

# Research Hotspots and Trend Analysis in the field of Media Consumption in China in the Past 20 Years: Knowledge Graph Analysis based on CiteSpace

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**Abstract:** This paper analyses a sample of 480 articles in the field of media consumption that were published in the CNKI database between 2013 and 2023, using CiteSpace software to illustrate the subject's structure, patterns and distribution. The resulting visual knowledge graph presents the findings and highlights the connections between authors and topics. 15 central authors in the field of media consumption in China are identified, including Yu Guoming, Jiang Jianguo, Song Xiaowei, Zhou Xinxin, amongst others. Researchers have identified four clusters in the field of media consumption: the process of media consumption, types of media, the media industry, and cross-media integration. They have conducted an in-depth exploration of research hotspots and trends in this field. Research has identified that media consumerism goes through several stages of media consumption. Media literacy education, media content construction, and cross-media consumption have become prevalent areas of research. However, it is essential to understand the boundary between the public and economic aspects of media in practical terms.

**Keywords:** Media Consumption; Research Trends; Knowledge Graph; Citespace

## 1. Introduction

Media consumption involves individuals engaging with and evaluating goods and services provided by the media, influenced by various factors and with a specific purpose in mind [1]. It is important to maintain objectivity in our assessments and avoid subjective evaluations, whilst ensuring a clear, concise, and logical structure of information with causal connections between statements. Technical terms should be explained when

introduced, and a conventional academic structure should be maintained. Language should be clear, objective and value-neutral, avoiding biased, emotional, figurative or ornamental language, with a preference for passive tone and impersonal construction. Consistent technical terms and common sentence structures should be employed. Citation should follow a consistent style guide, with clear marking of quotes. Formal language should be used, avoiding colloquial words and jargon, and hedging should be used to ensure positions on subjects are made clear. Finally, precise word choice and grammatical correctness is essential. As a consumption practice, media studies usually focus on the individual as the subject of consumption, while the object of consumption has diversified with the advances in media technology, encompassing traditional media, social media, and even the concept of the metaverse. In actual society, media consumption differs from traditional commodity consumption since it is intricately connected to consumers' spiritual activities. During media consumption, consumers exchange not only money, but also their time and attention. In the age of intelligent media, media consumers demonstrate increased initiative, participation, interactivity, and flexibility when consuming media. Therefore, the exploration of media consumption is of significant importance for media institutions, advertisers, policy makers, and other relevant parties. Improving the dissemination effect and market competitiveness of media and promoting the healthy development of society are the main objectives. This research is grounded on contemporary information science as its theoretical foundation. Relevant literature materials were gathered and organized, and the knowledge graph analysis software CiteSpace was used as a research tool

to visually scrutinize the current state of research and development in the domain of media consumption in China. The findings present the development context, thematic distribution, and research hotspots. It additionally presents potential avenues for media consumption research, offering a frame of reference for future investigation in the field.

## 2. Research Methods and Data Sources

CiteSpace is an information visualization software that can quantify literature in specific fields and create visual graphs, providing insights into research trends from various perspectives such as authors, institutions and keywords [2]. This study utilises CiteSpace v.5.7.R5 to visually analyse the research area of media consumption in China and provide context for its development. The data for this study was obtained from the CNKI database, where a search for literature relevant to the topic of media consumption, utilizing both title and keyword phrases, yielded 520 articles. After manual filtering and deduplication, 480 articles were deemed closely connected to the research subject, comprising data from January 1, 2013, until October 1, 2023.

## 3. Analysis of Media Consumption Research Characteristics in China

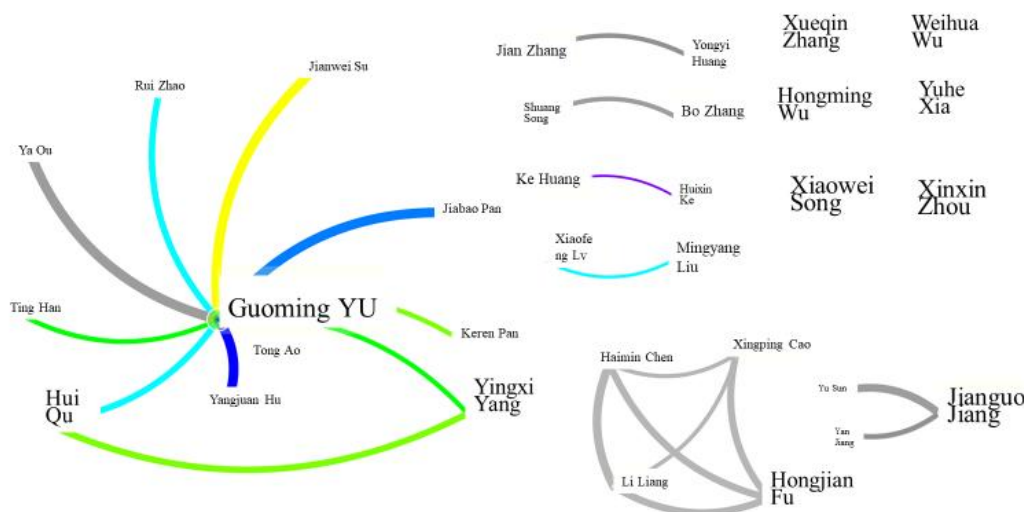


Figure 1. Visualization Graph of Author Collaboration Network Analysis

## 3.2 Thematic Analysis of Media Consumption Research

Keyword co-occurrence and keyword co-

## 3.1 Distribution of Research Authors

A literature review revealed the maximum number of articles published by "media consumption" field authors in China is 16.

Utilizing the Price Equation, core authors with three or more published articles in the field were identified (N=2,996). After reviewing the literature, a total of 15 key authors were identified in this field. These include 16 publications by Guoming Yu, 6 by Jianguo Jiang, 4 by Xiaowei Song, 4 by Zhou Xinxin, and 3 by Hongming Wu, Yuhe Xia, and Yingxi Yang, who are all highly engaged scholars in the field. From Figure 1, the collaborative network analysis visualization graph illustrates that the academic community focused on Guoming Yu has expanded into the largest research team within this field. Hongjian Fu and Jianguo Jiang lead the medium-sized team while Jian Zhang, Bo Zhang, Ke Huang, and Mingyang Liu have jointly contributed to publishing articles. Xiaowei Song, Xinxin Zhou, and Yuhe Xia are independent authors and core contributors. Technical abbreviations will be defined upon initial use. Overall, a number of research teams have been established in this field. However, there are fewer highly effective research teams operating above medium scale. Researchers tend to concentrate on independent or small-scale collaborative publications.

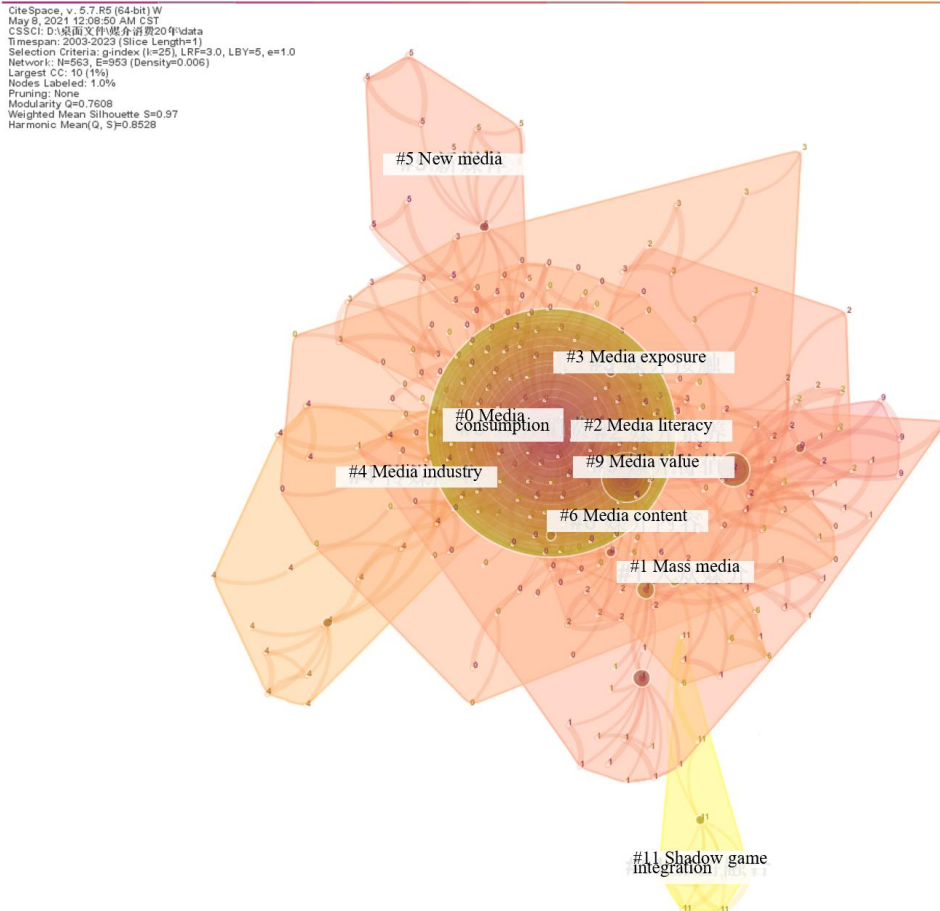
occurrence clustering analysis were conducted using CiteSpace to systematically analyze and visually present data in the research field of

media consumption.

### 3.2.1 Keyword co-occurrence network clustering

Keyword clustering is performed on the literature data through LLR clustering in CiteSpace software. As shown in Figure 2, in

this clustering result, the Modularity Q is 0.76; the Silhouette is 0.97, which indicates that the clustering network association structure is significant, the network homogeneity is high, and the clustering result is of high confidence.



**Figure 2. Keyword Cluster Diagram**

After screening out the groups with less literature (less than 10 articles), 9 clustering groups were derived. As shown in Table 1, the following 9 clustering groups clustering

average contour value (S) are > 0.945, the network homogeneity is high, and the clustering results have high confidence.

**Table 1. Keyword Clustering Table**

Cluster number	Cluster Name	Silhouette
0	Media consumption	0.981
1	Mass media	0.952
2	Media literacy	0.947
3	Media exposure	0.947
4	Media industry	0.946
5	New media	0.978
6	Media content	0.948
9	Media value	0.997
11	Shadow game integration	0.990

According to the clustering results, research in the field of "media consumption" mainly focuses on nine aspects, which can be initially divided into the following four categories:

#### 3.2.1.1 Category 1: Media Consumption Process

In this category, there are several aspects of #0 media consumption, #2 media literacy, #3

media exposure, #6 media content, and #9 media value, among which: cluster #0 media consumption as a research topic involves the process of how people choose, access, and interact with a variety of media content, which covers several aspects of media exposure, media literacy, media content, and media value [3].

Cluster #2 Media literacy is a user's ability to understand, critique, and use media, which includes the three components of recognizing, participating in, and using mass media [4]. With the evolution of the communication environment, research on media literacy has focused more on how digital media technologies contribute to the development of individuals, societies, and even nations [5]. Some researchers have also focused on media literacy in the age of artificial intelligence, emphasizing the need to upgrade from cultivating media literacy to cultivating intelligent literacy in the new media survival environment, to better utilize the technology and fight against alienation [6]. Individuals with high media literacy will be more effective in evaluating and selecting media content, which in turn affects their media consumption behavior.

In cluster #3 media contact, most researchers start from the use and satisfaction theory to explore the contact interaction patterns between different subjects and different media. In this part of the study, the media as the research subject is also gradually shifted from traditional media to new media. Some researchers believe that the academic research indicators for media contact are too single, and innovate the research paradigm in this field based on ecosystem theory [7].

In cluster #6 media content, there are two sub-themes "new media" and "media convergence". As the most important commodity in the process of media consumption, media content is an important factor in determining whether an individual consumes media. The development of the Internet has fundamentally changed people's access to information, and media content, as a kind of information, has also been changed by the development of network technology. The emergence of new media has accelerated the process of media content diversification, and a large number of user-generated content (UGC) continues to impact on professional media-generated

content (PGC) [8], and the interactivity of new media has also changed the way media content is produced and distributed, expanding its influence. Media convergence for the integration of different forms of media breaks the traditional media single form, creates a new mode of media content production and distribution, and thus triggers a revolutionary change in the way of media consumption [9].

Clustering #9 Media Value examines the impact of media content on society, culture and individuals. The level of media literacy affects the audience's judgment of media value. The above clustering involves how individuals choose, interact, and evaluate different media content. The judgment of media value depends on the level of media literacy, which determines how individuals choose and interact with media content. Media literacy and media value focus on the quality and effectiveness of media consumption. Media exposure is related to specific media consumption behaviors, and different media content will determine whether people engage in media consumption.

#### 3.2.1.2 Category 2: Media Types

This category includes #1 Mass Media and #5 New Media. As a "carrier of the consumption process", people's choice and use of media types are influenced by different factors. The emergence of new media provides more entertainment and interactivity to the media consumption process on the basis of mass media, and users have become more accustomed to obtaining information through new media [10].

#### 3.2.1.3 Category #3: Media Industry

The clustering under this category is #4 Media Industry. Scholars' research on the media industry has changed from technology (Internet) changing the communication ecology and driving the integration and innovation of the media industry [10]. to the platform supported by digital technology becoming an important field for information integration and resource allocation [11]. On this basis, the impact on media consumption has also changed, in the "circle community consumption and immersive consumption [12]" on the basis of the development of emotional consumption, at the same time, due to the updating of the media industry technology, the user's perception of media consumption breaks through the existing boundaries, and opens up

unlimited possibilities for spatial activity scenes [13].

3.2.1.4 Category 4: Cross-media convergence  
"Film-game convergence" means the mutual integration of the two mediums, film and game, in terms of thinking, narrative, style, content, industry, and technology in the process of development [14]. Henry Jenkins has pointed out that "there is a strong economic motive behind cross-media adaptation." Cross-media fusion attracts audience's attention again by combining different media contents, which in turn promotes audience's media consumption. At present, "games fused with movies" is a better fusion product in the cross-media consumption market, while "movies fused with games" has not yet appeared as a representative work. No representative works have yet appeared.

#### 3.2.2 Keyword Clustering Time Sequence Analysis

Keyword clustering time sequence analysis is based on keyword clustering, the introduction of time, which can clearly reflect the time of the emergence and development of keywords in each cluster. In the research of media consumption field, the keywords mentioned more frequently and related research are: media consumption, mass media, consumerism, media literacy, media exposure, big data, media convergence, short video, cross-media consumption and so on. Taking 2013 as the dividing line, research in the field of media consumption can be divided into ten years before and after. In the research before 2013, mass media, media culture and media literacy began to appear as research hotspots. Researchers also began to pay attention to the impact of consumerism on the media, and there are discussions and studies on consumerism in different clusters, and with the development of the media industry, the study of consumerism has been extended to consumer transformation (emotional consumption) and new technologies (artificial intelligence). In the post-2013 studies, the keywords as research hotspots are not prominent, evenly dispersed in each cluster, such as big data, algorithms, media convergence, short videos, cross-media consumption, etc. In the pre-2013 studies, there are also some keywords that have been developed, continued to the present, and constantly updated and combined with the

emergence of new research hotspots, such as media consumerism and media literacy.

#### 4. Summary

First, media consumerism as a research focus runs through all stages of media consumption research. According to the research findings, media consumerism runs through all stages of media consumption research and evolves and changes with the development of each research stage. The existence of media consumerism can stimulate economic growth and boost consumer demand, but media consumerism may lead to overconsumption of media by audiences, and consumers' attention (time) as one of the "currencies" in the process of media consumption is rigid, and overconsumption of media will inevitably reduce the opportunities for consumers to engage in other social activities. Secondly, media literacy education, media content construction and cross-media consumption have become mainstream research directions. With the development of society and the improvement of technology, media literacy education is a must, and how to choose the right content in the flood of information has become a prerequisite for the media consumption of contemporary "digital natives". Good media content construction has become the basis for improving the media consumption environment; the development of Internet technology has made cross-media consumption possible, but we cannot only consider the technical and economic feasibility, but also the psychological and emotional needs of the audience are the necessary conditions for the development of cross-media consumption. Finally, in practice, it is still necessary to grasp the boundaries between the public and economic attributes of the media. On the one hand, media consumption enriches the spiritual life of the public and promotes the development of the media industry; on the other hand, as an economic activity, the ultimate goal of media consumption is to create maximum economic benefits, but the public attributes of the media itself are contrary to the economic goal of "profit maximization". Therefore, in practice, it is still necessary to grasp the boundaries between the public and economic attributes of the media, and create more economic value on the basis of ensuring that the public interests of society are not violated.

### Acknowledgments

This paper is supported by Guangzhou Xinhua University Higher Education Teaching Reform Research Project "Research on Teaching Reform of Chinese and Foreign Broadcasting History Curriculum Based on OBE Concept" (Project Number: 2021J006)

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