          | 11      | 3.330                 | 21      | Traditional handicraft | 151.000           | 27      | 3.125                 | 26      |
| Citizen                | 811.000           | 12      | 4.711                 | 5       | Cultural center        | 149.000           | 28      | 3.125                 | 26      |
| Guizhou                | 733.000           | 13      | 3.686                 | 15      | Sichuan                | 142.000           | 29      | 3.226                 | 24      |
| Folk                   | 703.000           | 14      | 3.125                 | 26      | Cultural and natural heritage day | 124.000 | 30 | 3.125 | 26 |
| Chengdu                | 674.000           | 15      | 3.125                 | 26      | Opening ceremony       | 117.000           | 31      | 5.973                 | 2       |
| Ministry of Tourism    | 635.000           | 16      | 3.125                 | 26      | Temple fair            | 109.000           | 32      | 3.330                 | 21      |

Note: This study used in-closeness centrality to show the integration ability of nodes.

The average degree centrality score was 987.000 (SD = 926.512). “Folklore” (3651.000) was at the center of the ICH tourism cognition network, indicating that folklore represented a popular tourism resource. The term’s average closeness centrality score was 4.002 (SD = 1.077). The extent of control of this network was highly concentrated, as only 10 elements had higher-than-average scores. “Tourism bureau” (8.289), “opening ceremony” (5.973), and “tourism festival” (5.794) were the main integrators of ICH tourism activities. In other words, they were most influential in terms of incorporating ICH resources into tourism activities and keeping contact with other elements. Conversely, “folklore” (3.226) exhibited a low closeness degree score, reflecting its limited ability to integrate ICH activity.

The overall trend in centrality analysis results suggests that institutions hold great regulatory capabilities. ICH, inheritors, and tourism products constituted the core elements of ICH tourism cognition and thus informed tourists’ visit intentions. During tourism activities, people were especially concerned about ICH types and how these types could be converted into products. These cognitive elements were most important according to the centrality analysis.

5. Conclusions and Discussion

5.1. Conclusions

As national ICH discourse is currently dominated by the Chinese government, this paper examined ICH tourism cognition. In an effort to identify the cognitive dimensions and core/periphery structure of ICH’s cognitive image, the authors analyzed 9074 pieces of user-generated data from Chinese social media.

The findings of sentiment analysis revealed that only 0.67% of reviews on Weibo expressed negative emotions about ICH tourism activities. The cognitive image of ICH tourism on social media embodied a system of related influences and interactions among multiple subjects. Specifically, ICH cognition could be divided into dimensions such
as institutions, ICH and inheritors, tourism products, traditional festivals and seasons, tourism facilities and services, visitors, and regions. Among them, ICH and inheritors, tourism products, and visitors constituted the core of ICH tourism cognition, whereas regions and traditional festivals and seasons were in the peripheral area of the cognitive network. The institution dimension was found to hold great regulatory power and control over general ICH tourism activities. Folklore denoted another central aspect of the ICH tourism network, representing the most popular tourism resource at different events. This categorization differs from UNESCO’s five broad ICH domains (i.e., oral traditions and expressions; performing arts; social practices, rituals, and festive events; knowledge and practices concerning nature and the universe; and traditional craftsmanship) [1]. Chinese folklore revolves around cultural principles that have been passed down generationally and can be considered popular folk customs. These customs are distinct from the indigenous cultural heritage elements of language, stories, song, art, dance, hunting methods, rituals, and customs in the Western world [54].

5.2. Managerial Implications

Besides its academic revelations, this study can aid policymakers in striking a balance between the relationships among heritage protection, the business economy, and people’s well-being to promote the industrialization of ICH tourism. First, government departments should give full attention to their supervisory roles. In terms of ICH tourism’s cognitive network, government departments oversee general planning and control. It is, therefore, necessary to strengthen supervision of the ICH tourism market. For example, government departments should attend closely to ICH authenticity protection and carefully track counterfeit products. Government departments should also implement corporate competition mechanisms to regulate product prices and maintain a fair market environment. In addition, governments need to strengthen infrastructure construction, and so on.

Second, government departments should coordinate stakeholder relationships. Heritage sites usually have long histories, and the relationships among the government, tourism companies, local residents, and tourists is inherently nuanced. As the main overseer of ICH tourism in the country, the Chinese government must clarify the associations between stakeholders, introduce reasonable policies, coordinate all aspects of interest-based relationships, and encourage parties to work together in pursuit of long-term interests. Third, ICH organizers should create activities based on the cognitive framework presented in this study. For example, they could arrange exhibition activities around various types of ICH folklore and invite inheritors to perform in settings such as museums and scenic spots.

5.3. Discussion

As of 2020, China has more than 40 ICH sites registered on the lists of UNESCO, ranking first globally. Given Chinese ICH’s storied national history and high popularity, many elements have yet to be listed. National cultural and tourism integration policies have spurred ICH tourism’s continued industrialization. Taking China as an exemplar of ICH tourism is of academic and practical importance. This study initially explored the cognition of ICH tourism by using content analysis to evaluate social media data. The core and peripheral network structure revealed by the research findings can help marketers cater to tourists’ preferences when planning trips and promote ICH tourism activities online. Therefore, the authors have highlighted the utility of social media (taking Weibo as a case in point) in exploring ICH tourism cognition.

Although this research presents meaningful implications to enrich ICH tourism, theoretical and practical applications can be extended through future work. For instance, the content analysis approach adopted in this study can be used to uncover hidden cognitive image features of ICH tourism (e.g., cognition regarding different tourism destinations or tourist activities). In other words, what kinds of tourism destinations might enhance the cognitive image of ICH tourism? Which kinds of activities best suit the cognitive image of ICH? How does this cognitive image vary by ICH type? The importance of
cognitive image features can also be explored further; for example, scholars could refer to this study’s findings to devise a scale to measure ICH tourism cognition and assess the relationships between cognition and successful activities. To extend this line of research, expert consultations and questionnaire surveys could also be used to measure the weights of different variables and present a more holistic view of ICH tourism research. Moreover, as ICH is developed into ICH tourism activities, specific reference standards can guide decision makers.

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Appendix A

Figure A1. Performer working at scenic spot, drawing traditional paintings.
Appendix A

Figure A1. Performer working at scenic spot, drawing traditional paintings.

Figure A2. Inheritors of folk dance perform in the square at Lantern Festival.

Figure A3. Cultural museum built by the community at the birthplace of ICH.
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