A Visualization Analysis of Research on Hainan Intangible Cultural Heritage Based on CiteSpace

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Abstract: This study conducts a CiteSpace visual analysis of literature related to Hainan's intangible cultural heritage, revealing current research hotspots and trends. It suggests establishing a systematic communication management model, promoting the deep integration of intangible cultural heritage with tourism, and drawing on successful cases of cultural and creative product innovation to facilitate the sustainable development of Hainan's intangible cultural heritage.

Keywords: CiteSpace; Hainan; Intangible cultural heritage; Visualization analysis

Introduction:

The intangible cultural heritage of Hainan is rich in multi-ethnic cultural traditions, including the crafts, music, and dance of the Li and Miao ethnic groups. It is not only a cultural treasure of Hainan but also an important part of the world's cultural heritage. Due to the diverse and unique nature of Hainan's intangible cultural heritage, this study uses relevant literature as a data foundation and employs CiteSpace visualization software to map various knowledge graphs. The aim is to expand the breadth and depth of research and provide feasible suggestions for the sustainable development of Hainan's intangible cultural heritage.

1. Research steps

1.1 Data sources and collection process

The retrieval date for the subjects of this study was August 27, 2024. Using "Hainan Intangible Cultural Heritage" and "Hainan ICH" as keywords, an advanced search was conducted in the China National Knowledge Infrastructure (CNKI) database. After excluding documents categorized as "newspapers," "series," and "theses," 384 relevant documents were retrieved. Visualization software CiteSpace was used to export the 384 papers in Refworks format, which were then used to create maps for quantitative research. The study primarily focuses on qualitative research, aiming to summarize the current research status and trends

1.2 Research tools and methods

This paper utilizes Excel and CiteSpace visualization software as research tools. By using these two software programs, the study conducts both qualitative and quantitative analyses of research related to "Hainan Intangible Cultural Heritage." It explores the current research hotspots and methods in this field by analyzing relevant data, identifies shortcomings, and draws insights.

1.3 Research questions

1. The Overall Development Trends in the Research of Hainan's Intangible Cultural Heritage; 2. Analysis of Research Hotspots in Hainan Intangible Cultural Heritage; 3. The deficiencies and shortcomings in the research on Hainan's intangible cultural heritage.

2. Analysis of Research Literature Data on Hainan Intangible Cultural Heritage Based on CiteSpace Software

2.1 The temporal distribution of research literature

Using the publication date of the first document on Hainan intangible cultural heritage in CNKI in 2009 as a reference, a time distribution chart of the number of publications on Hainan intangible cultural heritage research was obtained (see Figure 1). The chart shows that early research grew slowly, but since 2019, it has increased rapidly, likely related to the "Implementation Plan for the Inheritance and Development of Intangible Cultural Heritage" jointly released by the Publicity Department of the Communist Party of China and other departments. The downward trend in 2024 is because the data only covers up to August, not the entire year.
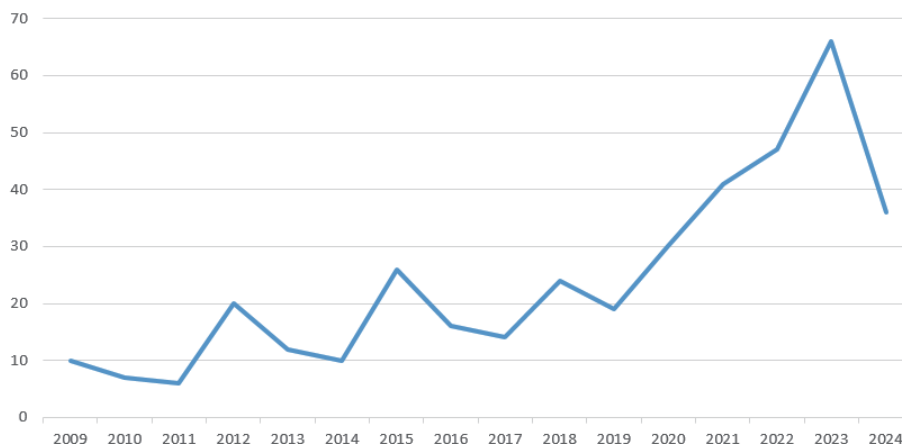

Figure I The time distribution chart of article volume

2.2 Research Focus and Trends
2.2.1 Keyword co-occurrence map

The term "keyword co-occurrence" refers to research hotspots in academia that receive continuous attention over a specific period, often accompanied by a surge in related literature and researchers. This paper employs CiteSpace software to analyze keyword co-occurrence in order to accurately reflect research hotspots and core topics.

The article constructs a keyword co-occurrence map based on the frequency of keywords from CNKI literature, using CiteSpace software to generate 345 nodes and 508 links. The size of the nodes in the map is positively correlated with their frequency, visually presenting the research hotspots. After excluding "intangible cultural heritage" and "Hainan," among the top ten keywords by frequency, "Hainan Li ethnic group" appears 35 times, "protection" and "inheritance" each appear 20 times, and "Li brocade" appears 7 times, among others.

Currently, scholars are primarily focusing on areas such as the Hainan Li ethnic group, intangible cultural heritage protection and transmission, Li brocade, and innovation. Co-occurrence maps indicate that the issue of media communication for Hainan's intangible cultural heritage has not been highlighted, with missing communication nodes. Additionally, the integration of Hainan's intangible cultural heritage with tourism is not well-developed, being linked only to a few nodes such as "Binglang Valley" and "cultural tourism integration." Research on the Hainan Li ethnic group is a focal point and is closely connected with "traditional craftsmanship," "living inheritance," and "cultural and creative product design." Other intangible cultural heritages can draw on its successful framework for development.

Frequency	Centrality	Year	Key Words
123	0.66	2009	Intangible cultural heritage
35	0.19	2009	Hainan
35	0.67	2009	Hainan Li ethnic group
20	0.57	2011	Protection
20	0.46	2012	Inheritance
7	0.07	2012	Protection and inheritance
7	0.09	2014	Li brocade
5	0.03	2010	University library
5	0.1	2012	Innovation
4	0.09	2012	Tourism development

Figure II

The high-frequency word statistics in Figure 2 indicate that keywords with a centrality greater than 0.1 are research hotspots. Excluding "Hainan" and "intangible cultural heritage," the high-frequency keywords are "protection," "Li ethnic group," and "inheritance." This reflects the focus and research trend on the protection and inheritance of the Li ethnic group's intangible cultural heritage in the Hainan region.

2.2.2 Keyword emergence map

Combining the keyword co-occurrence map with Figure 3, it can be seen that Hainan's Li ethnic culture, Danzhou folk tunes, and Hainan coconut carving are research hotspots. However, coconut carving has entered a period of stagnation since 2019. Li ethnic culture encompasses Li brocade and folk songs, while Danzhou's intangible cultural heritage mainly focuses on folk tunes and vocal harmonies. Hainan has 26 national-level intangible cultural heritage items, but research is mostly concentrated on a few hotspots, with others being overlooked. Nevertheless, Hainan's intangible cultural heritage resources are abundant, and successful cases from popular research can be used as references to promote the dissemination of less popular intangible cultural heritage.
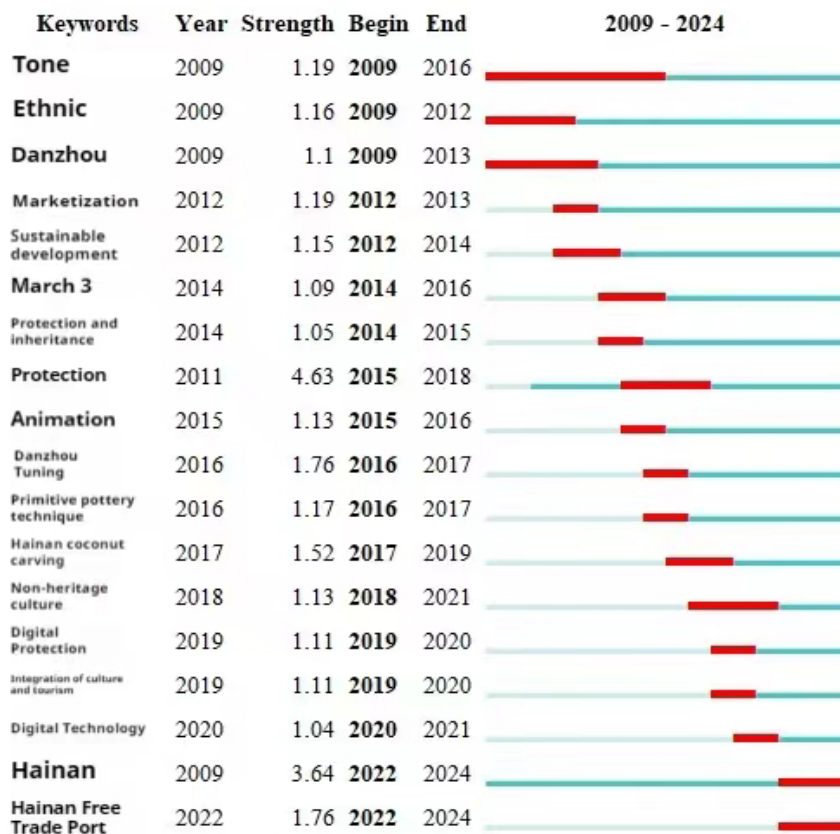
Keywords	Year	Strength	Begin	End	2009 – 2024
Tone	2009	1.19	2009	2016	
Ethnic	2009	1.16	2009	2012	
Danzhou	2009	1.1	2009	2013	
Marketization	2012	1.19	2012	2013	
Sustainable development	2012	1.15	2012	2014	
March 3	2014	1.09	2014	2016	
Protection and inheritance	2014	1.05	2014	2015	
Protection	2011	4.63	2015	2018	
Animation	2015	1.13	2015	2016	
Danzhou Tuning	2016	1.76	2016	2017	
Primitive pottery technique	2016	1.17	2016	2017	
Hainan coconut carving	2017	1.52	2017	2019	
Non-heritage culture	2018	1.13	2018	2021	
Digital Protection	2019	1.11	2019	2020	
Integration of culture and tourism	2019	1.11	2019	2020	
Digital Technology	2020	1.04	2020	2021	
Hainan	2009	3.64	2022	2024	
Hainan Free Trade Port	2022	1.76	2022	2024	

Figure III

3. Conclusion

Through the visual analysis provided by CiteSpace, the current state and challenges of research on Hainan's intangible cultural heritage can be intuitively examined. The study indicates that there are significant shortcomings in areas such as the dissemination and management of Hainan's intangible cultural heritage. Future research could involve systematic planning and innovation to develop corresponding measures to address these issues. These measures will help enhance the visibility and influence of Hainan's intangible cultural heritage, injecting new vitality into cultural preservation.

References:

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