

What Indian Parliament discusses on Library? An Exploratory Analysis of Questions and Answers in Indian Parliament

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This paper is an attempt to map library related issues raised in both houses of Indian Parliament. Parliament Questions and Answers (Q&As) are downloaded from Digital Sansad web portal (both Rajya Sabha and Lok Sabha) using the word "Library" occurs on the title of Q&As. The paper analyses year wise, session wise number of Q&As and the type of questions asked in the both houses of Indian Parliament. It further uses topic modelling tool for word frequency analysis to find the most frequently occurring key words, sentiments of words, major themes and historical evolution of library related issues in the Parliament. The study has observed almost similar trends in number of questions asked. The sentiment analysis shows the 'positive' is the most prominent type of sentiment. The LDA topic model extracted 10 latent thematic clusters. The topics shows that the debates are strongly oriented toward institutional growth, governance, funding, and modernization of libraries in India. Time-based thematic analysis is done using a gap of twenty-year period. In time-based thematic grouping there are consistent theme on public & national libraries. This indicated that these institutes were always highlighted in the parliament discourse. However, there are four types of shifts occurred during the period. First is the evolution of 'Library' concept second is the 'Personnel', third is the 'Technology' and fourth focus is more 'National' themes, for example, 'national mission'. This study will be useful for researcher, historian of libraries, and also for policy and decision makers.

Keywords: Library, Indian Parliament, Lok Sabha, Rajya Sabha, Parliament Questions and Answers, India

1. Introduction

The Parliament is the highest legislative body in any democracy including India. It plays a significant role in formulating national policies¹. Parliamentary Questions and Answers (Q&As) are vital tool available to parliamentarians in all democracies². In Indian Parliament Q&As sessions are an essential part of the legislative process. Q&A sessions allow Members of Parliaments (MPs) to ask for information on various issues from the government. These sessions are held in both houses of Parliament: the Lok Sabha (House of the People) and the Rajya Sabha (Council of States). This paper is an attempt to analyse the Q&As on topics related to library in Indian Parliament sessions. The paper is divided into the following sections. Section 2 is the literature review followed by the research objective in section 3. Section 4 deals with methodology followed by section 5, results and finally concluding remarks are in section 6.

2. Literature review

Parliamentary questions are "versatile and efficacious" instruments, allow MPs to highlight

administrative inefficiencies, inaction, or misconduct. The tradition of dedicating the first hour in parliament to these questions underscores their importance and accountability³. So, parliament Q&As are important to map policy issues in any democratic government. There are numbers of scholarly research used Indian Parliament Q&As to understand policy related issues⁴. For example, Adhya & Sanyal (2023) used data of Q&As during the Lok Sabha Question Hour (from 1999–2019 including four terms of 13th to 16th Lok Sabha) to map topic distributions, participation patterns, and temporal trends in both houses of Parliament⁵. Ayyangar and Jacob (2014) analyze three decades of Indian Lok Sabha Question Hour data (1980–2009), to find Members' participation patterns and observed that members' engagement in the house is shaped by their personal, social, and regional dynamics⁶.

A few studies on parliament Q&As deals with specific issues. For example, Science & Technology related questions raised in the year 1992 during the Tenth Parliament have been done by dividing the S&T related issues into 14 socio-economic areas¹. Parliament questions and issues on Climate Change

(analysed for 20 years period, from 1999 to 2019) had observed that despite the significant and growing vulnerability of India to climate change, there were very few questions raised in the Parliament related to climate change². Question analysis on diabetes mellitus has shown India's increasing attention in legislative discourse⁷. Questions related to obesity, highlighted the evolving legislative attention to public health issues in India⁸. Lok Sabha questions on foreign and defence policy were used to explore various engagements with foreign-security discourse⁹.

Although these studies used to map general trend and particular issues in Indian Parliament Q&As, there is no study on library related issues in Q&As. Library being a vital instrument in any society, it is an important topic to discuss in Indian Parliament. So, to fill the void this paper is an attempt to trace the trends in Q&As in Indian Parliament related to library issues.

3. Research Objectives

This exploratory study has the following research objectives:

1. What are the total numbers, yearly growth patterns and, session wise trends of Q&As on library related issues in both houses of Indian Parliament?
2. What are the types of questions asked?
3. What are the patterns in terms of word frequency and sentiment analysis?
4. What are the thematic groups emerged?
5. How historical transformation happened?

4. Methodology

To address the research objectives stated above, Parliament questions were downloaded from the following websites using the word “Library” in the title of debate. For Lok Sabha the debate were downloaded from Digital Sansad (website <https://sansad.in/l/questions/questions-and-answers>) and for Rajyasaba the records were downloaded from Digital Sansad (website <https://sansad.in/rs/questions/questions-and-answers>). Records were searched using the keyword ‘Library’ in the title of the Q&As. Retrieved records were downloaded and stored in Microsoft Excel for further analysis.

A word frequency, sentiment analysis and thematic analysis of keywords were done to trace the trends and development of library related themes in Q&As. Word frequency refers to how often each word appears in a text. Sentiment analysis is the process of determining the emotional tone behind a body of text.

Topic modelling is used to find the patterns in a collection of text documents. Word frequency, sentiment analysis and topic modelling was done using Google Colaboratory (Google Colab) platform. It is a cloud-based web interface used to execute Python code to get the topic modelling and theme analysis¹⁰.

5. Results

From the available records on Digital Sansad website (as of February 2026) the total number of Q&As listed in Lok Sabha (LS) is 11,43,512. Among those Q&As there are 1,101 questions asked in LS with library in their title which is about 0.096 per cent. Total questions in Rajya Sabha (RS) were listed on the website were 643,790. Among them there are 603 Q&As with library in the title which is about 0.093 per cent of total debate. Although the number of questions asked in LS is almost double than RS, percentage wise there is a similar trend observed in Q&As in both houses of parliament.

5.1 Trends in Q&As

Figure 1 shows session wise Q&As in LS. The maximum number of Q&As was asked during the 2nd LS with 144 Q&As followed by 3rd, 4th and 5th sessions of LS. Very few questions were asked during 7th and 9th sessions because of the sort durations of those LS terms.

Figure 2 shows year wise number of questions asked in Rajya Sabha. The highest number of questions was asked in the year 1961 with 33 questions. The next significant Q&As happened in 1970 with 18 and 19 Q&As in 1993. Afterwards there is a gradual declination of Q&As in RS on library related issues.

A comparison of number of Q&A in both houses is shown in Figure 3. From the trends it is observed that Q&As in LS are more than RS except a couple of

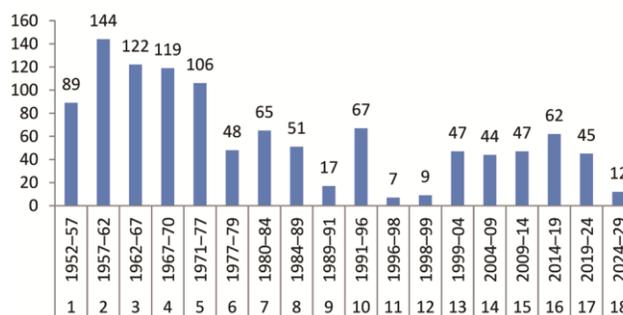


Fig. 1 — Session wise questions asked in Lok Sabha

years. A significant number of questions were asked in 1961 (33 QAs in RS while 20 Q&As in LS). However, there is no significant correlation observed in Q&As in both houses in Parliament.

5.2 Type of Q&As

Questions are submitted by MPs, and the respective ministries provide answers. The questions are listed on the Parliament's official website, and answers are published for public access. These sessions promote transparency and accountability by allowing MPs to scrutinize government policies and actions. There are different types of questions, including starred

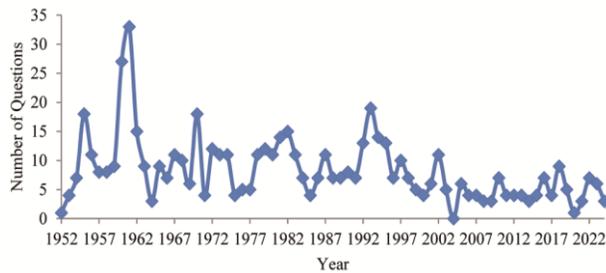


Fig. 2 — Year wise number of Questions asked in Rajya Sabha

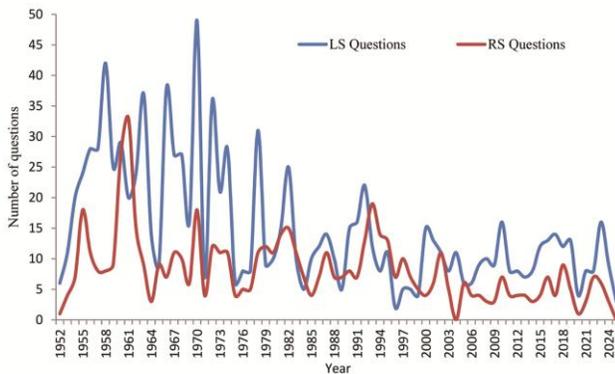


Fig. 3 — Number of questions asked in LS & RS

questions (requiring oral answers), un-starred questions (requiring written answers), and short notice questions (asked with shorter notice)¹¹. Table 1 shows types of questions asked. In LS 943 (85.64 percent) questions and in RS 456 (75.62 percent) are unstarred questions which requires written answers.

5.3. Word Frequency Analysis

Word frequency analysis is used to measure how often specific words occur in a text collection (corpus)¹². This method is used to identify patterns, themes, and features by counting and ranking words based on their frequency¹³. It is very commonly used method in various fields to study frequent words, authorship, genre, sentiment, or thematic groupings¹⁴. Google Colaboratory platform is used for word frequency analysis, sentiment analysis and topic modelling. It is a cloud-based interactive platform that supports Python programming for machine learning and data science libraries^{10, 15}.

Table 2 shows top 20 most frequent keywords in Q&As of both houses of parliament. Library is the most frequently occurred keyword. This shows that both houses prioritize library-related issues. Lok Sabha inclined toward administrative and infrastructural themes. This is seen by use of high frequency words like “office,” “central,” “digital,” “movement,” “setting,” “mobile,” “university”. Rajya Sabha emphasizes more on heritage and institutional issues because frequent use of “museum,” “memorial,” “pay,” “scales,” “london,” “hindi”. Both houses frequently mention Delhi and Calcutta because these cities are the hubs of national libraries and heritage institutions. Delhi appears more in Lok Sabha, because of its administrative centrality.

Keywords like “librarian,” “librarians,” “pay,” “scales” suggest attention to professional roles,

Table 1 — Types of questions asked in different houses of Indian Parliament related to Library

SL. No.	Question Type	Number of questions in LS	Percentage	Number of questions in RS	Percentage
1.	Starred	154	13.98		
2.	Written Answers To Starred			84	13.93
3.	Un starred	943	85.64		
4.	Starred-Supplementary	4	0.36		
5.	Oral Answers To Questions			60	9.95
6.	Papers Laid On The Table			1	0.16
7.	Written Answers To Questions			2	0.33
8.	Written Answers To Un starred Questions			456	75.62
	Total	1101		603	

Table 2 — Top 20 most frequent keywords in Parliament Q&As

Sl No	Lok Sabha				Rajya Sabha			
	Word	Frequency	Rank	Percentage	Word	Frequency	Rank	Percentage
1.	library	679	1	14.99	library	411	1	14.23
2.	libraries	327	2	7.22	libraries	138	2	4.78
3.	national	191	3	4.22	national	113	3	3.91
4.	delhi	125	4	2.76	books	88	4	3.05
5.	public	101	5	2.23	india	58	5	2.01
6.	india	88	6	1.94	delhi	53	6	1.83
7.	calcutta	84	7	1.85	calcutta	50	7	1.73
8.	central	81	8	1.79	hindi	44	8	1.52
9.	office	71	9	1.57	central	43	9	1.49
10.	books	67	10	1.48	public	43	9	1.49
11.	librarians	63	11	1.39	office	39	10	1.35
12.	indian	39	12	0.86	ministry	39	10	1.35
13.	digital	36	13	0.79	librarians	35	11	1.21
14.	museum	32	14	0.71	museum	35	11	1.21
15.	nehru	32	14	0.71	nehru	32	12	1.11
16.	movement	31	15	0.68	memorial	29	13	1.00
17.	librarian	30	16	0.66	pay	20	14	0.69
18.	memorial	29	17	0.64	new	20	14	0.69
19.	setting	28	18	0.62	digital	18	15	0.62
20.	university	27	19	0.60	london	16	16	0.55

compensation structures and institutional staffing. Rajya Sabha’s emphasis on “pay” and “scales” which reflect employment related conditions.

“Digital” appears in both house but it is more prominent in Lok Sabha. It shows a strong push for digital library initiatives and modernization in Lok Sabha discussions.

5.4 Sentiment Analysis

Sentiment Analysis is the computational study of people’s opinions, attitudes, evaluations, and emotions toward various entities such as products, services, organizations, individuals, or events. It is an emerging subject within Natural Language Processing used to identify sentiment polarity, for example, positive, negative, or neutral^{16,17}. Emotion classification in this study was conducted using the NRC Emotion Lexicon¹⁸ (anger, fear, anticipation, trust, surprise, sadness, joy, disgust, positive and negative).

Table 3 shows the sentiments extracted from Parliament Q&As. The NRC sentiment analysis reveals that both the Lok Sabha and Rajya Sabha Q&As are mainly positive in tone. However, Lok Sabha shows a higher proportion of anticipation. Rajya Sabha shows a bit higher trust and joy. Negative emotions such as anger, fear, sadness and disgust remain marginal in both Houses. In sum, Lok Sabha Q&A shows more positive and politically mobilizing discourse than the Rajya Sabha.

5.5 Topic Modelling

Topic modelling was used to identify the latent thematic structures within the corpus of parliamentary Q&As. Latent Dirichlet Allocation (LDA) was applied to model the title of each document¹⁹. Topic modelling (Table 4) shows 10 major themes that recur in Q&As.

The dominant themes revolve around Library & Personnel Development, Mobile Libraries & Collection Management, Librarian’s Training & Vacancies, National & International Library Services, Library Movement & Policy, Regional & Project-Based Libraries, Digital Libraries & Knowledge Management, Public Library Establishment & Staffing, Public Libraries & Grants, School Libraries & Financial Aid. The spread of topics indicates that parliamentary discourse primarily focusses on libraries as state-sponsored institutional entities. Furthermore, the presence of rural, school, and regional language topics shows the socio-cultural and economic development dimensions of library and related policies.

5.6 Historical Transformation of Q&As

Time-based thematic analysis and their explanations are given in Table 5. This analysis is done using a gap of twenty years period. The thematic periods can be categorised into the following four phases: *Early Development & Infrastructure*

Table 3 — Sentiment Analysis of Parliament Q&As

Sl No	Lok Sabha				Rajya Sabha				Keywords
	Emotion	Sum	Percentage	Rank	Emotion	Sum	Percentage	Rank	
1.	positive	1118	57.78	1	positive	688	56.44	1	Positive: [library, national, libraries, delhi, public, calcutta, india, office, books, central]
2.	anticipation	260	13.44	2	trust	175	14.36	2	Anticipation: [library, public, delhi, libraries, national, university, mobile, pay, scales, librarians]
3.	trust	224	11.58	3	anticipation	118	9.68	3	Trust: [library, libraries, national, pay, librarians, committee, scales, delhi, calcutta, institute]
4.	negative	105	5.43	4	joy	79	6.48	4	Negetive: [library, libraries, books, national, delhi, scheme, calcutta, public, central, missing]
5.	joy	78	4.03	5	negative	64	5.25	5	Joy: [library, pay, scales, libraries, librarians, ministry, grant, delhi, closure, public]
6.	fear	55	2.84	6	fear	39	3.20	6	Fear: [library, national, books, libraries, medical, delhi, calcutta, missing, government, central]
7.	sadness	42	2.17	7	sadness	25	2.05	7	Sadness: [library, books, delhi, national, libraries, missing, calcutta, closure, loss, new]
8.	anger	34	1.76	8	anger	18	1.48	8	Anger: [library, national, books, calcutta, delhi, libraries, loss, theft, shortage, force]
9.	disgust	17	0.88	9	disgust	10	0.82	9	Disgust: [library, theft, national, delhi, libraries, books, librarycumbook, stall, condition, manuscripts]
10.	surprise	2	0.10	10	surprise	3	0.25	10	Surprise: [libraries, orissa, receiving, central, assistance, award, research, fellowships, nehru, memorial]

Table 4 — Thematic grouping of Q&As

Sl. no	Topic	Top Words	Major themes
1.	Topic 0	library, assistance, indian, state, public, financial, abroad, embassy, house, promotion	Library & Personnel Development
2.	Topic 1	delhi, public, library, central museum, nehru, memorial, secretariat, new, medical	Mobile Libraries & Collection Management
3.	Topic 2	setting, librarian, pay, scale, library, college, university, national, aid, delhi	Librarians' Training & Vacancies
4.	Topic 3	india, office, library, london, acquisition, system, film, act, book, public	National & International Library Services
5.	Topic 4	ministry, hindi, book, library, punjab, language, child, woman, regional, periodical	Library Movement & Policy
6.	Topic 5	development, library, national, librarian, science, calcutta, training kendriya, post, publication	Regional & Project-Based Libraries
7.	Topic 6	national, calcutta, library, movement, commission, book, purchase, appointment, bombay, working	Digital Libraries & Knowledge Management
8.	Topic 7	service, library, committee, grant, central, mobile, advisory, staff, railway, modernisation	Public Library Establishment & Staffing
9.	Topic 8	digital, knowledge, library, traditional, establishment, orissa, national, raja, institute, kolkata	Public Libraries & Grants

10.	Topic 9	mission, rural, library, national, school ,area ,vacant, post, missing, librarian	School Libraries & Financial Aid
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Table 5 — Time based thematic analysis of parliament debates of both houses

Major theme	Period	Prominent Keywords	Explanation
Early Development & Infrastructure	1952-1971	'librarian,' 'service,' 'training,' 'national,' 'public,' 'development,' and 'university'	This period focused on the foundational aspects of library services including the establishment of new libraries, training of librarians, and discussion on the role of national and public libraries.
Growth, Resource Management & Employment Concerns	1972-1992	'book,' 'acquisition,' 'pay,' 'scale,' 'rural,' and 'shortage'	This period shows a continuation of library establishment and development. However, focus on resource management (e.g., 'book,' 'acquisition') was gradually emerged. There were specific concerns related to librarians' employment, pay scales, and vacancies. Moreover, topics also indicate the expansion of library services to regional and rural areas.
Modernization, Digital Transition & Access	1993-2013	'digital,' 'knowledge,' 'modernisation,' 'e-learning,' and 'mission'	This era marks a significant shift towards modernization. Discussion on digital concepts, e-learning etc were introduced. Also, attention paid on public library infrastructure, national missions, and accessibility of libraries.
Advanced Digitalization, Virtual Libraries & Policy Implementation	2014-2025	'Digitisation,' 'virtual library,' 'smart,' and 'elibrary'	The most recent period demonstrates an accelerated move towards advanced digital solutions and virtual libraries. There's also an emphasis on policy implementation, scheme maintenance, and addressing current issues like vacancies and pensions. This period reflects a mature stage of library development, integrating technology and focusing on modern challenges.

(1952-1971), *Growth, Resource Management & Employment Concerns* (1972-1992), *Modernization, Digital Transition & Access* (1993-2013) and *Advanced Digitalization, Virtual Libraries & Policy Implementation* (2014-2025).

It is observed from the table 5 that there is a shift in themes with the span of time. However, there are consistent themes that got attention with the all-time span.

- *Consistent Theme: Public & National Libraries:* Throughout this time span (1952-2025) 'public library' and 'national library' remain central themes. This indicated that these institutes were always highlighted in the discourse.

The following four types of shifts occurred during the period.

- *Shift 1: Evolution of 'Library' Concept:* Initially, 'library' discussions were about physical establishment and traditional services. With the technological advancement it includes 'mobile library,' 'digital library,' 'virtual library,' and 'elibrary'.
- *Shift 2: Personnel Focus:* Early periods focused on 'librarian training' and 'service.' Later, more emphasis was put on human resource and related issues for example, 'pay scale,' 'vacancy,' and 'pensioner'.
- *Shift 3: Technology Integration:* The most

paradigm shift happened is the gradual introduction and increasing prominence of digital and technology-related terms. Starting from general 'knowledge management,' it progressed to 'digital library,' 'e-learning,' 'modernisation,' 'digitisation,' 'virtual library,' and 'smart library' in recent years.

- *Shift 4: Scope and Scale:* Early discussions were more on foundational and local or regional. With time the themes become more national ('national mission') and policy-driven ('policy,' 'scheme').

6. Concluding Remarks

This paper is an exploratory analysis of library-related Questions and Answers (Q&As) in the both houses of Indian Parliament. The Q&As data was downloaded from the Digital Sansad portal by selecting Q&As that contains the term “Library” in the titles. The study identifies various patterns in the parliamentary Q&As. Word frequency analysis shows that Lok Sabha Q&As are mainly focused towards administrative and developmental issues. Rajya Sabha Q&As oriented more towards governance issues and cultural heritage preservation. Sentiment analysis shows more positive tone. LDA analysis identified major themes revolve around different aspect of library. Time-Based Thematic Analysis observed a shift in themes with the span of time. However, there

are consistent themes that got attention (public library, national library) with the all-time span and those were always highlighted in the discourse. However, with the span of time, the theme around library changes. The Q&As focus shifted from traditional to digital libraries and library issues become more national.

This study has certain limitations. Firstly, it relies solely on Q&As with “Library” in their titles. A more comprehensive analysis incorporating full text of the debate could perhaps yield more holistic and deeper insights. Secondly, the research does not account for the individual parliamentarians who frequently raised library-related issues or the specific ministers to whom these questions were asked. An inclusion of those issues could enrich and perhaps highlight a different dimension of this discourse.

References

- 1 Haritash N, and Gupta B, Mapping of S&T issues in the Indian Parliament: A scientometric analysis of questions raised in both Houses of the Parliament, *Scientometrics*, 54(1) (2002) 91-102.
- 2 Mundoli S, Jacob Z, Murali R and Nagendra H, Climate change: the missing discourse in the Indian Parliament, *Environmental Research: Climate*, 1(1) (2022) 015006. <https://doi.org/10.1088/2752-5295/ac7d67>
- 3 Singh D, Parliamentary Questions: A Glorious Beginning to an Uncertain Future (?), *Indian Journal of Public Administration*, 59 (1) (2013) 78-92.
- 4 Krishna Rohit S.V, Singh N, Analysis of Speeches in Indian Parliamentary Debates. In: *Gelbukh, A. (eds) Computational Linguistics and Intelligent Text Processing*. CILing 2018. Lecture Notes in Computer Science, 2023, vol 13396. Springer, Cham. https://doi.org/10.1007/978-3-031-23793-5_20
- 5 Suman Adhya and Debarshi Kumar Sanyal, What Does the Indian Parliament Discuss? An Exploratory Analysis of the Question Hour in the Lok Sabha. In *Proceedings of the LREC 2022 workshop on Natural Language Processing for Political Sciences*, 2022 p. 72–78, Marseille, France. European Language Resources Association.
- 6 Ayyangar S, Jacob S, Studying the Indian legislature: what does question hour reveal? *Studies in Indian Politics*, 2(1) (2014), 1-19.
- 7 Devani J, Chavda P and Mohapatra A, Discourse on Diabetes Mellitus in the Indian Parliament: A Thematic Analysis of Questions Posed in Lok Sabha and Rajya Sabha between 1999 and 2019, *Indian Journal of Public Health*, 67(Suppl 1) (2023) S4-S9.
- 8 Gauthaman J, A Qualitative Analysis of Parliamentary Questions on the Issue of Obesity Raised Over the Past Two Decades in India. *Journal of Family Medicine and Primary Care*, 10 (11) (2021) 4223–4228.
- 9 Ladwig III W C, Parliamentary Interest in Foreign Security Policy: Insight from the Indian Lok Sabha. *Foreign Policy Analysis*, 21(1) (2025) p. 1-37
- 10 Bisong E, Google Colaboratory. In *Building machine learning and deep learning models on Google Cloud Platform* (Apress: New York, USA), 2019, p. 59-64.
- 11 Hegde S R and Gaikwad Y R, A Hybrid Deep Neural Network for Aspect Based Sentiment Analysis On Rajya Sabha Questions, *Indian Journal of Computer Science and Engineering (IJCSE)* 12 (1) (2021) 112-128.
- 12 Stubbs M, Three concepts of keywords, *Keyness in texts* Torrasa 2010, 21–42.
- 13 Kilgarriff A, Comparing corpora. *International Journal of Corpus Linguistics*, 6(1) (2001) 97–133. <https://doi.org/10.1075/ijcl.6.1.05kil>
- 14 Holmes D I, The evolution of stylometry in humanities scholarship. *Literary and Linguistic Computing*, 13(3) (1998) 111–117. <https://doi.org/10.1093/lc/13.3.111>
- 15 Google Colaboratory, available at: <https://colab.research.google.com/> (accessed on 19 February 2026)
- 16 Liu B, *Sentiment analysis and opinion mining*, (Springer International Publishing; Delhi), 2012, p.1-167. <https://doi.org/10.2200/S00416ED1V01Y201204HLT016>
- 17 Pang B and Lee L, Opinion mining and sentiment analysis. *Foundations and Trends® in information retrieval*, 2(1–2) (2008) 1-135.
- 18 Mohammad S M and Turney P D, Crowdsourcing a word–emotion association lexicon. *Computational Intelligence*, 29(3) (2013) 436–465. <https://doi.org/10.1111/j.1467-8640.2012.00460.x>
- 19 Blei D M, Ng A Y and Jordan M I, Latent Dirichlet allocation. *Journal of Machine Learning Research*, 3, (2003), 993–1022.