

Social Network Analysis of Zhao Jingshen' s Specially Marked Documents: A Study Based on Bibliographic Data

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Abstract

[Purpose/Significance] This study aims to reveal the book collection social circle of the late Professor Zhao Jingshen (1902-1985) from the Chinese Department of Fudan University, an important scholar in the history of modern Chinese literature. [Method/Process] As of March 2025, the author retrieved 3,308 bibliographic records of ancient books, general books, periodicals, and other documents related to Professor Zhao Jingshen from the Aleph library catalog database of Fudan University Library, and identified 884 records containing special markings (including inscriptions, signatures, seals, marginalia, etc.). Names of individuals involved in the collection, gifting, and authorship circulation of books in Professor Zhao Jingshen' s library were extracted from these marked records. The author verified and supplemented information on these individuals' occupations, genders, biographies, and other details by searching the Aleph library catalog database, CNKI, Wanfang Data, VIP Database, Baidu, Kimi, DeepSeek, and other resources, thereby constructing a social relationship dataset of Professor Zhao Jingshen' s book collection. This dataset was input into the social network analysis software Visone to visualize the social network of individuals involved in the circulation of Professor Zhao Jingshen' s library collection. [Results/Conclusion] The study reveals that Zhao Jingshen' s close connections with literary, opera, educational, and publishing circles not only facilitated the development of his academic career but also exerted profound influence on modern literature and opera culture. This paper presents innovative research on the circulation network of Zhao Jingshen' s book collection using an interdisciplinary approach (bibliography + social network analysis). The application of the sociological research method Social Network Analysis (SNA) to library catalog data provides a new perspective for understanding Professor Zhao Jingshen' s academic network. The findings demonstrate the importance of effectively utilizing library catalog data in academic research and reveal new possibilities for future scholarly inquiry.

Full Text

Social Network Analysis of Zhao Jingshen' s Marked Literature: A Study Based on Bibliographic Data

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Abstract

[Purpose/Significance] This study aims to uncover the bibliophilic social network of Zhao Jingshen (1902-1985), a late professor in the Department of Chinese at Fudan University and a prominent scholar in the history of modern Chinese literature. **[Method/Process]** As of March 2025, the author retrieved 3,308 bibliographic records related to Professor Zhao Jingshen from the Aleph catalog database of Fudan University Library, including ancient texts, general books, and periodicals. Among these, 884 records containing special markings (such as inscriptions, signatures, stamps, and annotations) were selected. From these marked records, the names of individuals associated with the circulation of Zhao' s collected, gifted, or authored books were extracted. Using multiple sources—including the Aleph catalog database, CNKI, Wanfang Data, VIP Chinese Journal Database, Baidu, Kimi, and DeepSeek—the author verified and supplemented information on these individuals' professions, genders, and biographical details, constructing a social relational dataset of Zhao Jingshen' s bibliographic data. This dataset was then imported into the social network analysis software Visone to visualize the relational network of individuals involved in the circulation of Zhao' s library materials. **[Result/Conclusion]** The findings reveal that Zhao Jingshen' s close ties with literary, theatrical, educational, and publishing circles not only advanced his academic career but also exerted a profound influence on modern literature and traditional Chinese opera culture. This interdisciplinary study (philology + social network analysis) offers a novel perspective for understanding Zhao' s academic network, underscores the importance of leveraging library bibliographic data in scholarly research, and suggests new possibilities for future studies.

Keywords: Zhao Jingshen; Marked Literature; Social Relational Dataset; Social Network Analysis (SNA); Bibliographic Data

Classification Number: G254.29

1. Introduction

Libraries serve as institutions that connect science, technology, information, knowledge, thought, and emotion, facilitating their collision, interaction, fusion, and sublimation to generate the light and fruits of wisdom. Librarians must strive to become guides and designers in exploring, developing, and utilizing these treasure troves of information resources. For a long time, bibliographic

cataloging has focused on describing the physical characteristics of documents themselves, such as material form, content summaries, and subjects. Since 2022, Fudan University Library has begun emphasizing the cataloging of circulation information in Chinese and foreign literature, including signatures, inscriptions, annotations, and stamps, thereby enhancing the research value of bibliographic data.

To reveal and verify the research value of these bibliographic data, the author selected Professor Zhao Jingshen's collection for study. Professor Zhao was a renowned bibliophile who collected over 30,000 volumes throughout his life, including numerous precious ancient texts. His collection is not only vast in quantity but also rich in variety, covering multiple fields such as ancient Chinese literature, history, and philosophy, and possesses extremely high academic and collection value. Fudan University Library has received substantial donations of books from Professor Zhao Jingshen and his family, and his collection has always constituted an important component of the library's holdings. Professor Zhao's research interests were extensive, spanning literature, traditional opera, publishing, and other fields. Over the years, numerous scholars from both domestic and international institutions have visited Fudan University Library specifically to consult Professor Zhao's collection, demonstrating the importance of better revealing these resources.

As social beings, understanding a person's social network can provide deeper insight into the individual. Based on this premise, constructing Zhao Jingshen's bibliophilic social network can help researchers build a more three-dimensional scholarly profile of Professor Zhao.

2. Literature Review

As of February 11, 2025, the author conducted searches using "Zhao Jingshen" as the keyword across CNKI, Wanfang Data, and VIP Chinese Journal Database, employing three search pathways: keyword, subject, and title, yielding 1,316 documents. After screening by relevance, 75 closely related documents were selected. These were organized by theme, chronological order, and research methodology, as shown in Table 1.

Table 1 Literature Classification & Analysis

Category	Subcategory	Count	Time Period	Research Method
Interpersonal Relations	Individual Interactions	12	1980-1989	Historical Research
	Group Interactions	5	1990-1999	Documentary Research
Research Areas		13		
Biography	Autobiography/Biography	36	2000-2009	Case Analysis

Category	Subcategory	Count	Time Period	Research Method
Bibliophilic Stories		5		
Correspondence Studies		2		
Collection Studies		3		
Related Figures Related Groups/Institutions	Students, Friends, etc.	26	2010-2019	

Note: Since research methods overlap across documents, the total count exceeds 75. The author selected some of these 75 documents as references [3-35].

Analysis of these closely related documents reveals that existing scholarship on Professor Zhao Jingshen and his social interactions typically focuses on his relationships with specific individuals or small groups, and is concentrated within particular fields. In the field of library and information science, Social Network Analysis (SNA) is commonly applied in knowledge management, bibliometrics, and webometrics [36], such as citation analysis, link analysis, virtual community analysis, co-authorship analysis, knowledge management research, and competitive intelligence research [37]. However, there are no studies examining Zhao Jingshen's cross-disciplinary social network, and no research employing SNA to construct his social network. No literature has been found that analyzes bibliographic data to study the circulation of Zhao's collection and obtain datasets of social relations.

3. Methodology

3.1 Social Network Analysis (SNA)

Social Network Analysis (SNA) is a widely used sociological method for describing and exploring patterns in social relationships formed between individuals and groups. This research method originated in the 1930s, regained attention around the 1980s, and experienced explosive growth around 2000 with the rapid development of the information network era. Current SNA benefits from the availability of large-scale data and technological advances, enabling a shift toward highly technical and mathematical language. Various digital technologies and tools have been developed to better reveal and visualize unobservable social relationships and structural patterns.

Through literature review, the author found that in library and information science, SNA is typically applied in knowledge management, bibliometrics, and webometrics, such as citation analysis, link analysis, virtual community analysis,

co-authorship analysis, knowledge management research, and competitive intelligence research. Some scholars have used this method to analyze relationship patterns and their social significance in microblogs [38], including identifying opinion leaders [37], using Ucinet as an analytical tool. Others have applied SNA to study social networks in Hollywood [39] or Hong Kong' s film industry [40], with the former not using software tools and the latter employing Gephi for network identification, analysis, and visualization.

This study uses the social network analysis software Visone for network identification, analysis, and visualization to examine the network relationships between Professor Zhao Jingshen and others, describing social relationship patterns through nodes (individuals) and edges (connections).

3.2 Data Collection and Processing

As mentioned in the introduction, Fudan University Library has emphasized cataloging circulation information in Chinese and foreign literature since 2022, including signatures, inscriptions, annotations, and stamps. Through nearly three years of cataloging practice, numerous bibliographic records of specially marked literature have been created, greatly enhancing the academic research value of traditional bibliographic data.

To better reveal the characteristics of Professor Zhao Jingshen' s collection, as of March 2025, the author retrieved 3,308 bibliographic records related to Professor Zhao from the Aleph catalog database, including ancient texts, general books, and periodicals. From these, 884 records containing special markings (inscriptions, signatures, stamps, annotations, etc.) were selected. The names of individuals associated with the circulation of Zhao' s collected, gifted, or authored books were extracted from these marked records. Using the Aleph catalog database, CNKI, Wanfang Data, VIP Chinese Journal Database, Baidu, Kimi, and DeepSeek, the author verified and supplemented information on these individuals' professions, genders, and biographical details, forming a social relational dataset of Zhao Jingshen' s bibliophilic network. This dataset was then imported into Visone to visualize the social network of individuals involved in the circulation of Zhao' s collection.

4. Analysis of Professor Zhao Jingshen' s Bibliographic Data

4.1 Bibliographic Data Download

As previously described, the author searched the Aleph catalog database using "Zhao Jingshen" as the author, obtaining 3,308 bibliographic records. These were exported from the Aleph system and converted using MarcEdit software, with a CNMARC configuration file specifying required fields (010, 200, 210, 300, 305, 316, 317, 7**), resulting in 3,308 Excel-format bibliographic records. From these, 884 records containing special markings were selected (including

836 general book records and 48 ancient text records). Figure 1 [Figure 1: see original paper] shows these 884 bibliographic records in Excel format.

4.2 Bibliographic Data Analysis: Formation of the Social Relational Dataset

Based on special markings in fields 300, 316, and 317 of the 884 records—such as inscriptions, signatures, and stamps—the author extracted 121 social relational data entries related to the circulation of Zhao’ s collection, forming a social relational dataset. This dataset includes information such as Barcode, Source, Gender, Year, Organization, Position, RelationYear, RelationDonor, RelationFormerOwners, Author, Signature, Stamp, Translator, Donor, and Target. The author searched the Aleph database and consulted Baidu, Kimi, and DeepSeek to verify and supplement information on individuals’ professions, genders, and biographical details, making the dataset more complete [41]. Figure 2 [Figure 2: see original paper] shows the social relational dataset of Professor Zhao Jingshen’ s collection.

5. Construction and Analysis of Professor Zhao Jingshen’ s Bibliophilic Social Network

5.1 Network Construction

As described above, the author imported the 121 social relational data entries into Visone, as shown in Figure 3 [Figure 3: see original paper] (Node Attributes.txt in UTF8 format). After adjusting parameters, an initial network graph was formed. Edge attributes such as Work, CLC, and Source were manually input into Visone by: first querying each node’ s Source value, using the “select” button to automatically highlight the node, then selecting its corresponding edges, right-clicking to access properties, and manually entering attribute data for each edge. After adjusting visualization parameters, the final network is shown in Figure 4 [Figure 4: see original paper].

5.2 Network Characteristics Analysis

Zhao Jingshen’ s bibliophilic social network contains 85 nodes and 121 edges. Visone was used to calculate each node’ s degree centrality, with network visualization based on centrality values—larger circles indicate higher centrality. Node attributes include: Source, Gender, Year, Organization, Position, RelationYear, RelationDonor, RelationFormerOwners, Author, Signature, Stamp, Translator, Donor, and Target. Edge attributes include: Source, Work, CLC, and Target, with Source values matching between nodes and edges.

5.2.1 Network Centrality Analysis Degree centrality values: Zhao Jingshen (49.587), Wu Wenqi (4.545), Beijing Library Literature Editorial Department and Zheng Zhenduo (2.066), Hatano Tarō, Guan Dedong, Tan Zhengbi,

Wu Jiamian, Xu Jiarui, and Beijing Lu Xun Museum Research Office (1.24), Cen Jiawu, Shanghai Literature & Art Publishing House, Zhou Xishan, Central-South Literature & Art Troupe, Xu Chongqing, Shaanxi People's Publishing House, Qian Xingcun, and Nanjing Normal University Chinese Department Reference Room (0.826), and 67 remaining nodes including Chen Jie (0.413).

Nodes are arranged by degree centrality, with larger circles indicating higher centrality, as shown in Figure 5 [Figure 5: see original paper].

5.2.2 Network Structure Analysis Node Roles: Table 2 shows the distribution of node roles across categories including groups/institutions, research fields, university teachers, museum directors, modern historical figures, editors/publishers, and classmates/alumni.

Edge Attributes: Table 3 shows attribute values for edges, including circulation of specially marked literature, CLC classification, and ancient text classifications (e.g., “Collected Works: Poetry and Prose Criticism,” “Masters: Fiction”).

5.3 Visualization by Feature

5.3.1 Visualization by Mark Type The network enables visualization of different marking types: inscriptions, signatures, stamps, and annotations. Figure 6 [Figure 6: see original paper] shows signature distribution—a node's Signature attribute value of “Y” indicates the corresponding edge's Work contains a signature. For example, a node with Signature= “Y” and Source= “Liang Qichao” connects to Work= “Collected Works of Yinbingshi,” indicating this book contains Liang's signature. Figure 7 [Figure 7: see original paper] shows stamp distribution, with Stamp values describing the stamps (e.g., “red square seal” for Work= “Divine Turtle”). Figure 8 [Figure 8: see original paper] shows author distribution—a node's Author attribute value of “Y” indicates the edge's Work was authored by that node's Source.

5.3.2 Visualization by Characteristics The network enables multiple analytical perspectives through filtering by various attributes. Filtering by node attribute Year reveals age distribution: 9 individuals born 1900-1909, 5 each in 1890-1899 and 1940-1949, 4 each in 1910-1919 and 1930-1939. Filtering by Gender shows 38 males and 2 females. Filtering by Organization shows 12 university teachers, 5 writers, 1 dramatist, and 1 museum director. Filtering by Position reveals research field distribution: 3 in folk literature, 1 in children's literature, 1 in folk studies, 1 in Dunhuang studies, 1 in Manchu studies, 1 in Lu Xun studies, 2 in modern literature, 2 in classical literature, 7 in traditional opera, and 12 in education. Filtering by RelationDonor shows relationship types: 1 classmate/alumni, 1 friend, 1 colleague, 2 juniors, and 7 students. Filtering by RelationYear shows temporal distribution: 23 instances in the 1980s, 15 in the 1950s, 10 in the 1970s, 4 in the 1960s, 3 in the 1930s, and 1 each in the 1920s and 1940s. Filtering by Work shows 74 books, 42 periodicals, and 5 ancient texts.

Filtering by CLC shows disciplinary distribution: 63 in Class I (Literature), 17 in Class C (Social Sciences), 9 each in Classes H (Language) and J (Art), 7 in Class K (History), and 6 in Class G (Culture/Information).

6. Conclusion

Through visualizing Zhao Jingshen's bibliophilic social network, this study constructs a three-dimensional scholarly profile of Professor Zhao. The network includes numerous heavyweight figures across multiple fields: modern Chinese historical figure Liang Qichao; Wu Fafeng, the renowned playwright and actor of Hainan Qiong opera known as the "Grand Master of Qiong Opera"; Guan Dedong, a senior professor and famous folk literature scholar renowned for his work in folk literature, Dunhuang studies, and Manchu studies; Chen Zhongfan, a classical Chinese literature scholar and Redology expert; Qian Xingcun, a modern Chinese writer, playwright, critic, and translator; Cheng Yizhong, a writer and former deputy chief editor of Zhonghua Book Company; and Hatano Tarō, former professor at Toyo University's Faculty of Letters, among others.

The findings demonstrate that Zhao Jingshen's close connections with literary, theatrical, educational, and publishing circles not only advanced his academic career but also profoundly influenced modern literature and traditional opera culture. By applying Social Network Analysis to library catalog data, this study provides a new perspective for understanding Zhao's academic network, highlighting the importance of leveraging library bibliographic data in research and revealing new possibilities for future scholarship.

Naturally, due to limited data accumulation, the current network coverage is restricted. As the library continues to catalog specially marked literature, the author will supplement and expand this network to create a more comprehensive and vivid scholarly portrait of Professor Zhao.

This interdisciplinary study (philology + social network analysis) of Zhao's collection circulation network demonstrates academic value and innovation in several areas:

6.1 Methodological Innovation

This research represents the first systematic application of SNA to analyze a modern scholar's inscribed book network, establishing a "sociology of book circulation" research paradigm. It develops a three-tier analytical model of "marked literature-personal relationships-network visualization," integrates Aleph system data with AI tools (Kimi/DeepSeek) for relationship completion, and transcends traditional philological methods to achieve quantitative presentation of relational data.

6.2 Historical Discovery Value

The study reveals Zhao Jingshen' s role as a network hub across multiple academic identities: in publishing, as chief editor of Beixin Bookstore connecting new literature writers like Lu Xun and Zhou Zuoren; in traditional opera, forming an academic community with Qi Rushan and Wu Mei through his “Three Treatises on Traditional Opera” ; in education, cultivating a student network during 52 years at Fudan (including Li Ping and Jiang Jurong). It also uncovers overlooked cross-disciplinary connections: with the scientific community (Zhou Yushen, editor of *Science* magazine), with overseas Sinology (Hatano Tarō' s gifts), and with popular literature (Fan Yanqiao' s inscribed books).

6.3 Library Science Application Breakthrough

The research develops a deep utilization scheme for library catalog data, establishing a tripartite marking recognition system of “stamps-inscriptions-annotations” and designing an ETL (Extract-Transform-Load) process for relational data, achieving structured conversion of unstructured bibliographic data.

6.4 Digital Humanities Practice Significance

The study constructs a reusable research framework for scholar relationship networks, including design of personal attribute fields (birth/death years, native place, profession type), quantitative indicators of relationship strength (inscription frequency, annotation density), and network centrality calculation models.

6.5 Limitations and Future Directions

Data Level: Inscription information has been digitized but not yet network-enabled. **Methodological Level:** Integration with text mining is needed to analyze annotation semantics. **Comparative Research:** Networks of contemporary bibliophiles like Zheng Zhenduo, A Ying, and Wu Wenqi could be compared.

This research provides new empirical pathways for understanding the formation mechanisms of 20th-century Chinese academic communities. Its methodological framework is particularly applicable to modern scholar group network research and offers reference value for ongoing projects like the *General Catalog of Modern Chinese Literary Documents* [43]. Future research could expand to “writer signature networks” and “institutional gift networks.”

References

- [1] ZHOU W J. Preface to “Library Mission and Cultural Perspective”[J]. *Journal of Library Science in China*, 2002, (2): 13-14.

- [2] CAI W T, ZHAO R J, MIAO Q. To Explore the Application of Describing Books with Marks: A Case Study of Fudan University Library Donation Collections [J]. *Library Research and Work*, 2023, (2): 43-49.
- [3] WANG L. Rare Ancient Books Newly Acquired by Fudan University Library in Recent Years[J]. *Research on Library and Information Work in Shanghai Universities*, 2006, 16(2): 49-50.
- [4] JI Q Y, ZHENG T Y. A Research on the Precious Scrolls Collected by Zhao Jingshen[J]. *Fudan Journal (Social Sciences Edition)*, 2023, 65(5): 60-69. DOI:10.3969/j.issn.0257-0289.2023.05.008.
- [5] ZHAO Y L. Zhao Jingshen and Li Xiaofeng[J]. *Historical Materials on New Literature*, 2002(1): 4-9.
- [6] YI L. Zhao Jingshen and Lao She[J]. *Historical Materials of New Literature*, 2002(1): 10-13.
- [7] ZHAO Y L. Zhao Jingshen and “the Unfortunate Genius” Zhu Xiang[J]. *Archives and History*, 2006, (04): 14-16.
- [8] YI L. The Friendship Between Xu Diaofu and Zhao Jingshen[J]. *Historical Materials of New Literature*, 2002(1): 21-22.
- [9] YANG Y. Hu Shanyuan and Zhao Jingshen: A Documentary Account[J]. *Historical Materials of New Literature*, 2002(1): 22-24.
- [10] XU Z F. A Brief Account of the Siblings Zhao Jingshen and Zhao Huishen[J]. *Journal of Literature and History*, 2000, (5): 29.
- [11] HU S J. On the Friendly Contact between Lu Xun and Zhao Jing-shen[J]. *Research of Chinese Literature*, 2012(2): 116-118.
- [12] GU W. The Scholarly Exchange Between Zhao Jingshen and Aoki Masaru[J]. *Book Town*, 1997, (4): 15-17.
- [13] QU Y B. Zhao Jingshen and My Research on “Miscellaneous Compilations” [J]. *Folk Culture Forum*, 2004, (04): 92-96. DOI:10.16814/j.cnki.1008-7214.2004.04.020.
- [14] MU X Y, YOU X L. Lu Xun, Zhao Jingshen and Lafcadio Hearn’s The Soul of the Great Bell[J]. *Journal of Shihezi University (Philosophy and Social Sciences Edition)*, 2011, 25(2): 90-92. DOI:10.3969/j.issn.1671-0304.2011.02.017.
- [15] SONG J. Understanding Guo Moruo Through Three Trivial Matters in His Interactions with Zhao Jingshen[J]. *Guo Moruo Research Journal*, 2013(4): 13-15. DOI:10.3969/j.issn.1003-7225.2013.04.004.
- [16] LI G M. The Lifelong Friendship Between Zhu Xiang and Zhao Jingshen[J]. *Anhui United Front*, 2003(3): 40-42.
- [17] JIA C L. Zhao Jingshen and Beixin Books: A Retrospective[J]. *Shanghai Lu Xun Studies*, 2022, (03): 225-229.

- [18] ZHANG X, WU P L. Zhao Jing-shen and Provincial Anhui College during the Anti-Japanese War[J]. Journal of Wuhu Institute of Technology, 2016, 18(1): 67-70. DOI:10.3969/j.issn.1009-1114.2016.01.019.
- [19] ZHU J M. Zhao Jingshen and Anhui Province[J]. Huangmei Opera Art, 1999, 0(3): 24-26.
- [20] WU X B. The Forgotten Shanghai Literary Writers Association (Part 2)[J]. Historical Materials of New Literature, 1997, (4): 156-161.
- [21] LI Y. Zhao Jingshen and 20th Century Popular Literature Research[D]. Fudan University, 2013.
- [22] JIN M. Fifty Years of Drama History Research: A Chronicle of Professor Zhao Jingshen' s Scholarship[J]. Shanghai Drama, 1981, (02): 12-14.
- [23] ZHAO X Q. Zhao Jingshen and Children' s Literature Education[J]. Literature Education (Part B), 2020(2): 24-25.
- [24] LI P. Professor Zhao Jingshen and Traditional Opera Research[J]. Fudan Journal (Social Sciences Edition), 1982(5): 46-49.
- [25] ZHAO L T. Gu Sui and Zhao Jingshen' s Discourse on Qu (Part 1)[J]. Chinese Qu Studies, 2021, (01): 241-255.
- [26] FAN F. On Zhao Jingshen' s Study of Folk Literature [D]. Tianjin Normal University, 2019.
- [27] ZHAO Y L, WANG L. Zhao Jingshen and His Bibliophilic Stories[J]. Archives and History, 2005(11): 36-38.
- [28] DING Y Z. Reading at Mr. Zhao Jingshen' s Home: Reflections on Research on Chinese Village Sacrificial Rites[J]. Shanghai Drama, 1996, 0(4): 38-39.
- [29] LU R X. On Borrowing Books[J]. Reading, 1983, (7): 22.
- [30] LU R X. Transforming Dead Books into Living Ones[J]. Reading, 1983(4): 72.
- [31] FU J. The Silhouette Before Tall Bookshelves: Remembering Opera Historian Zhao Jingshen[J]. Shanghai Drama, 1995(3): 28-29.
- [32] SANG N. A 1934 Letter from A Ying to Zhao Jingshen[J]. Book Chamber, 2022(5): 26-29.
- [33] SUN Y H, GUAN J Z. Six Letters from Zhao Jingshen to Guan Dedong[J]. Historical Materials of New Literature, 2022(4): 131-136.
- [34] DONG W. A Textual Research on the Rare Edition Li Yuan Ji Cheng Held in Fudan University Library[J]. Lantai World, 2020(7): 148-150. DOI:10.16565/j.cnki.1006-7744.2020.07.41.
- [35] CHE X L. "Lin Lan" and Zhao Jingshen[J]. Historical Materials of New Literature, 2002(1): 36-37.

- [36] JIANG X. Research on the Application of Social Network Analysis in Library and Information Science [M]. Beijing: Intellectual Property Publishing House, 2015.
- [37] FU X. Research on Identifying Opinion Leaders in Microblogs Based on Social Network Analysis [D]. Nanjing: Nanjing University of Science and Technology, 2016. DOI:10.7666/d.Y3046381.
- [38] XIE L Q, YAN Q H, CHEN Y. Communication Dilemma Through the “Onlooker Model”: A Microblog Social Network Graph Analysis[J]. China Media Technology, 2011(8): 92-95. DOI:10.3969/j.issn.1671-0134.2011.08.043.
- [39] Cattani, G. Ferriani, S. A Core/Periphery Perspective on Individual Creative Performance: Social Networks and Cinematic Achievements in the Hollywood Film Industry[J]. Organization Science, 2008, 19(6): 824-844. DOI: 10.1287/orsc.1070.0350.
- [40] LI P, JIA W C. The making of ‘the Hollywood of China’ : A preliminary social network analysis of the early Hong Kong film industry (1914-1941)[J]. Journal of Chinese Cinemas, 2023, 17(3): 270-286. DOI: 10.1080/17508061.2024.2375698.
- [41] Kimi Chat. Input Character Names from Zhao Jingshen’s Bibliophilic Social Network Dataset [EB/OL]. (2025-01-31) [2025-03-26]. <https://kimi.moonshot.cn/chat/cue2fquahlmfkojbvni0>.
- [42] DeepSeek. Input the Abstract and Keywords of This Article [EB/OL]. (2025-03-26) [2025-03-26]. <https://chat.deepseek.com/a/chat/s/28d77c6e-f5d5-4f21-a5d4-030e07bbe3e2>.
- [43] National Library of China. Digitization Platform of Republican-era Literature [DB/OL]. [2023-10-01]. <http://mg.nlc.cn/>.
- [44] Wasserman, S. & Faust, K. Social Network Analysis: Methods and Applications [M]. CHEN Y, SUN C H trans. Beijing: China Renmin University Press, 2012.

Note: Figure translations are in progress. See original paper for figures.

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