

A CiteSpace-based Knowledge Mapping Study on Marine Culture in Fishing Villages

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Received: 16 October 2024; **Accepted:** 14 November 2024; **Published:** 12 December 2024

Abstract:

According to relevant research findings, fishing village marine culture presents the characteristics of multidisciplinary cross-fertilization development, mainly focusing on sociology, anthropology, marine culture [2], history, rural revitalization, rural tourism integration and other hot areas. In order to promote the sustainable development of fishing village marine culture, on the basis of the research results of our scholars in the development of fishing villages and marine culture, we clarify its themes, hot spots and future development trends and other related issues. This paper makes full use of CiteSpace [9] visualization and analysis software to reveal the cooperation network among the scholars in this field, and the timeline mapping analysis shows the historical lineage, important turning points and future development trend of the research on fishing village and marine culture, which provides powerful data support for the research of this topic. At the same time, with “fishing village” and “marine culture” as the key words, we systematically sorted out the current research status, hot trends and knowledge structure of this field, collected relevant academic journals at home and abroad, and used co-occurrence analysis, key word analysis, centrality analysis, time line analysis, etc., to provide a powerful data support for exploring the construction of a new research network, as well as the development of the new research network and the future development trend. line analysis, etc., in order to prepare for the exploration of the construction of new fishing villages and the integration of marine culture and tourism industry.

Keywords:

Fishing Village, Marine Culture, Citespace, Visualization Analysis, Rural Tourism Integration

1. Introduction

1.1. Maritime culture

Marine culture has been gradually accumulated and formed by mankind through the exploration, utilization and exploitation of the oceans in the course of a long history. In early times, there were footprints of human activities in the coastal areas of China,

and subsequently the seafaring industry and maritime technology have always been at the leading level in the world. People in the coastal areas have gradually formed cultural customs and lifestyles closely related to the sea in their long-term production and life. With the development of society and economy, the ocean has gradually gained importance in the development of the country. However, due to the rise of modern fishing industry and the over-utilization of marine resources, fishing villages are facing problems such as the decline of traditional fisheries, the fading of culture, the hollowing out of villages and the loss of labor force. In the context of cultural and tourism integration, fishing [5] villages can tap and pass on marine culture, develop leisure fisheries, rural tourism and other emerging industries, and achieve economic transformation and upgrading and cultural revitalization. At the same time, the government and all sectors of society should also increase their support for fishing villages and jointly promote the integration of marine culture and fishing villages.

1.2. Fishing villages

As the name suggests, fishing villages are generally villages inhabited by fishermen [1], usually located in coastal areas, where the inhabitants embark on a lifestyle of fishing as a means of subsistence, and where they carry out their work, forming unique fishing village cultures and communities, and so are known as fishermen or fisherwomen. Fishing village is not only a geographical concept, but also carries a rich history and culture, reflecting the wisdom and courage of harmonious coexistence between human and nature, and its culture and traditions are often preserved and developed through generation to generation, becoming a unique local cultural heritage and enhancing their sense of belonging. By integrating marine cultural elements into the cultural design of fishing villages, it is possible to create a tourism brand with local characteristics, attracting more tourists to come and experience it, thus driving the economic development of fishing villages [4] and solving the employment problem of fishermen to a certain extent on a large scale. This rationalized industrial chain development not only enhances the visibility and reputation of the fishing village, but also provides more sources of funds for local residents.

2. Purpose and Significance of the Study

As an important part of human culture [6], the study of marine culture is of great significance to the understanding of human history, the development of civilization and the process of globalization; the resources of marine culture are an important support for the development of the marine economy, and its education is also an important way to cultivate marine talents and enhance marine awareness.

The purpose of the study is that CiteSpace visualization research can further excavate the connotation and value of marine culture, promote the in-depth development of marine culture research, conduct cluster analysis of marine culture literature, realize the effective integration and classification of marine culture resources, and provide powerful support for the development of marine culture industry. At the same time, visualization research can also reveal the geographical distribution and spatial and temporal changes of marine cultural resources, expand the contents and forms of marine education, improve the quality and effects of marine education, provide scientific data support and analysis tools for policymakers, help them better understand the characteristics and values of marine culture, and formulate more realistic and scientific marine policies and development strategies.

The significance of the study can be stated in two ways.

(1) Marine culture is an important part of fishing villages. As natural villages in coastal areas, fishing villages are highly dependent on marine resources for their survival and development; the residents of fishing villages have been making a living by fishing for generations, and they pass on their marine culture through festivals, celebrations, folklore activities and other means. This cultural inheritance not only enriches the cultural connotation of fishing villages, inherits and innovates marine culture, but also strengthens the fishermen's sense of belonging and identity; fishing villages are important carriers of marine culture. The daily production and living practices of fishing village residents, such as fishing at sea, processing seafood, and organizing seafood food festivals, are concrete embodiments of marine culture. These practices not only demonstrate the fishermen's diligence and wisdom, but also convey the unique charm of marine culture. Fishing villages are endowed with rich marine cultural resources, such as fishermen's lighthouses and marine legends. These resources greatly contribute to the dissemination and exchange of marine culture.

(2) Marine resources provide fishing villages with abundant economic sources and employment opportunities, while the economic activities of fishing villages further promote the development and utilization of marine resources. With the rise of tourism, more and more tourists are attracted by the marine culture of fishing villages, thus driving their economic development [6]. The inheritance and innovation of marine culture also involves the protection of the marine[7] ecological environment, and by advocating the concept of harmonious coexistence between man and nature and strengthening the cultivation and dissemination of awareness of marine environmental protection, it helps to promote the sustainable development of the marine ecological environment.

3. Current Status of Domestic and International Research

3.1. Current status of foreign research

Firstly, based on the domestic and international research on the literature related to the culture of fishing villages is mapped and analyzed. Secondly, through the research and analysis of the existing literature, the hotspots of concern in the research on the development [6] of marine culture in fishing villages will be constantly sorted out and summarized. Finally, the results of research progress at home and abroad will be discussed around the levels of marine culture [3] and tourism, industrial integration development, and new fishing village construction.

3.1.1. Trend analysis of research related to marine culture in fishing villages

The study of marine culture in fishing villages abroad has gradually expanded from a single field of marine science to a multidisciplinary cross-cutting field. These disciplines include geography, history, sociology and so on, and the multidisciplinary approach to research helps to understand and analyze the connotations, characteristics and impact of the marine culture of fishing villages in a more comprehensive manner.

(1) Researchers have conducted in-depth excavations into the traditional customs and religious beliefs of marine folklore and explored the inheritance and changes of cultural elements in marine communities; they have paid attention to the phenomena of marine cultural belief systems and the cult of the sea god and analyzed their impact on the lifestyles of fishermen and on the culture of the society. These studies provide

useful reference and inspiration for the development of marine culture in China, and they also pay general attention to the uniqueness and diversity of marine culture [8] in different regions and ethnic groups; they conduct in-depth studies on marine culture in various regions through practical surveys, literature analysis, questionnaire visits, and so on, and emphasize the important role of marine culture in the process of globalization.

(2) The study of marine culture is no longer confined to a single discipline, but is gradually being cross-fertilized with a number of disciplines, including history, geography, sociology, anthropology and environmental studies. This trend of interdisciplinary research helps to explore the complexity and diversity of marine culture from multiple perspectives and dimensions. Scholars have begun to pay attention to the relationship between marine culture and colonialism, environmental issues, etc., and to explore how marine culture reflects and reconstructs these topics. This culturally critical research perspective has contributed to a deeper understanding of the connotations and values of marine culture.

3.1.2. Innovative application of research methodologies

In terms of research methods, foreign scholars have begun to use digital humanities, geographic information systems (GIS) and other new methods to conduct research on marine culture, and have published a large number of scholarly works and papers on marine culture. The application of these methods has helped to better analyze the geographic space and interactions in the literary works, to construct a wider history of marine culture and marine literature, and has also provided the public with an important way. Through empirical research on the marine culture of specific regions and groups, scholars obtain first-hand information and provide strong support for the in-depth development of marine culture research.

4. Data Analysis

4.1. Statistics

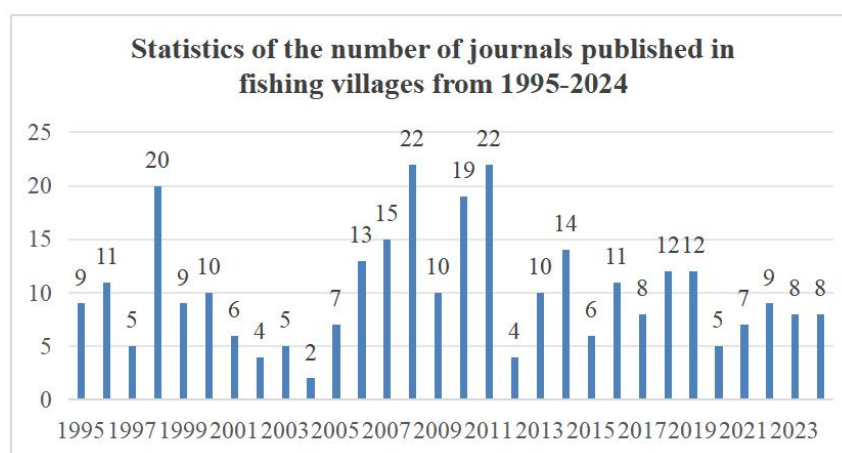


Figure 1. Statistics on the number of fishing villages in 1995-2024.

All the literature data come from China Knowledge Network (CNKI), and the screening framework excludes non-research articles (such as reviews, conference abstracts, etc.) The time limit of the following chart is 1995-2024 (see Figure 1), and the whole chart shows fluctuating ups and downs, with the highest number of articles published in one year being 22, and the lowest number being 2, which is a big

4.2. Keyword analysis of fishing villages

Note: Data are obtained from cnki.

5. Data Visualization and Analysis

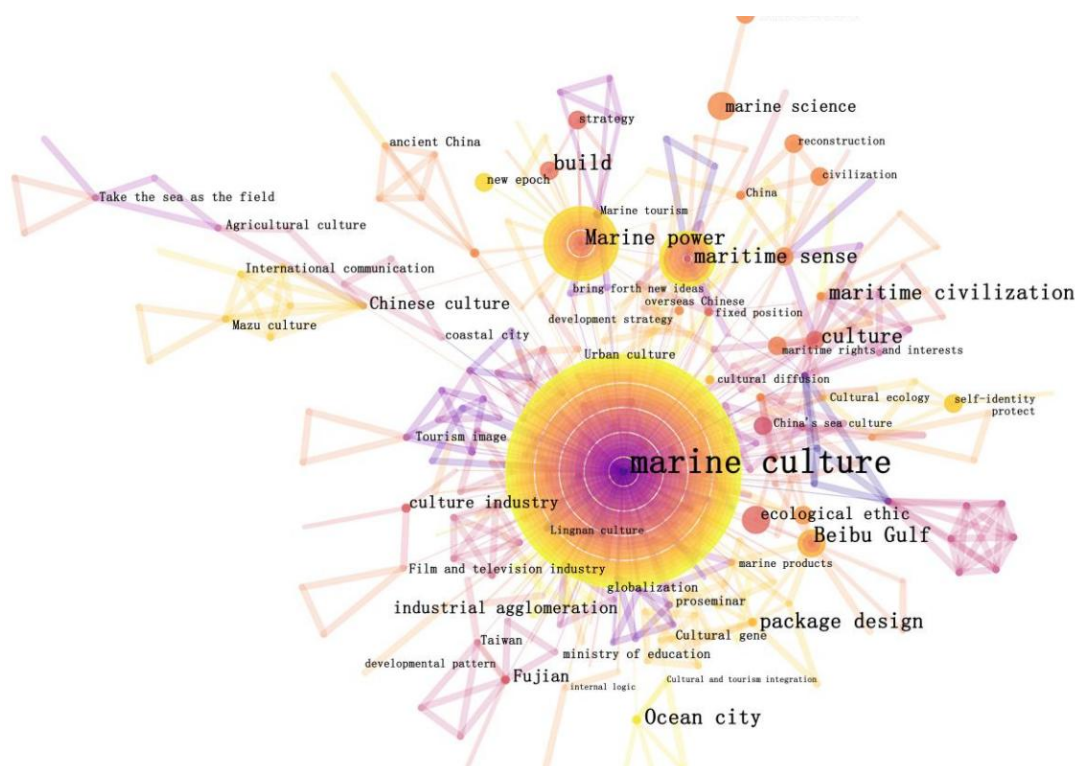
As mentioned above, the same way to “marine culture” as a keyword for literature combing, data from China Knowledge Network (CNKI), 1995-2024 as the definition

Year	Deaths
1995	3
1996	2
1997	2
1998	4
1999	2
2000	2
2001	2
2002	4
2003	1
2004	6
2005	11
2006	4
2007	10
2008	11
2009	9
2010	9
2011	23
2012	32
2013	38
2014	49
2015	27
2016	52
2017	31
2018	27
2019	34
2020	17
2021	24
2022	26
2023	29
2024	9

5.2. Keyword analysis

www.itspoa.com/journal/data

According to CiteSpace visualization analysis, the keywords of “ocean culture”, “ocean power”, “land culture” and “ocean civilization” are mainly displayed in the form of circles (Figure 4). “marine civilization” as an important node of the keywords, the color of the line segments are different, representing the time of publication of the article is also different; the sparse relationship between the keywords and keywords represents the connection between different fields; to “packaging design”, “marine economy”, “marine tourism”, “urban culture” as a small node, the size of the nodes have their differences and similarities, complement each other; with linear interlinking, you can make the keywords of the article pulse Clear (Figure 5), so that the reader in the shortest possible time to understand the details.



Note: Data are obtained from cnki.

Analyzing authors and author group analysis is an important part of academic research, which helps to reveal the distribution of research power, cooperation patterns, research trends, and academic contributions of scholars in a certain field. Literature published by the target author or group of authors is searched from the academic database China Knowledge (CNKI). The size of the name in the map indicates the extent of the author's publications, with the larger name reflecting stronger academic influence (e.g., Figure.6), with Wu Chunming, Xu Yongzhan, Tang Xuemin, Huang Jiaqing, and Sun Jiansong as the primary researchers; and the map displays a variety of colors, which indicate different years, representing much the same association between each scholar, with Li Pingxia, Yang Guozhen, Liu Yong, and Zhang Kaicheng as the secondary researchers, revealing that the scholars' research contributions to the field of marine culture.



Figure 6. Author Knowledge Map of Marine Culture Research.

Note: Data are obtained from cnki.

5.4. Keyword centrality analysis

From 1995 to 2024, the top 30 keywords are shown (Table 1), of which the top ones are “marine culture”, “ocean power”, “China’s marine culture”, “marine culture industry”, “marine awareness”, etc. The field of marine culture has attracted more attention from scholars. “marine culture industry”, “marine consciousness”, etc. The field of marine culture has attracted the attention of more scholars, and in the future, it will also be in the marine civilization, marine construction, culture and heritage successively farther and farther.

Table 1. Analysis of the keyword centrality of the Marine culture.

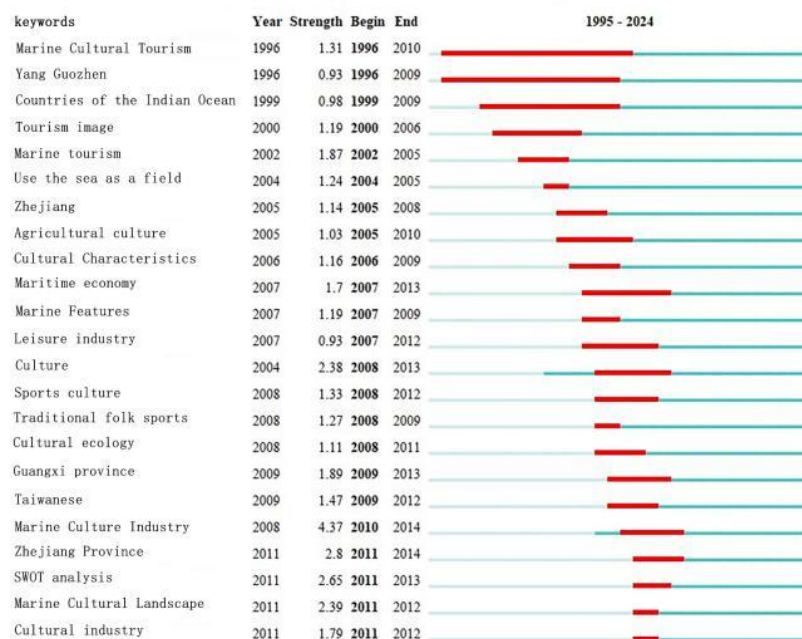
Number	Keyword	Centrad	Co-occurrence frequency
1	Marine culture	0.86	167
2	Marine power	0.07	24
3	Chinese marine culture	0.13	23
4	Marine consciousness	0.11	21
5	Maritime sense	0.05	17
6	Maritime silk road	0.06	12
7	The jing nationality	0.01	9
8	Beibu gulf	0.01	9
9	Sustainable development	0.01	7
10	Culture	0.01	7
11	Marine	0.03	7
12	Package design	0	7
13	Marine economy	0.02	6
14	Zhejiang province	0	6
15	Chinese marine	0.02	6

	university		
16	China	0.01	5
17	Culture and economy	0	5
18	Swot analyse	0.1	5
19	lhherit	0.1	5
20	Marine culture and heritage	0.1	4
21	Marine cultural landscape	0	4
22	Guangxi province	0	4
23	Marine ecological civilization	0	4
24	Develop	0.01	4
25	Philosophy and social sciences	0	4
26	Maritime civilization	0.04	4
27	Taiwan	0	4
28	Belt and road	0.01	4
29	Build	0	4
30	Sports culture	0	3

5.5. Analysis of the sudden present value of research hotspots

In recent years, due to China's increasing emphasis on the development of the marine economy, the marine fishery industry has also begun to transform and develop in a coordinated direction, such as marine tourism, folklore and sports. Using CiteSpace visualization [10] software to analyze the phenomenon of highlighting hot words in the research on marine culture industry (Figure 7), it is found that the top words are "Marine culture tourism", "Yang Guozhen", "Tourism image", "Marine tourism", "Zhejiang", "Marine feature", "Leisure industry", "Sports culture", "Guangxi province", "SWOT analysis", "Agricultural culture", "Construct", "the sea as a field" and other keywords with high strength of direction. This shows that in the future, there will be more development towards the integration of marine culture and tourism industry, and the construction of new fishing villages.

Top 50 Keywords with the Strongest Citation Bursts



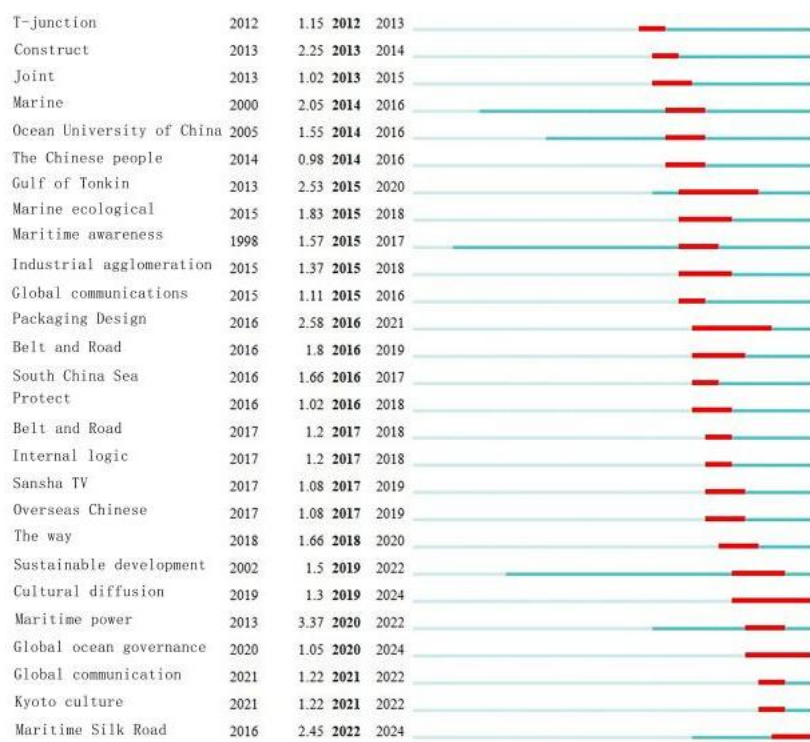


Figure 7. Hot words on Marine cultural industry research.

Note: Data are obtained from cnki.

6. Conclusions

In summary, with the practice of cultural economy and emerging industries continue to carry out, domestic and foreign scholars on the integration between the two development research for long-term learning attention, the focus of the research has experienced the economic development of fishing villages [11], industry new fishing village, rural revitalization, marine awareness and other courses, and has achieved more successful research results. From the analysis of the status of domestic and foreign research, foreign research focuses more on the technical update of the marine cultural field of inquiry, the cross fertilization and deepening of multidisciplinary research. In addition to the attention to the updating of marine technology [13], the domestic research also puts more energy and attention to the integration and development of the fishing village economy and cultural tourism, the improvement of marine culture consciousness, and the construction of new fishing villages. However, there is no more in-depth research on the construction of new fishing villages and the integrated development of industries abroad. Both foreign and domestic studies need to take the construction of new fishing villages, the promotion of industrial development and upgrading, and the updating of the technical field of marine culture as an important goal for continuous development. Although domestic and foreign research on the integrated development of marine culture and tourism in fishing villages has achieved more fruitful results, but from the above research can be seen in the research institutions and important experts and scholars between the cooperative links are not close enough to exchange, to a certain extent, the lack of interdisciplinary and geographical joint discussions, so the relevant theories in this field need to be explored even more. Under the strong background of the emerging industry, all industries need to continue to move forward through integration, continuous technological innovation, and exploration of roads, etc. Relevant research

should strengthen the sensitivity to the background of the times, policy documents, and the status quo faced by the industry, and carry out research on the new problems faced by the integration of the development of the marine culture and tourism [12] industry, and the awareness of the construction of the new fishing villages and the marine culture from a wider range of dimensions and perspectives, thus promoting the full development of the marine culture and the construction of new construction. The full development of the new construction.

Therefore, according to this paper research fishing village marine culture knowledge mapping analysis theme, based on the above relevant summary, from the fishing village marine culture economic development, industry new fishing village construction, rural revitalization, improve marine awareness and other dimensions of the discussion of domestic and foreign research progress.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

Funding

This work was supported by Jiangsu Ocean University commissioned doctoral research fund project “Research on high-quality Development of New Era in Lusu Region” Project No.: KQ24072, also supported by Nantong Hot topic (general topic) “Research on Cultural and Tourism Integration enabling Nantong Rural Landscape Design” Project No.: RB 24-97.

Acknowledgments

This article wrote here, after half a year of scientific research time, in these months, thanks to the tutor to the thesis modification and guidance, let the author learn a lot of academic knowledge, whether using software or words, make the research career become more rich, also thanks to insist on the academic road to I also thank to insist on the academic road to go on.

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