## **GYAN BHARATAM**

International Conference on

Reclaiming India's Knowledge Legacy Through Manuscript Heritage

11th-13th September 2025

# BOOKOF ABSTRACTS



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#### **Editorial Note**

It is privilege and honour to welcome the distinguished delegates, scholars and custodians to this momentous International Conference on "Reclaiming India's Knowledge Legacy Through Manuscript Heritage," organized by the Ministry of Culture, Government of India, from 11th to 13th September 2025 at Vigyan Bhawan, New Delhi.

The International Conference represents a formal launch of the Gyan Bharatam Mission (GBM)- a bold and far-reaching national initiative for manuscript conservation, digitisation, and dissemination announced in the Union Budget of Government of India 2025-26. GBM is both a response to this urgent challenge and a visionary step to assert India's knowledge leadership globally—integrating the wealth of ancient wisdom with modern technology, and nurturing a new generation of scholars and institutions to carry this legacy forward. The event envisages intellectual exchange and practical outcomes, comprising an Inaugural and Valedictory Session, 4 Plenary Sessions, and 12 Parallel Technical Sessions. It features an massive participation of over 1200 National, 20 International delegates, including 75 invited speakers and experts. The conference is organized in a Hybrid Mode to facilitate global access and interaction.

India possesses one of the richest manuscript heritages in the world, with an estimated 10 million ancient manuscripts. These manuscripts are unique in global scale, thematic diversity, and historical continuity. Preserved across Indian Temples, Mathas, Monasteries, Jaina Bhandāras, Libraries, and Private Collections, these manuscripts encompass philosophy, science, Vedic rituals, literature, medicine, mathematics, astrology, architecture, and the arts. They are more than texts and are foundational to the Bhāratīya Jñāna Paramparā, embodying the depth and resilience of Indian civilization.

Despite this, countless manuscripts remain unpublished, untranslated, or are threatened by the ravages of time. The Gyan Bharatam Mission (GBM) seeks to preserve, digitize, and disseminate these manuscripts, integrate it with modern technologies, and foster a new generation of scholars and institutions to carry the legacy forward.

The aims and themes of GBM, as reflected in this conference, are broad and ambitious and are as given below:

Survey, Documentation, and Cataloguing: Through a national network of Cluster Centres, Independent Centres, and Centres of Excellence.

Conservation and Restoration: Employing preventive and curative strategies, supported by specialized institutions.

Digitization and Digital Archiving: Leveraging advanced tools such as HTR, AI, and cloud-based metadata systems.

National Digital Repository: For global access, archiving, tagging, and AI-driven translation.

Research, Translation, and Publication: Including facsimiles and critical editions of rare and unpublished manuscripts.

Transcription and Script Training Workshops: Creating a second generation of conservators and scholars.

Technological Innovations: Development of mobile apps, microfilming solutions, IIIF protocols, and AI-assisted tools.

Capacity Building and Academic Integration: Structured training, expert appointments, and research partnerships.

International Collaboration: For manuscript retrieval, digitization standardization, and cross-border knowledge exchange.

Curricular integration: Bringing manuscript knowledge into mainstream education and skill development.

The conference witnessed a record-breaking response to its call for papers, receiving over 1,000 abstracts from scholars worldwide—a testimony to the resonance and relevance of the GBM vision. After a stringent peer review and selection process, 189 high-quality abstracts were accepted, representing the cutting-edge of research

and practice in manuscript heritage and are enclosed in the abstract volume.

This Book of Abstracts, stands as a testament to the vibrancy and future of India's manuscript heritage. This collections in this editorial catalyzes new scholarly innovation, civilizational pride, technological empowerment, and cultural diplomacy—echoing India's aspiration as an intellectual leader. The abstracts focus on various aspects and issues from Conservation and Restoration Techniques, Survey, Documentation, and Metadata Frameworks, Digitization: Tools, Platforms, and Standards, Technological Innovations: AI, HTR, Script Recognition, Decipherment of Indus, Gilgit and Śankha Scripts. The abstracts also accomplice issues in on Indian Renaissance and Translation, Outreach and Integration with Education and Culture, Capacity Building in Manuscriptology, Codicology, Paleography, Translation and Interpretation of Indic Texts and Research and Publication Frameworks and Copyright and legal issues. It is hoped that the collection of these abstracts and ideas will inspire dialogue, collaboration, and new pathways in reclaiming, protecting, and globalizing the treasures of Indian knowledge.

May the spirit of Swami Vivekananda's timeless Chicago address—commemorated at this conference—be a reminder of India's historic and continuing contribution to the world's intellectual and spiritual legacy.

With best wishes for an inspiring and fruitful conference.

Amita Prasad Sarbhai, Sachchidanand Joshi & Ramesh Chandra Gaur Prof. Alok Tripathi (Editors)

#### **TABLE OF CONTENTS**

## Working Group 1: Decipherment of Ancient Scripts: Indus, Gilgit, and Sankha

<ol> <li>How Certain Symbolisms Used in the Mercantile Semasiographic/ Logographic Indus Script are also Found in Linguistic Symbolisms of Both Ancient Dravidian and Vedic Words and Phrases         Dr Bahata A Mukhopadhyay     </li> <li>A Cryptanalytic Decipherment of the Indus Script         Sh. Bharath Rao (Yajnadevam)     </li> <li>Crossing the Bridge: A Proto-Dravidian Decipherment         Dr Bryan K. Wells     </li> <li>Understanding the Signs of the Indus Script         Ms. Devika Elisabeth         Co Author: Sh. SD Fernandes, Ms. S. Mary Lilly, Sh. M. Francis Joseph     </li> <li>A Summary of the Indus Script Decipherment:             Methodology, Key Findings             Sh. Farrukh Haidar Naqvi</li> <li>Reading Meaningfully the Indus Script Texts Easy Way through Primeval Koya Lambej Social System Prevalent Unique Culture</li> </ol>	1.	Bridging the Gap between Archaeology, Epigraphy, and Linguistics of the Indus Script Dr Andreas Fuls	1
<ul> <li>Sh. Bharath Rao (Yajnadevam)</li> <li>4. Crossing the Bridge: A Proto-Dravidian Decipherment</li></ul>	2.	Semasiographic/Logographic Indus Script are also Found in Linguistic Symbolisms of Both Ancient Dravidian and Vedic Words and Phrases	2
<ul> <li>Dr Bryan K. Wells</li> <li>5. Understanding the Signs of the Indus Script Ms. Devika Elisabeth Co Author: Sh. SD Fernandes, Ms. S. Mary Lilly, Sh. M. Francis Joseph</li> <li>6. A Summary of the Indus Script Decipherment: Methodology, Key Findings Sh. Farrukh Haidar Naqvi</li> <li>7. Reading Meaningfully the Indus Script Texts Easy Way through Primeval Koya Lambej Social System Prevalent Unique Culture</li> </ul>	3.		3
<ul> <li>Ms. Devika Elisabeth Co Author: Sh. SD Fernandes, Ms. S. Mary Lilly, Sh. M. Francis Joseph</li> <li>6. A Summary of the Indus Script Decipherment: Methodology, Key Findings Sh. Farrukh Haidar Naqvi</li> <li>7. Reading Meaningfully the Indus Script Texts Easy Way through Primeval Koya Lambej Social System Prevalent Unique Culture</li> </ul>	4.		4
Methodology, Key Findings  Sh. Farrukh Haidar Naqvi  7. Reading Meaningfully the Indus Script Texts Easy Way through Primeval Koya Lambej Social System Prevalent Unique Culture	5.	Ms. Devika Elisabeth Co Author: Sh. SD Fernandes, Ms. S. Mary Lilly, Sh. M. Francis	5
through Primeval Koya Lambej Social System Prevalent Unique Culture	6.	Methodology, Key Findings	6
Dr Gangesh Shah Gondwana	7.	through Primeval Koya Lambej Social System Prevalent	7

8.	A Structural Grammar Decipherment of the Indus Script: Rule-Based Decoding Without Linguistic Assumption Sh. Gautam Raj Anand	8
9.	Indus Script Deciphered as the Metal Route's Samparkabhāṣā Rebus Motifs  Dr Kalyanaraman Srinivasan	9
10.	Decipherment of Indus Script: A New Approach  Dr Karuna Shankar Shukla	10
11.	The Indus Script Deciphered: A Structural Breakthrough in Symbol Pairing Sh. Michael Louis Grasa	11
12.	. Decoding of Indus Tablets Sh. Narendra Madhavji Gori	12
13.	. Understanding the Indus Script: How Far Have We Come? Dr Nisha Yadav	13
14.	Decipherment of the Indus Script: A Step Forward in Santali Sh. Prabhunath Hembrom	14
15.	Decipherment of the Indus Script with the Help of Root Morphemes of the Proto-Dravidian Language - Gondi Sh. Prakash Namdeorao Salame	15
16.	Encoding the Harappan Writing System Enigma: Doctor Gupta Harappan Code, a Breakthrough Dr Puneet Gupta	16
17.	Decipherment of Indus Script and Symbols in the Light of Tribal Culture of Bastar	10
	Dr Shiv Shankar	18
18.	Plausible Breakthrough Revelations of Sound-Values from Indus Pashupati-Seal  Dr Sreekanth Yerramilli	19

19	The Visible, Beyond the Visible, and in Between: Interpreting the Indus Script Based on Layers of Meaning through Evolutionary Human Consciousness Dr Tanima Bhattacharya Co Author: Dr Joy Sen	19
W	Vorking Group 2: Survey, Documentation,	
	<u>Setadata Standards</u>	
1.	पांडुलिपियों का संरक्षण, पुनरुद्धार और डिजिटलीकरणः पटना संग्रहालय के विशेष सन्दर्भ मे	
	Afzal Ahmad	23
2.	Publication of compendium of single folio manuscripts of Ayurveda	
	Dr Bhavana K R, Co-Author - Gowri P.	24
3.	मेटाडाटा निर्माण में पाण्डुलिपि के पुष्पिका की भूमिका (Role of the Colophon of Manuscript in Metadata Creation)	
	डॉ० त्रिलोचन प्रधान	26
4.	Challenges and Methodological Insights in Documenting, Annotating and Translating Siddha Medical Manuscripts Senthamil Selvi VG	27
5.	जैन पांडुलिपि संग्रहालयों की विलक्षणता (The Uniqueness of Jain Manuscript Libraries)	
	Jitendra B Shah	29
6.	SURVEY OF MANUSCRIPTS FROM BALESHWAR DISTRICT OF ODISHA STATE	
	Dr. Bholanath Dash	31
7.	History of Studies on Palm Leaf Manuscripts in Sri Lanka Anura Manatunga	33

8.	What resolution digital imaging Sanjaya Singhal	35
9.	Survey, Discover, Disseminate: A Call for National Framework for Manuscript Access and Integration Vinoth Murali	36
10.	From Sensor to Schema: A Metadata Framework for 3D Data Acquisition Technologies in Architectural Heritage T. K. Gireesh Kumar	38
11.	Text and Tradition: An Investigation into Tai Ahom Manuscripts from Assam Subhra Devi	40
12.	Conservation and Preservation challenges of Palm Leaf Manuscript in PLMSRL M.K.Weerasinghe	42
13.	Unveiling India's Intellectual Traditions: Kerala's Contribution through Manuscripts at ORI & MS Library, University of Kerala  Dr. R.B. Sreekala	44
	Survey and Documentation of Manuscripts in Tamil Nadu Dr. M.K. Kovaimani	45
15.	Modi Manuscripts from Historical Archives of Goa (1680- 1850 CE) Dr. Balaji Shenoy	47
16.	A paper On Manuscript collection of IGNCA  Dr. Poulomee Dasgupta	49
17.	In-library imaging - equipment, speed, quality and challenges Sanjaya Singhal	
	Co Author: Rajshree Godawat, Chaitrali Joshi	50

18. Structured metadate Quantitative Assessment	-	Realities-	A
Meheralok Dhapare, C	To Author: Ashwini, G	andhar	51
19. Traditional & Cultur Palm leaf Manuscripts Dr. Venkataraman H Co-Author: Pirakas R I	s	ards for Anc	ient 52
20. Beyond Technical Pro South - CSSSC's Pr Heritage through the (EAP)	reservation of Beng	gal's Manusc	ript 1me
Gopal Adak			54
21. Beyond Metadata: A I for Mahanubhav Ma Making Approaches Rajarshi Das, Co-Auth	anuscripts through	Multiple Ser	nse-
22. Undocumented Tradi	ition in Voudo		
Dr Manju P.M	ition in Keraia		58
23. Unearthing Hidden Manuscripts in the C Kinnaur, Himachal P	Collection of the K radesh	•	e in
Dr Kishori Lal Chande	el		60
24. Mapping Knowledge a Bibliometric and The Ms. Pramod Sharma	*	1 0	
Co Author: Dr. Parveen	n Babbar		62
25. A Structured Approac		scripts Studie	es in
Thiagarajan S			64

26.	Preservation, Digitization, and Scholarly Management of Early-Bengali Script Manuscripts at Syamsundar College Library in the Backdrop of Regional Historiography of Radh Bangla	
	Dr. Debdatta Chatterjee Co Author: Dr. Gouri Sankar	65
27.	. जम्मू की विरासत: गुरु नानक जन्म साखी का दृश्य दुस्तावेज़ीकरण Heritage of jammu: Visual documentation of Guru Nanak janam Sakhi Dr. Sarabjeet Singh	67
	Dr. Saraojee Singi	07
28.	Documenting the Unpublished Vachana-s of Krishnamacharyulu from Simhachalam Manuscripts Dr. P. Nirmal Harish	
	Co Author: Dr. B. Lakshmi Surya Teja	68
29.	. मालदा संग्रहालय में संरक्षित गौर-बरेन्द्रभूमि की कुछ मध्यकालीन पांडुलिपियों का विवरण एवं समीक्षा	
	डॉ. निशिकान्त पाण्डेय	70
30.	Ontological Mapping of Indian Knowledge Systems: A Semantic Framework for Reclaiming Manuscript Heritage Snehasish Paul	
	Co Author: R.K. Bhatt	71
31.	. पुरातन लेखनकला की महान धरोहर हिमाचल की सांचा पाण्डुलिपियाँ Prof. (Dr.) Om Prakash Sharma	73
W	Orking Group 3: Manuscriptology,	
<u>Pa</u>	leography, And Codicology	
1	Need of Higher Criticism in Assessed Managemental	
1.	Need of Higher Criticism in Ayurvedic Manuscriptology:  A Methodological Approach	
	Dr. Madhura Kulkarni	75
		, ,

2.	Textual criticism for Indian texts – a new approach.  Vasant Kumar M. Bhatt	76
3.	New frontiers of Manuscriptology Dilip V. Apte	78
4.	Repositioning Scribal Practice: Calligraphic approach in the Study of Early Indian Manuscripts (10 <sup>th</sup> -13 <sup>th</sup> Century CE)	
	Abhishek Vardhan Singh	80
5.	"Atra śodhapatram ekam" – Peculiar case of two Mahābhārata manuscripts (Nos. 565 and 566/1882-83) deposited at the Bhandarkar Oriental Research Institute Shreenand L. Bapat	
	Co-Author - Amruta Natu, Balkrishna Joshi	82
6.	Critical Edition of the works of Dhandapani Swamigal (1839-1898): Prospects and Challenges.	
	Dr. A. SATHISH	84
7.	The Dhūrtasamāgama of Jyotirīśvara: A Manuscriptological Exploration of Linguistic Diversity, Nāṭya tradition and Judiciary system	
	Ripunjay Kumar Thakur	86
8.	Typographic Analysis of Sharada Manuscript: Exploring Script Form and Design Sumit Raj	87
	Sumit Kaj	0/
9.	Mūla, Pāṭha and Vikṛti: The Dynamics of Textual Corruption in Sanskrit Manuscript Studies.	0.0
	Dr. Sāyanto Māhāto	89
10.	Beyond The Colophon: Cultural and Social Landscapes In Manuscript	
	Manashi Ghosh	91

11. Semiotic Explorations of Marginalia in Indian Manuscripts:  The Visual and Textual Interplay in Knowledge Transmission  Shivam Maurya	
Co-Author: Manish Arora, Shristi Prajapati, Monali Singh, Himesh Baboolal	93
12. Textual Variants and Scribal Interventions: Challenges in Critical Editing of Sanskrit Manuscripts  Dr. Naba Kumar Das	95
13. Paleographic perspectives on copper plates and palm leaf manuscripts: A comparative study.  S. Shanu	96
14. Unlocking the Past: Paleography, Codicology, and the Future of Script Training  Sridharini G	97
15. Son-Bhandar Caves: Epigraphical study and Palaeographic Observations  Debopom Ghosh	98
16. The Art and Craft of Manuscript Making: A Critical Study on the Assamese Indigenous Manuscript Heritage Dr. Sangeeta Gogoi	99
17. Importance of Paleography in Transcripting Tamil Palm leaf Manuscripts - Reflections from Field Experience Kalaimani R.  Co-Author - Matheshvaran S, Meena R, Rajendra Kumar A, Selvarajan S, Muthukumar NJ	100
18. A Conceptual Framework for Siddha Manuscript Research and Its Integration into Educational Curriculum <i>R. Subhashri</i>	
Co-Authors: A. Sherin Nisha, A. Rajendra Kumar, R. Meena, V. Aarthi, S. Selvarajan, N.J. Muthukumar	101

19. An Exploratory study on manuscript titled "Dēhattilē Maṛma Viparaṃ" and its comparison with "Pratyēka Maṛma Nirdēśa" Chapter of Suśṛutha Saṃhitā Śārīra Sthāna  Dr Neenu Jessy Sabu  Co-Authors: Dr P.P Kirathamoorthy, Dr Bindu K K	102
00 11 11 11 11 11 11 11 11 11 11 11 11 1	102
20. Reconstructing a small portion of Ānandajñāna;s Tarkasaṅgraha: A case of codex unicus Dr. Satyan Sharma	103
21. FOLIOSOF'SUPREMEPERFECTENLIGHTENMENT': SOME THOUGHTS ON THE AVATAMSAKASŪTRA MANUSCRIPTS FROM TABO MONASTERY IN LAHAUL-SPITI, HIMACHAL PRADESH	
Laxman S. Thakur	104
22. A Comprehensive Case Study on the Jain Manuscripts of Sudarshan Charitam of Mumukshu Vidyanandi	
Dr. Shruti Jain	106
23. The Art of Book Making: A Study of some selected Arabic and Persian Manuscripts from the collection of the National Museum.	
Khatibur Rahman	108
24. A CASE STUDY OF TIBETAN MANUSCRIPTS	
Chandran soban dinesh, Co-Author : Anuj Sharma	110
25. Sage Agasthiya's Tamil Manuscripts and its Contemporary Relevance	
Dr. O. Muthiah	
Co-Author : Dr.K.Venkatesan	111
26. The Manuscripts of the Maitrāyaņī Saṃhitā and their distribution	
Nirmala Ravindra Kulkarni	113

27	. Research Methodology in Manuscript Studies: Approaches, Challenges, and Perspectives	
	Kinjal Shah	114
28	. Methodological Approaches to Editing a Single Sanskrit Manuscript Dr. Lisha C R	115
	Dr. Lisna C K	115
29	. युद्धादर्श ; पाण्डुलिपि सम्पादन में अनुभूत समस्याएँ Dr. Arun Kumar	
	Co-Author: Mr. Madhusudan	116
	Vorking Group 4: Digitization Tools, latforms, and Protocols (HTR, AI)	
1.	A High-Resolution Devanagari Manuscript Dataset and AI-Assisted Binarization Pipeline for Enhanced OCR and Digital Preservation  Suyash Kumar Bhagat  Co Authors: Sarthak Jain, Samridh Mincha, Shalin Aggarwal	118
2.	Isolated Character recognition and Transcription of Grantha Script Palm Leaf Manuscripts for seamless Content Preservation and Knowledge Dissemination Harish G, Co Author: K. Anitha, V. Jayapradha, R. Jayalakshmi	120
3.	Tala-Patra Samrakshanam: Vision-Based Micro-to-Macro Machine Vision framework for Palm-Leaf Manuscript Digitization  D. Jeevan Kumar	
	Co Author: R. Vasant Kumar Mehta	122
4.	Lipikar: A Multilingual OCR System for Indian Scripts and the Digitization of Cultural Heritage  Arjun Ghosh	
	Co Authors: Chetan Arora	123

5.	Creating India's Largest IIIF-Based Digital Manuscript Collection: A Case Study of the SAMHITA Project at India International Centre	
	Kumar Saurabh, Co Author: Niharika Gupta	125
6.	ManuSpeak: Giving Voice to India's Manuscript Heritage Tarun Rathore, Co Authors: Amit Chawla, Akash Verma	127
7.	Preserving The Past, Protecting The Future Digital Pathways For Manuscript Heritage Abhyudaya Prasad Jain	
	Co Authors: Vaibhav Jain, Siddhant Shah	129
8.	Applications of machine learning for the processing of Sanskrit manuscripts	
	Ketan Bhatt, Co Author: Rhythm Jain, Anjali Chaudhary	131
9.	Digital Pathways to Cultural Heritage: Strategies for Children's Engagement in Manuscript Preservation	
	Chinmay Pade, Co Author: Charu Moga	133
10.	Towards Robust OCR for the Maithili Script: Challenges and a Pilot Study	
	Dr. Chandranath Adak, Co Author: Rajib Ghosh	135
11.	Reconstruction and Digitization of Distorted Manuscripts, Through Varied Image Processing Techniques: With Special Reference to Histogram Equalization Method	
	Dr. Manoj Kumar Dutta	137
	Orking Group 5: Conservation and	
R	estoration of Manuscripts	
1.	MANUSCRIPTS CONSERVATION ACTIVITIES IN THE THANJAVUR MAHARAJA SERFOJI'S	
	SARASVATI MAHAL LIBRARY Palanichamy Perumal	140

2.	Critical Connections: Integrating Disaster Risk Management to Safeguard India's Manuscripts Dr Heather Brown	1.42
	Dr Heather Brown	142
3.	Digital Transformation in Conservation: The Adoption of Tablet-Based Documentation for the Preservation of Historical Manuscripts	
	Kalpana	144
4.	Embedding Indian Knowledge System into Laboratory- Based Conservation Education: A Sustainable Framework for Manuscript Preservation	
	Aditya Prakash Kanth	145
5.	भारत की पाण्डुलिपि धरोहर संरक्षण की राष्ट्रीय पहल	
٥.	Dr. Kirti Srivastava	147
6.	THE CHALLENGES AND PROSPECTS OF MANUSCRIPTS CONSERVATION AND PRESERVATION INNORTH BENGAL WITH SPECIAL REFERENCE TO SUB- HIMALAYAN DARJEELING Dr. Malay Saha	148
7.	Preservation, Conservation and Restoration of Manuscripts:  A Case Study of Chunilal Gandhi Vidyabhavan  Dr. Meeta Vansadia	150
8.	Conservation and Restoration of Manuscripts (पांडुलिपियों का संरक्षण और पुनरूद्धार)	
	Dr. Meenakshi Upadhyaya Tiwari	152
9.	The Need for an Integrated Institutional Framework for the Conservation, Editing, and publication of Indian Manuscript Heritage	
	Shah Gajendra	154
10.	Conservation and Restoration of Manuscripts : Challenges, Methods and Solutions in Indian Perspective	
	Dr. Ramesh Satyappa Shirahatti	155

11. Conservation and Restoration of Manuscripts  MAITHILY V	156
12. Material Stability and Conservation Challenges: A case study on Ink and Paper conservation  Paromita Pal	157
13. From Pāṭaṇa to Bīkānera: Institutional and Sectarian Efforts in Jaina Manuscript Preservation  Mansi Dhariwal	159
14. Sanchipaat Manuscripts from Assam: Need of a Holistic Conservation Framework	161
Dr. Subhra Devi	161
15. Diffusion-Driven Restoration of Indic Manuscripts: A Cyclic and Structure-Preserving Approach  Akkshita Trivedi	163
16. Conservation and Restoration of Manuscripts: Preserving Cultural Heritage for Future Generations	
Dr. Vinod Kumar Jain	165
17. From Decay to Revival: Restoration Techniques for Fragile Manuscript Heritage Dr. Shivani Yadav	
Co-Authors:, Dr. Vinod Kumar Jain	166
Working Group 6: Decoding Manuscripts:  Pathways to the Indian Knowledge System (IKS)	
1. Importance Of MANUSCRIPTS In Indian Knowledge	
System Anandita Paul	169

2.	Reclaiming Indian Knowledge and Legacy: A Path to Civilizational Self-Renewal Sachin Beniwal	170
3.	Integrating Kautilya's 'षाड्गुण्य' into Education of Management": An Indic Epistemologies of 'Six Factor Strategy'  Dr. Charulata Londhe	172
4.	Reclaiming India's Knowledge Legacy: Strategies for Integrating Manuscriptology and Indian Knowledge Systems in Contemporary Higher Education  Sachchidanand Snehi	174
5.	LANGUAGE AND LINGUISTICS IN PROMOTION OF GYAN BHARATAM, INDIAN KNOWLEDGE SYSTEMS & SUSTAINABLE DEVELOPMENT RAVINDRA REDDY M	176
6.	Shruti and Smriti: Methodological Foundations of the Indian Knowledge System  Monalisha Medhi	178
7.	भारतीय ज्ञानसंपदा की रक्षा में जैन श्रमण परम्परा का प्रदान Shri Vairagyarativijay Maharaj	180
8.	Reclaiming Naga indigenous knowledge through museum- based education <i>ALINO SUMI</i>	181
9.	Manifestation of Shiva in Shivanidhi manuscript - A study of Mysore traditional paintings  Dr Anitha HC	183
10.	प्राकृत एवं जैन पांडुलिपियां - भारतीय ज्ञान प्रणालि का महत्वपूर्ण स्रोत Kunal Kapasi	184

11. Integrating Indian Knowledge Systems into the contemporary learning through Manuscript Heritage	105
Puspa Das	185
12. Transformative Wisdom: Analysing the Influence of the Bhagavad Gita on Values and Mental Strength  Dolly Jamwal	. 0 =
Co Authors: Rupali Satsangi , Preeti Manani	187
13. Ghora Nidan and Hastividyarnava: Text, Treatment, and Tradition: Revisiting India's Knowledge System from Assam's Veterinary Manuscript Heritage	
Pankaj Protim Bordoloi	189
14. Cheating Death in Vajrayāna Buddhism: A Comprehensive	
Analysis of the 'Mṛtyuvañcanopadeśa' Manuscript Niraj Dahal	191
15. INTERPRETING ANCIENT BIODIVERSITY THROUGH MANUSCRIPTS	
Al Shaz Fatmi	193
16. A Survey of Some Hitherto Unpublished Texts on Advaita-	
Vedānta: Uncovering Indian knowledge System	40.
Somnath Sarkar	195
17. Reclaiming the Political Ideas in Ancient Manuscripts: From Arthashastra to Dharmaśāstra	
Devendra Kumar Dubey	197
, and the second	
18. Reading Ekalingamahatmya in the Historical context of	
Mewar: Translations and Interpretations	100
Prof. Nandini Sinha Kapur	199
19. संस्कृत पाण्डुलिपि 'नागकुमारचरित्नम्' में वर्णित धर्मोपदेश	
Eirya Jain	201

20. Palm-Leaf Pedagogies: Reclaiming India's Knowledge Legacy through Kerala's Manuscript and Language Traditions.  Dr. Jibin Francis	
Co Author: Dr. M. Subha	202
21. Indian Artistic Traditions, their Revival and Teaching: As Reflected in Early Santiniketan Murals (1920-1950)  Prof. Udaya Narayana Singh	
Co Author: Pradipta Biswas	204
22. भारतीय ज्ञान परम्परा में चतुर्दश विद्यास्थान और उनका वर्तमान शिक्षा में सम्प्रत्यय	
Dhananjay Mani Tripathi	206
23. From Palm-Leaf to Pedagogy: Integrating IKS Practices from Rājataraṅgiṇī Corpus into Modern School Curricula Shaktimaan Vats	207
Shakimuut vuis	207
24. Bridging Indian Knowledge System with Educational Psychology: Fostering Academic Resilience and Mindfulness in Adolescents through The Bhagavad Gita Anindita Mallick, Co Author: Dr. Seema Gopinath	208
25. Nididhyāsana as Pedagogical Praxis: Insights from Indian Knowledge Systems for Contemporary Educational Renewal	
Dr. Sanjeev Panchal, Co Author: Amruta Arvind Malvade	210
26. Echoes from the Palm Leaves: The Pedagogy of Pali Manuscripts and its Integration into Indian Knowledge Systems for Contemporary Education	
Satyendra Kumar Pandey	211
27. From Palm Leaf to Print: The Role of Translation in Preserving Classical Indian Literature	
Ananya Sharma	213

28. Cultural Literacy through Curriculum: The Educational Relevance of Manuscript Heritage  Dr K Venkatesan	
Co Author: Prof. O. Muthiah	215
29. वर्तमान परिप्रेक्ष्य में - भारतीय ज्ञान परंपरा के आधार पर ओडिशा में उपलब्ध पांडुलिपियों की उपयोगिता  Somyaranjan Barpanda	215
Co Author: Pallavi Jena	217
30. Cosmetic production from plants as referred to in ancient Indian Texts	
P.S. Angad, Co Author: Akshath Shenoy	218
31. An Analysis of Visual Narratives in the Manuscript Paintings of Assam	
Gaurav Moral, Co Author: Dr Mousumi Deka	219
32. Limbuwan Culture and Tradition: From Manuscript Heritage to the Enduring Indigenous Culture of the Limboos An Anthropological Study in the Eastern	
<b>Himalayas</b> Dr. Debashis Debnath	221
33. Leveraging Ashtavikriti - The Inbuilt Scheme For Preserving The Veda	
D.K.Hari, Co Author: Dr.D.K.Hema Hari	223
34. Towards a Knowledge-Based Future Rooted in Indigenous Wisdom: A Critical Insight into the Assamese Manuscripts Heritage	
Dr. Sahab Uddin	224
35. Indigenous Medicines: Practices & Related Manuscripts, Their Preservation and Inclusion in Modern Education	
<b>System</b> Prof. Neera Raghav	226

Dr. Uttam Singh  37. Reviving the Roots: Translation Methodologies for Ayurvedic Manuscript Traditions  Sumit Kumar Singh  Co Author: Acharya Balkrishna, Swati Arya, Karuna Arya  38. Agricultural Knowledge in Ancient Manuscripts: Indigenous Techniques for Climate Resilience  Sobibur Rahaman	228 229 230
Ayurvedic Manuscript Traditions  Sumit Kumar Singh  Co Author: Acharya Balkrishna, Swati Arya, Karuna Arya  38. Agricultural Knowledge in Ancient Manuscripts:  Indigenous Techniques for Climate Resilience	
Indigenous Techniques for Climate Resilience	230
Sobibur Rahaman	230
39. Manuscript Traditions of Kashmir: Sharada Script and Its Intellectual Legacy Dr. Rajesh Kumar Mishra	
Co Author: Suman Naskar	231
40. Integrating Buddhist Manuscript Heritage into Early Childhood Education through a Blended Pedagogy  Nidhi Singh	
Co Author: Arisha Sajid	232
41. रामायण के परिप्रेक्ष्य में प्राचीन भारतीय शिक्षा- प्रणाली <i>डॉ. सीता</i>	234
42. Translating Siddha Literature through Semantic and Pragmatic Lenses: From Palm Leaf Manuscripts to Global Digital Platforms  Dr. G. Kaaruniya  Co Author: Eugene Wilson	235
43. From Vedas to Vision: Integrating Indic Knowledge Systems into Indian Education through NEP 2020  Dr. Shruti Arora	
Dr. Spruti Arora Co Author: Arif Md. Sattar	236

44. कश्मीरशैवपरंपरा के पल्लवन में शारदा पांडुलिपिओं की भूमिका डा० नरेन्द्र भारती	
Co Author: डा० अजय कुमार सिंह	237
45. The Relevance and Applicability of Kautilya's Arthashastra in Contemporary Public Finance Policy	
Prof. Ravindra K Brahme Co Author: Pragati Krishnan	238
46. भोगीलाल लहेरचंद इन्स्टीट्यूट ऑफ इण्डोलोजी, दिल्ली में संरक्षित प्राकृत की पाण्डुलिपियों में ज्ञान-विज्ञान की सम्पदा	
Prof. Vijay Kumar Jain	240
47. Painted Texts: Visual Storytelling and Script in Indigenous Manuscript Traditions	
Khushi Kesari	242
48. Integration of Manuscript Heritage in Indian Education Via Curriculum, Skill Development, And Conservation- Restoration Practices Ravula Krishnaiah Co Author: Sakshi	243
Co Author. Sakshi	243
49. Integrating Siddha, an Indian Health Tradition in Education Curriculum: Forward-Looking Perspectives  Dr. A.Sherin Nisha	
Co Author: Rajendra Kumar, V. Aarthi, S. Selvarajan, N.J. Muthukumar	245
50. Integration of Indian Knowledge Systems in Education Utilization of Human Resources Inscriptions of Andhra- -A Select and Critical Study	
Professor Vijaya Kumar Babu	246
51. Manuscript & Siurces of Indian Genealogy and the Use of Artificial Intelligence	
Dr. Devendra Kumar Sharma	248

## Working Group 7: Manuscripts As Tools of Cultural Diplomacy

1.	Indian Manuscripts as Instruments of Cultural Diplomacy: From Ancient Knowledge Preservation to Contemporary Soft Power Projection	•
	Rani Alisha Rai	250
2.	Tracing the Cultural Diplomacy between Ancient India and Sinhala through Manuscripts and Epigraphs	
	Prity Rawat, Co-Author: Dr. Arpita Chatterjee	252
3.	Kalila wa Dimna as a Diplomatic Manuscript: Tracing the Translation and Transmission of Indian wisdom from Sanskrit to the Arabic-Islamic World	
	Muhammed Uzair, Co-Author: Md Yousuf Kamal	254
4.	Reimagining Indian Heritage through Digital Twins सर्वेक्षण से डिजिटल कूटनीति तकः डिजिटल द्विन्स के माध्यम से भारतीय विरासत की पुनर्कल्पना	
	Ananya Sharma, Co-Author: Aishwarya Murali	256
5.	Interfaith Dialogues in Manuscript Tradition: Evidence from Indo-Persian, Sanskrit, and Arabic Texts  Homa Fatma	259
	Homa Fatma	258
6.	Illuminated Dialogues: Languages, Styles, and Cultural Diplomacy in Jain Manuscript Paintings A Comparative Study of Writing Traditions, Aesthetics, and Cross-Cultural Exchange in Medieval Western India	
	Prof. Radha Ambekar	260
7.	Cultural Diplomacy through Manuscript Repatriation: A Tool for Soft Power in India's Foreign Policy Dr. Nisikant Nayak	
	Co-Author: Dr. Biranchi Narayan P. Panda	262

8.	India and Tibet in Dialogue: A Study of Ancient Buddhist Knowledge Partnership Karan Kumar	264
9.	Stefan Norblin and the Visual Legacy of the Manuscripts of Ramayana and Mahabharata in the Royal Courts of Jodhpur: An Artistic Confluence of Indian Epics and European Artistry	207
	Manya Misra, Co-Author: Ananya Misra	266
10.	Maritime Manuscripts as Cultural Bridges: Interpreting Indian Ocean Records for Reclaiming India's Knowledge Legacy	
	Komal Thakran, Co-Author: Dr. Manish Karmwar	268
11.	Foods of the Past as a Binder for Modern Diplomacy Prisha Revar	270
12.	AR/VR-Enabled Cultural Immersion: Leveraging Manuscript Heritage for Tourism, Scholarship, and Economic Growth in India	
	Sanmay Das	271
13.	Buddhism as Soft Power: Monastic Travels and Manuscript Diplomacy in Ancient India-Korea Relations	
	Aditi Singh, Co-Author: Sanskriti Ahuja	273
14.	Kashmir's Manuscript Heritage: A Confluence of Indic and Persianate Knowledge Systems	
	Dr. Jahangir Iqbal	275
15.	Across Centuries and Continents: Tracing Knowledge Networks of Indian-Origin Heritage Communities for Cultural Diplomacy	
	Srijana Jaiswal, Co-Author: Shrishti Pandey	277
16.	Buddhist Pathways as Cultural Diplomacy: Reframing Intercultural Exchange in Buddhaland Brooklyn and The Dharma Bums	
	Ms. Disha Mondal, Co-Author: Dr. Shubhankar Roy, Prof. (Dr.) Indrani Singh Rai	279

17	. Reclaiming Ancient Environmental Knowledge: Manuscripts as Instruments of Climate Diplomacy Mobit Dalal	
	Co-Author: Prof. (Dr.) Harpreet Kaur, Dr. Kavita Singh	281
18	. Reframing Manuscript Exhibitions: Integrating Curatorial Innovation and Outreach Campaigns for Inclusive Public Engagement	
	Jhilam Roy	283
W	Orking Group 8: Legal and Ethical	
<u>F</u> 1	rameworks For Manuscript Conservation	
<u>ar</u>	nd Access	
1.	The Legal Framework for Custodianship of Manuscripts in India: A Critical Analysis  Abhishek Kumar Rai	286
2.	Preserving the Past, Respecting the Rights: A Critical Study on Legal and Ethical Challenges in Manuscript Custodianship in India  Ansarul	
	Co-Author: Araj Sekh	287
3.	Manuscripts Custodianship in India: A Historical Review and Related Contemporary Aspects	
	Dr. Mohit Sharma	288
4.	Legal obligations, ethical responsibilities, and moral imperatives to ensure the preservation, accessibility, and respectful handling of manuscript custodianship  Dr. Chander A Pawar	200
	Co-Author : Likha Chandran, Jyotsna Cherukuri	289
5.	Ancient Wisdom vis-a-vis Modern Law: Preserving Ancient Indian Manuscripts in the Digital Era Dr. Mayank Kapila	
	Co-Author : Manish Kumar	291

6.	Manuscript Heritage as Commons: Legal and Ethical Mechanisms for Protecting Indian Knowledge Systems in the Digital Age	
	Udaya Sidhharrth S Kumaar	293
7.	Codifying Custodianship: A Legal and Ethical Framework for India's Manuscript Heritage  Anubhav Mishra	
	Co-Author: Dr. Pinky	295
8.	Preserving Manuscripts under Private Custodianship with special reference to Shankrachary Math, Bodhgaya Shanker Sharma	297
9.	Custodians of India's Written Heritage: Legal and Ethical Dimensions of Manuscript Custodianship in India Sapresh Devidas  Co-Author: Miss. Parita Udai Naik	299
10.	Custodianship of Ancient Hindu Law Manuscripts: Legal and Ethical Dimensions	
	Sharda	301
11.	Need for A Policy Framework and Model Reference Manual for Manuscript Custodian and Conservation Centres Dr. Vijay Srinath Kanchi	303
12.	राजस्थान में पांडुलिपि संरक्षण का एक लोक नीति विश्लेषण: प्रशासनिक बाधाएँ और भविष्य की राह Dr. Renuka Choudhary	305
13.	Custodians in Conflict: Case Studies of Ownership Disputes and Ethical Challenges in Indian Manuscript Collections	303
	Sujauddin S.K.	307

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### DECIPHERMENT OF ANCIENT SCRIPTS: INDUS, GILGIT, AND SANKHA

#### 1. Bridging the Gap between Archaeology, Epigraphy, and Linguistics of the Indus Script

Dr Andreas Fuls

The paper presents an overview of the Interactive Corpus of Indus Texts (ICIT), a relational database that has been under development since 1990. It discusses various inscribed artefacts, the heterogeneity of Harappan sign sequences, and concludes with some theoretical considerations on the methodology for deciphering the Harappan writing system.

Ideally, any attempt to decipher the Harappan script should be based on archaeological, epigraphic, and linguistic evidence. These three fields form the essential pillars of research, which are often studied in isolation from one another. However, a valid decipherment should not rely solely on one of them or compensate for gaps in evidence with speculative assumptions. It is therefore necessary to build a bridge between these areas of specialisation. The paper examines the current state of research in these three fields in relation to the Indus script, aiming to determine the available data and methods.

After providing a general definition of "decipherment", the paper presents different methods and discusses their prerequisites and potential. These include approaches based on the rebus principle, the acrophonic principle, comparison with known writing systems, and the identification of logograms through sign forms, iconography, archaeological context, and phonetic complements. As in any scientific discipline, verifying hypotheses is crucial in assessing the reliability of proposed sign readings. For this reason, it is of paramount importance to establish robust insights into the Indus writing system, drawing on internal and mathematical epigraphic analyses, before advancing any claims of decipherment.

Keywords: Indus Script, Decipherment Methodology, Epigraphic Analysis

#### 2. How Certain Symbolisms Used in the Mercantile Semasiographic/Logographic Indus Script are also Found in Linguistic Symbolisms of Both Ancient Dravidian and Vedic Words and Phrases

Ms. Bahata Ansumlai Mukhopadhyay

This paper serves as both a summary and a contribution to the debate. In summary, it builds upon the author's earlier research, which characterizes the Harappan script as semasiographic and partly logographic, employed in commercial and administrative functions such as tax collection, licensing, commodity control, and access regulation. Most Harappan signs are proposed to be language-independent sematograms (meaning-symbols), while a subset functioned as language-specific logograms (word-symbols). Since structural analysis alone cannot distinguish the two, the article introduces a method for identifying possible logograms that relies on symbolism and homonymy. For example, fish-shaped signs are interpreted as logograms denoting shiny or precious commodities, possibly influenced by an ancient Dravidian homonymy that used the same Proto-Dravidian root for words referring to glittering things such as fish, fireflies, lightning, bright coins, and gems. The author also draws on previous work identifying gold and preciousmetal symbols in the script, noting parallels with linguistic symbolisms in both Vedic texts and the Dravidian lexicon.

As a debate piece, the paper critiques recent, unpublished, non-peer-reviewed documents that treat the Indus script as alphabetic and claim complete decipherment. It further revisits the author's earlier argument that elephant-related terms (e.g., pīri, pīru) and ivory-related terms (e.g., pîruš) in ancient Near Eastern languages were likely borrowed from the Proto-Dravidian Indus word pīlu, itself linked to the Proto-Dravidian root pal ("tooth") and its variants (pīl/pil/pel). This supports the widely accepted view that a significant portion of the Harappan population spoke an ancestral Dravidian language. At the same time, the paper recognizes the likely multilingual character of the Harappan Civilization, suggesting that elites developed its semasiographic script to convey commercial meanings across linguistic boundaries. The discussion concludes with examples of specific decoded Indus signs.

**Keywords:** Semasiographic Script, Proto-Dravidian Hypothesis, Harappan Trade Symbols

#### 3. A Cryptanalytic Decipherment of the Indus Script

Sh. Bharath Rao (Yajnadevam)

The Indus script, comprising more than 4,300 short inscriptions from the Harappan Civilization, has remained undeciphered for over a century. Its earliest form appears as graffiti on potsherds at Balakot around 4000 BCE, while most inscriptions date from 2600 to 2000 BCE. Unlocking this script is a key to understanding the early history and cultural development of pre-Iron Age India and the Indo-European peoples.

Previous attempts at decipherment have been unsatisfactory and unfalsifiable. A novel approach has been proposed, treating the Indus script as a large cryptogram and applying methods first described by Claude Shannon. This decipherment comfortably exceeds Shannon's unicity distance metric, thereby providing mathematical proof of its validity. The dictionary method for solving cryptograms, freely available on various cryptogram websites, forms the basis of our approach, and the algorithm itself is independent of the candidate language. Using regular expressions and set intersection in modern programming languages, we sequentially decipher each sign.

The analysis reveals that the Indus script functions as a proto-abugida segmental script, with distinct signs for consonants and vowels. Short inscriptions containing repeated signs were used wherever possible to narrow the range of matches. A comprehensive study of all 4,300+ inscriptions, from single signs to sequences exceeding ten signs, confirms that the script's grammar aligns with Vedic Sanskrit.

Seventy-four primary allographs have been identified, along with conjunct signs that represent phonetic combinations. Notably, it demonstrates that standardized Brahmi glyphs evolved directly from Indus signs, affirming a linguistic and cultural continuity from the Harappan Civilization to post-Bronze Age India.

**Keywords:** Cryptographic Decipherment, Proto-Abugida, Vedic Sanskrit Continuity

## 4. Crossing the Bridge: A Proto-Dravidian Decipherment

Dr Bryan K. Wells

There have been many previous attempts at decipherment based on a Proto-Dravidian (p-Dr.) root language. The present study departs from these earlier efforts by employing consistent and replicable methods. Readings are derived from associations of signs with iconography, sign contexts, and dictionary glosses. Acrophonic association is used only as a last resort, and never as the sole criterion.

The results of the analysis are evaluated in terms of Proto-Dravidian syntax and morphology, as well as the consistency of subject matter in relation to contextual expectations. It is essential to examine the complete set of texts containing the sign under consideration and to account for possible polyvalent values. Texts are also analyzed with respect to artifact type, site of origin, and chronological associations.

In this study, Tamil is used as a proxy for Proto-Dravidian unless otherwise indicated by an asterisk (\* = p-Dr.). Tamil provides a close approximation to the reconstructed root language. This decipherment yields 33 readings of signs and sign clusters, assessed at varying levels of confidence.

Keywords: Proto-Dravidian Decipherment, Contextual Analysis, Tamil as Proxy

### 5. Understanding the Indus Signs

Ms. Devika Elisabeth Co Author: Dr. Donald Fernandes, Dr. S. Mary Lilly, Dr. Francis Joseph

The Indus script remains one of the most enigmatic and undeciphered writing systems of the ancient world. Despite extensive scholarly effort, its underlying structure and meaning continue to elude researchers. This paper proposes a practical approach to gaining preliminary insights into the design and structure of selected Indus signs through the application of a basic geometrical tool, referred to as the "resolver". The process of applying this tool is referred to as "resolution."

The method is based on the premise that the creators of the Indus script followed a set of logical principles in standardizing their signs. However, due to the absence of a correlating cultural or linguistic context, the effectiveness of this tool remains limited. Nonetheless, it offers a novel pathway for partial exploration.

Using this approach, ten signs—representing approximately 2% of the known corpus—were analyzed. The signs examined include: (1) Fish, (2) Rhombus, (3) Grove, (4) Jar, (5) Wheel, (6) Double erect strokes, (7) Four short strokes, and (8) Man. Two additional signs were studied but are not included in this abstract.

While the tool provides only foundational data, some unexpected and puzzling patterns have emerged. Most signs proved resistant to this approach and remain unidentified. Even so, the methodology creates space for further experimentation and offers a fresh lens through which to approach the script's complexity. This study does not claim to resolve the Indus puzzle, but it presents a unique analytical technique that may contribute, in a modest way, to the broader efforts of decipherment.

**Keywords:** Indus Sign Resolution, Geometrical Analysis, Decipherment Methodology

### 6. A Summary of the Indus Script Decipherment: Methodology, Key Findings

Sh. Farrukh Haidar Naqvi

This paper presents a concise summary of the first complete, linguistically grounded decipherment of the Indus script, based on the analysis of more than 700 inscriptions, as detailed in the full-length volume, The Decipherment of the Oldest Script in the World. Contrary to long-standing interpretations of the script as proto-writing or symbolic shorthand, this research establishes it as a fully developed and phonologically complete writing system, comprising over 30 vowels, 35 consonants, diacritics, and conjunct forms.

The study recovers archaic linguistic features lost in later Vedic Sanskrit, including vowel–vowel sequences, pre-Pāṇinian grammatical structures, and archaic verb forms. It also provides the first epigraphic confirmation of the Laryngeal Theory through the identification of a second "H" consonant. Additional findings include secondary "Y" and "W" sounds, as well as a consonant series comparable to those in Tocharian.

Key inscriptions, such as the Dholavira gateway texts and the Pashupati seal, are deciphered using a consistent linguistic methodology. The Pashupati seal, often misidentified as depicting Shiva, is instead shown to reference a different Vedic deity, corroborated by a parallel seal from the Oliver Hoare collection. These findings introduce new theonyms and shed light on early Vedic religion and cultural practices.

This paper presents the methods and results of the 280-page corpus in a clear and accessible format, inviting critical scholarly engagement. The research redefines the Indus script as the world's earliest phonologically complete writing system, offering transformative implications for the study of early Indo-European and South Asian languages.

**Keywords:** Phonologically Complete Script, Archaic Vedic Features, Laryngeal Theory Confirmation

### 7. Reading Meaningfully the Indus Script Texts Easy Way through the Primeval Koya Lambej Social System Prevalent Unique Culture

Dr Gangesh Shah Gondwana

This paper reviews global efforts to decipher the Indus script, emphasizing the challenges faced by scholars. Despite attempts to interpret the script using various languages and socio-cultural contexts, most efforts proved unsuccessful. The study highlights Kangali's work, which deciphered 225 basic signs, 43 compound signs, and about 215 short and long texts. His readings, based on the Koyas'/ Gonds' primeval language, social structure, and cultural values, are presented as meaningful and consistent.

For instance, seal nos. M.304 and M.1937-75 are read as *Aal Koya Pari Pahandi Muthawapoy Aand* and *Hatum Payar Ta Muthawapoy Aar* (right to left), meaning "This is Koya Pari Pahandi Chief-Preceptor; The Chief Preceptor Authority of Saga-relationship." These interpretations highlight the morphemes and grammatical features of Gondi and Harappan, distinguishing them from other Dravidian languages. The author carefully analyzed Indus signs and drew on Kangali's statements to build confidence in reading previously undeciphered texts.

The paper also questions why linguists overlooked the Koitoors' language, sociocultural legacy, and artistic traditions amidst competing claims. It draws attention to their knowledge systems, cultural practices, and philosophies. *Muth Lingo Manters* describe ancient kingdoms (*Gandrajyas*), rivers, forests, and mountains of *Koyamoori Deep*—the land of the Koyavanshiya Gondiwen Gondolas—extending across India and into north-western regions beyond Pakistan and Afghanistan.

The Koya people's cosmological ideas, such as the division of the earth into Andodeep and Gandodeep, which form the Pangaea-dai (Earth Mother), and their evolutionary phases, offer fresh perspectives on the Harappan Civilization. Remarkably, modern geographical discoveries reveal parallels with information preserved in their oral traditions, including *patang* (songs), legends, and folklore.

Keywords: Gondi Decipherment, Koya Cultural Legacy, Indus Script Readings

### 8. A Structural Grammar Decipherment of the Indus Script: Rule-Based Decoding Without Linguistic Assumption

Sh. Gautam Raj Anand

The Harappan Civilization, which flourished between 2600 and 1900 BCE, remains one of the most enigmatic ancient cultures. Among its greatest unresolved mysteries is the Indus script, a system of symbols found on seals, tablets, and pottery, widely believed to encode linguistic or proto-linguistic information.

Despite more than a century of study, the script remains undeciphered. Most attempts have focused on linguistic mapping, associating symbols with sounds or words of a hypothesized language (e.g., Dravidian, Indo-Aryan, or Munda). However, these efforts have yielded little consensus, hindered by the absence of bilingual texts, the brevity of inscriptions, and uncertainty regarding script directionality.

This study takes a different approach. We ask: Can the script be structurally parsed without assuming the spoken language it may represent? Drawing on principles from formal grammar, computational linguistics, and symbolic logic, we developed the Harappan Decipherment Toolkit (HDT) - a rule-based system designed to achieve complete structural parsing of the known corpus.

This paper introduces HDT, which successfully parses more than 300 Indus script inscriptions without relying on language-based assumptions. By treating the script as a structured symbolic system governed by syntactic rules, HDT identifies functional roles, grammatical categories, and recurring compositional patterns in the inscriptions. The framework classifies symbols, parses inscriptions into valid syntactic trees, and enables semantic clustering.

The results, evaluated against prior attempts, demonstrate that HDT provides a falsifiable, replicable, and linguistically agnostic model for analyzing the Indus script, offering a new path toward understanding one of the world's oldest undeciphered writing systems.

**Keywords:** Harappan Decipherment Toolkit (HDT), Structural Parsing, Computational Linguistics

## 9. Indus Script Deciphered as the Metal Route's Samparkabhāṣā Rebus Motifs

Dr Kalyanaraman Srinivasan

This paper presents a groundbreaking announcement. Over the last 40 years, the author has steadily and successfully deciphered more than 9,400 Harappan seals. The consistent findings indicate that these seals record a sophisticated pictographic trade-accounting system, here referred to as *karaṇam*. This system was conveyed in *Meluhha* or *Mleccha*, a specialized guild-speech expressed through rebus and homophonic principles, used by metallurgists and merchants across Asia who were pivotal to the Bronze Age economy.

Through the decipherment of select classic seals, the paper demonstrates the application of the Rebus Principle, which connects pictographs to homophones. In this context, the homophones relate directly to metallurgy and trade (e.g., "goat/ ram" for copper, "liquid measure" for tin).

The discovery of Harappan script, inscribed tin ingots from a shipwreck off Haifa, is presented as compelling evidence of the script's use in metallurgical trade, functioning as a kind of "bill of lading."

Further evidence, akin to a "Rosetta Stone" moment, is found in the parallels between graphemes on a Neo-Assyrian agate cylinder and those on Harappan seal M304. These parallels also converge with textual narratives of Trisiras and Tvastra from the *Mahābhārata* and the *Purāṇas*, reinforcing the metallurgical context.

The paper emphasizes that the 9,400 deciphered seals consistently reflect communication related to trade, accounts, industry, identity, and quality. It argues that the Pictographic–Rebus–Homophone technique, applied within a shared trade and commerce language of guilds across Asia and Eurasia, is the key to understanding the Indus script.

It concludes that these decipherments confirm a Bharata historical narrative: India played a foundational role as a pan-Asian economic superpower, with *Meluhha* serving as the first pan-Eurasian *Samparkabhāṣā* (link language) for technology, trade, and commerce.

**Keywords:** Rebus Principle in Trade Script, Meluhha Guild Language, Harappan Metallurgical Accounting

## 10. Decipherment of Indus Script: A New Approach

Dr Karuna Shankar Shukla

It is essential to focus on the intrinsic content of the Harappan inscriptions found on seals, sealings, copper tablets, potsherds, and bas-relief tablets, as well as their contemporary literary references.

The literary tradition of ancient India is primarily rooted in Sanskrit, the predominant language of knowledge acquisition during that time. Sanskrit encompasses the complete range of phonetic sounds, and its script—ancient Brahmi—accurately represents the phonetic value of each letter (*varṇa*), reflecting its inherent meaning. For example, the humming of bees may illustrate the origin of the English word "bee." In this light, the Indus script should not be regarded as "mystifying," but rather as straightforward to read and write. A scholar well-versed in Aśokan Brahmi can decipher it with relative ease, since about a dozen signs share phonetic similarities. For this reason, the script may be more accurately described as *Old Brahmi* or *Vaidikī* for better understanding.

Regarding the writing direction of the Harappan script, evidence suggests that it was predominantly written from left to right, rather than right to left. A potsherd inscribed with four Indus signs reads *Tritsuvana* (K-96A), meaning "of the Tritsus." The Tritsus were associated with the Aryans of the Bharata clan. King Divodāsa was a prominent ruler of the Tritsus, and Viśvāmitra is also referred to as *Bharata Ŗṣabha* of the same lineage. The Tritsus are believed to have inhabited the Saraswati valley. Thus, seals and sealings from Harappa and Mohenjo-Daro may be understood as representing Vedic hymns, possibly used as instructional tools by Vedic scholars across regions extending far beyond the Ganga-Saraswati valleys—the cradle of Vedic civilization.

**Keywords:** Old Brahmi / Vaidikī Hypothesis, Sanskrit Phonetics, Vedic Interpretation of Indus Seals

## 11. The Indus Script Deciphered: A Structural Breakthrough in Symbol Pairing

Sh. Michael Louis Grasa

This paper presents the RSPM-49 decoding system, a structured framework designed to interpret the Indus script through forty-nine distinct symbols. Each symbol is systematically assigned a consistent phonetic value and semantic meaning, based on detailed analysis of repetition patterns, structural clustering, and comparative studies with early proto-languages. The RSPM-49 method provides transparent, step-by-step transliterations from symbol to meaning, demonstrating a clear and repeatable process. Actual Harappan seal samples are examined, revealing potential references to divine authority, natural elements, and communal identity.

Unlike earlier speculative theories, this approach is grounded in observable patterns and a consistent methodology, establishing a stronger foundation for scholarly debate and verification. Accompanying the system are teaching materials and an alphabet chart that facilitate structured training in symbol recognition, pattern identification, and semantic association.

Keywords: Indus Script, Decipherment, RSPM-49 System, Proto-Languages

### 12. Decoding of Indus Tablets

Sh. Narendra Madhavji Gori

The Harappan script has remained undeciphered for over a century, mainly due to the absence of a "Rosetta Stone." This study approaches the problem through the lens of visual interpretation, drawing on three decades of research, where a single image can convey complete meaning.

Initial challenges included uncertainty about the script's language, a lack of parallel symbols, an unknown purpose of the tablets, and the absence of bilingual sources. Many researchers proposed Tamil or Dravidian origins, while others looked to commerce alone. In contrast, this work turns to the Vedas as the closest cultural and linguistic source, aided by Sanskrit dictionaries and cross-referencing with Kutchi and Sindhi, languages of the Sapta-Sindhu region, where most Harappan sites are located.

Field explorations in Kutch, including caves, museums, and inscriptions, provided local clues. Focus is given to the Dholavira signboard, where ten symbols are interpreted in relation to Vedic deities, especially Indra and Varuna. The analysis links rituals, water management systems, astronomical alignments, and structures such as reservoirs, yūpa posts, and ceremonial plazas to Vedic cosmology. Indra is identified as a central figure, with Dholavira functioning as a ritual and cultural hub, termed Indramah.

Geological studies of the nearby Luna Crater suggest a significant impact event around 4900 years ago, possibly affecting Harappan settlement patterns. Symbolic interpretation also connects seals to concepts of trade, cosmic order (ṛta), and spiritual meaning, aligning with Vedic texts that operate on cosmic, terrestrial, and symbolic planes.

This approach proposes that the Vedas act as a cultural "Rosetta Stone" for interpreting the Harappan script, offering a framework that integrates archaeology, linguistics, geology, and living cultural traditions.

Keywords: Indus Script, Vedic Interpretation, Dholavira, Harappan Civilization

## 13. Understanding the Indus Script: How Far Have We Come?

Dr Nisha Yadav

The Indus script, a hallmark of the Harappan Civilization (2600-1900 BCE), remains one of the world's major undeciphered writing systems. Despite decades of research, a definitive interpretation has proved elusive due to the scarcity of bilingual texts and the brevity of the inscriptions. Since its discovery in the 19th century, scholars have applied diverse approaches to understand its structure and function.

Deciphering the Indus script has been an enduring challenge, with numerous attempts yielding inconclusive results and no consensus on its meaning. A key limitation has been the limited understanding of its internal structure, which makes objective evaluation of decipherment claims difficult.

To address this, computational methods have been employed to analyze the script without presuming its content. These studies reveal that sign sequences are not random but follow positional regularities and syntactic constraints, suggesting a rule-based system with underlying logic. Machine learning has also proved valuable in restoring damaged or illegible texts and in identifying hidden structural patterns.

Yet fundamental questions remain, notably whether the script encodes language at all, and if so, which language it represents. The way forward lies in interdisciplinary research that integrates archaeology, linguistics, epigraphy, and computer science.

This paper reviews recent progress, highlighting a shift from speculative decipherments to data-driven structural analysis. While the script remains undeciphered, advances in computational and structural approaches provide a clearer understanding of its form, distribution, and internal logic, laying a stronger foundation for future breakthroughs and critical evaluation of proposed decipherments.

Keywords: Indus Script, Harappan Civilization, Computational Analysis, Structural Patterns

## 14. Decipherment of the Indus Script: A Step Forward in Santali

Sh. Prabhunath Hembrom

The task of deciphering the Indus script has posed a significant challenge to both academic researchers and independent scholars worldwide. The advent of computer technology has significantly advanced these efforts, yielding promising results that may ultimately lead to a definitive solution to this longstanding enigma.

Currently, three main avenues of research are being pursued. First, researchers seek to identify the Indus language by examining the possible presence of proto-Dravidian or proto-Indo-Aryan languages during the Harappan period. Second, some scholars apply machine learning and data mining techniques to study the frequency distribution of signs and analyze syntactic patterns. Third, others investigate non-Indo-European and non-Indo-Iranian terminologies in Vedic texts to provide insights into the Harappan language.

The present work diverges slightly from these three approaches, offering an alternative perspective on the problem.

Keywords: Indus Script, Decipherment, Santali Language, Harappan Studies

# 15. Decipherment of the Indus Script with the Help of Root Morphemes of the Proto-Dravidian Language - Gondi

Sh. Prakash Namdeorao Salame

The Mohenjo-Daro and Harappan civilization represents a golden chapter in India's history. Discoveries at these ancient sites have laid a 5000-year-old foundation for India's cultural legacy, making them a source of national pride. Yet, the Indus script, inscribed on thousands of excavated seals, remains one of the world's most enduring mysteries.

Over 50 scholars have attempted to decode the roughly 4,000 seals, with many attributing the language to a pre-Dravidian root due to its linguistic affinities with the Dravidian family. Linguist Caldwell identified Gondi, spoken by the Gond tribes of central India, as a native Dravidian language preserving ancient features. Jules Bloch also observed that Gondi stands apart from the South Dravidian languages due to its unique and archaic traits. However, no one had attempted to interpret the Indus script using Gondi—until Dr M. C. Kangali.

On expert advice, Dr Kangali compiled a Gondi grammar and dictionary and reevaluated prevailing interpretations of the Indus script. His decoding method, detailed in *Saindhavi Lipi Ka Gondi Mein Udyachan*, proposed that the script was written from right to left and highlighted recurring pictographs, such as deities or priests with bison-horn headdresses comparable to the *Gondi Sigh Mohur* still worn in rituals today.

These cultural continuities suggest a living connection between the Harappan Civilization and the present-day Gond community. For example, Seal M-304 depicts a yogi seated on a thorn-like seat, which Dr Kangali interpreted as symbolizing clan leadership—a tradition preserved among the Koya subgroup of the Gonds. Based on his research, the author asserts that nearly 90% of the inscriptions from the Harappan Seal Corpus have been deciphered.

**Keywords:** Indus Script, Proto-Dravidian, Gondi Language, Harappan Civilization

### 16. Encoding the Harappan Writing System Enigma: Doctor Gupta Harappan Code, a Breakthrough

Dr Puneet Gupta

The Harappan Writing System (HWS) primarily employed geometrically shaped glyphs, including circles, semicircles, crosses, rotated crosses, triangles, angles, ovals, circles with dots, circles with six spokes, arches, one to nine lines, bent lines, squares, rectangles, and others. These geometrical glyphs were decoded in the "Dr. Gupta Harappan Code Hypothesis," which correlated the symmetrical articulatory positions of human speech organs (tongue in relation to lips, gums, teeth, soft/ hard palate) with specific spoken sounds.

Around 3500 BCE, four types of writing systems existed in the world: Egyptian hieroglyphs, Syrian hieroglyphs, cuneiform, and the Harappan Writing System (HWS). The first three remained non-alphabetic and non-abugida from 3500 to 1900 BCE. Other major alphabetic scripts, such as Phoenician, Greek, Roman, Latin, Farsi, Arabic, and Ancient South Arabian, emerged only after 1000 BCE.

HWS was later nicknamed Harappan Brahmi (HB) after its full decipherment. HB evolved into three distinct types over the 2,500 years of its use (c. 3800 to 1300 BCE):

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Early (Immature HB; c. 3800-2600 BCE; ~1200 years)
Middle (Mature HB; c. 2600-1900 BCE; ~700 years)
Late (Vernacular HB; c. 1900-1300 BCE; ~600 years)
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Between 2600 and 1900 BCE, the Mature HB phase marked humanity's first abugida (phonetic) script, which employed both full and half forms of vowels and consonants. Mature HB reflects the Harappan cultural milieu, encompassing the Hindu paramparā, including Vedic, Lalita-Tripura, Kartikeya, Avadhoot Dattatreya, and Jina traditions. It also records the Harappan number system, aspects of medical care, names of local places within Maluha, and references to distant trading partners. The Mature HB phase eventually gave rise to the third,

vernacular variant—an abridged form of its predecessor.

Keywords: Harappan Writing System, Gupta Harappan Code, Abugida Script, Indus Decipherment

## 17. Decipherment of the Indus Script and Symbols in the Light of the Tribal Culture of Bastar

Dr Shiv Shankar

The Harappan Civilization is among the world's most ancient civilizations, noted for its advanced urban facilities and cultural sophistication. Yet, many aspects of this civilization remain unresolved, including the identity of its people, the reasons for its decline, and the undeciphered script found on seals and artifacts. Despite extensive research, no scholarly consensus has been reached. However, evidence suggests that yoga practices were part of this culture, as several artifacts depict figures in yogic postures, indicating strong links to ancient Indian traditions.

Bastar, in southern Chhattisgarh, is a region renowned for its rich tribal culture. Historically identified as Dandakaranya, it is described in ancient texts as an empire founded by Dandaka under the guidance of Shukracharya. Bastar's tribal traditions retain many elements of the Sanatan and Vedic heritage, which have been preserved over centuries by the region's dense forests, challenging terrain, limited infrastructure, and relative isolation. These factors have enabled the survival of ancient practices that echo India's earliest cultural foundations.

Comparative studies reveal significant parallels between Bastar's tribal traditions and the Harappan Civilization. Songs, oral narratives, and tribal art motifs from Bastar exhibit striking similarities to the pictographic script and symbolic imagery found in Indus artifacts. Since the Indus script remains undeciphered, material culture and mythology provide critical tools for interpretation. The role of mythology, culture, and tradition in script development underscores the importance of such comparisons.

This research highlights the continuities between Bastar and the Harappan Civilization, suggesting that elements of the latter survive within Bastar's living traditions. These connections offer valuable insights into the shared cultural heritage of one of the world's earliest civilizations and underscore India's profound historical legacy.

**Keywords:** Indus Script, Bastar Tribal Culture, Harappan Civilization, Cultural Continuities

### 18. Plausible Breakthrough Revelations of Sound-Values from Indus *Pashupati-Seal*

Dr Sreekanth Yerramilli

The Harappan Civilization's Pashupati Seal (CISI-ID M-304/M-420) is renowned for its intricate design and enigmatic script. Despite decades of sustained research, the decipherment of this seal and the broader Indus script remain unresolved. This study identifies specific gaps in earlier approaches and attempts to address them by integrating interdisciplinary perspectives from history, linguistics, cultural studies, anthropology, and ongoing research on the Indus script and the Pashupati Seal.

Since the early observations of Charles Masson and later studies by Alexander Cunningham and Mortimer Wheeler, scholars such as Rajesh P. N. Rao (2008), Suzanne M. Redalia-Sullivan (2016), Iravatham Mahadevan, Bahata Mukhopadhyaya, and more recently Bharath Rao (Yajna-Devam, 2024) have advanced our understanding of the Indus script. The present research aligns with several of these findings but introduces key insights that represent potential breakthroughs overlooked in earlier works.

This paper observes that the script on the Pashupati Seal directly complements the central figure, with phonetic values demonstrating near-universal consistency across the geographies of the Indus civilization and its contemporary cultural expanse. Further, it identifies a logo-syllabic/ abugida system, where numerical markers appear to play a crucial role in altering sound values.

The research builds upon prior scholarship while incorporating AI-driven data analysis and cryptographic studies. Comparative evaluation of earlier works (Mahadevan, Parpola, Redalia-Sullivan, Rao) was combined with an extensive survey of global ethno-cultural proper nouns and iconographic parallels. This holistic framework enabled a macro-level interpretation of the Pashupati Seal, offering new dimensions for understanding its inscription and symbolic significance.

Keywords: Indus Script, Pashupati Seal, Sound Values, Interdisciplinary Analysis

# 19. The Visible, Beyond the Visible, and in Between: Interpreting the Indus Script Based on Layers of Meaning through Evolutionary Human Consciousness

Dr Tanima Bhattacharya Co Author: Dr Joy Sen

The script engraved on the seals of the Harappan Civilization (c. 2600-1900 BCE) remains one of the most enigmatic symbolic systems of the ancient world. For decades, attempts at decipherment have primarily relied on linguistic or structuralist methodologies, seeking phonetic equivalences or syntactic coherence. While such approaches have yielded valuable insights, this study proposes a broader interpretive lens, viewing the Indus script not merely as a precursor to phonetic writing but as a symbolic system infused with multiple layers of meaning, resonant with frameworks later evident in Indian thought.

Rather than pursuing a definitive decipherment, the study emphasizes engaging with the signs across interpretive layers, beginning with their material presence and extending into mental, psychic, and spiritual dimensions. In this view, seals may be read not only as records of administrative activity but also as carriers of encoded knowledge.

This perspective finds echoes in Vedic and Upanishadic traditions, where symbols operate simultaneously on exoteric and esoteric levels, addressing the world, the self, and the cosmos. Examples include seals depicting a yogic figure or the double-unicorn motif with seven pipal leaves, both of which suggest profound symbolic implications.

The study employs the DIKW hierarchy—Data, Information, Knowledge, Wisdom—as a heuristic framework, enabling layered readings of the script: as syntactic structures of visual symbols, semantic expressions referencing ritual or conceptual associations, and semiotic vehicles carrying philosophical or spiritual resonance. This multilayered interpretation parallels Indian hermeneutic

traditions, where a single mantra or symbol embodies literal ( $sth\bar{u}la$ ), subtle ( $s\bar{u}ksma$ ), and causal ( $k\bar{a}rana$ ) meanings.

While not claiming a conclusive decipherment, this perspective invites renewed engagement with the Indus script as part of a broader pan-Asian symbolic continuum, offering possibilities for reinterpreting India's earliest cultural history.

**Keywords:** Indus Script, Symbolic Interpretation, Evolutionary Consciousness, Indian Hermeneutics

# SURVEY, DOCUMENTATION, METADATA STANDARDS

### 1. पांडुलिपियों का संरक्षण, पुनरुद्धार और डिजिटलीकरणः पटना संग्रहालय के विशेष सन्दर्भ मे

Afzal Ahmad

प्राचीन भारतीय ऐतिहासिक संस्कृति एवं विरासत का प्रतिनिधित्व जिन साधनों से होता है वे सभी हमें हमारी प्राचीन जीवन शैली, सामाजिक, आर्थिक, राजनैतिक एवं धार्मिक विश्वासों पर आधारित कर्मकांडों के विभिन्न पहलुओं से अवगत कराते हैं। भारतवर्ष की सास्कृतिक धरोहर का अध्ययन एव शोध करने हेतु पुरावाशेष, शिलालेख, पांडुलिपियों, मूर्तिया एवं मृदभांड इत्यादि का अत्याधिक महत्व है। जिसमें पाण्डुलिपियों की खोज, दस्तावेजीकरण, संरक्षण, सुद्रीकरण एवं प्रसार के कार्य की आवश्यकता एवं महत्व बना रहता है। बिहार के सास्कृतिक गौरव के रूप में स्थापित पटना संग्रहालय भारत के प्रसिद्ध संग्रहालयों में अपना विशेष महत्व रखता है और अपने दुर्लभ, बहुमूल्य और विविध प्रकृति के संग्रहों के लिए विख्यात है। प्रस्तुत पत्न में पटना संग्रहालय के संग्रह से विशेष रूप से पांडुलिपियों के सरक्षण, पुनरुद्वार और डिजिटलीकरण की प्रक्रिया का अध्ययन करना है उससे सम्बधित समस्याओं, मुद्दों और चुनौतियों पर चर्चा करना है तािक भविष्य में हम पांडुलिपियों में उपलब्ध ज्ञान को अध्ययन एवं शोध का विषय बना सकें। अतः पटना संग्रहालय ज्ञानरूपी दस्तावेज़ी विरासत का परिरक्षण करके हमारे ज्ञान मे वृद्धि के साथ-साथ उसे साझा करके वर्तमान और भावी पीढ़ियों की अध्ययन एवं शोध सम्बन्धी आवश्यक्ताओं की पूर्ति कर सकता है।

Keywords: दस्तावेज़ी विरासत, पटना संग्रहालय, सरक्षण, पुनरुद्वार और डिजिटलीकरण

**Bio:** Dr. Afzal Ahmad is a Project Assistant at Patna Museum under the Indira Gandhi National Centre for the Arts, Ministry of Culture. He holds a Ph.D. from the University of Delhi, an M.Phil. from JNU, and multiple postgraduate degrees in History, Philosophy, Library Science, Buddhist Studies, and Museology. He has worked with the National Archives of India, JNU Central Library, and Alwar Museum, and authored a book along with numerous research papers. Actively engaged in conservation, he serves as a Consultant for the Heritage Conservation Society and is a member of the Indian Association for the Study of Conservation of Cultural Property.

## 2. Publication of compendium of single folio manuscripts of Ayurveda

Dr Bhavana K R Co-Author: Gowri P.

Many manuscript libraries contain a large number of single folio manuscripts. These might have been written as study notes or could be a detached section of larger volume. However, such single folio manuscripts are often overlooked due to their inadequacy to form as a book and the knowledge contained there is often lost. Hence, we undertook this study at the Oriental Research Institute, Mysore. Methodology - Manuscripts consisting of 1-2 folios related to Ayurveda formulations in Oriental Research Institute, Mysore, were noted from the Vaidyam volume of the catalogue. The damaged and worm-eaten manuscripts were excluded. The folios which contained conceptual part of Ayurveda like diagnosis of diseases or Dinacharya were excluded. Both palm leaf and paper manuscripts were considered for the study. Manuscripts written in Grantha, Kannada, Telugu and Devanagari scripts were considered. Only those containing formulations were selected for the study. Results - A total of 148 manuscripts were found. Out of which 67 were herbo-mineral and rest were herbal. Discussion -The single leaf manuscripts indicate the prevalence of diseases in that region and the accessibility to the drugs mentioned. Sarasvati Gritam was found as the first page of the text "Shlokavivaranam of Raghunatha" indicating the importance of Medhya rasayanas  $in the study of scripts. Few formulations were very common like \ Talisadi \ churna \ and$ Gangadhara Rasa whereas few were very rare formulations like Kuntalaushadham. Kuntala was an ancient name of Mysore and Kuntalaushadham was prevalent in Mysore region. Conclusion – The study of single-folio manuscripts at the Oriental Research Institute, Mysore, reveals that even fragmented texts can offer significant insights into the medical practices, regional formulations, and disease prevalence of historical periods. Hence, more such studies are needed.

**Keywords:** Single-folio manuscripts, Ayurveda formulations, Oriental Research Institute, Mysore, Herbo-mineral and herbal preparations, Regional medical practices, Disease prevalence

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Samhita and Siddhanta at the Government Ayurveda Medical College, Mysore. She holds an M.D. (Ayu) in Ayurveda Samhita and Siddhanta and an M.A. in Sanskrit, reflecting her expertise in classical Ayurvedic knowledge with a strong foundation in Sanskrit literature and philosophy. She specializes in classical Ayurvedic epistemology, textual traditions, and their contemporary applications. In 2017, she was selected as a Fellow of the Asia Pacific Leadership Program at the East-West Center, Honolulu, where she engaged with an international cohort delivering several talks on Ayurveda to diverse global audiences. She has several publications in PUBMED and SCOPUS indexed journals. She has also authored a book, "Alankaras in Caraka Samhita."

# 3. मेटाडाटा निर्माण में पाण्डुलिपि के पुष्पिका की भूमिका (Role of the Colophon of Manuscript in Metadata Creation)

डॉ० त्रिलोचन प्रधान

सामान्यतः किसी वस्तु के आकार, प्रकार, परिमाण आदि के विषय में जो तथ्य प्रस्तुत किया जाता है उसको मेटाडाटा कहते हैं अर्थात् मेटाडाटा के माध्यम से उस वस्तु के विषय में समग्र जानकारी हमें प्राप्त होता है। भारतीय ज्ञान-परम्परा के अनेक अप्रकाशित ग्रन्थ पाण्डुलिपि के रूप में विद्यमान हैं। इन ग्रंथों का उद्धार करना अत्यन्त ही आवश्यक है। प्राचीन लिपियों में लिपिबद्ध होने के कारण विद्वानों के लिए इनका अध्ययन दुरूह हो गया है। उन पांडुलिपियों का विषयवस्तु स्पष्ट नहीं हो पा रहा है। अतः पांडुलिपियों के संग्रह के बाद उनके विषय में सम्पूर्ण विवरण प्रस्तुत करना अत्यावश्यक है। जैसे – पाण्डुलिपि की विषयवस्तु अर्थात् किस, विषय से सम्बंधित है। पाण्डुलिपि का प्राप्ति स्थान।पाण्डुलिपि की पृष्ठ संख्या। प्रति पृष्ठ पंक्तियों की संख्या। प्रति पंक्ति अक्षरों की संख्या। पाण्डुलिपि की लिपि क्या है? पाण्डुलिपि की भाषा क्या है? पाण्डुलिपि की लेखन-सामग्री क्या है? पाण्डुलिपि की लिपि क्या है? पाण्डुलिपि का समय क्या है? पाण्डुलिपि के लिपिकार कौन है? आदि। इन सभी विषयों का ज्ञान हमें पृष्पिका से हो जाता है। परन्तु पृष्पिका को समझना इतना सहज नहीं है और समय निर्धारण करते समय तो अनेक समस्यायें उपस्थित होती हैं। पृष्पिका में ऐसे-ऐसे कूट शब्दों का प्रयोग होता है जिनके विषय में ज्ञान अर्जित किये बिना उसको समझना दुष्कर है। इनको समझने के लिए जो ज्ञान अपेक्षित हैं उनके विषय में इस आलेख के माध्यम से विचार प्रस्तुत किये जायेंगे।

Keyword: पाण्डुलिपि अध्ययन, मेटाडाटा, पुष्पिका, प्राचीन लिपियाँ, भारतीय ज्ञान-परम्परा, समय-निर्धारण समस्याएँ

Bio: डॉ. तिलोचन प्रधान 2009 से इन्दिरा गांधी राष्ट्रीय कला केन्द्र, क्षेत्रीय केन्द्र वाराणसी के अनुसंधान विभाग में कार्यरत हैं। वे काशी हिन्दू विश्वविद्यालय में प्रोजेक्ट फेलो तथा संस्कृत महाविद्यालय में प्रवक्ता रह चुके हैं। प्राचीन पाण्डुलिपियों और लिपियों के अध्ययन-सम्पादन में उनकी विशेष दक्षता है। उन्होंने कई ग्रन्थों का लेखन-सम्पादन किया, 20 से अधिक शोधलेख प्रकाशित किए और देशभर में व्याख्यान व संगोष्ठियों में सहभागिता की है। भारतीय विद्या के क्षेत्र में योगदान हेतु उन्हें 2017 में 'आनन्दवर्धन सम्मान' से सम्मानित किया गया।

# 4. Challenges and Methodological Insights in Documenting, Annotating and Translating Siddha Medical Manuscripts

Senthamil Selvi VG Co Author: Meena; Muthukumar

Siddha medicine, rooted in Dravidian heritage, has traditionally been transmitted orally and preserved in palm-leaf manuscripts. These manuscripts form the cornerstone of Siddha system of medicine (SSM), yet many remain uncollected, undocumented, insufficiently annotated, or untranslated. Since the texts are in classical Tamil, they pose a language barrier for both non-Tamil and Tamil-speaking clinical researchers where even Tamil scholars require annotations to interpret their poetic and philosophical depth. Challenges span through collection, documentation, annotation, and translation. Semantic diversity is a key issue, as many terms are polysemous and contextual. Literal translations may preserve structure but often lose meaning while semantic translations risk conceptual distortion when mapped onto biomedical frameworks. Inconsistent translation strategies and competing terminologies further hinder comprehension and standardization.

Additionally, gaps persist in the standardized vocabulary for pharmaceutical components, therapeutic procedures, clinical observations and many other facets of SSM. Physical deterioration of manuscripts, lack of documentation protocols, and minimal integration of digital tools exacerbate these challenges. Addressing these challenges demand interdisciplinary collaboration involving Siddha practitioners, Tamil scholars, Historians, and Anthropologists. There is a grave need to develop a standardized glossary cross-referenced with biomedical terms wherever relevant, while preserving traditional context. Structured translation protocols encompassing literal, contextual, and interpretive layers with annotations are vital to retain nuances specific to the niche. These ground laying steps will support the integration of technology, including high-resolution digitization, Text Encoding Initiative (TEI)-based annotation, and Natural Language Processing (NLP) tools trained in classical Tamil. AI and digital tools can enhance access and analysis, but only when built on accurate, context-rich, human-curated data. This

paper highlights the layered challenges in Siddha manuscript documentation and translation, while offering a roadmap integrating interdisciplinary collaboration and digital innovation.

**Keywords:** Siddha manuscripts, siddha literature translation, siddha texts annotation, Siddha manuscript documentation

**Bio:** Dr. V. G. Senthamil Selvi is a Research Associate–I (Siddha) at the Central Council for Research in Siddha, Chennai. She holds a Bachelor's degree in Siddha Medicine and a Master's in Siddha Pharmacology. With clinical experience in Tamil Nadu, her work focuses on Siddha medicinal formulations, raw materials, and sustainable sourcing. She is passionate about integrating traditional knowledge with modern healthcare and actively engages in the study of classical texts and manuscripts to preserve and promote Siddha medicine.

### 5. जैन पांडुलिपि संग्रहालयों की विलक्षणता (The Uniqueness of Jain Manuscript Libraries)

Jitendra B Shah

भारतीय ज्ञान परंपरा की रीढ़ पांडुलिपियाँ रही हैं, जिनमें हमारे प्राचीन मनीषियों का चिंतन, साधना, और सृजन अक्षर रूप में संरक्षित है। भारत के विविध धार्मिक, दार्शनिक, शास्त्रीय एवं कलात्मक परंपराओं की मौलिक अभिव्यक्ति हमें प्राचीन ग्रंथों में दिखाई देती है। इन ग्रंथों में न केवल दर्शन, व्याकरण, साहित्य, अलंकार आदि विधाओं का गृढ़ विवेचन मिलता है, बल्कि जीवन के व्यवहारिक पक्षों—जैसे चिकित्सा, ज्योतिष, संगीत, नृत्य, स्थापत्य, एवं 64 पारंपरिक कलाओं—का भी सुविस्तृत वर्णन उपलब्ध है। इन बहुमूल्य ग्रंथों का मूल स्वरूप पांडुलिपियों के रूप में ही हमारे समक्ष उपस्थित है। एक विद्वत अनुमान के अनुसार, भारत में वर्तमान में एक करोड़ से अधिक पांडुलिपियाँ विद्यमान हैं, जो विश्व में ज्ञान-संरक्षण की एक अद्वितीय परंपरा का परिचायक है। इन पांडुलिपियों में जैन परंपरा का योगदान विशेष उल्लेखनीय है। गुजरात: जैन पांडुलिपियों का भंडार भारत में यदि किसी क्षेत्र को पांडुलिपियों के संरक्षण, संरक्षणशास्त्र और अध्ययन की दृष्टि से अग्रणी कहा जाए, तो गुजरात उसका श्रेष्ठ उदाहरण है। विशेषतः पाटन, अहमदाबाद, वडोदरा, जामनगर, कोबा, और भावनगर जैसे नगरों में स्थित जैन पांड्लिपि-संग्रहालय इस दिशा में विशेष उल्लेख के पाल हैं। यहाँ के संग्रह न केवल आकार में विशाल हैं, बल्कि विषयवस्तु की विविधता के कारण भी विलक्षण माने जाते हैं। गुजरात के जैन मंदिरों, मठों और ज्ञानमंडलों में संरक्षित पांडुलिपियाँ मुख्यतः ताड़पत्र या हस्तनिर्मित कागज पर लिखित हैं। इन पर सोने, चाँदी, लाल, नीले तथा हरित रंगों से की गई लिपिबद्धता, चिलांकन और अलंकरण इनकी सौंदर्यात्मक गरिमा को और भी बढाते हैं।

विषय-विविधता और ग्रंथ प्रकार इन संग्रहों में पाई जाने वाली पांडुलिपियाँ प्रायः निम्नलिखित विषयों को समेटे हुए हैं: जैन दर्शन: आगम, सिद्धांत, नंदीसूल, तथा अन्य उपांग, भारतीय दर्शन: न्याय, वैशेषिक, योग, सांख्य, वेदांत आदि, भाषा और व्याकरण: संस्कृत, प्राकृत, अपभ्रंश भाषाओं के व्याकरण ग्रंथ, साहित्य और काव्यशास्त्र: महाकाव्य, रूपक, आलोचना, छंद, अलंकार, नाट्य और कला: नाट्यशास्त्र, चित्रकला, वास्तुशास्त्र, और संगीत आदि। इन ग्रंथों में न केवल धार्मिक एवं दार्शनिक गहराई होती है, अपितु भारत की सांस्कृतिक विरासत को समझने का एक प्रामाणिक माध्यम भी ये पांडुलिपियाँ प्रदान करती हैं। संरक्षण और सूचीकरण की परंपरा जैन समुदाय ने इन पांडुलिपियों के संरक्षण हेतु विशेष तकनीकों का विकास किया है। अनेक पांडुलिपियाँ तांबे के पातों में रखी जाती हैं,

जिनमें नीम के पत्तों का उपयोग, कीट-प्रतिरोधी पदार्थों का लेप, तथा नियमित रूप से स्थान-परिवर्तन जैसी विधियाँ सम्मिलत होती हैं। इनके सूचीपल (CATALOGUES) भी अत्यंत व्यवस्थित होते हैं—जिसमें ग्रंथ का नाम, रचियता, विषयवर्ग, भाषा, और लिपि आदि का विस्तृत विवरण दिया जाता है। कुछ स्थानों पर डिजिटल सूचीकरण की दिशा में भी कार्य आरंभ हो चुका है। जैन पांडुलिपि संग्रहालय न केवल ज्ञान के अक्षय भंडार हैं, बल्कि भारत की सांस्कृतिक चेतना के जीवंत प्रतीक भी हैं। इन संग्रहों का संरक्षण, अध्ययन एवं प्रचार न केवल शास्त्रीय विद्या की पुनर्प्राप्ति हेतु आवश्यक है, बिल्के यह आने वाली पीढ़ियों को अपनी जड़ों से जोड़ने का भी सशक्त माध्यम बन सकता है। प्रस्तुत आलेख में इन संग्रहालयों की विशिष्टताओं का परिचय माल दिया गया है; इस दिशा में और भी गंभीर शोध की आवश्यकता विद्यमान है।स आलेख में एक में विस्तार से विचार किया जाएगा।

Keywords: भारतीय पांडुलिपि परंपरा, जैन पांडुलिपि संग्रह, गुजरात – पांडुलिपि केंद्र, सांस्कृतिक विरासत संरक्षण, सूचीकरण एवं डिजिटलीकरण, धार्मिक एवं दार्शनिक ग्रंथ

Bio: Prof. Shah, Founder Trustee of Shrut Ratnakar and former Director of L.D. Institute of Indology, Ahmedabad, has made significant contributions to preserving India's spiritual and intellectual heritage. He expanded manuscript collections, developed an e-library, and represented Jain thought globally, including at the 1992 Parliament of World Religions in Chicago. With over 75 research articles, 50 lectures, and 60 seminar contributions, he has also taught as a visiting professor across India and abroad. Honored with 15+ awards, including "Nagar-Ratna" and "Gujarat Gaurav," his work in Indian philosophy and culture remains widely acclaimed.

## 6. SURVEY OF MANUSCRIPTS FROM BALESHWAR DISTRICT OF ODISHA STATE

Dr. Bholanath Dash

Odisha is exceedingly rich, since ancient times in exquisite and excellent palm leaf manuscript expanse of textual and illustrative eminence. The varied palm leaf manuscripts galore, now found in the collection of museums, private institutions and individuals amply testify to the exuberance and efflorescence of this great tradition from about 10th Century A.D., as is evident from the epigraphic reference to Odia language & Kutila script found in an inscribed sculpture of Jaina monk-Kumarasena discovered from Gandhi-bedha in Balasore district. They formed the treasure house of wisdom and knowledge on different aspects of Odishan history, culture, artistic & architectural legacy. Because of the easy availability of palm leaf in abundance in Odisha, the palm leaf manuscript culture became very popular through ages. It also becomes easy to scribe and engrave different subject matters with an iron stylus. The Odia writing due to its round & linear shape, facilitated the growth and development of palm-leaf manuscript writing & this tradition even continues till the present days. Apart from the State Museum of Odisha and other reputed Institutions, the Palm-leaf manuscripts are lying in individual collection without care and conservation. Many rare and unpublished manuscripts, commentaries are still unpublished with individuals and also in royal collections. It is required to care and publish and bring into light for researchers and scholars. We find a good number of palm leaf manuscripts of historical prose and translation works. Odia scholars have also contributed to Bengali & Hindi manuscript composition. Many manuscripts are found uncared in the villages which are a in state of decay & destruction. They are the depository of our cultural heritage and should be restored by popular drive through various institutions and individuals dedicated to the cause of saving the extinct palm leaf manuscript heritage of Odisha. In this paper we will focus on some issues occurs in the time of door-to-door survey of manuscript in the Baleshwar District of Odisha.

Keywords: Palm-leaf manuscripts, Odisha cultural heritage, Odia script and language, Manuscript conservation, Historical and literary traditions, Baleshwar

#### manuscript survey

**Bio:** Dr. Bholanath Nath Dash, Joint Director at Amritavanee Adarsha Shodha Sansthan, Odisha, holds an M.A., M.Phil., and Ph.D. in Sanskrit, along with a Diploma in Manuscriptology, and has qualified UGC-NET. With 8 years of teaching and extensive research experience, he has served at institutions like the Prof. K.V. Sarma Research Foundation, Chinmaya International Foundation, and the University of Madras under the IGNCA. He has authored and edited five books, with several more in progress, and published research in reputed journals. His academic interests include Vedic studies, grammar, linguistics, Sanskrit literature, and manuscriptology.

## 7. History of Studies on Palm Leaf Manuscripts in Sri Lanka

Anura Manatunga

The present paper is a study into the history and present status of studies on palm leaf manuscripts in Sri Lanka. Palm leaves are the most common writing medium in ancient Sri Lanka before advent of the printing machine in the 18th Century. Copper plates, gold plates and lithic inscriptions are also used as writing materials but Palm leaf manuscripts outnumbered all other forms of writings in ancient Sri Lanka. Sri Lanka has a long historical tradition for written tradition from 3rd Century BCE onwards and it is a known fact that the Buddhist scriptures which were in oral tradition for centuries after Buddha's passing away were first written down in the 1st Century BCE in Sri Lanka by King Vatta Gamini Abhaya at Aluvihare in Matale.

Pali chronicles such as Dipawamsa and Mahavamsa are written in Sri Lanka and were in palm leaves until they were transformed into printed books in the 19th Century. Jataka Stories and other literary works were written in palm leaves and found in many Buddhist temples in Sri Lanka. Studies of these palm leaf manuscripts were started by British colonial officers since early 19th century by collecting such documents and attempted to translate them into English. Alexander Johnston, John Doyly and Colin Campbell were pioneers in these studies. The establishment of the Ceylon Branch of the Royal Asiatic Society in 1845 is a landmark of palm leaf manuscript studies in Sri Lanka. On the request and persuasion of the Royal Asiatic Society, the Government initiated a programme to collect palm leaf manuscripts in 1850s. The Colombo Museum library was the house for these manuscripts since its establishment in 1877. In addition to the Royal Asiatic Society, the Government Archives, the Colombo Museum and the Department of Archaeology were principal institutions engaged in palm leaf manuscript studies in Sri Lanka. The establishment of the Historical Manuscript Commission and attaching it to the Government Archives in 1934 is another landmark of study of palm leaf manuscripts in Sri Lanka. These historical works and present status of studies on palm leaf manuscripts will be analysis and summarized in this research which has not yet been exclusively done elsewhere.

#### Keywords: Sri Lanka, palm leaf manuscripts, history

**Bio:** Prof. Anura Manatunga is a Senior Professor of Archaeology at the University of Kelaniya and former Director General of Archaeology, Sri Lanka (2021–2023). He has served as Director of the Centre for Heritage Studies, Head of the Department of Archaeology, and Director of the Polonnaruva World Heritage Site for over a decade. Founder Secretary of the International Association for Asian Heritage, he is also a Fellow of the Sri Lanka Council of Archaeologists. A graduate of the University of Kelaniya, he pursued postgraduate studies in India and Sri Lanka and was a Visiting Research Fellow at University College London and the University of Cambridge.

### 8. What resolution digital imaging

Sanjaya Singhal

The ultimate goal of GBM is to bring the knowledge hidden in our ancient manuscripts to the world. This will be achieved by scholars studying the images of manuscripts scanned / imaged by GBM. Therefore, the quality of images must meet two goals viz. be readable by scholars and be suitable for OCR when this technology is available for manuscripts. An image resolution adequate for reading on a typical laptop screen or printed on A4 sized paper is usually considered appropriate for scholarly work. Similarly, colours ought to be available in the image but the nuance of different shades of a colour is not critical. A 24 megapixel / 300 dpi resolution image would be more than adequate for this. For handwritten OCR a higher image resolution is desirable and image resolution of 400 dpi or more is desirable. Cameras on modern mobile phones are capable of imaging manuscripts to the resolution required for both applications. Using mobile phones de-skills the imaging process, allows for portable equipment and allows imaging to be done in-library. The paper examines the advantages and disadvantages of using mobile phone cameras for the imaging of manuscripts.

**Keywords:** Manuscript digitization, Image resolution, Optical Character Recognition (OCR), Mobile phone imaging, Scholarly readability, Preservation technology, In-library digitization

Bio: Sanjaya is a voracious learner and reader. Having spent his career building cutting edge technology at Secure Meters, the multinational company he founded, he has now turned his fierce intellect, broad perspective, and systems thinking, to this Sangrah project. In retirement, he developed a passion for Sanskrit and our ancient texts. As head of Sangrah, he has meticulously designed the system architecture, the cataloguing processes, and built the team to bring both of these to life. In addition to his role at Sangrah, he also sits on several other boards.

## 9. Survey, Discover, Disseminate: A Call for National Framework for Manuscript Access and Integration

Vinoth Murali

India's manuscript wealth is vast, yet a large portion of it remains uncatalogued, untraceable, or forgotten. Foundational projects such as the New Catalogus Catalogorum (NCC) recorded thousands of manuscript-holding institutions across the country, but today, many of these collections are difficult to locate, access, or verify. The lack of an updated, unified, and searchable system leads to practical setbacks for researchers and blocks the scholarly use of manuscripts in various fields of Indian knowledge. This paper reaffirms the long-standing vision of Prof. V. Raghavan, who urged that a nationwide manuscript survey is not merely a matter of safeguarding antiquities but a vital academic and civilizational enterprise. In his work Manuscripts, Catalogues and Editions, Raghavan stressed that rediscovering forgotten texts could radically enrich our understanding of Indian literature, philosophy, arts, and sciences. Taking this perspective forward, the paper proposes two urgent and complementary initiatives: 1. The launch of a fresh, Pan-Indian manuscript survey programme under the Gyan Bharatam Mission or a similar national initiative, with updated field-level assessments and metadata verification. 2. The creation of a unified, public-facing digital discovery platform that integrates catalogue data from existing institutions, enriched by AI-assisted tools and multilingual metadata frameworks. This paper envisions a future where scholars, institutions, and the public can easily trace manuscript data across repositories, enabling better research, preservation, and dissemination of India's intellectual legacy. A renewed survey and an open-access catalogue system could form the backbone of India's effort to reclaim and globalize its manuscript heritage.

**Keywords:** Manuscript Survey, Digital Cataloguing, Archival Integration, Unified discovery platform, Metadata Standards.

**Bio:** I am a Sanskrit grammarian and researcher currently working in the Department of Indology at the French Institute of Pondicherry. I hold a Ph.D. in Vyākaraņa from SCSVMV University and have served as a postdoctoral

fellow at the University of Cambridge. My research spans Sanskrit grammar, Manuscriptology, and Indian Knowledge Systems, with a focus on editing and translating unpublished śästric texts from both Vaisnava and Saiva traditions. I have contributed to several digitisation and cataloguing initiatives and aim to bridge classical scholarship with digital tools to improve access to India's rich and diverse manuscript heritage.

## 10. From Sensor to Schema: A Metadata Framework for 3D Data Acquisition Technologies in Architectural Heritage

T. K. Gireesh Kumar

Comprehensive documentation is indispensable in the cultural heritage sector for preservation, research, and public dissemination. Each artefact possesses distinctive physical characteristics and embedded historical information that must be translated into a coherent interpretive framework. Considering the heterogeneity of items, each cultural heritage object requires a customised, adaptable, and systematic approach to data collection, processing, and visual presentation. As a fundamental component of the documentation process, metadata standards are instituted to systematically encode relevant information concerning specific heritage items, thereby ensuring their consistency, quality, and governance. Architectural heritage sites are increasingly adopting and exploring advanced digital data acquisition technologies and visualisation methods. Although numerous metadata standards are employed in heritage management, their adoption in digital architectural heritage development remains limited. Standards such as CIDOC CRM, Dublin Core, and LIDO describe content and provenance but lack detailed fields for data acquisition technologies and methods used for creating digital replicas. This study examines the need for a comprehensive metadata schema to document data associated with the technologies and methodologies utilised in capturing the physical attributes of architectural heritage and generating precise digital replicas. Furthermore, the study proposes a metadata schema for the three principal data acquisition technologies- Terrestrial Laser Scanning (TLS), Photogrammetry, and Structured Light Scanning- to improve the documentation process. A case study approach is employed, applying the proposed metadata schema to threedimensional models of an architectural structure generated through these technologies. This demonstrates the effectiveness of the schema in systematically documenting the data acquisition process for digital replicas. The findings will benefit professionals in architecture and archaeology engaged in data acquisition and processing for systematic recording; GLAM and cultural institutions involved in documentation and accessibility; policymakers involved in developing relevant policies; and researchers and students seeking to retrieve associated resources and

geospatial data efficiently.

**Keywords:** Cultural heritage, documentation, metadata, architectural heritage, digital heritage, 3D model.

Bio: Gireesh Kumar currently serves as the Lead Researcher and Visiting Professor within the Department of Civil Engineering and Architecture at the University of Pavia, Italy. His scholarly research focuses on the theme of "Reconnecting With Your Culture' as part of the Global Experience Faculty Program (GEFP) at Banaras Hindu University, Varanasi, India, where he also holds the position of Assistant Professor in the Department of Library and Information Science. His area of expertise is in heritage informatics, which involves applying advanced digital technologies and methodologies to the digital preservation and documentation of cultural and architectural heritage.

## 11. Text and Tradition: An Investigation into Tai Ahom Manuscripts from Assam

Subhra Devi

Manuscripts are invaluable treasures of traditional knowledge, embodying the rich tapestry of our cultural heritage and history. Tai Ahom Manuscripts from Assam are handwritten documents in the Tai Ahom language that cover a wide range of topics. In Assam, these manuscripts constitute a significant portion of the local manuscript collections. The primary materials used for these manuscripts include sanchipat, bamboo strips, cloth (muga and cotton), and tulapaat (handmade paper). They exist in various stages of conservation and are stored in different private and public collections across the region. The subject matter of these manuscripts is diverse, -- including historical accounts (chronicles or buranjis) and traditional knowledge from the community and even technical knowledge. While some manuscripts have been digitized and preserved in digital formats, a systematic approach to their study and documentation is still lacking. We had the opportunity to work on a select number of these manuscripts. Manuscripts dealing with rituals and ceremonies often mention specific types of trees or animal species. Do these have any significance in terms of rarity and medicinal or other properties? Do the chants have any deeper meaning and cultural relevance? How can this knowledge be integrated into a holistic and interdisciplinary research? Can manuscripts be related to the curriculum to imbibe a sense of importance of these treasures? This paper tries to highlight the results of our field studies in Sivasagar and Charaideo district of Assam. It highlights an urgent need for proper care, documentation, digitization, and thorough examination of these manuscripts. It tries to outline a method to integrate these manuscripts in the present educational realm to pave the way for a holistic development approach.

Keywords: Buranjis (historical chronicles), Tai Ahom manuscripts, Assam cultural heritage, Traditional knowledge systems, Manuscript conservation and digitization, Sivasagar, Digitisation Assam.

**Bio:** Dr. Subhra Devi is a Curatorial Member at the Cultural Interpretation Centre, Department of Cultural Studies, Tezpur University. She holds a Ph.D.

from the National Museum Institute, New Delhi, on the conservation of Sanchi-Bark manuscripts of Assam. A recipient of the ICFP-Mellon Fellowship at the Metropolitan Museum of Art, New York, and the Nehru Trust UK Visiting Fellowship, she has worked on object conservation and Assamese textile documentation. She is a member of ICOM, MAI, and an executive member of the Indian Art History Congress, with several significant publications to her credit.

## 12. Conservation and Preservation challenges of Palm Leaf Manuscript in PLMSRL

M.K.Weerasinghe

Palm leaf manuscripts represent a critical facet of the world's documentary heritage, housing centuries-old indigenous knowledge and cultural practices. Despite their invaluable content, these manuscripts face myriad conservation and preservation challenges, primarily stemming from their organic nature, environmental vulnerability, and the lack of standardized preservation strategies. This abstract explores these challenges based on the ongoing efforts described by the Palm Leaf Manuscripts Study and Research Library. From ancient times up to the early 19th century, the palm leaf was the main writing material in Sri Lanka. The art of palm leaf bookmaking was a unique feature of Sri Lankan religious and academic culture. Buddhist sacred script (Tripitaka) and related literature, as well as works on other mundane subject fields such as historical texts, astrology, traditional medicine, architecture and a wide range of other subjects. Due to foreign invasions and natural disasters, most of the palm leaf manuscripts are not in existence today. However, thanks to the efforts of monks in the country, a considerable number of palm leaf books are still available in Buddhist temples throughout the island. Although these valuable documents have received the attention of the authorities for a long period of time, even up to now, there are few national programmes to preserve and make them available for study and research. Having considered the absence of a single library devoted to the collection, preservation and provision of access to palm leaf manuscripts in Sri Lanka, the Faculty of Social Sciences of the University of Kelaniya commenced to construct a special library in 2011.

The centre has 854 Palm leaf books and 350000 pages of palm leaf digitised from the original copy. Palm leaf manuscripts, deeply embedded in South and Southeast Asian cultural histories, are deteriorating at an alarming pace. Their preservation is crucial for safeguarding specialised indigenous knowledge passed down through generations.

**Keywords:** Palm leaf manuscripts, Sri Lankan documentary heritage, Manuscript preservation and digitization, Indigenous knowledge systems, Buddhist textual tradition

**Bio:** Prof. M.K.Weerasinghe is the Chair Professor and Director of the Palm Leaf Study and Research Library at the University of Kelaniya, Sri Lanka. A leading authority in library and information science, he formerly served as the Director General of the National Library and Documentation Services Board of Sri Lanka. His work focuses on the conservation and digitization of palm leaf manuscripts and the advancement of indigenous knowledge systems. With decades of academic and administrative experience, he has played a pivotal role in shaping national library policies and preserving Sri Lanka's documentary heritage for future generations.

#### 13. Unveiling India's Intellectual Traditions: Kerala's Contribution through Manuscripts at ORI & MS Library, University of Kerala

Dr. R.B. Sreekala

Kerala's contributions to Indian culture and knowledge heritage are profound, with its ancient manuscripts playing a significant role in shaping the country's intellectual traditions. The Oriental Research Institute and Manuscripts Library (ORI&MSSLibrary) at the University of Kerala, Estd. 1908 is a treasure trove of these manuscripts, boasting over 65,000 works in 30,000 bundles, mostly in Sanskrit on palm-leaves and paper.

**Keywords:** Indian knowledge system, traditional knowledge, Kerala manuscripts, Ayurveda, mathematics, astrology, astronomy, philosophy, ORI & MSS Library, University of Kerala

**Bio:** Dr. R. B. Sreekala, Professor and Director of the School of Indian Languages, University of Kerala, is the former Head of the Oriental Research Institute and Manuscripts Library. She holds a Ph.D. in Malayalam Language & Literature and has authored six books, edited 12, and published over 90 research articles. A recognized research guide with several Ph.D. scholars, she has also completed projects on manuscriptology and paleography. Recipient of awards like the N.V. Smaraka Vaijnanika Award, her notable work Oolayum Naarayavum focuses on palm-leaf manuscripts.

## 14. Survey and Documentation of Manuscripts in Tamil nadu

Dr. M.K. Kovaimani

Human knowledge was recorded in various materials to transfer future generation. Recording were done in stone, clay tablets, metal sheets, barks, cloth, Palm leaf, Paper etc. The earliest Tamil literature is Tholkappiyam, which are dates back to 6th century B.C. Since it is a Tamil grammar, we could assume the formation of literature before 6th century. Mostly literatures were not recorded in stone, clay tablets, metal sheets. Mostly literatures were written in Palm leaf and Paper form.  $These \, manuscripts \, were \, stored \, in \, temple, Palaces, Learned \, scholars \, houses, Medical \,$ Practitioners and Astrologists houses. To show the importance of manuscripts, statue of some Hindu Gods, Goddess, Poets are keeping manuscripts in their hand. Saiva Purana stories are reflecting the usages and importance of manuscripts. In course of time due to various reasons they were uncared. From early 19th century onwards manuscripts were collected for preservation and to dissemination of knowledge. Is assumed 30% manuscripts were not collected. Manuscripts stored in some institutions are not properly documented to bring to light. In the History King Raja Raja Chola was collect Devaram (Hymans of God Siva) manuscripts. This Paper accounts various methods of survey; the methods of collection; problems faced during collection with the holders and manuscripts; preliminary works to be done during collection; the details to be collected for preliminary documentations and methods of Photographic documentation to be done. It also dealt with previous collectors experiences; documentation done; cataloguing method followed. Some case studies, of collection experiences, digitalization work done with metadata used catalogues to be prepared etc.

**Keyword:** Manuscript survey, Tamil manuscripts, Earlier Tamil Catalogues, Private manuscript collections, Documentation of manuscripts.

**Bio:** Born on 3-6-1963,. Studied B.Sc., M.A., M.Phil, Ph.D. Joined as Research Assistant in the Department of Palm leaf manuscripts, Tamil University, Thanjavur. Promoted as Prof and Head of the Same Department in 2012 and Retired on June 2023. Guided 9 Ph.Ds., 43 M.Phils. Published 68 books and 74 e-books.

Manuscript script reading training 77. Workshops conducted 40. Seminars and Conferences conducted 10 and attended 218. Online Manuscript reading training through YouTube (Ezhuthusi) 154. Received Best book Award in 2013 from State Government. Executed British Library, London EAP digital Project for digitization of 3000 manuscripts. Collected more than 3000 manuscripts and 1000 bundles of Revenue records. Visited Malaysian and Srilankan Universities to deliver Lecture.

## 15. Modi Manuscripts from Historical Archives of Goa (1680-1850 CE)

Dr. Balaji Shenoy

The Historical Archives of Goa (HAG) is one of the oldest repositories of the records which reveal the rise & fall of Portuguese empire in India, their economic, cultural, political and diplomatic relations with other political powers in India. These records are in various languages and scripts and one such important records series are in the Modi scripts. Due to paucity of awareness about these records which are available at HAG and due to dearth of knowledge about the script hardly research scholars are consulting these records. Manuscript written in Modi script reveals the history of the land and its people. Presently it is very important for historians, researchers and students to understand this script and use it as historical heritage. The core objective of the present study is to figure out and classify the Modi Records available at Goa Archives which are hardly been consulted in last decades by researchers due to paucity of knowledge of the script and the hypotheses developed for the present study is that there is a scope for reviving the Modi script by rendering it with appropriate technology that makes it easy to use. In the present study these Modi script manuscripts of historical importance are classified into five major types based on the letters from whom these letters were received namely records from the Bhosales of Sawantwadi, Records of Sunda Kings, Records of Local Chieftains from Goa, Records from Marathas and Peshwas and their chieftains; and Miscellaneous records. All these records help to explore the Portuguese relations with these rulers from political, social, economic and military perspectives. Present study is based on the content of the Modi manuscripts available at the HAG. However the long time span of almost two centuries is also covered through the study of paleography to understand Modi manuscripts in varied historical context through historical methods.

Keywords: Modi, Script, Archives, Manuscript, Goa

**Bio:** Dr. Balaji Shenoy has been actively engaged in archival and historical research for over a decade. He has served in various roles at the Goa Archives, contributing to the several outreach activities including publications of certain important

files pertaining to Goa's Struggle for Freedom and study of invaluable historical records. Presently he is holding the Post of Executive Editor & Ex-officio Joint Secretary to the Government of Goa in the Department of Goa Gazetteer and Historical Records.

#### 16. A paper On Manuscript collection of IGNCA

Dr. Poulomee Dasgupta

IGNCA (Indira Gandhi National Centre for the Arts) is a well-known institution under the Ministry of Culture, established on 19th November, 1985 by the late Prime Minister Shree Rajiv Gandhi. IGNCA works as a custodian and carrier of Indian culture. The innermost part of this organization is its vast collections and most important is Manuscript collection. Manuscripts are the evidence of Indian culture. It showcases the treasure of India from several aspects. Because of this collection IGNCA get a chance to serve this world from the background of sharing knowledge. IGNCA collected almost two and half lacks manuscripts from fifty two libraries from all over the India, like Anand ashram samsthan pune, Asiatic society of Mumbai, banaran hindu university, Bombay university, Government oriental manuscript library Chennai, keladi museum Karnataka, Maharaja sarfiji saraswati mahal library tanjavure, Nagpur university etc. This paper will be the reflection of that collection in details. Here I will be discuss about all the fifty-two institutions, where the institution situated, their collections, collection related topic, how many manuscripts IGNCA collect from that particular institute, subjects like Kavya, Naya, Vyakarana, Mathematics, Grammar, Philosophy, Tantra, Ved etc, scripts like whether it is in Granta or Nandinagari, or Newari or Bengali etc, language like Sanskrit, Bengali, Hindi etc and speciality about that particular institution. Also will provide a list about old manuscripts according to institutions. So following these I will design my paper, which will be a complete detailed guideline about the manuscript collections of IGNCA according to institution.

Keywords: Manuscript Collections, IGNCA, Indian Cultural Heritage

**Bio:** Over 17 years of experience in the manuscript field, also have 11 years of experience in teaching & research field. My achievements include award winning short films & documentary production which screening worldwide, 38 published manuscript catalogues & papers, 1 manuscript project. Looking forward to innovative research & teaching in the field of Manuscriptology & Palaeography, Sanskrit, Indology & Asian studies.

## 17. In-library imaging - equipment, speed, quality and challenges

Sanjaya Singhal Co Author: Rajshree Godawat, Chaitrali Joshi

Dharohar was started with a goal of digitising and cataloguing 25 lakh Sanskrit manuscripts within twenty years. Our scope of work covers all the activities viz. in-library imaging, arranging images in the correct page order, transcribing from manuscripts and making descriptive catalogue entries. We have placed quality assurance across all process areas at the core of our systems design. Quality and consistency in the metadata entered in the descriptive catalogue is essential is computer searches are to be effective. Our systems are designed for handling 25 lakh manuscripts. This goal requires a large team (~300 people) and managing this large workforce requires a smooth flow of accurate information and work across all processes and persons. It is also necessary to ensure the integrity of our databases at all times. We have developed an IT system can be best described as a library cataloguing system with integrated workflow. IT systems alone cannot deliver the quality results needed for this large and complex task. Success in our mission requires the constant orchestration of people, processes and technology. This paper describes our processes and the IT systems that support those processes.

**Keywords:** Sanskrit Manuscripts, Digitization, Cataloguing System, Workflow Management

**Bio:** Sanjaya is a voracious learner and reader. Having spent his career building cutting edge technology at Secure Meters, the multinational company he founded, he has now turned his fierce intellect, broad perspective, and systems thinking, to this Sangrah project. In retirement, he developed a passion for Sanskrit and our ancient texts. As head of Sangrah, he has meticulously designed the system architecture, the cataloguing processes, and built the team to bring both of these to life. In addition to his role at Sangrah, he also sits on several other boards.

## 18. Structured metadata, Unstructured Realities - A Quantitative Assessment

Meheralok Dhapare Co Author: Ashwini, Gandhar

Dharohar is engaged in producing digital descriptive catalogues of Sanskrit manuscripts since 2019. The actual project phase started from 2022. 19000+ catalogues have been published on sangrah.org. Preparing a digital descriptive catalogue is an intellectually demanding, methodologically rigorous, and deeply patient scholarly pursuit. Indeed, a painstaking work due to the variabilities involved in the manuscripts. Dharohar has prepared its own systems, rulesets and identified metadata fields in harmony with the main purpose of facilitation of the Sanskrit scholars. To maintain consistency in the data fields, quality control mechanisms have been developed by Dharohar. Still the cataloguers face many variabilities in every field of the catalogue, influencing the man-hours and cost per catalogue. This paper focuses on the quantitative analysis of the challenges while deciding titles, variabilities in the observations while paginating the manuscripts, validation of date data, and complexities with the manuscripts containing primary texts with their commentaries, emphasising the meticulousness in efforts while cataloguing.

**Keywords:** Complexities, challenges. validation, statistics, variabilities.

**Bio:** Meheralok Dhapare has completed his M.A., B.Ed. (Sanskrit) from the University of Mumbai. Currently he is working as a lead of quality and process improvement at Sangrah team, Dharohar, Udaipur, Rajasthan. He is a passionate singer and has composed Sanskrit songs.

## 19. Traditional & Cultural Metadata Standards for Ancient Palm leaf Manuscripts

Dr. Venkataraman H Co-Author: Pirakas R K

In the world of manuscript research, the physical preservation and deciphering of palm-leaf manuscripts are significant hurdles. Beyond preservation, a primary goal is to digitally connect and assemble these valuable texts, bringing them together under a single, accessible platform. Existing digital metadata standards, such as Dublin Core, primarily focus on extracting information from digitized replicas of ancient texts. While valuable for digital preservation and discovery, this approach often overlooks the unique, culturally significant, and historical data embedded within the original physical artifacts, particularly ancient palm leaf manuscripts. This paper presents a novel approach to metadata creation developed at SCSVMV's Saswathaiswaryam manuscript section, where the focus is on generating rich metadata fields directly from the original palm leaf treasures themselves. Building on extensive scholarly research, we've implemented 32 traditional and cultural metadata fields. These fields capture critical information directly from the original manuscript, such as its creation period and the life and contributions of the contributing scholar. Our system prioritizes this data, which can only be ascertained from the authentic artifact itself, over information from digitized copies. The creation of such a detailed metadata framework is crucial for advancing research and critical editions of these ancient texts. By capturing the historical context of the manuscript's creation and the intellectual contributions associated with it, we enable researchers to connect the physical document to a broader historical narrative. This deep contextualization not only enriches the academic study of manuscripts but also provides a powerful tool for every palm leaf manuscript holder to identify, preserve, and connect with the history held within their collections. Our work proposes this method as a viable and essential standard for the scholarly community. The new traditional metadata standards for palm-leaf manuscripts will establish a generic framework for various stakeholders, including repositories, preservation centers, and individual holders. This standard will create a common global platform, allowing for easy identification of similar manuscripts by subject and providing one-click access to essential information.

Keywords: Palm leaf manuscripts, Metadata, Critical edition, Saswathaiswaryam

**Bio:** Dr. H. Venkataraman, Vedic and Sanskrit scholar at SCSVMV, Kanchipuram, holds a Ph.D. in Sanskrit on unpublished Śaiva manuscripts. With 8+ years of expertise in manuscript research and preservation, he deciphers ancient scripts and has received the "Young Researcher in Sanskrit" award.

#### 20. Beyond Technical Protocols: Archival Salvage in the Global South - CSSSC's Preservation of Bengal's Manuscript Heritage through the Endangered Archives Programme (EAP)

Gopal Adak

This paper examines the methodological innovations of the Centre for Studies in Social Sciences, Calcutta (CSSSC) in safeguarding Bengal's endangered manuscript heritage through three major Endangered Archives Programme (EAP) projects, with a particular focus on metadata standardization and culturally responsive cataloguing. EAP781, in collaboration with Santipur Bangiya Puran Parishad, digitized 1,265 medieval Bengali and Sanskrit manuscripts, while EAP921's partnership with Rajnarayan Basu Smriti Pathagar uncovered unexpected Persian and Arabic manuscripts embedded within predominantly Bengali collections, alongside additional holdings from Birsingha Vidyasagar Memorial Hall and Sisir Bani Mandir Pathagar. EAP1031, conducted with Akshay Library (Santipur), preserved 15th-18th century scholastic traditions, including rare Vaisnava manuscripts of the Goswamis. A central achievement across these projects was the creation of adaptable metadata frameworks that reconciled multilingual and multi-script materials with EAP's technical requirements. To achieve this, CSSSC employed a combination of descriptive fields and controlled vocabularies adapted for regional contexts. Script identification, transliteration protocols, and multilayered authority files were implemented to ensure discoverability across languages, while crosswalks were developed to align vernacular descriptors with international schemas. Digitization protocols incorporated high-resolution imaging at 600 DPI, the use of standardized color calibration charts, and the generation of archivalquality uncompressed TIFF master files alongside derivative JPEG/PDF formats for access. Fieldwork was conducted under challenging high-humidity conditions, requiring customized conservation measures for fragile formats ranging from palm-leaf folios to brittle 19th-century paper. This case study highlights how a regional institution can negotiate between global preservation standards and local archival realities, using metadata as both a technical instrument and an epistemological bridge. The multilingual recoveries not only extend the known

corpus of Bengal's intellectual history but also provide a transferable model for manuscript preservation in resource-constrained and climatically challenging contexts across the Global South.

**Keywords:** Endangered Archives Programme, Vernacular Metadata Standards, Postcolonial Documentation, Ethical Digital Preservation, CSSSC, Manuscript Survey Methodologies

**Bio:** Gopal Adak is a Digitization & Metadata Specialist at the Centre for Studies in Social Sciences, Calcutta (CSSSC), with over nine years' experience in archival preservation and digital access to South Asian cultural heritage. He has led major digitization projects under the British Library's Endangered Archives Programme with partners like Columbia University, UCLA, and the University of Pennsylvania. His work focuses on culturally responsive metadata for multilingual collections, integrating indigenous knowledge with global standards, and promoting ethical, community-oriented digitization.

# 21. Beyond Metadata: A Bharatiya Drşţi Paradata Framework for Mahanubhav Manuscripts through Multiple Sense-Making Approaches

Rajarshi Das Co-Author: Vishal Damodar Hivarkhedkar

The Mahanubhav sect's manuscript tradition in Maharashtra, especially in various symbolic scripts like Sakal/Nari Lipi, showcases a rare convergence of linguistic innovation, spiritual transmission, and community-led preservation. The deep dive into these manuscripts unearths rare knowledge of geographic descriptions of the 14th-15th century, cultural settings, eco-friendly climate-repairing conservation practices, and also deeply encoded lifestyles that safeguard cultural heritage conventional metadata frameworks fail to capture the processual, embodied, and interpretive dimensions that give these manuscripts their living significance. This paper proposes a three-layer Bharatiya Drşţi paradata framework designed to document not only the material and technical aspects of these manuscripts but also the cultural, ritual, and epistemic contexts in which they exist. Layer One, "Hard Paradata," records codicological, provenance, and digitization details to ensure reproducibility and material accuracy. Layer Two, "Sense-Making Paradata," integrates Dervin's model with Weick's, capturing the interpretive processes of custodians, scribes, and users. Layer Three, "Soft Sense-Making Paradata," draws from Gianni Vattimo's "weak thought" and Japanese aesthetics (mushin, mujō, hitei no ronri), preserving ambiguity, impermanence, and relational identity and employing Bharatiya Drşţi, underscoring right and wrong and ownership of consequences within the documentation process. Using a case study of the Leela Charitra and Darshan Prakash manuscript, this framework demonstrates how paradata can support both scholarly analysis and culturally faithful storytelling. By embedding Indian Knowledge Systems (IKS) principles paramparā, multilevel reality, and pietas the approach aligns technical documentation with indigenous epistemologies. The result is a more holistic archival record that resists the reductive tendencies of rigid categorization, enabling narratives that are as much about lived practice and evolving meaning as about textual preservation. This work contributes to heritage informatics by offering a replicable model for integrating hard data with soft, culturally embedded interpretive layers, fostering

a balance between certainty and openness. It also addresses ethical imperatives of community custodianship, ensuring that living traditions retain agency in how their knowledge is represented and shared.

**Keywords:** Mahanubhav Manuscripts, Paradata Framework, Indian Knowledge Systems, Heritage Informatics

**Bio:** Rajarshi Das is Coordinator and Librarian at Banwarilal Bhalotia College, Asansol, and Curator of Rarh-Chive, a digital archive of Rarh-Bangla heritage. Experienced in digital archiving and metadata, he has worked on British Library projects EAP 1104 and EAP 1612 (Co-PI). Pursuing a PhD in Digital Humanities at IIT Jodhpur, his research documents and digitizes indigenous knowledge, blending tradition with technology for cultural and environmental sustainability.

#### 22. Undocumented Tradition in Kerala

Dr. Manju P.M.

Man satisfies his mind's hunger through reading and acquiring knowledge. In the earlier times, the Indian knowledge system, which was transmitted orally, was later used for communication in the form of manuscripts. Even today, they are preserved in manuscripts form. The study of Manuscripts is known as Manuscriptology, it focuses primarily on the editing of Manuscripts. The Study of ancient writing systems, along with deciphering and dating of historical manuscripts, is known as paleography. These two disciplines come under the broader field of the Manuscript Knowledge Tradition. Manuscripts serve as silent witness to human civilization and the legacy of intellectual, spiritual, cultural by gone era. A large number of undocumented Manuscripts still remain in unpreserved form in various parts of India. In Kerala also exists so many undocumented manuscripts are in various disciplines, awaiting the attention of scholars for editing and preservation. However, these treasures of knowledge will soon be lost to us if we do not pay immediate attention to them. Many unclassified and unidentified Manuscripts are heaped in a corners, and even the classified ones are often not stored properly. Insects, climatic conditions humidity and lack of awareness are the main causes of damage to Manuscripts. This Paper mainly focusses on prominent Scripts, languages, writing material, writing tools, the NA-NNA-NYADI AND KA-TA-PA-YADI Numerical systems, custodianship and the rich knowledge embedded in various disciplines in Kerala and along with editing Manuscripts. Sugar palm leaves and Talipot palm leaves are traditionally used in Kerala for writing Manuscripts. The subjects covered in these undocumented manuscripts include Vedic literature. Religion. Tantra, Vaidya, Ganitha, Jyothisha, Vastu and Performing Arts. These represent the diverse disciplines preserved in Kerala's Manuscript tradition.

**Keywords:** Prominent Languages and Scripts, Writing Material, Writing Tools, NA-NNA-NYĀDI, KA-TA-PA-YADI, Editing Manuscripts

**Bio:** Dr. Manju P. M., Assistant Professor, Department of Sanskrit at K.K.T.M. Government College. Pullut, Thrissur. Kerala. She holds a Ph.D.. M.Phil.. and JRF in Sanskrit Sahitya. A member of the Board of Studies at the University

of Calicut, she contributed to designing eight courses in Manuscriptology, Palaeography, and Epigraphy. She is an Editor of one book (Yogaratnasamuccaya of Sudararaja-critical edition with study (Manuscript) and five research articles. She served as Research Assistant on a Manuscript project involving Dhvanyāloka and Keralite commentaries. She has attended four Manuscriptology workshops, including NMM and IGNCA's 16days basic and 43 days advanced-level training programs.

#### 23. Unearthing Hidden Treasures: A Study of Ṭākarī Manuscripts in the Collection of the Kamru Temple in Kinnaur, Himachal Pradesh

Dr Kishori Lal Chandel

Manuscripts represent a priceless legacy of India's historical and cultural heritage. They not only shed light on key aspects of political, social, cultural, economic and religious history but also play a vital role in preserving literary and cultural knowledge. The study of these manuscripts is vital for uncovering lesser-known details about past lifestyles, languages, scripts, governance structures, belief systems, and regional traditions across different periods. They also serve as authentic sources of information on writing styles, administrative structures, the nature of land grants, diplomatic exchanges, and socio-religious practices of various regions. Himachal Pradesh also possesses a vast collection of manuscripts in different scripts and languages, which not only reveal hidden historical narratives. The study of manuscripts would also help the possible revival of Himachal's fading dialects, languages, and scripts. Manuscripts hold a prominent place among the historical sources of Himachal Pradesh, offering valuable insights into many lesserexplored dimensions of the state's history and culture. These precious documents, preserved in government archives, religious institutions, and private collections across the region, primarily provide information related to the history and culture of Himachal Pradesh since early medieval times. The state is dotted with temples, kothīs and bhandara, each associated with local devatās (deities). Many of these sacred sites still safeguard antiquities and a wealth of manuscripts in diverse scripts and languages. Similar to other districts, Kinnaur's Kamru fort/temple houses a rich collection of Ṭākarī manuscripts. These not only illuminate key historical aspects of the region but also highlight the cultural and trade relations between the Rampur-Bushahr princely state and Tibet. The present author examined this collection during a field visit in November 2023. The present paper provides translations of some selected manuscripts and discusses their historical, archaeological, and cultural significance of this untapped, precious corpus.

Keywords: bhandāra, devatās (deities), Kamru (Tibetan: Mone), kothī. Tākarī.

**Bio:** Dr. Kishori Lal Chandel is an Assistant Professor of History at Rajiv Gandhi Govt. College, Shimla, with a PhD on 'Epigraphical Sources of Kulu History' from Himachal Pradesh University. He has translated over thirty unpublished Śāradā and Ťākarī epigraphs, won the 2016 Sudhir Ranjan Memorial Prize, and presented 30+ papers nationally and internationally. An expert in Śāradā, Ťākarī, and North Indian scripts, he has published thirteen papers, reviewed for Bulletin of SOAS, and trained in a 2025 Ťākarī workshop. He is currently researching unpublished copper-plate inscriptions from Bhuri Singh Museum, Chamba.

#### 24. Mapping Knowledge and Gaps on Manuscript Heritage: A Bibliometric and Thematic Review of Scholarly Literature

Ms. Pramod Sharma Co Author: Dr. Parveen Babbar

Manuscripts play a crucial role in any civilization, as they are essential for preserving historical knowledge across various disciplines, including literature, science, philosophy, and religion. These represent the cultural heritage through diverse cultures, different languages, artistic works and scholarly output. In the present times, the combination of digital technology and historical culture and heritage has given a new dimension to manuscript preservation, digitization and interpretations of ancient manuscripts. This study employs a mixed-methods approach, integrating bibliometric analysis and qualitative thematic review to explore the research landscape of global and Indian manuscript heritage. The paper analyses peer reviewed publications using three leading bibliographic and citation databases i.e. Scopus, Web of Science and Google Scholar. The bibliometric analysis identifies trends in publications, leading studies and authors, institutions involved in manuscript heritage, highly cited papers, key journals, and patterns in publication. -VOS viewer will be used for visualization of collaboration networks and research themes. The thematic review will also be examined on the basis of the extracted literature. Some research areas that will be studied for thematic analysis are conservation and preservation methods, digitization technologies, metadata and documentation standards, legal and ethical issues in manuscripts and incorporating indigenous knowledge in manuscript studies. The study places special emphasis on Indian manuscripts and their landscape. It reviews institutional efforts such as the National Mission for Manuscripts and the IGNCA. The study gives special focus to India's complex manuscript landscape, spanning multiple languages and scripts. It reviews institutional efforts like the National Mission for Manuscripts and IGNCA while identifying key challenges such as limited public access to manuscripts. absence of strong policy frameworks for long term preservation and digitization. The paper also discusses future research directions, policy frameworks, and ethical practices in manuscript digitization and preservation. This mixed-method approach provides a comprehensive overview

while highlighting research gaps and priorities in manuscript preservation.

**Keywords:** Manuscript Preservation, Bibliometric Analysis, Digitization of Cultural Heritage

**Bio:** Pramod Sharma has been serving as Librarian at Miranda House, University of Delhi, since April, 2023. Previously, she worked as a Professional Assistant at the Institute of Home Economics, University of Delhi, from 2006 to 2023, where she was In-charge of library operations and staff management. She holds M.Com. and M.L.I.Sc. degrees, and was awarded the \*Gopal Krishan Medal\* for being the best student of B.L.I.Sc. A UGC-NET qualified professional, she is presently pursuing her Ph.D. in Library and Information Science from the University of Delhi. She has published around 8 research articles and conference papers in national and international forums and has expertise in several library management systems, including KOHA, Libsys, SOUL etc.

#### 25. A Structured Approach to Sanskrit Manuscripts Studies in Tamil Nadu: Addressing Key Challenges

Thiagarajan S

Sanskrit and Tamil, two classical languages with deep historical and literary legacy, together form the foundation of Tamil Nadu's manuscript heritage. Numerous palm-leaf manuscripts in both languages remain unpublished and inaccessible, often due to a lack of awareness, limited access, and insufficient subject knowledge. Tamil Nadu holds immense manuscript wealth — as evidenced by early surveys like the New Catalogus Catalogorum, which listed at least ten places with manuscript collections, and recent discoveries such as the 277 manuscripts found at the Sri Ramanatha Swami Temple in Rameswaram. Pioneering scholars like U. Ve. Swaminatha Iyer and M. Rangacharya, with their command of both languages, played a vital role in cataloguing and preserving such texts.

This paper proposes a structured, tech-driven, and community-oriented approach to address the challenges in manuscript studies, particularly in Tamil Nadu, with a special focus on Sanskrit manuscripts. It also emphasizes the importance of integrating manuscript literacy into school and college curricula to foster early awareness and scholarly engagement. As a Sanskrit scholar from Tamil Nadu, I offer practical suggestions to revive interest in manuscript culture through collaborative, interdisciplinary efforts.

**Keywords:** Manuscript Literacy, Digital Humanities, Preservation and Access, Community Engagement, Curriculum Integration

Bio: Dr. S. Thiagarajan, Assistant Professor (Senior Grade) at Amrita Vishwa Vidyapeetham, Chennai, holds a Ph.D. in Sanskrit (Vyākaraṇa) from SCSVMV, Kanchipuram. A gold medalist in B.A. and M.A. Sanskrit with an M.Phil. (CGPA 9.81/10), he has over a decade of academic experience, including teaching and research at SASTRA University and Sri Jayendra Saraswathi Ayurveda College. He has guided Ph.D. scholars, published extensively in reputed journals, and presented 20+ papers at major conferences. His expertise spans Vyākaraṇa, Indian Knowledge Systems, Yoga Philosophy, and Sanskrit Literature, alongside translation work in Sanskrit, Tamil, and English.

# 26. Preservation, Digitization, and Scholarly Management of Early-Bengali Script Manuscripts at Syamsundar College Library in the Backdrop of Regional Historiography of Radh Bangla

Dr. Debdatta Chatterjee Co Author: Dr. Gouri Sankar

Radh Bangla, the region between the Gangetic delta and the Chotanagpur Plateau, comprises several important geo-ecological segments, with the South Damodar Valley being one of the most crucial among them. Our focal point is the unique and large collection of rare and invaluable manuscripts in prototype/early Bengali script and Sanskrit language, dating back to as early as 1375 Shaka era (1453 CE) to 18th Century, primarily known as the period of Mangalkavyas, present in the library of Syamsundar College (Estd. 1948), located in the heart of this valley region, which produced several well-known Bengali poets of Mangalkavyas, especially Chandimangal and Dharmamangal. Shortly after the establishment of this college, a group of dedicated educationists locally gathered handwritten documents encompassing subjects such as literature, history, folklore, religion, and local governance, which represent an irreplaceable aspect of the cultural heritage of Bengal and rural eastern India. An irreversible danger looms large where factors like aging, exposure to unconducive environment, and lack of proper archiving have the potential of permanently damaging these manuscripts. The documentation and digitization of the repository of a mofussil college in West Bengal will not only unravel Bengal's regional intellectual tradition in the valley region, but also reveal possible demographic and geo-ecological transitions. This initiative will also help in creating a well-preserved proto-Bengali manuscript collection centre, which may eventually expand into a model manuscript centre to include Sanskrit and other local scripts and contribute significantly to explore the relevance and potential of the Indian Knowledge System (IKS).

Keywords: Radh Bangla, South Damodar Valley, Mangalkavya, Manuscript, IKS

Bio: Dr. Debdatta Chatterjee, currently working as Assistant Professor of History

at Syamsundar College, obtained her Ph.D from Jawaharlal Nehru University. Before joining this college, she worked as a Senior Research Assistant at Nehru Memorial Museum and Library and Project Coordinator of the Prime Ministers' Museum. She also taught History at the School of Law, Jagran Lakecity University, Bhopal. Her area of interest is cultural history, gender studies, and women's education.

#### 27. जम्मू की विरासत: गुरु नानक जन्म साखी का दृश्य दुस्तावेज़ीकरण Heritage of jammu: Visual documentation of Guru Nanak janam Sakhi

Dr. Sarabjeet Singh

जम्मू की शाहवट आर्ट गैलरी और पांडुलिपि लाइब्रेरी में संरक्षित गुरु नानक जन्म साखी का एक अनुपम कला संग्रह है, जिसमें एक अज्ञात कलाकार द्वारा रचित 100 लघुचितों की श्रृंखला शामिल है। यह संग्रह सिख धर्म के संस्थापक गुरु नानक देव जी के जीवन, शिक्षाओं और आध्यात्मिक याताओं को दृश्य रूप में प्रस्तुत करता है। प्रत्येक चित्रकला पारंपिरक भारतीय लघुचित्र शैली में निष्णात है, जिसमें रंगों की जीवंतता और जिटल पैटर्न गुरु नानक के दर्शन—समानता, करुणा और एकेश्वरवाद—को जीवंत करते हैं। यह पांडुलिपि जम्मू की सांस्कृतिक और धार्मिक पहचान को प्रतिबिंबित करती है, जो कला और आध्यात्मिकता का एक अनूटा संगम प्रस्तुत करती है। चित्रों में गुरु नानक के प्रारंभिक जीवन, उनकी चार उदासियों, सामाजिक सुधारों और मानवता के संदेश को सूक्ष्मता से दर्शाया गया है। शाहवट आर्ट गैलरी के इस निजी संग्रह में संरक्षित यह विरासत न केवल सिख समुदाय के लिए एक पवित्र धरोहर है, बल्कि भारतीय कला इतिहास और आध्यात्मिक अध्ययन के लिए भी एक अमूल्य स्रोत है, जो जम्मू को सांस्कृतिक केंद्र के रूप में स्थापित करती है। यह शोध पत्र गुरु नानक देव जी के जीवन और शिक्षाओं को दृश्य रूप में प्रस्तुत करता है, जो भारत की एक अमूल्य निधि है। ऐसे चित्रों को संरक्षित किया जाना चाहिए, प्रदर्शनियाँ आयोजित की जानी चाहिए और उन्हें विरासत का दर्जा दिया जाना चाहिए।

Keywords: गुरु नानक जन्म साखी, लघुचित्र कला, शाहवट आर्ट गैलरी, सांस्कृतिक विरासत

**Bio:** Dr. Sarabjit Singh is a faculty member at the S. Sobha Singh Department of Fine Arts, Punjabi University, Patiala. With a strong background in fine arts, he contributes to the department's teaching, research, and creative pursuits, fostering both traditional and contemporary approaches to art. Dr. Singh is actively engaged in mentoring students and advancing the study and practice of fine arts within the academic community.

# 28. Documenting the Unpublished Vachana-s of Krishnamacharyulu from Simhachalam Manuscripts

Dr. P. Nirmal Harish Co Author: Dr. B. Lakshmi Surya Teja

Simhachalam Temple, located in Visakhapatnam, Andhra Pradesh, is a revered Hindu shrine dedicated to Lord Varaha Narasimha, an incarnation of Vishnu. Perched on a hill, the temple is renowned for its architectural beauty and spiritual significance, with the deity worshipped as Varaha Lakshmi Narasimha Swamy, symbolizing the union of Narasimha and Lakshmi. Dating back to the 11th century, it has enjoyed royal patronage from the Eastern Ganga dynasty, the Gajapati rulers of Odisha, and the Vijayanagara Empire, all contributing to its construction, expansion, and rituals. Sri Kantha Krishnamacharyulu, or Krishnamayya, was a 12th-13th century Telugu poet and temple bard of Simhachalam. As the temple's official gāyaka (singer), he created Vachanas devotional exchanges between the jīvātma (human soul) and God along with compositions in gīta and prabandha forms. He is believed to have lived before Annamacharya and during Purandara Dasa's era, 109 Vachanas were published in 1988 by the Simhachalam Devasthanam. In 1999, T.P. Ramachandracharlu and T.P. Ramanajacharlu expanded this to 250 works by adding 141 compositions from the palm-leaf manuscript Simhagiri Narahari Vachanalu, preserved in the Tanjavur Saraswati Mahal Library with the help of the Telugu Late. T. Vishwanathan. While debates over authorship exist, some identify him as Krishnamayya, even believed by tradition to be the eleventh incarnation of Mahavishnu. He is hailed as the Toli Telugu Vaggeyakara (first Telugu composer). Although recent researchers such as Shri Madan Mohan from Visakhapatnam have engaged with this subject, their work remains incomplete and unpublished. Reliable research materials are scarce, leaving significant gaps in our understanding of this Vaggeyakara. This paper aims to provide first-hand, consolidated documentation of Krishnamacharyulu's songs published by the Simhachalam Devasthanam, along with their original manuscript sources from the Saraswati Mahal. It is intended as a foundational resource for future scholarship and as a step toward reconstructing the musical tradition of his compositions, thereby preserving the devotional heritage of Lord Varaha Narasimha Swamy and

honouring the cultural legacy of Visakhapatnam.

**Keywords:** Krishnamacharyulu (Krishnamayya), Simhachalam Temple Heritage, Telugu Devotional Music Manuscripts

**Bio:** Dr. P. Nirmal Harish is an Assistant Professor at GITAM School of Humanities and Social Sciences, Visakhapatnam, and a Carnatic musician and composer. He specializes in the Bhagavatha Mela tradition of Melattur, Tanjavur. He earned his PhD from Central University of Tamil Nadu on the unpublished manuscript *Saptasvaradi Lakşanam*, documenting 16th-17th century Caturdandi musical forms. His research focuses on Indian music manuscripts, especially from the Saraswati Mahal Library, and reviving lesser-known compositions of the Thiruvarur Tyāgarājasvāmi Temple. He is also involved in broader fine arts and documentary research.

#### 29. मालदा संग्रहालय में संरक्षित गौर-बरेन्द्रभूमि की कुछ मध्यकालीन पांडुलिपियों का विवरण एवं समीक्षा

डॉ. निशिकान्त पाण्डेय

पश्चिम बंगाल के मालदा जिले में स्थित मालदा संग्रहालय में पांडुलिपियों के साथ-साथ अन्य कलाकृतियों का एक महत्वपूर्ण संग्रह है। ये पांडुलिपियाँ मालदा संग्रहालय में कैसे और कहाँ से आई, इसका इतिहास पूरी तरह से ज्ञात नहीं है। हालाँकि, संग्रहालय से जुड़े कुछ प्रमुख वरिष्ठ व्यक्तियों और संग्रह के कुछ निदेशकों से यह ज्ञात है कि अधिकांश पांडुलिपियाँ चाँचल राजवाडि से एकत की गई थीं। इसके अलावा, जिले के कुछ प्रमुख ब्राह्मण परिवारों ने अपने संग्रह से पांडुलिपियाँ मालदा संग्रहालय के कुछ निदेशककों, दान किए है। ये पांडुलिपियाँ सूती (तुलोट) कागज़ पर हस्तिलिखत हैं। इनकी लिखावट अद्भुत शिल्प कौशल दर्शाती है। ये पांडुलिपियाँ समकालीन बंगाल की धार्मिक, सामाजिक गतिविधियों और ऐतिहासिक घटनाओं के संदर्भ में लिखी गई हैं। यहाँ मध्यकालीन गौड़-बरेन्द्रभूमि पांडुलिपियों की चर्चा की गई है। यह पांडुलिपि किस काल की है और इसका विवरण क्या है, और दिनाजपुर, राजशाही, बोगारो-मालदा, राजशाही ज़िला और अविभाजित बांग्लादेश के ज़िला, व्यापक रूप से बोली जाती है। पूर्व में, यह बरेन्द्रभूमि के नाम से प्रसिद्ध था। इसके अलावा, यहाँ संस्कृत और बंगाली में कुछ पांडुलिपियों और वैष्णव भक्ति आंदोलन के दौरान साहित्य में विभिन्न शब्दों का वर्णन भी मिलता है। इस अविध के दौरान साहित्य में पदावली साहित्य का रचित वर्णन समीक्षा करेंगे।

Keywords: मालदा संग्रहालय पांडुलिपियाँ, बरेन्द्रभूमि साहित्यिक विरासत, वैष्णव भक्ति आंदोलन और पदावली साहित्य

#### 30. Ontological Mapping of Indian Knowledge Systems: A Semantic Framework for Reclaiming Manuscript Heritage

Snehasish Paul Co Author: R.K. Bhatt

India's manuscript heritage, which represents the Bharatiya Jñana Parampara or the Indian Knowledge System, encompasses a wide range of disciplines, including philosophy, medicine, mathematics, astronomy, linguistics, and the arts. However, these legacies lack frameworks that capture the interrelationship among texts, authors, schools, and contexts. This paper presents an ontological framework to represent Indian Knowledge Systems semantically, developed in OWL 2 using Turtle syntax and designed in Protégé, following W3C standards including RDF, RDFS, and XSD. The data for its construction were compiled from authoritative Indian texts such as the Nyāya Sūtras, Caraka Samhitā, Aryabhaṭīya, and Aştādhyāyī, and supported by scholarly literature on IKS and manuscript traditions. To enhance this ontology, information was added from reliable digital repositories such as the National Mission for Manuscripts, IGNCA, and the NDLI. The core classes defined in the ontology are Knowledge System, School of Thought, Core Concept, Textual Work, Manuscript, Script, Language, Person, Historical Period, and Geographic Region, which were connected with properties on objects and data. Representatives of the bodies, including the Nyaya Sutras (written by Gautama), the Caraka Samhita (written by Charaka), the Aryabhaṭīya (written by Aryabhața), and the Aşţādhyāyī (written by Panini), were introduced to demonstrate the capacity of the body. The manuscripts were linked to their respective script (Devanagari) and languages (Sanskrit, Tamil and Pali), and the historical and geographical context was integrated to highlight the cultural and temporal depth of the knowledge system. OntoGraf from Protégé verified the consistency of the ontology and gave an insightful visualisation of related legacy (i.e., ontological mapping), which demonstrated that Indian knowledge was reclaimed and presented in a way that enabled research and protection of heritage. Future work will expand the scope of the ontology, connect it to more repositories, interlink it with other Linked Open Data (LOD) sources, promote multilingual representation, and provide an extensible basis for preserving and disseminating

the Indian manuscript heritage.

**Keywords:** Indian Knowledge Systems; Manuscript Heritage; Ontology Design; Semantic Framework; Protégé; Cultural Preservation.

**Bio:** Mr. Snehasish Paul is a Doctoral Research Scholar in the Department of Library and Information Science, University of Delhi. His research interests include ontology development, semantic web. technologies, academic library services, and knowledge organization.

#### 31. पुरातन लेखनकला की महान धरोहर हिमाचल की सांचा पाण्डुलिपियाँ

Prof. (Dr.) Om Prakash Sharma

हिमाचल प्रदेश प्राचीन सांचा पाण्डुलिपियों की अमूल्य परम्परा का धनी है। कश्मीर की शारदा लिपि से विकसित पाबुची, भटाखरी, पण्डवाणी और चन्दवाणी लिपियों में लिखी गई ये पाण्डुलिपियाँ शिमला, सिरमौर, ठियोग तथा उत्तराखण्ड के जौंसार-बावर क्षेत्र में पाई जाती हैं। स्थानीय पण्डित पीढ़ी-दर-पीढ़ी इनका संरक्षण करते रहे और काशी व कश्मीर से विद्या अर्जित कर हिमाचल में ज्ञान का प्रसार किया इन क्षेत्रों में विशेष गुरुकुलों की स्थापना हुई, जिनमें खड़काँह, खहुर, मणेयोटी और बटेवड़ी जैसे स्थान प्रमुख केन्द्र रहे। यहाँ से प्राप्त पाण्डुलिपियाँ खगोल, पंचांग, ज्योतिष, तन्त्र, पुराण तथा स्थानीय देव-परम्पराओं से सम्बन्धित हैं। हाल के शोध कार्यों में लगभग 31 पाण्डुलिपियों का संग्रह एवं डिजिटलीकरण भी किया गया है। इन पाण्डुलिपियों की भाषा स्थानीय हिमाचली पहाड़ी बोलियाँ (महासुई, सिरमौरी, जौंसारी) हैं और इनकी लिपियाँ विशिष्ट लिपिकला (Palaeography) का उदाहरण प्रस्तुत करती हैं। यह धरोहर न केवल हिमाचल की सांस्कृतिक पहचान है, बल्कि भारतीय ज्ञान परम्परा के संरक्षण और अध्ययन के लिए भी अत्यन्त महत्त्वपूर्ण है।

Keywords: सांचा पाण्डुलिपियाँ, शारदा लिपि, हिमाचली सांस्कृतिक धरोहर, भारतीय ज्ञान परम्परा

Bio: प्रो. ओमप्रकाश शर्मा, भारतीय उच्च अध्ययन संस्थान शिमला में टैगोर फैलो एवं हिमाचल प्रदेश विश्वविद्यालय, शिमला के परमार पीठ के पूर्व अध्यक्ष रहे हैं। उन्होंने हिमालय और हिमाचल की सभ्यता, संस्कृति, इतिहास, लोकसाहित्य तथा लिपियों-पाण्डुलिपियों पर 19 पुस्तकों एवं सौ से अधिक शोध पत्नों का प्रकाशन किया है। उनके योगदान को देखते हुए उन्हें संस्कृति मंत्रालय भारत सरकार का राजभाषा पुरस्कार, हिमाचल गौरव सम्मान, हिमाचल साहित्य अकादमी सम्मान और परमार साहित्य सम्मान प्राप्त हुआ। टैगोर फैलो के रूप में उन्होंने 31 पाण्डुलिपियों की खोज कर हिमाचल की ज्ञान-परम्परा के संरक्षण में महत्त्वपूर्ण योगदान दिया है।

### MANUSCRIPTOLOGY, PALEOGRAPHY, AND CODICOLOGY

#### 1. Need of Higher Criticism in Ayurvedic Manuscriptology: A Methodological Approach

Dr. Madhura Kulkarni

Ayurvedic manuscript study requires a critical approach to understand the originality and influence of ancient texts. Higher criticism is a crucial aspect of textual criticism that involves analyzing the historical context, sources, and impact of a manuscript. Hence to evaluate scale for Higher criticism in Ayurveda manuscript studies is essential. A critical edition of an Ayurvedic manuscript was prepared by comparing its available copies. It was compared with classical texts like Brihat-trayee and Laghu-trayee. A grading scale was developed to assess similarities and differences between the manuscript and classical texts: - 0: Totally same verse,  $1 \ge 75\%$  similar,  $2 \ge 50\%$  similar,  $3 \le 25\%$  similar,  $5 \ge 15\%$  Totally different verse. The comparison revealed variations in symptoms, disease classification, and treatment formulations. The grading scale enabled the identification of original contributions, influences, and new information in the manuscript. Higher criticism is essential in Ayurvedic manuscriptology to understand the author's contribution, sources, and impact on later works. This approach can retrieve new information, establish the originality of manuscripts, and provide insights into the evolution of Ayurvedic knowledge. The application of higher criticism in Ayurvedic manuscriptology enhances the understanding of ancient texts, reveals new information, and contributes to the advancement of Ayurvedic knowledge.

Keywords: Ayurvedic manuscript, higher criticism, textual criticism, originality, classical texts, grading scale, disease classification, treatment formulations, manuscriptology, evolution.

Bio: Dr. Madhura Kulkarni - B.A.M.S (Tilak Ayurved Mahavidyalaya, Pune), B.A. M.A. Ph.D. (Sanskrit) (Tilak Maharashtra Vidyapeeth, Pune), Diploma in Manuscriptology (Mumbai University), Certificate course in Pali (Deshana institute of Buddhist Studies, Pune) Working as Assistant Professor of Sanskrit in Samhita Siddhant and Sanskrit department of Tilak Ayurved Mahavidyalaya, Pune for 15 years. Worked on an Ayurvedic Manuscript to prepare its critical edition and its comparison with classical Ayurveda texts. The above mentioned scale is used by the author for Ph.D. manuscript work. Now PG students from the department are also using it for their research work.

## 2. Textual criticism for Indian texts – a new approach.

Vasant Kumar M. Bhatt

It is true that today the text of any composition (Poetry or Shastra) transmitted in manuscripts is not fit for publication in its written form. Because there are errors and lacunas scattered in them. All those errors need to be corrected first. Only then the refined text becomes viable for publication. But European scholarship was not satisfied with this. They wanted to find out what the intended and original text of any author must have been? That should be made the subject of research. Hence, they started applying the genealogical tree method of textual criticism and text editing used for the Bible to Sanskrit texts as well. But to what extent will this genealogical tree method of textual criticism prove to be correct and beneficial for Sanskrit texts? - There is a need to reconsider it in independent India. Although the European method works from a comparative and historical point of view, yet it is primarily a negative method. Since it involves the endeavor to reach the oldest of the ancient texts, and if possible, the model ("architype") copy, they consider textual variations and interpolations intolerable. They make it their goal to reconstruct the original text by removing the interpolated part. But looking at the diversity of Indian texts, it seems that we have been continuously incorporating the experimental and empirical new knowledge in the traditional scriptures. Therefore, such new parts are always acceptable, we should avoid removing them by giving them a stigmatizing name like "interpolated parts". Otherwise we will be deprived of the knowledge-sadhana done by our own ancestors. Therefore, in this research paper, the innovative approach of Indian textual criticism will be presented with examples.

Keywords: Sanskrit text, manuscript errors, textual criticism, genealogical tree method, European scholarship, original text, interpolations, Indian textual diversity, empirical knowledge, innovative Indian approach.

**Bio:** Prof. Vasantkumar M. Bhatt, Former Director of the School of Languages, Gujarat University, Ahmedabad, is a student of Sanskrit grammar. His areas of interest are very wide, e.g. Language teaching, Translating Veda-mantras, Natya

Shastra, Sanskrit drama, Editing of manuscripts etc. He has critically edited the Kashmiri recension of the Abhijnana-shakuntalam, A commentary on the same drama, e.g. Sandrabha Dipika of Chandrashekha Chakravarti is also critically edited first time. He has recently authored a book on the Sanskrit manuscript and critical text editing, which is published by the IGNCA, Delhi.

#### 3. New frontiers of Manuscriptology

Dilip V. Apte

One of the main reasons for pursuing the preservation and cataloging of manuscripts Is to make the knowledge considered precious to be brought to the notice of the Researchers. When found useful or relevant in the current knowledge requirement, It needs to be properly interpreted, and to be delivered incorporated in present educational system. This last mile delivery forms an important step in integration of Indian knowledge System in Education. Although the original manuscript may be in Sanskrit or any Indian language, translation is required in Hindi to begin with, and in all major regional languages in order to be available to common citizen. The modern approach would be to use Al for this purpose. Mere digitisation itself is challenging in case of Manuscripts. Scanned copy is a first step. Running OCR on scanned copy is step 2, and editing and vetting of OCR conversion is step 3. Step 1 was pursued With effective cost/benefit by NMM. However, step2 and step3 in case of manuscript is most challenging. In case of Sanskrit, two distinct approaches are possible: 1.Conversion via OCR pure machine-Al approach.; 2. Taking cognisance of the fact that Sanskrit is not (originally) a scripted language, use of it being phonetically scripted may improve actual conversion. A trained reader with voice transcription, man-machine Al, is still viable alternative. This process may appear slow in the computer world, but has several advantages in quality of conversion.

A detailed strategy for research into methodology needs to be worked out to improve the Quality as well as speed of such conversion. This will be discussed in the paper. Perhaps a combination of above two may be needed. 3. Unless the quality of such critical version of the manuscript is vetted, auto translation attempts are meaningless.

**Keywords:** manuscript preservation, cataloging, knowledge integration, translation, digitisation, OCR, artificial intelligence, Sanskrit, educational system, quality vetting.

Bio: Education B.Tech. (IIT Powai), M.S. (SUNY Stony Brook), 52 years of

industrial consulting experience, some in software, some in Engineering. Trustee of NGO: Anandashram Sanstha is a Manuscript Resource Center (MRC), 135+ years in preservation of 17000 + manuscripts, publications of 146 different Sanskrit books in 28 different subjects. Dedicated NGO for propagation of Sanskrit knowledge base.

# 4. Repositioning Scribal Practice: Calligraphic approach in the Study of Early Indian Manuscripts (10th-13th Century CE)

Abhishek Vardhan Singh

Paleographic research in India has traditionally emphasized typological classification, chronological dating, and the analysis of letterforms as graphic designs, often overlooking the physical act of writing. This study urges a methodological shift by interpreting early Indian manuscripts—particularly from the 10th to 13th centuries CE—not just as text carriers but as products of deliberate and disciplined scribal craft. Drawing on the insights of Ahmad Hasan Dani, who underscored the impact of writing instruments on script form; Richard Salomon, who identified ornamental marks as intentional; and R. K. Joshi, who connected classical calligraphy with modern practice, the paper advances a calligraphic approach to manuscript analysis. The research uses a dual method: close visual examination of manuscript samples and experimental reconstruction with historically accurate tools and materials like palm-leaf, birch bark, stylus, and reed pens. This approach reveals how stroke direction, ductus, pen angle, and writing rhythm shape the visual grammar of scripts such as Siddhamātṛkā and Nāgarī. These features are seen as fundamental to the lekhaka paramparā—the pedagogy of writing. Though few manuscripts survive, copperplate charters and stone inscriptions demonstrate balanced compositions, indicating well-trained scribal institutions. These epigraphic sources bridge historical gaps and trace continuity in India's writing tradition. By adopting a calligraphic lens, this study challenges conventional paleography and enriches discussions on script aesthetics, transmission, and pedagogy. It argues that Indian manuscripts represent not simply textual archives but integrated calligraphic traditions where form, meaning, and philosophy coexist—a stance aligned with the Gyan Bharatam mission to reclaim India's intellectual and artistic heritage.

**Keywords:** Calligraphic Script Writing Tradition; Scribal Performance and Pedagogy; Palaeography; Ductus and Stroke Analysis; Experimental Reconstruction Methodology; Indic Manuscripts and Visual Grammar; Knowledge Transmission in the Indian Context.

**Bio:** Abhishek Vardhan Singh is an interdisciplinary researcher and calligraphy educator specializing in History, Paleography, and Art History. As Executive Director of The Calligraphy Foundation, he promotes India's scriptural heritage through teaching, exhibitions, and curriculum development. His research combines material culture, manuscript studies, and traditional penmanship to reinterpret historical Indian writing systems. He has presented nationally and developed pedagogy modules for institutions like IGNCA, National Museum, and Banaras Hindu University. Currently, he focuses on reconstructing calligraphic traditions in early Indian manuscripts to refine paleographic methods.

#### 5. "Atra śodhapatram ekam" – Peculiar case of two Mahābhārata manuscripts (Nos. 565 and 566/1882-83) deposited at the Bhandarkar Oriental Research Institute

Shreenand L. Bapat Co-Author - Amruta Natu, Balkrishna Joshi

There is a unique manuscript of the Mahābhārata in the collection of the Bhandarkar Oriental Research Institute. It is the only complete manuscript of the text in that collection and is divided into two volumes bearing two different accession numbers, 565 and 566 of 1882-83. This Devanāgarī manuscript, based on the Sāradā tradition of the text, is important from the point of view of understanding the process of interpolation and text-transmission. It has many supplementary folios inserted, that are named 'Sodhapatra-s'. These contain long passages copied in the same hand. The scribe seems to have prepared the manuscript during a period of at least three years, from Saka 1616 to 1619, copying from several manuscripts of different Parvans that he procured from others. Though belongs to the Śārarā lineage, the manuscript displays southern traits of writing, meticulously has recorded the places of insertions of the Sodhapatra-s. In this process he has also preserved the terminology used for the purpose. In the present paper, it is intended to shed light on the process of copying in general, and on the importance of this manuscript in particular.

**Keywords:** Mahābhārata manuscript, Bhandarkar Oriental Research Institute, Devanāgarī, Śāradā tradition, interpolation, text transmission, Śodhapatra-s, scribe, Parvans, southern writing traits.

**Bio:** Dr. Shreenand L. Bapat, Registrar and Curator of the Bhandarkar Oriental Research Institute (BORI), has over 24 years of expertise in manuscript conservation, decipherment, and interpretation. He has worked extensively on inscriptions, including those of the Kadamba dynasty, and contributed to the astronomical dating of the *Mahābhārata*. Holding postgraduate degrees in

Sanskrit and Archaeology with a Ph.D. on ancient Indian material culture, he has authored several books and over 60 research papers. As Managing Editor of BORI's *Annals*, he also teaches widely on India's ancient literature, philosophy, science, and institutions.

#### 6. Critical Edition of the works of Dhandapani Swamigal (1839-1898): Prospects and Challenges

Dr. A. SATHISH

Dhandapani Swamigal (1839-1898), born in Thirunelveli, began composing poetry at the age of eight and travelled widely across Tamil Nadu and Sri Lanka, writing extensively at religious sites. He authored grammar books and numerous poetic works, including his autobiography Kurubara Thathuvum and a history of Tamil poets, Pulavar Puranam. A proponent of non-violence, vegetarianism, religious harmony, anti-colonialism, and gender equality, he supported his wife's literary work as well. Though he is said to have written 100,000 songs, only around 48,000 survive today, preserved in madams he and his disciples established. He spent his final years in Thiruvamathur, where he died in 1898. Over the past century, many of Dhandapani Swamigal's followers have published his works based on their local regions. However, significant gaps remain, as numerous original palm leaf manuscripts with location-based verses are still unpublished. Some of the major methodological challenges faced in an attempt to bring out critical edition of his works include problems associated with transcribing the text, spelling and mistaken perception of the text and misreading; difficulties associated with organizing the text using Yapu (Metre) and Sandhi. The author of this paper proposes an alternative methodology framework, customized after closely examining all works of the author, avoiding place name based, deity based, instead focusing on editions that are based on Genre.

**Keywords:** Dhandapani Swamigal, Critical edition, Tamil Grammar, Shaivism, Anti-colonial literature, Gender

**Bio:** Dr.A.Sathish earned his doctorate in Sangam Literature from the University of Madras in 2008. He served as Assistant Professor of Tamil at Government Arts College, Chittur, Kerala, and is currently Associate Professor of Tamil and Manuscriptology at the International Institute of Tamil Studies (IITS), Chennai. He has published 30 research papers on ancient Tamil literature and was key in establishing the Palm Leaf Manuscript Repository at IITS in 2014. He collaborated with Gaumara Madam on bringing out a nine-volume work on

Dhandapani Swamigal's palm leaf manuscripts. Currently, he leads the 'Integrated Tamil Palm Leaf Manuscript Information Network' (ITMIN) project, supported by the State Planning Commission, Government of Tamil Nadu.

# 7. The Dhūrtasamāgama of Jyotirīśvara: A Manuscriptological Exploration of Linguistic Diversity, Nāṭya tradition and Judiciary system

Ripunjay Kumar Thakur

The *Dhūrtasamāgama*, a 14th-century satirical drama by Kaviśekharācārya Jyotirīśvara Ṭhākura, is a landmark work in Sanskrit and Maithili literature and the dramatic arts of Early Medieval Mithila. Written under King Harisimhadeva's patronage, it is the earliest surviving Maithil drama, combining Sanskrit and Prakrit in its main scenes with Maithili songs, reflecting the region's linguistic richness. Preserved in Mithilākṣara, Nevārī, and Nāgarī scripts, the text offers vital insights into manuscript traditions of the period. Published by Dr. Jayakanta Mishra in 1960 using manuscripts from Nepal, the drama depicts agrarian life, social structures, and judicial practices through vivid characters, serving as both a dramatic work and social commentary. This paper explores the manuscript's paleographic traits, historical transmission, and its role in expressing the interplay of linguistic diversity and cultural identity in medieval Mithila. Emphasizing script recognition and textual editing canons, it highlights the importance of scripts in unlocking knowledge from lesser-known manuscripts.

**Keywords:** Dhūrtasamāgama, Jyotirīśvara, Manuscriptology, Paleography, Indian dramaturgy, Nāṭyaśāstra, linguistic diversity, Sanskrit, Maithili literature.

**Bio:** Ripunjay Kumar Thakur is a doctoral researcher in History at the University of Delhi and Project Associate at the Kalakosa Division, IGNCA, Ministry of Culture. He has previously worked with IGNCA's Parliament Art Advisory Committee and Aryabhatta College, and served as a Maithili expert at C-DAC (2021–2022). A published Maithili poet and researcher, he has authored over 15 papers on history and Indology and contributed to the forthcoming Darbhanga district gazetteer. His PhD focuses on the intellectual traditions, material culture, and power dynamics of Early Medieval Mithila (8th–14th century CE).

### 8. Typographic Analysis of Sharada Manuscript: Exploring Script Form and Design

Sumit Raj

The Sharada scripted manuscripts, an important writing from medieval Kashmir and other regions, express rich visual culture, as the unique composition of letters, spacing, visual rhythm, as well as ligatures, offer valuable information regarding past writing practices. This research bridges palaeography and design history, strengthening academic inquiry and cultural heritage preservation. It functions at the crossroads of palaeography, typography, and the examination of cultural heritage. The research utilizes a morphological analytical framework to investigate the visual characteristics of Sharada scripts. The research data sourced from highresolution digitized Sharada manuscripts available at the eGangotri repository. The criteria for selection are predicated on the lucidity of letterforms, the extent of physical deterioration, and the unequivocal recognition of strokes and ligatures. The examination consists of a thorough morphological analysis of each manuscript, recording characteristics such as letterform shape, stroke variation, ligature intricacy, baseline alignment, and spatial configuration. The accuracy of the analysis is assured by employing digital tools like Adobe Illustrator, ImageJ, and Photoshop. The morphological examination uncovers consistent structural patterns in the main letterforms, showcasing significant differences in stroke thickness and the complexity of ligatures throughout the manuscripts. Baseline alignment ranges from stable and straight in well-preserved paper manuscripts to slightly undulating in palm-leaf specimens, suggesting material influence on script execution. Morphological analysis provides an accurate and non-destructive approach to capturing the typographic characteristics of Sharada manuscripts, creating a visual structure that enhances palaeographic studies, facilitates trustworthy authentication, and aids in the preservation of this unique script heritage.

Keywords: Sharada script, Typography, Cultural Heritage, Manuscripts

**Bio:** Sumit Raj is a communication designer currently pursuing a PhD in Design at IIT Kanpur, specializing in semiotics and visual communication. With a keen

interest in identity design, typography, and calligraphy, he explores how signs and symbols shape perceptions and influence human interaction with design. Prior to his doctoral studies, he earned a Bachelor's in Fashion Communication from NIFT Patna and a Master's in Visual Communication from IIT Hyderabad. His research focuses on the intersection of culture, design, and the storytelling power of visual language.

### 9. Mūla, Pāṭha and Vikṛti: The Dynamics of Textual Corruption in Sanskrit Manuscript Studies

Dr. Sāyanto Māhāto

Sanskrit literature has been preserved for hundreds of years mainly through handwritten manuscripts. These manuscripts, written on palm-leaf, birch-bark, or paper, were copied many times by different scribes. In this long process of copying, changes in the text often happened. This paper, Müla, Pātha and Vikrti: The Dynamics of Textual Corruption in Sanskrit Manuscript Studies, looks at the original text (mūla), the copied or transmitted text (patha), and the changes or distortions (vikṛti) that appear during transmission. The study explains different kinds of textual corruption. Some happen by mistake, such as wrong spelling, skipped lines, or sound-based substitutions. Others are done on purpose, for example to suit a particular religious or philosophical belief. Examples are taken from different types of Sanskrit works śāstra (treatises), kāvya (poetry), and purāņa (narrative texts) to show how corruption affects meaning, storytelling, and interpretation. Methods from textual criticism, manuscriptology, and palaeography are used to compare different manuscript copies. The paper also discusses traditional Indian ways of keeping texts accurate, such as oral recitation and checking, memory-based training in pāthaśālās, and careful notes made by scribes in the colophon or in the margins. These are compared with modern critical edition techniques to see where they agree and where they differ. By following the journey from mula to patha to vikṛti, the paper shows that textual corruption is a natural part of how manuscripts survive over time. It suggests that scholars should study Sanskrit texts with an understanding of the history, culture, and material conditions that shaped them. In this way, we can better appreciate both the weaknesses and the strengths of India's manuscript tradition.

**Keywords:** Sanskrit manuscripts, textual corruption, mūla, pātha, vikṛti, textual criticism, manuscriptology, palaeography, oral recitation, critical edition techniques.

**Bio:** Myself Dr. Sayanto Mahato, I am currently working as a Preservation Assistant (Manuscripts) at the National Sanskrit University, Tirupati. I hold an M.A. in

Sanskrit (Sahitya), an M.Phil. in Manuscriptology and Paleography, and a Ph.D. in Sanskrit, all from NSU. My research focuses on critical editions, including Saroddhāriņi (a commentary on Meghadūta) and Kārtavīryodaya Kāvyam. I have also worked with Samskrita Bharati's E-Bhārati Sampat project and served as a Sanskrit Consultant for the Ministry of AYUSH's manuscript transcription project, with expertise in ancient Indian scripts, manuscript preservation, and textual criticism.

### 10. Beyond The Colophon: Cultural and Social Landscapes In Manuscript

Manashi Ghosh

The post colophon statements found in Bengali manuscripts scribal notes that appear after the formal conclusion of a text serve as invaluable historical records that go beyond their immediate literary or religious functions. Often overlooked in manuscript studies, these marginal yet purposeful insertions offer insights into the social, cultural, and economic life of their time. This research explores the depiction of society within post-colophon statements, drawing on a curated selection of Bengali manuscripts dated from the 16th to the 19th centuries. Employing a qualitative content analysis approach, the study integrates paleographic examination with socio-historical interpretation. Selected manuscripts from institutional archives and private collections are analyzed for references to patronage networks, scribal identities, caste affiliations, occupational details, gender roles, religious practices, festivals, natural disasters, and political conditions. Additionally, linguistic nuances, dialectal variations, and orthographic features are examined to contextualize the socio-regional background of the scribes and patrons. The findings reveal that post-colophon notes frequently document the identities and lineages of patrons. hinting at patterns of cultural sponsorship. Mentions of prices, materials, and labor reflect contemporary economic structures, while references to famine, floods, or political instability illuminate the lived experiences of both rural and urban communities. The presence of devotional expressions, moral exhortations, and blessings signifies the intertwining of religious sentiment with everyday life. In some instances, subtle humor, personal laments, or pride in artisanship humanize what might otherwise be seen as a formal medium of manuscript culture. By emphasizing these oftenneglected textual fragments, this study illustrates that post-colophon statements serve as micro-historical windows into pre-modern Bengali society. The research highlights their potential to enhance our understanding of social history, cultural exchange, and the dynamics of literary production in Bengal, urging future scholarship to regard them as primary socio-historical sources rather than mere peripheral scribal ornamentation.

#### Keywords: IKS, Colophon, Manuscript, Society

**Bio:** I am a research scholar with a Ph.D. from JNU's School of Sanskrit and Indic Studies on the ancient Indian army system, alongside an M.Phil. in ancient treaty systems and a PG Diploma in Sanskrit Manuscriptology and Paleography. My academic interests include Indian political thought, military strategies, legal traditions, Sanskrit manuscripts, and temple heritage. I have presented over 35 research papers and participated in numerous workshops on Indian knowledge systems. Beyond research, I actively engage with Bengal's cultural heritage and pursue training in Gaudiya and Kathak classical dance.

# 11. Semiotic Explorations of Marginalia in Indian Manuscripts: The Visual and Textual Interplay in Knowledge Transmission

Shivam Maurya Co-Author : Manish Arora, Shristi Prajapati, Monali Singh, Himesh Baboolal

Indian manuscript traditions are rich not only in textual content but also in the visual interplay between script, ornamentation, and marginalia. These marginal notes-ranging from glosses and corrections to symbolic markers often operate as parallel narratives, extending meaning beyond the primary text. The present study focuses on the Jain Kalpa-Sutra manuscript (c. 1404 CE), noted for its intricate layout and marginal commentary, as discussed by Dalvi and Naik's Study of Jain Manuscripts: Layout Analysis, 2016. In this manuscript, the primary Prakrit text is presented in dual-column format, framed by margins hosting miniature annotations in reduced script, with symbolic signs such as kākapāda (crow's-foot) guiding the reader's attention. This paper explores the semiotic dimensions of such marginalia how they act as "visual signs" in Charles Sanders Peirce's terms, serving both denotative and connotative functions. Drawing on observations from the Sanskrit Reading Room's essay Living on the Edge: Marginalia in Sanskrit Manuscripts (2017), the analysis situates marginalia as intentional design features rather than incidental additions, contributing to both interpretive clarity and visual rhythm. The study investigates how scribal interventions in margins encode layers of commentary, cross-references, and reader guidance, making them integral to the knowledge-transmission process. Methodologically, it employs visual semiotic analysis combined with layout mapping, examining spatial relationships, symbol usage, and script variation. This approach reveals that marginalia in Indian manuscripts are not merely scholarly aids but dynamic interfaces sites where design. meaning, and reader engagement converge in a uniquely Indian visualtextual tradition.

Keywords: Indian Manuscripts, Marginalia, Visual Semiotics, Tradition

**Bio:** Shivam Maurya is a Ph.D. Scholar in the Department of Applied Arts, Faculty of Visual Arts, Banaras Hindu University, holding an MFA (BHU, 2022) and a BFA

(University of Allahabad, 2020). His research integrates visual arts, design, Indian mythology in graphic novels & semiotics. Prof. Manish Arora serves as Head of the Department, guiding academic and creative pursuits. Assistant Professor Shristi Prajapati contributes actively to teaching and research in Applied Arts. Research scholars Monali Singh and Himesh Baboolal, from the same department, engage in innovative and scholarly projects, collectively advancing creativity, pedagogy, and research within the Faculty of Visual Arts, BHU.

#### 12. Textual Variants and Scribal Interventions: Challenges in Critical Editing of Sanskrit Manuscripts

Dr. Naba Kumar Das

A critical edition of a manuscript is a detailed and scholarly edition, based on three or more manuscripts, aimed at understanding the author's intended meaning as accurately as possible, using established methodology. Research on Sanskrit manuscripts faces several basic problems. It is often difficult to decide which manuscript to select for study, especially when many copies exist with small differences. Moreover, there are many manuscripts that discuss worldy matter i.e. metallurgy, medicine, Jurisprudence etc other than traditional veda, Vedanga, Sahitya and Darshana. Many researchers do not receive proper training in palaeography, philology, and related skills. Access to manuscripts is limited because they are scattered in different libraries and private collections. Preservation is a serious issue, as many manuscripts are damaged by age, climate, or poor storage. Scholars and institutions need to understand the real importance of carefully deciphering and studying these materials. Finally, the work requires collaboration with experts from other fields such as information technology, conservation science, or even medical imaging to improve analysis and preservation.

**Keywords:** critical edition, Sanskrit manuscripts, manuscript selection, metallurgy, medicine, jurisprudence, palaeography, preservation, interdisciplinary collaboration, access to manuscripts.

**Bio:** Dr. Naba Kumar Das, M.A. in Sanskrit with specialization in Vedic studies, obtained his Ph.D. for preparing a critical edition of the prayoga text of Cāturmāsya Sacrifice, authored by Śeṣācārya. He is Assistant Professor and PG Coordinator, Department of Sanskrit, Sitananda College, affiliated to Vidyasagar University and also Guest Faculty at Rabindra Bharati University, Kolkata. Dr. Das has edited and published over ten research papers/ books and has presented papers and delivered lectures at several national seminars. His academic interests primarily include Vedic studies and Manuscriptology.

### 13. Paleographic perspectives on copper plates and palm leaf manuscripts: A comparative study

S. Shanu

Since the dawn of time, man has expressed his thoughts through sign anguage, then through drawings on rocks or trees, and then through spoken vords. Over time, these words took on a linear form. The original script of the Tamil tradition was called Brahmi or Tamil Brahmi. Later, this script changed over time. Even today, the main reason why the Tamil script has a continuous connection with Tamil is the usage of the cursive continuous writing method. The history of a language is best determined by the changing characters in its vritings over time. Although writing materials varied in terms of the security and longevity of the written message, government messages were recorded as Hocuments on copper plates as inscriptions, and grammar, literature, medicine, and astrology were recorded on palm leaves as manuscripts. Although Tamil script underwent many changes from its origin to the 15th century AD, there were no significant changes in Tamil script after the 15th century AD. There were two different types of scripts that existed during the same period, namely, The practice of writing on copperplates and the practice of writing on palm eaVBEAS. Although manuscripts are in two different states, as they are easily Hestroyed if not properly preserved, and as they are made of metal, they are Indestructible as solid documents. Thus, this research is based on the hypothesis of examining the similarities and differences between the characters in them, whether the scripts that may have been written in them are similar.

**Keywords:** Tamil script, Brahmi, Tamil Brahmi, cursive writing, copper plate inscriptions, palm leaf manuscripts, script evolution, language history, preservation, character comparison.

**Bio:** Attended a five days training program on palm leaf manuscripts organized by the Tamil department of Thiagarajar college, Madurai. Completed Ug diploma course on Epigraphy and Heritage Management at the Central University of Tamilnadu, Thiruvarur. elaborate more

### 14. Unlocking the Past: Paleography, Codicology, and the Future of Script Training

Sridharini G

Paleography and codicology are vital disciplines for studying, preserving, and interpreting humanity's written heritage. Paleography analyzes ancient scripts, tracing their evolution and identifying regional and chronological styles. Codicology, the "archaeology of the book," studies manuscripts as physical objects, exploring their materials, construction, and decoration. Together, they provide insights into the social and cultural contexts of textual production, especially in South Asia, where palm-leaf, birch-bark, and early paper manuscripts preserve rich knowledge. This presentation highlights how script analysis aids dating, restoration, and understanding scribal practices, while codicology reveals manuscript production networks and usage. It also emphasizes script training programs—ranging from traditional learning to digital workshops—that equip researchers to engage with manuscripts using both physical and digital tools like multispectral imaging. Integrating paleography, codicology, and training is essential for preserving fragile documentary heritage and ensuring future scholarship benefits from these ancient records.

**Keywords:** paleography, codicology, manuscript preservation, script evolution, South Asian manuscripts, dating techniques, scribal practices, manuscript production, training programs, digital imaging.

### 15. Son-Bhandar Caves: Epigraphical study and Palaeographic Observations

Debopom Ghosh

The Son Bhandar rock cut caves are one of the most significant heritage sites of Rajgir located in the Vaibhara hills of Rajgir and is possibly the only Jaina cave site in eastern India .Based on the dedicatory inscription found in the largest cave which uses Gupta script of the 4th century CE, the caves are generally dated to the 3rd or 4th century CE, although some authors have suggested the caves could actually go back to the period of the Maurya Empire, possibly as early as 3rd century BC. SK Saraswati and S.P. Gupta dated it to Mauryan and pre-Mauryan periods due to its certain attributes. This complex consists of two parallel caves having distinctive imagery pertaining to both Buddhism and Jainism, and multiple inscriptions. The caves also feature the distinct polished stone interior, resembling the Mauryan style. Based on palaeographic investigations of the various inscriptions in Brahmi (Gupta Brahmi in particular), Tibetan and Shell-and-Conch (Shankhalipi) scripts, the occupational phases of the caves can be differentiated. An epigraphical and palaeographic analysis of the inscriptions at Sonbhandar has been attempted through this study.

**Keywords:** Sonbhandar, Rajgir, Buddhism, Jainism, Epigraphy, Palaeography, Brahmi, Siddhamatrika

**Bio:** I, Debopom Ghosh, am a history graduate from Ramakrishna Mission Residential College, University of Calcutta, and currently pursuing a Master's in Archaeology at Nalanda University, Rajgir. My research interests include human evolution, prehistoric archaeology, art and iconography, epigraphy, and palaeography. Passionate about exploring ancient cultures and civilizations, I aim to connect the past with our collective identity. Beyond academics, I am trained in tabla, keyboard, and Hindustani classical music.

### 16. The Art and Craft of Manuscript Making: A Critical Study on the Assamese Indigenous Manuscript Heritage

Dr. Sangeeta Gogoi

This paper explores the rich and multifaceted tradition of manuscript making in Assam, delving into its artistic, cultural, and historical dimensions. Titled *The Art* and Craft of Manuscript Making: A Critical Study on the Assamese Manuscript Heritage, the study examines the indigenous practices involved in the creation of manuscripts—from the preparation of writing materials such as Sanchipat (agar bark) and *Tulapat* (handmade paper), to the use of natural inks, calligraphy, and intricate illustrations. It investigates the socio-religious and literary contexts that shaped this manuscript culture, highlighting the roles played by Ahom Royal Scribes, Vaisnavite Gurus of Satras, Tai Mo Lungs, scholars, and artisans in preserving and disseminating knowledge. By analyzing select manuscripts, including their aesthetic features, script styles, and thematic content, the paper underscores the significance of Assamese manuscripts as both artistic artifacts and repositories of regional identity. The study also addresses the challenges of conservation and the urgent need for digitization and scholarly engagement to safeguard this endangered heritage. Through an interdisciplinary lens, this work contributes to a deeper understanding of Assam's manuscript legacy within the broader framework of South Asian textual and visual traditions.

Keywords: Manuscript, Ahom Royal Scribe, Mo Lung, Tai Painting, Medieval Assam, Assamese.

### 17. Importance of Paleography in Transcripting Tamil Palm leaf Manuscripts - Reflections from Field Experience

Kalaimani R. Co-Author- Matheshvaran S, Meena R, Rajendra Kumar A, Selvarajan S, Muthukumar N J

Tamil palm-leaf manuscripts form a vital corpus of India's intellectual heritage, encapsulating centuries of accumulated wisdom in literature, philosophy and traditional medical systems. Among these, the Siddha system of medicine is richly documented in palm-leaf manuscripts that detail Diagnostic principles, Materia medica, Alchemical methodologies and Treatment regimens. However, access to this knowledge is often limited, due to various challenges in reading and interpreting the manuscripts, which can be overcome by adopting paleographic trainings. This paper is based on the author's firsthand experience in transcripting the Tamil palm leaf manuscripts, especially Siddha manuscripts. It revealed, how to address paleographic complexities such as, variations in script styles, inconsistent orthography, broken leaves and scribal abbreviations. Demystifying these complexities, plays a significant role in bringing out accurate interpretation. Expertise in paleography will pay better way to reduce mistakes and also will improve the proper understanding of manuscripts. The application of foundational paleographic methods including character differentiation, stroke analysis and cross-reference will improve the transcription fidelity. The experience gained by the authors are very useful in the role of paleography in transcripting the Siddha medical literatures. This paper advocates for structured paleography training as part of manuscript research, especially with the traditional medicine and the related versions. Collaborations between manuscript conservators, language experts and Siddha scholars are vital to ensure the preservation, interpretation and dissemination of this invaluable traditional heritage worldwide.

Keywords: Palm-leaf manuscripts, Siddha literature, Paleography, Transcription

#### 18. A Conceptual Framework for Siddha Manuscript Research and Its Integration into Educational Curriculum

R. Subhashri Co-Authors : A. Sherin Nisha, A. Rajendra Kumar, R. Meena, V. Aarthi, S. Selvarajan, N.J. Muthukumar

The Siddha System of Medicine, one of India's oldest traditions, has a rich manuscript heritage on palm-leaf and paper detailing diseases, diagnostics, therapies, and holistic health rooted in sustainable local practices. However, inconsistent transcription, biased translation, and fragmented publication have hindered systematic research and preservation. This study proposes a conceptual framework for Siddha manuscript research, integrating codicology, paleography, philology, and digital humanities. The process includes systematic manuscript collection, codicological and paleographic analysis, standardized cataloguing, and a hybrid transcription model combining expert manual decoding with AI-assisted OCR for classical Tamil. Annotation, critical editing, and unbiased translation ensure preservation of the holistic narrative. Digital dissemination uses OCR, natural language processing, and semantic indexing for searchable annotated outputs on web platforms. Projects like the Cultural Emotion Analyzer and Expert System for Siddha demonstrate the effective use of technology for authenticity, accessibility, and preservation. This rigorous framework supports sustainable scholarly revitalization of Siddha literature.

**Keywords:** Siddha System of Medicine, Siddha medical manuscripts, methodological framework, conceptual studies, deep learning in humanities, Tamil manuscripts.

# 19. An Exploratory study on manuscript titled "Dēhattilē Marma Viparam" and its comparison with "Pratyēka Marma Nirdēśa" Chapter of Suśrutha Samhitā Śārīra Sthāna

Dr Neenu Jessy Sabu Co-Authors : Dr P.P Kirathamoorthy, Dr Bindu K K

Manuscripts are cultural and intellectual treasures that preserve the deep-rooted traditions of India's knowledge systems. In the realm of Ayurveda, several unpublished manuscripts remain unexplored, especially those representing regional traditions. The manuscript titled "Dēhattilē Marma Viparam", housed in the Department of Samhita, Sanskrit, and Siddhanta, VPSV Ayurveda College, Kottakkal, is a significant yet unstudied document reflecting the indigenous understanding of Marma—vital points in the human body. The present study was undertaken with the aim of enriching the Ayurvedic knowledge base by critically examining and translating this manuscript. The objectives were: (1) to perform a lower criticism of the manuscript, (2) to translate its content into English, and (3) to compare its descriptions of Marma with those in the "Pratyēka Marma Nirdēśa" chapter of the Suśruta Samhitā Śārīra Sthāna. The manuscript was transcribed verbatim, and its content was critically analyzed. Drug references were identified with the help of Ayurvedic pharmacognosy experts, and the manuscript's context and probable period were examined using internal literary evidence and expert consultation. The study revealed unique Marma descriptions absent in classical texts, therapeutic approaches to Marma injuries using herbal formulations, and several previously undocumented medicinal preparations.

This work underscores the value of regional manuscripts in expanding classical Ayurvedic thought and demonstrates the potential of such texts to inspire future clinical research and therapeutic innovation in Marma Chikitsa.

**Keywords:** Maṛma, Ayurveda Manuscripts, Regional Tradition, Suśṛuta Saṃhitā, Dēhattilē Maṛma Viparaṃ, Translation, Drug Formulations

## 20. Reconstructing a small portion of Ānandajñāna;s Tarkasaṅgraha: A case of codex unicus

Dr. Satyan Sharma

Tarkasaṅgraha, authored by Ānandajñāna, is a text of the Advaita Vedānta tradition dating between the 12th and 13th centuries CE. It contains a detailed refutation of the Vaiśeṣika and Nyāya schools of Indian philosophy. The text survives in a single manuscript, housed at Shri Hemachandracharya Jain Gyanmandir, Vadi Parshvanath Bhandar, Patan, Gujarat. It was first published in 1917 by Mr. T. M. Tripathi. The manuscript's scribe left many blanks on folio 19, presenting a challenge; errors include hidden missing portions, visible missing portions, and incorrect spellings. Tripathi attempted a reconstruction of this section, and this paper presents another reconstruction effort. The physical manuscript is reportedly missing, so only a digital copy is available for study. Additionally, two digitized manuscripts of Ānandajñāna's commentary on Ānandānubhava's Padārthatattvanirṇaya have been referenced. Other relevant texts, such as Citsukha's Tattvapradīpikā with Pratyaksvarūpa's commentary, have also been consulted.

**Keywords:** Reconstruction, Codex Unicus, Ānandajñāna, Tarkasaṅgraha, Advaita Vedānta

**Bio:** Dr. Satyan Sharma holds a PhD in Sanskrit, from the Panjab University, Chandigarh. His PhD thesis is based on a rare Sanskrit text "Tarkasangraha" authored by Anandajñāna. He was awarded by AIOC (All India Oriental Conference) in the year 2020 with the "Dr. V. G. Rahurkar Prize for Vedanta". He has been a volunteer with the Chandigarh based Panjab Digital Library, an NGO involved in digitisation of manuscripts and books. He has also served as a Guest Faculty at the department of Sanskrit, Panjab University, Chandigarh from the year 2021 to the beginning of 2024.

### 21. FOLIOS OF 'SUPREME PERFECT ENLIGHTENMENT': SOME THOUGHTS ON THE AVATAMSAKASŪTRA MANUSCRIPTS FROM TABO MONASTERY IN LAHAUL-SPITI, HIMACHAL PRADESH

Laxman S. Thakur

The western Himalayan Buddhist monasteries have preserved numerous heritage Buddhist manuscripts in the Tibetan language dating back to the 10th and 11th centuries. This period marks the bstan-pa phyi-dar (the second diffusion of Buddhism in Tibet), during which many Buddhist sūtras and śāstras were translated into Tibetan. Tabo Monastery, located in the Lahaul-Spiti district of Himachal Pradesh, houses a large collection of handwritten Tibetan manuscripts. This paper analyzes eleven manuscripts of the Avatamsakasūtra, including the Gandavyūhasūtra, the final section of the Avatamsakasūtra corpus. The Gaṇḍavyūhasūtra is adorably illustrated on the walls of the gTsug-lag-khang, the main temple founded in AD 996 at Tabo. The narrative murals and sūtra extracts explain the complex concept of dharmadhātu (the Realm of Reality) to both laypersons and the Buddhist community, demonstrating the text's popularity among western Himalayan Buddhists. The paper discusses why and how this text gained such significance and attempts to identify corresponding chapters and content in the Peking edition of the bKa'-'gyur and the Sanskrit texts of the Gandavyūhasūtra (Suzuki and Idzumi, 1949; P. L. Vaidya, 1960).

Keywords: Anuttara Samyaka Sambodhi, bstan-pa phyi-dar, dharmadhātu, Kalyanamitras, pothi (pe-cha), Tabo monastery, vimokṣa.

Bio: Laxman S. Thakur, former Dr. Yashwant Singh Parmar Chair Professor at Himachal Pradesh University, Shimla, is a leading scholar of the western Himalayas. Author of works such as *The Architectural Heritage of Himachal Pradesh and Buddhism in the Western Himalaya*, he has published over 70 research papers in reputed international journals. He received the Asia Award (2001) and the Best Teacher Award from Himachal Pradesh University (2015). He has also served

as Sectional President at the Indian History Congress and the Punjab History Conference, and held leadership roles as Chairperson of the History Department and Dean of Social Sciences.

# 22. A Comprehensive Case Study on the Jain Manuscripts of Sudarshan Charitam of Mumukshu Vidyanandi

Dr. Shruti Jain

"Literature is said to be the mirror of society." Literary works do not merely reflect worldly thoughts and behaviour but also play a unique role in expressing and inspiring religious, philosophical, and spiritual elevation. In the Jain tradition, a vast body of literature has been composed that highlights spiritual advancement and has the potential to elevate an ordinary person to the stature of a great soul. In this tradition, the scholar Mumukshu Vidyanandi composed a work titled Sudarshan Charitam, which portrays the spiritual progress of a merchant named Sudarshan. This case study is based on the manuscript of that text. The manuscript not only contains religious teachings but also presents the moral, philosophical, and social dimensions of Jain literature. A close analysis and comparison with traditional Jain texts clearly reveal that this manuscript is not merely a life story, but rather a profound scripture carrying deep religious messages. This study is based on three manuscripts of the text, all written in Sanskrit using the Devanagari script on paper. It includes linguistic, poetic, religious, and philosophical analyses, making it a valuable treasure from the perspective of medieval Bhattaraka-era Jain biographical poetry and Jain Shravaka culture. This case study will also mention the historical period of the manuscript, its script, and geographical context. I have conducted a textual-critical study of this as part of my research work, which marks my first effort toward its preservation and further I want to publish this work too with its Hindi version.

Keywords: Sudarshan, Jain, Manuscript, Vidyanandi, religious, Shravaka.

Bio: Dr. Shruti Jain, Assistant Professor at Central Sanskrit University, Jaipur, specializes in Jain philosophy and religion with over four years of teaching experience. She completed her PG in Jain Darshan from Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeeth, New Delhi, and cleared NET/JRF in Buddhist, Jaina, Gandhian, and Peace Studies. Her research focused on the critical edition

of the Jain manuscript सुदर्शनचरितम्. Recipient of the "Dr. Bimla Bhandari Jain Ratna Shodh Samman-2023" and several academic awards, she has guided PG research, published 10+ articles, and participated in 30+ national and international seminars.

# 23. The Art of Book Making: A Study of some selected Arabic and Persian Manuscripts from the collection of the National Museum.

Khatibur Rahman

The Art of Book Making: A Study of Selected Arabic and Persian Manuscripts from the Collection of the National Museum Manuscripts are a celebrated heritage, blending bookmaking and visual art with historic, cultural, literary, economic, administrative, and religious significance throughout world history. Over time and across regions, manuscripts evolved into diverse styles, scripts, hands, and miniature art schools. The National Museum's manuscript collection is among the most valuable in India. Created on a variety of materials such as birch bark, parchment, palm leaf, paper, wood, metals, and cloth, these manuscripts especially the dated ones—feature rich illuminations and intricate illustrations. They represent different schools of miniature painting, with many rare or sole surviving copies bearing royal seals and signatures from emperors and imperial libraries. This paper focuses on Arabic and Persian manuscripts showcasing intricate penmanship in calligraphic styles like Kufic, Naskh, Nasta'līq, Bihari, and others. The visual illustrations reflect the splendid court arts of Delhi, Agra, Lucknow, Lahore, and Rampur under Mughal and provincial patronage, as well as those of the Deccan regions like Bījāpūr, Golconda, and Hyderabad under Nizam patronage. The collection also includes masterpieces from renowned global art centers such as Bukhara, Samarqand, Herat, Shiraz, Tabrez, and Isfahan. These manuscripts testify to the devoted passion and avid patronage of their creators. The paper further examines these manuscripts from the perspectives of codicology and calligraphy.

**Keywords:** Visual Arts, Miniature School, Calligraphic Scripts, Colophon, Imperial Libraries, Seals of Emperors, Patronage.

Bio: Khatibur Rahman is Deputy Curator and Head of the Manuscripts Department at the National Museum, New Delhi. He specializes in Arabic language and literature, studied at Jamia Millia Islamia and JNU, and has extensive experience handling rare Indian manuscripts. He teaches medieval

Indian inscriptions at the Indian Institute of Heritage and has been part of expert committees with the Archaeological Survey of India and other institutions. As a curator and educator, he has delivered lectures and courses on manuscriptology, calligraphy, and art history.

### 24. A CASE STUDY OF TIBETAN MANUSCRIPTS

Chandran soban dinesh Co-Author: Anuj Sharma

This conservation report presents a comprehensive treatment of rare Tibetan manuscripts inscribed on thick blue pigmented board, with inscriptions rendered in silvery white/grey, copper brown/orange and golden yellow and selected folios adorned with miniature paintings. Initial preventive and curatorial measures included dry-surface cleaning using soft brushes, followed by graded wet cleaning with ethanol water mixtures ranging from absolute ethanol to 90:10 and 70:30 ratios to remove accretions while minimizing solubility of sensitive media. Metallic pigments were non destructively examined using portable X-ray fluorescence (XRF) spectroscopy, revealing grey, orange, and gold hues with a major elemental composition of gold (Au), Aluminium (Al), phosphorus (P), magnesium (Mg), copper (Cu), and iron (Fe). These results are consistent with metallic gold alloys or shell gold mixed with other metal-based pigments; copper and iron signals could indicate admixture or substrate contamination typical of historic scrolls and oriented pigment layers Tears and losses were treated by mending with ultrafine Japanese tissue adhered using carboxy methy lcellulose (CMC) paste, while larger voids received fills of mashed handmade paper fibers combined with starch paste. Torn edges were sealed and toned using hand made paper to harmonize with original board color. Because the manuscripts bear text and imagery on both recto and verso, they were housed in double window mounts: archival grade mount boards featuring corner pocket supports made from handmade paper affixed to hold each folio securely without adhesives contacting the media.

**Keywords:** Tibetan manuscripts, blue pigmented board, metallic pigments, X-ray fluorescence spectroscopy, gold alloys, conservation treatment, Japanese tissue mending, carboxymethylcellulose paste, archival mounting, miniature paintings.

### 25. Sage Agasthiya's Tamil Manuscripts and its Contemporary Relevance

Dr. O. Muthiah Co-Author : Dr.K.Venkatesan

Sage Agasthiya occupies a seminal position in the Siddha tradition of Tamil Nadu and in the broader history of Indian knowledge systems. Revered as the foremost among the eighteen Siddhars, Agasthiya is regarded as the Guru to the other seventeen Siddhars and as a unifying figure in the cultural and spiritual heritage of India. Settling in the Pothigai Hills of southern Tamil Nadu, his contributions extend across medicine, astrology, alchemy, linguistics, yoga, and ethics. Tradition holds that his life and work spanned the four Yugas—Krita, Treta, Dvapara, and Kali—enriching Tamil intellectual heritage through both mythic narratives and practical treatises. Manuscript evidence attributed to Agasthiya is vast. Scholarly records identify over 300 texts and more than 60 thematic threads, with additional references noting 40 texts and 40 threads under various classifications. Notable works include the Yoga Wisdom Shastram (10 volumes), Agasthiyar Gnanam (51 verses), and a corpus of 15,000 verses preserved from palm-leaf manuscripts and later published in printed form. These works encompass around fifty subject areas, including medicine, magic, astrology, alchemy, education, love, and spiritual wisdom. At our institute, over 100 palm-leaf manuscripts have been collected and digitized, including several rare Siddha medical texts attributed to Agasthiya. The digital preservation of these materials offers new opportunities for scholarly engagement, linguistic study, and public accessibility. This research examines the thematic scope, medical knowledge, and philosophical depth of Agasthiya's manuscripts, situating them within both historical context and modern application.

By exploring these manuscripts, the paper highlights Agasthiya's enduring relevance—demonstrating how ancient Siddha wisdom can inform contemporary health practices, cultural studies, and holistic education. The study argues that preserving and studying such manuscripts not only safeguards heritage but also revitalizes traditional knowledge systems for future generations.

Keywords: Sage Agasthiya, Pothigai Hill, Siddhar Tradition, Siddha Medicine,

Palm Leaf Manuscripts, IKS Contributions.

**Bio:** Prof. O. Muthiah is Senior Professor of the School of Tamil, Indian Languages & Rural Arts at the Gandhigram Rural Institute (Deemed to be University), Dindigul, Tamil Nadu. A distinguished scholar in Tamil studies, he has made notable contributions to research on indigenous communities and their oral and written traditions. His work focuses on the digital documentation and preservation of manuscripts, integrating traditional knowledge systems with modern technology for academic use. As a member of the Academic Council, he actively shapes curriculum innovation, promotes cultural heritage education, and advances interdisciplinary approaches in rural and indigenous knowledge research.

#### 26. The Manuscripts of the Maitrāyaṇī Saṃhitā and their distribution

Nirmala Ravindra Kulkarni

The Maitrayani Samhita is one of the branches of the Krsna Yajurveda. It is partially translated into German (2009). Though Schroder (1923) and Satavalekar (1942) have brought out editions of this Samhitä, still it awaits critical edition. Dharmadhikari (2008) and at present Amano are the scholars who have extensively written on various textual aspects of this branch. As an initial step towards more study of the text, the present paper intends to survey the manuscripts of the Maiträyani Samhitā deposited in various Indian libraries. It may also take into consideration the manuscripts utilized by Schroder. It further analyses the locations where these mss are written.

Amano, Kyoko. 2009. Maitrāyani Samhitā I-II: Übersetzung der Prosapartien mit Kommentar zur Lexik und Syntax der älteren vedischen Prosa. Bremen: Hempen Verlag Dharmadhikari TT. N. 2008. Maitrayani Samhita: Its Ritual and Language, Pune: Vaidik Samshodhan Mandal Satavalekar, S. D. 1942. Yajurvediya Maitrāyani Samhitā. Aundh: Svadhyay Mandal.

Schroder, L. 1923. Maitrāyani Samhitā die Samhitā der Maiträyani-śākhā Vols 1-4. Leipzig: Otto Harazowitz.

**Keywords**: Maitrayani Samhita, Krsna Yajurveda, manuscript survey, critical edition, Schroder, Satavalekar, Dharmadhikari, Amano, Indian libraries, manuscript locations.

#### 27. Research Methodology in Manuscript Studies: Approaches, Challenges, and Perspectives

Kinjal Shah

Manuscript studies is the study of old hand-written texts that help us understand the history, culture, and ideas of the past. To study them well, we need proper methods that use both traditional skills and modern technology. This paper explains the main steps in manuscript research in simple language. The process starts with finding and recording the details of a manuscript, such as the material (palm leaf, paper, parchment), style of writing, type of ink, page numbering, and binding. Next, researchers read and copy the text, compare it with other copies, and prepare the most correct version possible. Modern tools like special light photography, dating methods, and ink testing help in reading damaged or faded writing and in knowing the manuscript's age. The paper also discusses common problems like missing pages, changes in the text over time, and how to protect the original while allowing scholars to read it. Examples show that a step-by-step method makes research more accurate and helps preserve manuscripts for the future. In the end, the paper shows that manuscript research is a mix of careful observation, historical study, and scientific support. It requires patience, skill, and respect for the old texts so they can continue to share their knowledge.

**Keywords :** Manuscript research, preservation, restoration, script study, cultural heritage, old writings.

**Bio :** Dr. Kinjal Shah is an Assistant Professor in the Department of Prakrit & Pali at Gujarat University, Ahmedabad. Her research focuses on Prakrit language and literature, Jain philosophy, and manuscriptology, with an emphasis on India's intellectual and cultural traditions. She has presented papers at national and international forums and actively contributes to discussions on the relevance of Prakrit in interdisciplinary studies. Passionate about teaching, she blends traditional and modern methods to engage students with the richness of classical languages.

#### 28. Methodological Approaches to Editing a Single Sanskrit Manuscript

Dr. Lisha CR

Editing a Sanskrit text from a single surviving manuscript is a highly specialized task demanding rigorous scholarly discipline. In the absence of parallel witnesses for cross-comparison, editors must carefully balance codicological analysis, philological expertise, and contextual interpretation. This paper proposes a systematic workflow for such projects, beginning with the physical examination of the manuscript—including material type, script, folio condition, and scribal patterns—followed by precise transcription using high-resolution imaging and palaeographic tools. Orthographic normalization is applied judiciously, aiming to preserve the historical features of the text while enhancing readability. In cases of textual corruption or ambiguity, conjectural emendations are guided by traditional Sanskrit knowledge systems, such as vyākaraņa (grammar), alankāra (poetics), and nyāya (logic). Paratextual elements like colophons, marginalia, and invocation verses are considered essential to reconstructing the text's provenance and cultural context. The study emphasizes transparent documentation of all editorial decisions through a clearly designed critical apparatus. This methodological model is intended to be replicable for other single-manuscript projects, ensuring scholarly precision and preserving India's rich manuscript heritage for future generations.

**Keywords:** Single-manuscript editing, Sanskrit philology, codicology, critical apparatus, digital manuscript tools

**Bio :** Lt. Dr. Lisha C. R. is an Assistant Professor in the Department of Sanskrit General at Sree Sankaracharya University of Sanskrit, Kalady, where she has been serving since 2017. An alumna of the same institution, she holds a B.A. and M.A. in Sanskrit General, along with an M.Phil. and Ph.D. from the Centre for Manuscriptology. She also completed a B.Ed. from the University of Calicut and has qualified the UGC-NET, SET, and C-TET examinations. Her primary areas of academic interest include Sanskrit literature, manuscriptology, and Indian literary theories. She has published extensively in Sanskrit, Malayalam, and English. contributing research articles to reputed journals and edited volumes. She is the editor of the book Modern Sanskrit Writings and Indian Literary Theories, which showcases her commitment to advancing contemporary Sanskrit scholarship.

#### 29. युद्धादर्श ; पाण्डुलिपि सम्पादन में अनुभूत समस्याएँ

Dr. Arun Kumar Co-Author : Mr. Madhusudan

युद्धादर्श: ; पाण्डुलिपि सम्पादन में अनुभूत समस्याएँ युद्धादर्श नामक पाण्डुलिपि की दो प्रतियों (क. मातृका और ख. मातृका) का विवरण, उनके लिपिविज्ञान से सम्बन्धित अध्ययन, तथा पुष्पिका एवं उत्तरपुष्पिका के आधार पर शोधपरक दृष्टिकोण यहाँ प्रस्तुत किया गया है। 'युद्धादुर्श' नामक प्रथम पाण्डुलिपि (क. मातृका) अखिल-भारतीय-संस्कृत-परिषद्, लखनऊ, उत्तरप्रदेश में सुरक्षित है तथा इसकी डिजिटल प्रति राष्ट्रीय पाण्डुलिपि मिशन, नई दिल्ली (NMM) में उपलब्ध है । इसका लेखन स्पष्ट है और लिपि देवनागरी है । इसमें कुल १३ पत्नक हैं, प्रत्येक पृष्ठ पर ८ पंक्तियाँ लिखी गई है। लेखन से स्पष्ट है कि इस मातृका के लेखन में लिपिकर ने अन्य पाण्डुलिपि को आधार माना है । उत्तरपुष्पिका के आधार पर मातृका लेखन काल संवत् १९०९ (१८५२ ई.) की है। द्वितीय पाण्डुलिपि (ख. मातुका) कलानिधि सन्दर्भ पुस्तकालय, इन्दिरा गान्धी राष्ट्रीय कला केन्द्र में संरक्षित है । यह मुलतः सिन्धिया-प्राच्यविद्या-प्रतिष्ठान्, विक्रम विश्वविद्यालय्, उज्जैन्, मध्यप्रदेश की है । इसका लेखन स्पष्ट है और लिपि देवनागरी है । इसमें कुल ९ पत्नक हैं, प्रत्येक पृष्ठ पर १० पंक्तियाँ लिखी गई हैं। प्रस्तुत कृति के मङ्गलाचरण एवं अन्तिम श्लोक में पुष्पिका को स्पष्ट किया गया है । मातृका के लिपिकर ने अपना परिचय आरम्भ में ही व्यक्त किया है । यथा-युद्धादर्शस्येदं पुस्तकम्। लिखितमिदं पुस्तकण्डेरापुरग्रामवासिना महादेवतिपातिना स्वपठनार्थम् ॥ पत्रसङ्ख्या ९॥। प्रस्तुत पाण्डुलिपि को देवनागरी लिपि में लिखा गया है तथापि मातृका के प्रतिलेखन में लिपिकर की विशेषशैली, प्रान्तीय भाषा का प्रभाव, कालक्रम में प्रचलित अक्षर का स्वरूप और उसका आधुनिक मानक अक्षरों से भेद इत्यादि अनेक कारणों से कई स्थानों पर सन्देह भी स्वाभाविक है । कुछ संयुक्ताक्षर एवं सन्देहजनक पाठ निम्नप्रकार के हैं- मात्त्रार्णखेटा, भौमेनयोर्बुधेन्द्रोश्चेद, सहिताहितष्टा, कर्क्षाण्यर्क, ग्रहर्सेतघटी, रविभाद्दिनभं गजाहतं, स्फुटेतिः, खरामैस्तष्टा, 'खण्डिः शनीज्येन बुधेन भेदः । प्रकरणसम्मत पाठ निर्द्धारण में उपर्युक्त अक्षरज्ञान के साथ-साथ ज्यौतिष-आयुर्वेदादि विषयों के अनुसार प्रयुक्त पारिभाषिक शब्द, छन्दों का ज्ञान, भूतसंख्याओं का ज्ञान, सन्धि एवं समास का ज्ञान इत्यादि भी प्रतिलेखन में ध्यातव्य है।

स्वरशास्त्र से सम्बन्धित इस अनुपम ग्रन्थ में स्वरशास्त्र के महत्त्वपूर्ण ग्रन्थों जैसे नरपतिजयचर्या तथा समरसार इत्यादि के अनेक विषयों को साररूप में एकसाथ प्रस्तुत किया गया है ।

Keywords: युद्धादर्श, पाण्डुलिपि सम्पादन, देवनागरी लिपि, मातृका, पुष्पिका, लिपिविज्ञान, प्रतिलेखन, अक्षरज्ञान, शोधपरक दृष्टिकोण, स्वरशास्त्र.

#### DIGITIZATION TOOLS, PLATFORMS, AND PROTOCOLS (HTR, AI)

### 1. A High-Resolution Devanagari Manuscript Dataset and AI-Assisted Binarization Pipeline for Enhanced OCR and Digital Preservation

Suyash Kumar Bhagat Co Authors: Sarthak Jain, Samridh Mincha, Shalin Aggarwal

Preserving and digitizing old Indian manuscripts require specialized approaches for non-Latin scripts, as existing datasets and methods often fall short. This work presents the first publicly available high-resolution Devanagari manuscript dataset specifically designed for document binarization, cleaning, and denoising—essential steps for accurate OCR and long-term digital preservation. The dataset includes manually curated binarized ground truth for color manuscript images (2048×2048 px) and 603 large-format, noisy manuscript images (12000×8000 px) containing authentic degradations, all sourced from the Indira Gandhi National Centre for the Arts (IGNCA). We propose an AI-assisted image processing pipeline that applies contrast-preserving color-to-gray conversion using Gradient Correlation Similarity (GCS), adaptive thresholding, connected component analysis for noise removal, and denoising with a CycleGAN architecture employing U-Net generators. This method outperforms traditional binarization techniques like Otsu's and Sauvola's algorithms on this dataset. To evaluate practical utility, we tested state-of-the-art Devanagari OCR models; recognition accuracy improved from 17% on unprocessed images to 33% on cleaned images, a 100% relative gain. This dataset and baseline pipeline mark the first phase of a larger project aimed at developing robust OCR systems for Devanagari manuscripts. By releasing this curated resource publicly, we aim to establish a benchmark for future research in non-Latin script digitization and foster the development of advanced AI tools for conserving and enhancing access to India's rich manuscript heritage.

Keywords: Devanagari Manuscripts, Document Binarization, OCR Digitization.

Bio: Suyash Kumar Bhagat, an ECE undergraduate at DTU (class of 2026), focuses on Machine Learning, Deep Learning, and multimodal AI. As a Research Intern at MIND Lab, IIT Delhi, he studies biomedical signals for neuropsychology and mental health. He contributed to digitizing 1,400+ ancient manuscripts with

IIT Jodhpur, DTU, and IGNCA, using connected component analysis and CycleGAN. At IIT Guwahati, he developed a DCGAN for near-infrared facial image synthesis. Suyash also built AI models for image captioning and signal classification and was selected for Amazon ML Summer School, Oxford's OxML, and Harvard's Asia Conference, bridging AI, healthcare, and culture.

## 2. Isolated Character recognition and Transcription of Grantha Script Palm Leaf Manuscripts for seamless Content Preservation and Knowledge Dissemination

Harish G Co Author: K. Anitha, V. Jayapradha, R. Jayalakshmi

Palm leaf manuscripts are invaluable ambassadors of ancient Indian culture, requiring preservation that extends beyond physical care to digital accessibility. The Grantha script, an ancient script used for Sanskrit texts in Tamil Nadu, has lakhs of manuscripts preserved in various repositories, containing a wealth of knowledge, including Vedas, Kshetra Puranas, Ayurveda, and Vedic mathematics. However, manual deciphering is laborious, highlighting the need for automated tools. This paper presents an automated methodology for recognizing isolated Grantha script characters from palm leaf manuscripts, addressing the unique challenges posed by its handwritten nature and complex modifiers, through a comprehensive pipeline for character recognition in historical documents. This pipeline begins with advanced image processing to handle noise, degradation, and uneven backgrounds, yielding clean, binarized images, followed by an automated segmentation approach that isolates individual characters, including modifiers and base characters, addressing the unique challenges of handwritten Grantha texts. The segmented characters are then fed into a Machine Learning Framework for recognition, with the results exported in Devanagari script. By encompassing pre-processing, segmentation, and recognition stages along with results and discussion, this paper presents a comprehensive pipeline for the recognition and transcription of Grantha script from Palm leaf manuscripts. With a focus on the unique challenges posed by the Grantha script, this research significantly advances the digital preservation and accessibility of knowledge contained within these historical manuscripts.

**Keywords:** Palm leaf Manuscripts, Grantha script, Optical Character Recognition, Segmentation, Transcription

**Bio:** Harish Ganapathy, an engineer with IIT Madras research experience, works at the Saswathaiswaryam Palm-Leaf Manuscript Heritage Centre, Kanchipuram, on digital preservation of Palm-Leaf Manuscripts. He developed OCR for Grantha Script using Digital Image Processing and Data Science, with interests in Epigraphy, Manuscriptology, Codicology, and Vedic Temple Practices. He played a key role in the MeitY/GoI "Saswathaiswaryam" project (2021–2024), managed a Grantha script training internship (2024–2025), and coordinated a transcription workshop funded by Gyan Bharatham Mission (May 2025).

#### 3. Tala-Patra Samrakshanam: Vision-Based Micro-to-Macro Machine Vision framework for Palm-Leaf Manuscript Digitization

D. Jeevan Kumar Co Author: R. Vasant Kumar Mehta

This dissertation proposes an integrated multi-level end-to-end machine vision framework for high-fidelity digitization and archival of "Micro to Macro" capturing, Quality Inspection and cloud preservation of palm-leaf manuscript heritage. The proposed pipeline comprises four sequential phases, where the initial stage involves the design of a variable-intensity illumination system featuring many machine vision lighting geometries, engineered to capture the inscribed text. The process then advances to establish a vertically adjustable camera system, which enables multi-scale capture that transitions seamlessly from a macro-level overview of the entire leaf to a microscopic analysis of fine text. Following this, the third stage involves building a prototype application for in-line manual visual quality inspection to ensure the integrity of the digital surrogates, allowing for immediate verification and executing a recapture system. The workflow culminates upon successful validation, and an automated pipeline manages the ingestion and cataloguing of the high-resolution images into a secure cloud digital repository located on-premises.

**Keywords:** Indian Knowledge Systems (IKS), Manuscript Digitization, Machine Vision Illumination, High-Fidelity Imaging, Digital Archiving

Bio: D. Jeevan Kumar is a Research Scholar at SCSVMV University, an institution where he also completed his graduation and holds postgraduate degrees in Computer Science. Deeply integrated into the university's academic environment, his work is situated at the intersection of cultural preservation and modern technology. His research is dedicated to the digitization of historical palm leaf manuscripts. His primary focus involves developing and applying Machine Vision frameworks to accurately interpret and transcribe the content of these fragile artifacts. Furthermore, he is pioneering the use of Cloud Integrations to create robust, scalable, and accessible digital archives, ensuring the long-term preservation and global availability of this significant cultural heritage.

### 4. Lipikar: A Multilingual OCR System for Indian Scripts and the Digitization of Cultural Heritage

Arjun Ghosh Co Authors: Chetan Arora

Lipikar is an Optical Character Recognition (OCR) system developed by IIT Delhi, designed to support printed text recognition across all 22 official Indian languages. Unlike commercial OCR engines that are often optimized for Latin scripts, Lipikar seeks to move towards a script-agnostic architecture grounded in modular, extensible design. At present it has the capacity to handle language triplets. It uses indigenously developed cutting edge deep learning architecture to perform robust layout analysis enabling reliable recognition of page layouts and diverse typographic conventions commonly found in Indian-language print materials. It then uses another state-of-the-art machine learning developed inhouse at IIT Delhi to perform OCR. The significance of Lipikar within the field of digital cultural heritage lies in its capacity to unlock large volumes of textual material that have remained digitally inaccessible due to the lack of robust OCR support for Indic scripts. These include vernacular newspapers, literary magazines, government documents, and archival print resources spanning the colonial and postcolonial periods. By enabling their conversion into machinereadable, searchable, and analyzable text, Lipikar facilitates a range of scholarly activities—from historical research and linguistic analysis to corpus building and digital editions (Terras 2011). Moreover, Lipikar supports Unicode-compliant output and post-recognition reannotation through an easy-to-use user-interface for scholars to enhance recognized text. As digital humanities and cultural AI initiatives expand across the Global South, tools like Lipikar offer an inclusive technological foundation for equitable digital transformation and multilingual scholarship at scale (Ghosh 2024). Lipikar is an entirely indigenous model that does not rely on foreign technologies or cloud computing servers located abroad. Therefore, Lipikar aligns with and promotes the objectives of data localization and an Atmanirbhar Bharat.

**Keywords:** OCR for Indian Languages, Deep Learning Architecture, Digital Cultural Heritage

**Bio:** Arjun Ghosh works on the digital humanities and mobilisation, copyright and intellectual property, new media and the politics of performance. He was formerly a Fellow at the Indian Institute of Advanced Study, Shimla and currently teaches at IIT Delhi. He is the President of DHARTI (Digital Humanities Alliance for Research and Teaching Innovations).

#### 5. Creating India's Largest IIIF-Based Digital Manuscript Collection: A Case Study of the SAMHITA Project at India International Centre

Kumar Saurabh Co Author: Niharika Gupta

Digitisation of manuscripts in India has traditionally faced challenges like restricted access, irreconcilable metadata schemas, and limited interoperability between repositories. Initiatives such as NAMAMI and AMAR have been crucial to laying the foundations for manuscript preservation and documentation; however implementation of open international standards for digital dissemination has remained limited. This study presents the successful implementation of the International Image Interoperability Framework (IIIF) standards through the SAMHITA project at the India International Centre supported by the Ministry of External Affairs, Government of India, which facilitated the creation of India's largest IIIF-enabled collection of Indic manuscripts. By leveraging IIIF standards, the project successfully integrated digitised manuscripts from international repositories, resulting in a substantial digital archive. The SAMHITA collection now comprises 1,101 manuscripts with approximately 64,312 folia, sourced from 12 distinct collections across Nepal, the UK, France, and Denmark. A notable contribution is the original digitsation of 275 manuscripts comprising 7,773 folia from the Kenneth G. Zysk Indological Collection in Copenhagen, Denmark.Addressing the inherent diversity of scripts/languages, subjects and provenance within these manuscripts, the project developed a unified, structured metadata format adhering to international archival standards. Additionally, an innovative, custom-built tool was created to automatically generate IIIF manifests from structured Excel sheets, significantly streamlining the process. Manifest creation time was reduced to an average of less than 60 seconds per manuscript (approximately 100 folia). Manifests generated using this tool are effectively visualised using Universal Viewer v4.0.1 and Mirador Viewer v3.3, enhancing global scholarly accessibility and engagement. This initiative significantly advances manuscript digitisation in India by enabling collaboration, improved accessibility, and international scholarly engagement. Future developments envisaged include enhancing the tool's capabilities, integrating artificial intelligence to automate

metadata generation, and strengthening global collaboration in digital humanities. **Keywords:** IIIF, Digitisation, Manuscripts, Metadata, Digital Humanities, Interoperability

Bio: Kumar Saurabh, Founder and CEO of Labify, is a tech entrepreneur and author with 18+ years of experience. A BIT Mesra graduate in Computer Science and Engineering, he advises SAMHITA, leading India's largest manuscript repository using IIIF technology. As a core member of the team behind the latest Mirador viewer for IIIF, he now pioneers India's first Medical Manuscript platform, using AI and Large Language Models to identify therapeutic bioactive compounds from historical manuscripts.

#### 6. ManuSpeak: Giving Voice to India's Manuscript Heritage

Tarun Rathore Co Authors: Amit Chawla, Akash Verma

Indian manuscripts, on palm leaves, birch bark, copper plates, and rare handmade papers, hold centuries of wisdom and history of the Bhāratīya Jñāna Paramparā or Indian Knowledge Systems . In recent years, many of these ancient texts have been digitised through manuscript digitisation projects, but reading and understanding them remains a challenge for the masses and is mostly confined to scholars. This is because they are often written in now-extinct scripts and classical languages, understood by very few experts. ManuSpeak is a conversational AI chatbot designed to engage users with Indian manuscript traditions through interactive dialogue. It offers an innovative way to provide public access to the treasure trove of India's manuscripts through its dedicated AI agent trained on manuscript text, expert annotations, metadata, and related references. The platform allows users to ask questions in their preferred Indian language or English and receive answers that cite verses, accompanied by concise, contextually accurate explanations and references. This is achieved by combining advanced semantic search, large language models, and manuscript specific AI training to make the information reliable and accessible. The AI also offers capabilities of reading manuscript aloud both answers and original manuscript passages for an immersive auditory experience. This supports low-vision readers, oral learners, and those interested in listening to the authentic sound of traditional scripts. It makes the experience inclusive and participatory. This paper, by explaining the concept, technical architecture, and pilot results of ManuSpeak, highlights how the platform aligns with the Gyan Bharatam Mission's goals of cultural preservation, digital accessibility, and education. By giving every manuscript its own "voice" and making it universally accessible, ManuSpeak bridges tradition and technology - an essential step in preserving India's knowledge heritage and advancing a truly Digital Bharat.

**Keywords:** Indian Knowledge Systems, digitisation, conversational AI, semantic search, cultural preservation, Bhāratīya Jñāna Paramparā, Digital Bharat

Bio: Tarun Rathore, Co-founder of PrimusCreo, specializes in AR, VR, MR, and

AI-driven applications, focusing on immersive technologies that blend design, interactivity, and innovation. A B.Tech graduate from Maharshi Dayanand University, Rohtak, he started at Vizara Technologies, working on cultural and heritage tech projects like digital museum replicas, AR apps for the Anglo Indian Community, and a 3D artisan e-marketplace. At PrimusCreo, Tarun leads projects merging creativity with advanced tech to enhance user experiences while promoting cultural preservation, digital accessibility, and education. His mission is to bridge tradition and technology, making knowledge, heritage, and innovation universally accessible.

### 7. Preserving The Past, Protecting The Future Digital Pathways For Manuscript Heritage

Abhyudaya Prasad Jain Co Authors: Vaibhav Jain, Siddhant Shah

"Digital Pathways for Manuscript Heritage" initiative, led by Vaibhay Jain (BAMS student, NIA Jaipur), Abhyudaya Jain (BDS student, TMU Moradabad), and Siddhant Shah (CA finalist). Guided by Acharya Shri 108 Vidyasagar Ji Maharaj under the Shrut Gyan Kosh project of the World Jain Mission Trust, the team is dedicated to preserving ancient Jain, Sanskrit, and Prakrit manuscripts. By January 2025, they have digitized over 3,000 rare manuscripts, aiming to protect them from decay and make them accessible globally. The process includes identifying sources in temples and archives, high-resolution scanning, preservation in protective covers, cataloguing, and uploading to secure cloud storage. Benefits include safeguarding cultural heritage, enabling worldwide access for researchers, students, and the public, supporting education, and bridging traditional wisdom with modern technology. Key achievements include providing unpublished Ayurvedic manuscripts to NIA Jaipur, features in national newspapers, presenting at an Arham workshop in Delhi, training 10+ students in preservation, gaining international recognition (including a Belgian scholar's appreciation), and assisting scholars with rare resources [09/08, 10:13 pm] **Abhyudaya Jain:** Access is available through a request process: contacting the team for a catalogue, selecting manuscripts, and emailing requests. A dedicated website is in development for direct online access. [09/08, 10:13 pm] Abhyudaya Jain: The project invites researchers, students, and heritage enthusiasts to contribute, emphasizing that each digitized manuscript serves as a bridge between the past and future. By merging tradition with technology, the mission ensures that India's ancient knowledge remains preserved, protected, and available for generations to come.

Keywords: Digitization, Manuscript Preservation, Cultural Heritage

**Bio:** We are passionately engaged in preserving the ancient cultural and literary heritage of Bharat. With deep interest in traditional Jain and Sanskrit texts and Prakrit text, they have taken a practical and technological approach toward manuscript preservation. As of January 2025, we have scanned and digitized

over 3,000 rare and valuable manuscripts with a goal to make them universally accessible. Their dedication reflects a strong commitment to heritage conservation through seamless and efficient digitization processes and also ensuring it remains available for generations to come.

### 8. Applications of machine learning for the processing of Sanskrit manuscripts

Ketan Bhatt Co Author: Rhythm Jain, Anjali Chaudhary

Processing manuscripts from imaging to cataloguing is a painstaking and precise step-by-step process. From image capture to descriptive cataloguing machine learning (ML) methods can assist the processing. This paper describes some ML methods deployed at our institution and others that are planned in future. Each ML application is carefully assessed for its effectiveness in assisting the persons doing the work. ML effectiveness depends on the initial training corpus. Improving the process requires a learning feedback loop for all errors found. Our organisation has built a large corpus of manuscript pages that is used for ML applications. We have effectively deployed ML methods in a few areas of image processing and cataloguing. We plan to develop other useful applications such as identifying duplicated pages, unrelated pages, linking unrelated pages to another manuscript and sorting mixed-up pages from many manuscripts by manuscript. The "holy grail" for the application of Al remains handwriting recognition and machine transcription of the pages of a manuscript. Scholars need a high degree of accuracy (99+%) in transcriptions. Any transcription needs to be faithful to the manuscript, including reproducing the errors recorded in it. Apart from the huge variability, Sanskrit manuscripts do not have spaces to distinguish words. These factors limit the application of dictionaries. grammar checkers and large language models to OCR. We believe this technology still needs a lot of development to be useful to scholars. Since AI/ML systems require existence of good corpora, this paper also suggests methods for the creation of such corpora within the ambit of GBM.

**Keywords:** Machine Learning (ML), Manuscript Processing, Handwriting Recognition

**Bio:** Ketan Bhatt is the Chief Operating Officer of the Dharohar Foundation, Udaipur, bringing a wealth of experience from a long and successful corporate career. Despite having held prominent leadership positions, he continues to pursue academic growth and is currently undertaking a Master's degree in

Artificial Intelligence and Machine Learning from Walsh College, Michigan. As a mentor, Ketan provides invaluable guidance, blending deep industry insights with cutting-edge technical knowledge. His commitment to lifelong learning and passion for applying AI to manuscriptology inspire the team to innovate and excel in the preservation, documentation, and analysis of ancient manuscripts and cultural heritage.

### 9. Digital Pathways to Cultural Heritage: Strategies for Children's Engagement in Manuscript Preservation

Chinmay Pade Co Author: Charu Moga

Manuscripts serve as vital repositories of cultural memory, transmitting the intellectual, artistic, and social heritage of past generations. They encapsulate centuries of thought, creativity, and historical context, often preserved in fragile physical forms that remain vulnerable to environmental degradation, handling, and the passage of time. The advent of new media tools such as animation, interactive games, augmented reality (AR), virtual reality (VR), and mixed reality has significantly transformed the ways in which these materials can be preserved, accessed, and interpreted. These technologies allow for the creation of immersive, high-fidelity digital twins that protect original artefacts while enabling broader public engagement. While the stewardship of manuscripts has traditionally been the domain of scholars, archivists, and heritage institutions, children represent a critical stakeholder group whose early engagement is essential for ensuring the long-term preservation and relevance of this heritage. As future custodians, their connection to these cultural resources must be cultivated through meaningful, age-appropriate experiences. New media makes this possible by transforming manuscripts from static artefacts into dynamic, participatory learning experiences. Gamified exploration, narrative-based applications, and virtual exhibitions can contextualize ancient texts within stories, visuals, and interactive elements that resonate with young learners. Such approaches foster curiosity, encourage cultural identification, and create sustained emotional engagement. Importantly, these strategies align with the National Education Policy's emphasis on immersive and experiential pedagogy, which advocates for integrating heritage learning into creative, hands-on educational frameworks. Embedding manuscript preservation within this pedagogical model enables children to move from passive observers to active participants, allowing them to value historical knowledge and contribute to its continuity. This paper thus examines the evolving role of new media in manuscript preservation, with a specific focus on approaches that position children as learners, co-creators, and digital custodians, thereby ensuring the intergenerational transmission of heritage knowledge in the digital age.

**Keywords:** Manuscript Preservation, New Media Tools, Digital Heritage, Child Engagement, Interactive Learning

Bio: Chinmay Pade is a designer, architect, and researcher, currently a Senior Research Scholar at the Department of Design, IIT Delhi. His work spans child-centered design, immersive technologies (AR/VR), and digital heritage preservation, integrating Indian Knowledge Systems with advanced visualization tools to enrich primary school learning spaces. A top-ranked architecture graduate from BAMU and a Master's in Urban Design from KRVIA, his thesis earned national and international recognition. As a Bhagwan Fellow (CSIR-CBRI) and Yuva Sangam Coordinator at IIT Delhi, he contributes to heritage-tech projects. Also an artist and trained sitarist, he is skilled in painting, digital illustration, and clay sculpting.

#### 10. Towards Robust OCR for the Maithili Script: Challenges and a Pilot Study

Dr. Chandranath Adak Co Author: Rajib Ghosh

The Maithili script, also known as Mithilakshar or Tirhuta, is an ancient Brahmic writing system historically employed in the Mithila region of India and Nepal. Despite its profound cultural and linguistic significance, the script is currently classified as low-resource in the digital domain, with a critical shortage of annotated datasets, standardized fonts, and computational tools. Developing an Optical Character Recognition (OCR) system for Tirhuta introduces distinct challenges that extend beyond those faced with more widely researched Indic scripts. These challenges include extreme data scarcity, pronounced variability in handwritten styles, complex ligature formation, multi-tiered diacritic placement, and substantial orthographic diversity arising from historical and regional variations. Additional obstacles emerge from the degradation of archival manuscripts, uneven digitization quality, limited adoption of Unicode standards, inconsistencies in script rendering across platforms, and a lack of robust linguistic resources for post-recognition error correction. This paper systematically examines these barriers, providing an in-depth analysis of the linguistic, technical, and infrastructural constraints that hinder the development of a robust OCR pipeline for Tirhuta. To contextualize these issues, we present a small-scale pilot study in which a convolutional recurrent neural network (CRNN) was trained on a modest collection of printed and handwritten samples. The experiment illustrates how data limitations, script complexity, and model architecture interact to impact recognition performance. The findings underscore the urgent need for comprehensive digitization efforts, corpus creation, and tailored machine learning strategies to address the specific demands of the Maithili script. By consolidating technical insights and preservation imperatives, this work offers a roadmap for advancing OCR research in low-resource scripts while contributing to the safeguarding of Tirhuta's literary heritage.

**Keywords:** Maithili, OCR, Low-Resource Indic Script, Handwritten Text Recognition

**Bio:** Dr. Chandranath Adak received his Ph.D. degree in handwriting data analysis from the University of Technology Sydney, Australia, in 2019. He is currently an Assistant Professor with the Dept. of CSE, Indian Institute of Technology Patna, India. He has over 15 years of research experience in handwriting recognition, with expertise spanning offline script analysis, document image processing, computer vision, and deep learning. His research interests include handwriting recognition for Indic scripts, low-resource OCR development, and computational linguistics for document understanding.

## 11. Reconstruction and Digitization of Distorted Manuscripts, Through Varied Image Processing Techniques: With Special Reference to Histogram Equalization Method

Dr. Manoj Kumar Dutta

India is a place of art, culture, and heritage. It has a rich and ancient tradition of writing and preserving knowledge through manuscripts. Manuscripts are hand-written documents that carry important information about religion, science, literature, art, medicine, philosophy, etc. The manuscripts feature various scripts, including Devanagari, Sharada, Grantha, and are written in many Indian languages such as Sanskrit, Pali, Prakrit, etc. India's manuscript heritage is one of the largest and oldest in the world, with millions of manuscripts found in temples, monasteries, libraries, and private collections. These manuscripts not only show India's deep knowledge and wisdom but also reflect its cultural diversity, intellectual achievements, historical richness, and artistic traditions. Most of the manuscripts are written on fragile materials like palm leaves, birch bark, and handmade paper. Over time, the survival of the manuscripts has been jeopardized due to various reasons such as ageing effects, pest attacks, climatic conditions of the tropical region, human negligence, etc. The restoration and proper preservation of these invaluable manuscripts, which reflect the country's intellectual, cultural, and artistic legacy, is not only a technical challenge but also a social and moral responsibility. The manuscripts that have lost their radiance and have been damaged over time can be reconstructed or restored using proper image processing techniques and may be preserved through digitization. The image reconstruction techniques may include Histogram Equalization, Convolutional Neural Network, Particle Swarm Optimization, Fuzzy Logic, Genetic Algorithm, and many more. In this article, two different histogram equalization techniques, namely Contrast Limited Adaptive Histogram Equalization (CLAHE) and Bi-Histogram Equalization Technique (BBHE), have been used for the restoration of the distorted manuscripts. A comparative performance of CLAHE and BBHE has been reported in this work. The quality of the reconstructed manuscripts has been verified and compared using different standard parameters like AMBE,

PSNR, NMSE, and CPP.

**Keywords:** Manuscript Preservation, Image Processing Techniques, Histogram Equalization

**Bio:** Dr. Manoj Kumar Dutta obtained his M.Tech from Institute of Radio Physics & Electronics University of Calcutta in the year 2002 and Ph.D from Birla Institute of Technology & Science, Pilani, Rajasthan in June 2013. He is having more than 21 years of teaching experience in different engineering colleges & institutes of India, including BITS-PILANI, Pilani Campus, Rajasthan. Currently he is working as a Asst. Prof. (Grade-1) & In-Charge in the Dept. of Physics, BIT Mesra, Off-Campus Deoghar, Jharkhand, India. He is having almost 18 years of research experience and his research interest includes Applied optics, Image processing, Indian Culture and heritage study. He has more than 32 international journal and 30 international conference publications & 05 Patents.

# CONSERVATION AND RESTORATION OF MANUSCRIPTS

## 1. MANUSCRIPTS CONSERVATION ACTIVITIES IN THE THANJAVUR MAHARAJA SERFOJI'S SARASVATI MAHAL LIBRARY

Palanichamy Perumal

The Thanjavur Maharaja Serfoji;s Sarasvati Mahal Library is one among the few medieval Libraries in India. This library was developed by the successive kings of Nayak and Maratha dynasties, who ruled Thanjavur from 16th to 19th Century. Among them King Serfoji II ruled from 1798 to 1832 collected and copied more manuscripts from all over India. Most of the manuscripts were written by the court poets of that age. From the kings period itself conservation activities were stared. This paper dealt with the details of types of manuscript available, their origin, preparation technique; condition of palm leaf and paper manuscripts; preventive measure taken in ancient days; its effectiveness; collection of manuscripts from private holders at throughout the times; conditions of collection manuscripts; precautionary measure taken before adding to the original collection; storage system throughout the period; and preventive conservation technique followed through records; traditional materials techniques used for preventive conservation followed from the ancient documents and other recorded documents; Documentation system, It also gives details of ancient cataloguing system; Copying system; materials used for preparation of manuscripts; rare manuscripts; interested and importance manuscripts, preservatives used; periodical preventive conservation woke done; scientific approach for preservation of manuscripts by using modern materials and chemicals; problems faced and suggestion got from experts to rectify them; introduction of duplication of manuscripts by copying, microfilming system, digitalization, present day condition and needs for their betterment. This paper would be an eye opener for the manuscript stack holders various methods of preservation and storage systems and what to do and what not to do.

**Keywords:** Manuscript library, Palm leaf manuscripts, Paper manuscripts, Illustrated Manuscripts, Method of Storage, Indigenous materials for preservation.

**Bio:** Born on 2 June 1954, Dr. Palanichamy Perumal completed B.Sc., MLISc., M.A., and a Ph.D. on the history and development of manuscript conservation. He served as Conservator at the Thanjavur Maharaja Serfoji's Sarasvati Mahal Library (1980–2012) and coordinated the National Mission for Manuscripts project (2004–2009). Trained at NRLC Lucknow, Japan, and the UK, he has presented papers internationally, including at Leiden, Netherlands, and Halle, Germany. His expertise lies in the conservation of palm-leaf and Sanskrit manuscripts.

#### 2. Critical Connections: Integrating Disaster Risk Management to Safeguard India's Manuscripts

Dr Heather Brown

This landmark international conference showcases India's extraordinary manuscript heritage, as the Gyam Bharatam Mission (GBM) strategically moves ahead to preserve and create access to this treasure trove of knowledge. Now is the opportune time to connect and embed disaster risk management (DRM) as a fundamental strategy to safeguard the manuscripts. All the vital work being undertaken to preserve and provide access to the knowledge in manuscripts from conservation, to digitisation, documentation, and creating digital repositories can be destroyed in an instant during a disaster. Furthermore, the risks are escalating. The international disaster landscape records increasing risks of climate change and escalating cyber-attacks that impact on digital heritage collections. The need for effective DRM of India's manuscript collections is critical. Until recently, an additional factor has led to a major hurdle to effective DRM. In short, international approaches to DRM have largely been uncoordinated and disconnected across physical and digital collections, their storage and management. With India's manuscript collections existing in both physical and digital formats, such a divided approach to DRM limits its effectiveness. However, it is timely that there are now new developments to help bridge this divide. A recently developed UNESCO DRM training toolkit (2024) takes an interconnected approach. The UNESCO toolkit is designed for trainers, interconnecting DRM across both physical and digital collections, including storage and risk management.IGNCA Conservation staff have recently piloted the toolkit to develop a highly successful practical DRM training program in different Indian cultural organisations. Attendees have successfully developed their knowledge and skills to effectively prevent, prepare, respond to and recover from disasters and develop their DRM plans. Now is the opportune time to safeguard India's manuscripts by integrating DRM as a fundamental strategy, underpinned by an interconnected approach, using the UNESCO toolkit, and leveraging the practical expertise of IGNCA's Conservation staff.

Keywords: Manuscript Heritage, Disaster Risk Management, Digital Preservation,

#### **UNESCO** Toolkit

**Bio:** Dr Heather Brown has a long-standing interest in the preservation of India's heritage collections. Her research interests lie in an integrated approach to disaster risk management (DRM) of physical and digital collections. She has co-authored the ALIA disaster management resources and has co-delivered an award-winning DRM training program to local community museums and libraries.

Heather is one of the international contributors to UNESCO's Disaster risk management training toolkit. Together with IGNCA, she has co-delivered a pilot DRM training program across different Indian cultural organisations. Currently Heather is the Education and Sector Standards Librarian at the Australian Library and Information Association.

### 3. Digital Transformation in Conservation: The Adoption of Tablet-Based Documentation for the Preservation of Historical Manuscripts

Kalpana

Accurate and timely documentation is an essential aspect of historical Manuscript Conservation. This paper discusses the development and implementation of a tablet-based system designed to create and manage treatment records within conservation workflows. Intended to replace traditional paper-based documentation, the system allows conservators to capture detailed information including materials used, treatment methods, and observational data in real time at the point of intervention. Key functionalities such as handwriting recognition, photographic annotation, and standardized input templates contribute to improved accuracy, consistency, and usability. The digital format enhances data management by facilitating efficient storage, retrieval, and sharing of records, thereby supporting interdisciplinary collaboration and long-term preservation strategies. This initiative reflects a broader shift toward digital integration in heritage conservation, offering a scalable and sustainable solution for modern conservation practices.

**Keywords:** Manuscript Conservation, Digital Documentation, Tablet-Based System, Heritage Preservation

**Bio:** Smt. Kalpana, Deputy Curator – Conservation, has over two decades of expertise in preventive, curative, and research-based conservation. Trained at NRLC, Lucknow, she has worked with regional labs, Rampur Raza Library, and the Salarjung Museum, Hyderabad. She was awarded a Conservation Fellowship at The Metropolitan Museum of Art, New York, gaining global exposure. Her work includes projects under the National Mission for Manuscripts, several research publications, and active participation in workshops and conferences.

## 4. Embedding Indian Knowledge System into Laboratory-Based Conservation Education: A Sustainable Framework for Manuscript Preservation

Aditya Prakash Kanth

Indian manuscripts represent an irreplaceable repository of cultural memory, often preserved for centuries through Indian Knowledge System (IKS). These practices grounded in plant-based materials, natural resins, and artisanal craftsmanship form a vital part of India's cultural heritage. Yet, the growing preference for synthetic, laboratory-synthesized materials has led to a decline in their use, risking the loss of both practical skills and the intangible knowledge embedded in them. The National Education Policy (NEP) 2020 emphasises the integration of Indian Knowledge Systems into all levels of education, offering a timely opportunity to embed traditional conservation methods into structured, laboratory-based university training. This paper presents a sustainable framework for incorporating IKS into laboratory-based conservation education, with a specific focus on manuscript preservation. The framework combines theoretical and practical modules where students are first introduced to the historical and cultural contexts of traditional methods alongside modern conservation science. Laboratory sessions then provide hands-on training in the preparation, application, and testing of traditional materials, followed by comparative performance analyses with synthetic alternatives. Emphasis is placed on documentation, collecting oral histories from practitioners and assessing environmental and economic sustainability, thereby creating a robust repository of both technical data and intangible heritage. By embedding traditional knowledge within a rigorous, laboratory-based educational model, this approach ensures that IKS remains scientifically validated, environmentally sustainable, and professionally relevant. It aligns with NEP 2020's vision, strengthens conservation curricula, and produces graduates skilled in both heritage-rooted and technologically advanced practices. This dual competency not only supports sustainable heritage management but also safeguards the living tradition of conservation knowledge for future. generations. The framework serves as both a pedagogical tool and a conservation

strategy. ensuring the continued relevance of IKS in the manuscript preservation.

**Keywords:** Indian Knowledge Systems, Manuscript Preservation, Sustainable Conservation, NEP 2020

**Bio:** Dr. Aditya Prakash Kanth, Art Conservator with 20 years of experience, is Assistant Professor and Programme Chair at the Centre for Heritage Management, Ahmedabad University. A Fellow of IIC, London, he has served as Senior Conservator at the National Museum, New Delhi, and specializes in manuscript preservation and conservation science.

#### 5. भारत की पाण्डुलिपि धरोहर संरक्षण की राष्ट्रीय पहल

Dr. Kirti Srivastava

भारत की पाण्डुलिपि धरोहर ज्ञान का एक अमूल्य भंडार है, जो हजारों वर्षों की बौद्धिक साधना, व्यावहारिक अनुप्रयोग, अनुसंधान, और निरंतर विचार-विमर्श के माध्यम से विभिन्न क्षेतों में संचित हुआ है। ये पाण्डुलिपियाँ ऐतिहासिक अभिलेखों, वैज्ञानिक उपलब्धियों, दार्शनिक दृष्टिकोणों, साहित्यिक सृजनात्मकता, तथा समाजिक समस्याओं के समाधान हेतु समर्पित मनीषियों के प्रयासों से प्राप्त ज्ञान का समृद्ध संग्रह प्रस्तुत करती हैं। यह विशाल सांस्कृतिक धरोहर न केवल अंतरराष्ट्रीय बौद्धिक समुदाय द्वारा मान्यता प्राप्त है, बल्कि इसके स्वरूप और विषयवस्तु ने वैश्विक ज्ञान प्रणाली को भी गहराई से प्रभावित करते हैं। ऐसी धरोहर के संरक्षण का महत्व भारतीय संविधान के अनुच्छेद 51A(छ) के अंतर्गत राज्य के नीति निदेशक तत्वों में निहित है, जो प्रत्येक नागरिक का यह मूल कर्तव्य मानता है कि वह भारत की बहुआयामी सांस्कृतिक विरासत को महत्व दे और उसकी रक्षा करे। इस संकट का समाधान करने हेतु भारत सरकार द्वारा फरवरी 2003 में 'राष्ट्रीय पाण्डुलिपि मिशन' (National Mission for Manuscripts) की स्थापना की गई। इस मिशन का उद्देश्य पाण्डुलिपियों का पता लगाना, सूचीबद्ध करना, संरक्षण डिजिटाइजेशन करना और उनके उपयोग को बढ़ावा देना है। संरक्षण से आगे बढ़ते हुए यह मिशन शोध और शिक्षा के लिए इन संसाधनों को सुलभ कराने तथा जनसामान्य में इनके महत्व के प्रति जागरूकता फैलाने पर भी बल देता है।

Keywords: भारतीय पाण्डुलिपि धरोहर, राष्ट्रीय पाण्डुलिपि मिशन, संरक्षण एवं डिजिटलीकरण, सांस्कृतिक विरासत

# 6. THE CHALLENGES AND PROSPECTS OF MANUSCRIPTS CONSERVATION AND PRESERVATION IN NORTH BENGAL WITH SPECIAL REFERENCE TO SUB- HIMALAYAN DARJEELING

Dr. Malay Saha

The rich manuscript heritage of north Bengal, particularly in the Sub-Himalayan Darjeeling region, holds immense historical, cultural, and linguistic significance. These manuscripts-ranging from ancient religious texts to local administrative records- face serious threats due to natural, environmental and anthropogenic factors. Climatic instability, high humidity, fungal infestation, insect attacks, and inadequate storage conditions, contribute to the rapid deterioration of these fragile documents. Additionaly, a lack of awareness, skilled conservators and modern archival infrastructure further aggravate the crisis. Despite these challenges, significant prospects remain for the conservation and preservation of this valuable heritage. Traditional conservation practices, when combined with scientific techniques and community participation, offer a promising way forward. Initiatives from museums, libraries, and academic institutions in the region especially collaborative programs with national heritage bodies are beginning to address these concerns. Sub-Himalayan Darjeeling, with its unique blend of ethnic diversity and monastic traditions, has the potential to emerge as a centre for manuscripts conservation, particularly through the digitization of rare texts and the establishment of local conservation units. This paper explores both the barriers and opportunities involved in manuscripts preservation in this region, emphasizing the need for sustained government support, academic collaboration and public engagement. It also highlights successful case studies from local monasteries and archival centres, suggesting pathways for safeguarding this cultural legacy for future generations.

**Keywords:** Manuscripts conservation, Sub- Himalayan Darjeeling, preservation challenges, heritage management, digitization, traditional knowledge system.

**Bio:** Dr. Malay Saha is Assistant Curator of the N.B.U.A.K.M. Heritage Museum, University of North Bengal, Darjeeling, with over a decade of experience in heritage conservation, museology, and cultural advocacy. He has organized seminars, workshops, heritage walks, and outreach programs focusing on North Bengal and the eastern Himalayas. Author and editor of four books on cultural heritage and museums, he has also worked on manuscript documentation and conservation. He collaborates with leading institutions on interdisciplinary heritage projects and serves as Director of the Heritage Foundation of India (West Bengal chapter).

# 7. Preservation, Conservation and Restoration of Manuscripts: A Case Study of Chunilal Gandhi Vidyabhavan

Dr. Meeta Vansadia

The preservation and accessibility of historical manuscripts remain a significant challenge due to their fragile condition, linguistic complexity, and limited digital availability. The age-old manuscripts hold immense precious knowledge inherited through generation. They embrace invaluable insights into culture, rituals, religious belief, history, philosophy and science. Their accessibility is limited due to their fragility, degradation and also for the reason of language barriers. Further, the process of conservation and Restoration of the manuscripts is the most essential step for the preservation of them, in the original form, for future generation. Chunilal Gandhi Vidyabhavan ( www.cgvidyabhavan.org ) is one of the oldest Institutes of Higher Learning and Research in Surat, South Gujarat, India. It is dedicated to Research Scholars in general, and to College Teachers and Students of the Sarvajanik Education Society, in particular. It has very valuable collection of Sanskrit manuscripts on various subjects. These manuscripts were originally collected by Shivadatt Shukla alias Swami Prakashanandnath and were donated to the institution by a successor of one of his disciples. These manuscripts were classified and a Catalogue of the same was published in two parts in the Bulletin of the Vidyabhavan. Another set of Sanskrit manuscripts collected by Pandit Dinmanishankar Shastri, a great Sanskrit scholar was donated by Prof. Mahanlal Dave. These manuscripts are being classified and its Catalogue was published. Also, the institute has some very valuable manuscripts in Prakrit and Apabhransh as well as medieval Gujarati literature. The Institute has so far published 61 books, out of which 3 have received State Level Awards. All these Manuscripts have been digitised with the support of National Mission for Manuscripts, Ministry of culture and tourism, New Delhi. Several manuscripts are in a delicate condition and show signs of tearing. The Centre is looking forward to National Mission for Manuscripts for the Conservation and Restoration process of the fragile manuscripts.

Keywords: Manuscripts, Preservation, Conservation, Restoration

**Bio:** Dr. Aditya Prakash Kanth, Art Conservator with 20 years of experience, is Assistant Professor and Programme Chair at the Centre for Heritage Management, Ahmedabad University. A Fellow of IIC, London, he has served as Senior Conservator at the National Museum, New Delhi, and specializes in manuscript preservation and conservation science.

## 8. Conservation and Restoration of Manuscripts (पांडुलिपियों का संरक्षण और पुनरूद्धार)

Dr. Meenakshi Upadhyaya Tiwari

इस शोध पत में पांडुलिपियों को प्राप्त करना, पांडुलिपियों के प्रकार, संरक्षण और पुनरुद्धार के बारे में कुछ तथ्य वर्णित है। पांडुलिपियाँ हमारे भारत देश की अमूल्य धरोहर है और इनका संरक्षण हमारी देश की सरकार द्वारा बहुत अच्छे से किया जा रहा है। 'ज्ञान भारत' (NAMAMI) के कई संरक्षण केन्द्र हैं, जिनमें पांडुलिपि संरक्षण और पुनरुद्धार किया जाता है। पांडुलिपियों को एकत्र करने की प्रकिया जिसके अंतर्गत पुस्तकालय, निजी क्षेत्र से पांडुलिपियाँएकत करना, किस प्रकार के स्थान पर रखना, कितना तापमान होना चाहिये और क्या क्या सावधानियाँ होनी चाहिये, बिमार पांडुलिपियों का उपचार जिसमें पुनः पूर्व रूप में लाने के लिए (सर्जरी) भी की जाती है, और पांडुलिपि संरक्षण के उपाय इन सब बातों का वर्णन इस शोधपत्न के माध्यम से किया गया है। पांडुलिपियों के क्षय के कारण और उनकी सुरक्षा के उपाय, पुरानी पांडुलिपियों की विभिन्न स्थानों में प्राप्ति और उनका संरक्षण, ज्ञान भारत द्वारा पांडुलिपि संरक्षण और पुनरुद्धार के लिये विभिन्न कार्यक्रम चलाना जिससे भारत देश के नागरिक भी सजग रहें, पांडुलिपि का अध्ययन करते समय। पांडुलिपि संरक्षण दो प्रकार से किया जाता है, एक वैज्ञानिक ढंग से दुसरा जैविक ढंग अर्थात् परम्परागत तरीके से, इस शोध पल में परम्परागत विधि को अधिक महत्त्व दिया है। भारत ज्ञान संस्था पूरे देश विदेशों से पांडुलिपियाँ एकल कर अलग अलग लिपियों के अध्ययन के लिये कार्यशालाएँ भी चलाती हैं। पांडुलिपि संरक्षण के लिए पांडुलिपियों का 'Digitalization' भी कर रही है ताकि पांडुलिपि दीर्घायु रहें। ब्रिटिश शासन के दौरान हमारी पांडुलिपियाँशोध के लिए विदेशों में गई, जिसमें हमारे देश का ज्ञान और साहित्य विदेशों तक पहुँचा, ज्ञान भारत संस्था उन पांडुलिपयों को भी वापिस लाने का प्रयास कर रही है इसके अतिरिक्त भारत के नागरिकों में जागरुकता फैलाने का पूरा प्रयास कर रही है।

Keywords: पांडुलिपि संरक्षण, पांडुलिपि पुनरुद्धार, ज्ञान भारत के प्रयास, पांडुलिपि संरक्षण के उपाय, पुनरुद्धार के उपाय।

Bio: डॉ. मीनाक्षी उपाध्याय तिवारी वैदिक संशोधन मंडल, पुणे से 'पांडुलिपि और पुरालिपि शास्त्र अध्ययन' पी.जी. डिप्लोमा की छात्रा हैं। उन्होंने अपने पीएच.डी. में "यजुर्वेदीय माध्यन्दिन और तैत्तिरीय शाखाओं के विशेष संदर्भ में दाक्षायण यज्ञ का आलोचनात्मक अध्ययन" विषय चुना है।

'विग्नान डिग्नी कॉलेज' में अध्यापन करते हुए उनका पांडुलिपि अध्ययन की ओर विशेष आकर्षण बढ़ा। उन्होंने ज्ञान भारत संस्था के लिए पांडुलिपि विषय पर शोध पल लिखने का अवसर भी प्राप्त किया है और इस क्षेत्र में निरंतर शोधरत हैं।

# 9. The Need for an Integrated Institutional Framework for the Conservation, Editing, and publication of Indian Manuscript Heritage

Shah Gajendra

आयुर्वेद, भारत की प्राचीन चिकित्सा प्रणाली, पाँच सहस्राब्दियों से मानव स्वास्थ्य की रक्षा में सहायक रही है। यह केवल औषधीय उपचार पर आधारित न होकर आहार, जीवनशैली, योग, प्राणायाम और ध्यान जैसी प्राकृतिक पद्धतियों पर भी बल देती है। इस ज्ञान परम्परा को संरक्षित करने में पाण्डुलिपियों की महत्त्वपूर्ण भूमिका रही है, जो ताड़पल, भोजपल, कपड़े, धातु और कागज़ पर हस्तलिखित रूप में उपलब्ध हैं। इनमें चिकित्सा साहित्य के साथ-साथ खगोल, गणित, तन्त्र, पुराण और याता-वृत्तांत जैसी विविध सामग्री भी मिलती है। भारत में लगभग दो लाख आयुर्वेदिक पाण्डुलिपियाँ विद्यमान मानी जाती हैं, जिनमें से कई अद्वितीय हैं और अब तक अप्रकाशित हैं। इन पाण्डुलिपियों में प्रयुक्त लिपियाँ — जैसे देवनागरी, ग्रन्थ, मलयालम और उड़िया — भारतीय भाषायी और सांस्कृतिक विविधता को दर्शाती हैं। पारम्परिक संरक्षण पद्धतियों (ताड़पत्नों पर तेल लगाना, हर्बल उपचार आदि) और आधुनिक तकनीकों (रासायनिक स्थिरीकरण, डिजिटलीकरण, सुचीकरण) का संयोजन इनके संरक्षण हेतु आवश्यक है। प्रमुख आयुर्वेदिक ग्रन्थ — बृहत्लयी (चरक संहिता, सुश्रुत संहिता, वाग्भट्टकृत ग्रन्थ) और लघुलयी (माधवनिदान, सारंगधर संहिता, भावप्रकाश) — के समालोचनात्मक संस्करणों का संपादन व प्रकाशन आज की आवश्यकता है। इन ग्रन्थों के अध्ययन से केवल चिकित्साशास्त्र ही नहीं, बल्कि भारतीय इतिहास, संस्कृति और भाषाविज्ञान पर भी प्रकाश पड़ता है। निष्कर्षतः, आयुर्वेदिक पाण्डुलिपियों का संरक्षण, डिजिटलीकरण और व्यवस्थित शोध न केवल भारतीय चिकित्सा ज्ञान की निरंतरता के लिए, बल्कि हमारी सांस्कृतिक धरोहर को सुरक्षित रखने के लिए भी अनिवार्य है।

Keywords: आयुर्वेदिक पाण्डुलिपियाँ, चिकित्सा ज्ञान परम्परा, संरक्षण एवं डिजिटलीकरण, सांस्कृतिक धरोहर

### 10. Conservation and Restoration of Manuscripts: Challenges, Methods and Solutions in Indian Perspective

Dr. Ramesh Satyappa Shirahatti

पांडुलिपियाँ भारत की सांस्कृतिक, ऐतिहासिक और बौद्धिक विरासत की अमूल्य निधि हैं। ये प्राचीन ज्ञान, धर्म, साहित्य, चिकित्सा, खगोल, गणित, संगीत और व्याकरण जैसी विविध विषय-वस्तुओं का लेखा-जोखा संजोए हुए हैं। भारत के विभिन्न ग्रन्थालयों, मठों, मंदिरों और व्यक्तिगत संग्रहों में लाखों पांडुलिपियाँ संरक्षित हैं.. जिनमें से कई अत्यन्त दुर्लभ और अति प्राचीन है। परन्तु समय के साथ जलवायु परिवर्तन, नमी, कीट आक्रमण, अनुचित भंडारण और मानवजन्य लापरवाही के कारण अनेक दुर्लभ पांडुलिपियाँ क्षतिग्रस्त हो रही हैं। अतः इनके संरक्षण और पुनर्स्थापना के लिए वैज्ञानिक पद्धतियों, पारंपरिक ज्ञान और आधुनिक तकनीक का संतुलित उपयोग आवश्यक है। इस शोध पत्र में पाण्डुलिपियों के संरक्षण की पारंपरिक और आधुनिक विधियों, सामग्री की पहचान, भंडारण तकनीक, रसायन शास्त्र, डिजिटल रिकॉर्डिंग और पुनर्स्थापना प्रक्रियाओं का विवेचन किया गया है। इसके अलावा प्रशिक्षित मानव संसाधन, कार्यशालाओं और नीति निर्माण की आवश्यकता पर भी प्रकाश डाला गया है। साथ ही, समुदायों, पुस्तकालयों और संग्रहालयों के बीच सहयोग, स्थानीय कारगिरों और विशेषज्ञों की भूमिका तथा जन-जागरूकता की महत्ता पर चर्चा की गई है। यह शोध भविष्य के लिए एक ऐसी कार्य योजना प्रस्तुत करता है जिससे आने वाली पीढियों के लिए दुर्लभपांडुलिपियों को सुरक्षित रखा जा सके और भारत की प्राचीन बौद्धिक परंपरा को वैश्विक स्तर पर पुनर्जीवित किया जा सके । अतः पांडुलिपियों का संरक्षण केवल तकनीक दायित्व नहीं, बल्कि सांस्कृतिक जागरण का एक सशक्त माध्यम भी है, जो भावी पीदियों को हमारे समृद्ध ज्ञान-विज्ञान से जोडने का कार्य करता है।

Keywords: पांडुलिपि संरक्षण, आधुनिक एवं पारंपरिक तकनीक, सांस्कृतिक विरासत

Bio: एम.ए. (प्राकृत एवं जैनदर्शन, स्वर्ण पदक), संस्कृत व हिन्दी में एम.ए., यूजीसी-नेट तथा मैसूर विश्वविद्यालय से पीएच.डी.। कन्नड, प्राकृत, संस्कृत, हिन्दी और अंग्रेज़ी के ज्ञाता। वर्तमान में श्रवणबेलगोला स्थित राष्ट्रीय प्राकृत अध्ययन एवं संशोधन संस्थान से संबद्ध। जैन धर्म, प्राकृत भाषा व पांडुलिपि संरक्षण में महत्वपूर्ण योगदान हेतु जिनवाणी पुरस्कार (2023) एवं शास्त्रि-परिषद् पुरस्कार (2024) से सम्मानित। अनेक शोधपत्न, संपादित व अनूदित कृतियाँ प्रकाशित।

### 11. Conservation and Restoration of Manuscripts

#### MAITHILY V

A manuscript is a hand written document, often the original version of a book, article prepared for publication. It's essentially a pre-printed version of a text, distinct from the final. The Manuscripts are the prepared palm leafs, which in India as one of the common materials for writing in ancient days. Palm leaf is a generic term. They are the major source of information to know about the historical facts, cultural and old traditions of the past. The glorious past of our ancestors scripted in ancient manuscripts, these historical documents have great research value therefore it's important to preserve and conserve these to access more efficiently. They constitute our most precious national heritage as rare pieces of recorded knowledge which are the powerful medium for preservation of our literary, linguistic, artistic and cultural heritage. They are scattered all over the world and in India about six million manuscripts are present in different languages and scripts. Being organic in nature, palm-leaf manuscripts are susceptible to decay and disintegration over time. Deterioration of palm leaves are due to various agencies Natural, Biological, Physical, Chemical in tropical countries, biological agents cause great damage. The most important biological organisms are fungi, bacteria, algae, yeast and protozoa. Insects such as Cockroaches, Silverfish, and Termites damage of them. The conservation and restoration of manuscripts is a specialized field within cultural heritage preservation. It focuses on protecting, stabilizing, and repairing handwritten documents, so they can be preserved for future generations. In the conservation of manuscripts, there are several main types of conservation approaches, here under two broad categories: 1.preventive conservation 2.interventive conservation. The advent of technology has given rise to greater concerns of preservation of manuscripts by adopting modern technologies. The study reveals adopting different techniques by the natural and Traditional way for the conservation of manuscripts and they are successful in protecting them.

**Keywords:** Manuscript Preservation, Palm-leaf Manuscripts, Preventive & Interventive Conservation

## 12. Material Stability and Conservation Challenges: A case study on Ink and Paper conservation

Paromita Pal

Considered one of the most sought-after sources of historical record, the study of manuscript conservation has received an exceptional sum of research endeavours due to the often occurring heterogeneous and complex nature of material technology and mode of structural assemblage. As manuscripts are classified under the archival category, the storage system is frequently seen to be acting as the primary agent of feeding the source of deterioration when it comes to archiving records in unsupervised environments, which further leads to building vulnerability. The object was received in an extremely concerning physical condition with a damaged cover, binding, detached folios, lost parts, and, most alarmingly, fading of the ink. The manuscript shows both physical and biological deterioration; therefore, detailed documentation was carried out for safe record keeping before engaging in the remedial treatment procedure. Hence, this paper will focus on refurbishing the physicality of the object with a conscious attempt at stabilizing the folios and the ink. The documentation approach was carried out with minimal intervention given the sensitivity the object bore. Each folio was measured with a micrometre screw gauge to understand the mass of the paper per unit. The documentation of the manuscript with micro magnification camera and documentation tools have revealed the scale of challenges in layers; the foremost challenge was to dismantle manuscript in chronological order, gradual ageing has caused in upscaling of the acidity in the paper fibre, causing brittleness and disintegration of the fibres in molecular degree, excessive creases has caused unrecoverable damages in some number of folios; exposure to biological infestation has caused in the loss of physical integrity and accumulation of alien particles, the changing nature of the folios has manipulated the behavioural order of the ink that has seemingly appeared to be bleeding, as the writings are found in different grades of ink consequently affecting the decision making process. The research will focus on measured conservation steps for salvaging the object with possible reversibility and the overall condition of the manuscript, providing an insightful case study.

Keywords: paper manuscript conservation, ink consolidation, lining.

Bio: I'm Paromita Pal from Kolkata, currently a Young Professional in Restoration at Victoria Memorial Hall. I hold postgraduate degrees in Painting and Conservation & Museology from Rabindra Bharati University, plus a 6-month Practical Conservation training from NRLC. I've worked with TTAC and several museums and archives, including Chennai Government Museum, Hill Palace Museum, and Delhi State Archives. My conservation projects include restoring the Sahasra Shivalinga at Pashupatinath Temple and conserving Raja Ravi Varma paintings. I specialize in paper and archival material conservation, with hands-on experience treating manuscripts and official documents.

## 13. From Pāṭaṇa to Bīkānera: Institutional and Sectarian Efforts in Jaina Manuscript Preservation

Mansi Dhariwal

This paper examines two distinct yet complementary models of manuscript preservation within the Jaina tradition—an institutional initiative centred at Śrī Hemacandrācārya Jaina Jñānamandira in Pāṭaṇa, and a sectarian network of libraries maintained by Akhila Bhāratavarśīya Sādhumārgī Jaina Saṃgha, with its intellectual and administrative base in Bīkānera. The first section presents the outcomes of a three-month digitisation and conservation project undertaken in early 2024 at the Jñānamandira, one of western India's most significant manuscript repositories. The project involved scanning previously unverified manuscripts, reconciling inconsistencies between physical holdings and earlier digital records, and documenting the custodial history of the collection. Noteworthy discoveries included exquisitely illustrated palm-leaf codices, rare astronomical treatises, and early Svetāmbara canonical manuscripts—texts of both aesthetic richness and critical scholarly value. In parallel, work is underway on a new descriptive catalogue that integrates palaeographic and codicological data with metadata standards, aimed at improving scholarly accessibility and digital interoperability. The second section focuses on the ongoing manuscript preservation efforts led by the Sādhumārgī sect. Libraries such as the Gaņeśa Jñānabhaṇḍāra (Ratalāma), Āgama-Ahimsā-Samatā evam Prākṛta Samsthāna (Udayapura), and Ārugga-Bohi-Lābham (Bhīnāsara) have collectively digitised and catalogued thousands of manuscripts over the past decade. These collections, actively supporting scholarly research, encompass a wide range of Prakrit, Sanskrit, Gujarati, and regional texts including canonical works, commentaries, poetic compositions, ritual manuals, and scientific treatises. Bīkānera's central role as a publishing and examination hub adds further coherence to this decentralised yet vibrant manuscript ecosystem. Together, these case studies demonstrate the significance of both institutional and community-led manuscript preservation. The paper advocates for greater recognition of sectarian repositories within national archival frameworks and calls for inclusive, collaborative cataloguing practices to bridge the gap between public archives and private custodians.

**Keywords:** Jaina Manuscripts, Digitisation, Hemacandrācārya Jaina Jñānamandira, Sādhumārgī Sect, Catalogue Development, Sectarian Libraries

Bio: Mansi Dhariwal is an independent scholar in Indology, trained in the traditional Gurukula system at Ärugga-Bohi-Labham, Bīkānera. Her research spans Jaina studies, Sanskrit and Prakrit philology, manuscriptology, and Indian astronomy. She has managed the digitisation, preservation, and cataloguing of multiple Sadhumärgi sect libraries and, in 2024, led a major conservation project at the Śrī Hemacandrācārya Jaina Jñānamandira, Paṭaṇa. She has presented at national and international forums and published in Jaina Studies. She continues to work on descriptive manuscript catalogues, critical editions, and collaborative research projects, including the Jaina Prosopography at SOAS, University of London.

### 14. Sanchipaat Manuscripts from Assam: Need of a Holistic Conservation Framework

Dr. Subhra Devi

Assam has a recorded history of manuscripts from 7th Century AD onwards. The support materials used for writing in Assam are varied-- including sanchipaat, tulapaat, bamboo-strip and cloths among others. However, sanchipaat is predominantly used as a writing material over the ages in Assam and thus, the number of sanchipaat manuscript found in Assam compared to other manuscripts is much higher. As sanchipaat manuscripts are not found in other parts of India, the conservation fraternity in the country were aware about this material quite late, and the conservation procedures devised for these manuscripts are also not very much well developed. This paper, after careful survey throughout the state propose that there is still need of studies in the scientific investigation of sanchipaat. Also, sanchipaat manuscripts are scattered across the state in various namghars, satras, temples and private collections apart from a limited collections at the public libraries, archive, and museums. Thus, care and conservation strategies need to take into account these unstructured/unorganized (in terms of preservation procedures and facilities) collections. Moreover, a considerable number of sanchipaat collections are also related to religious ethos and rituals. These collections lack scientifically designed storage for manuscripts nor do they have any trained personnel for the care and conservation of manuscripts. However, some of the traditional methods of preservation followed in the region, which took back-seats after the commencement of western education can significantly contribute for preservation of the same. Thus, the conservation strategy for these manuscripts need to incorporate community engagement and communityconscious efforts along with collaboration with a well- designed Conservation Centre in the state.

**Keywords:** Assamese Manuscripts, Sanchipaat, Conservation Strategies, Community Engagement

Bio: Dr. Subhra Devi, Curatorial Member at the Cultural Interpretation Centre,

Tezpur University, holds a PhD from the National Museum Institute on the conservation of Sanchi-Bark manuscripts of Assam. She has been an ICFP-Mellon Fellow at the Metropolitan Museum of Art, New York, and a Nehru Trust UK Visiting Fellow for Assamese textile documentation. A member of ICOM, MAI, and executive member of IAHC, she has travelled widely for research and has several significant publications to her credit.

### 15. Diffusion-Driven Restoration of Indic Manuscripts: A Cyclic and Structure-Preserving Approach

Akkshita Trivedi

India holds one of the most extensive and diverse manuscript heritages globally, with over ten million manuscripts spanning disciplines such as philosophy, science, medicine, Vedic rituals, mathematics, astrology, vastu, Sanskriti, literature, and darsana. These ancient documents, preserved across temples, monasteries, Jaina Bhandaras, and institutional archives, face severe degradation due to environmental factors, ink corrosion, and material decay. To address these challenges, we present a comprehensive end-to-end document-level image-to-image translation framework built on recent advances in diffusion-based generative models. Our pipeline eliminates the dependency on paired datasets by independently training domainspecific denoising diffusion probabilistic models (DDPMs) for the degraded (source) and restored (target) domains, followed by a cyclic diffusion module that enforces cycle consistency loss to preserve spatial structure, typography, and marginal annotations. The model operates in an unpaired image restoration setting, using forward and reverse diffusion processes to iteratively refine reconstructions while minimizing perceptual and structural distortion metrics. We employ Fourierdomain noise scheduling for better handling of text-heavy regions and introduce a structure-preserving attention mechanism to maintain script geometry. Restored outputs are further evaluated using quantitative measures such as Peak Signal-to-Noise Ratio (PSNR), Structural Similarity Index (SSIM), and Learned Perceptual Image Patch Similarity (LPIPS), along with qualitative assessments by paleography experts. The framework is tested on diverse Indic script datasets, including heavily degraded palm-leaf and paper manuscripts, and achieves significant improvements over state-of-the-art (SOTA) restoration baselines in both objective quality metrics and subjective readability scores. These results demonstrate the potential of cyclic diffusion-based restoration for large-scale preservation, enabling accurate downstream scholarly work such as script decipherment, text interpretation, and cultural archiving.

Keywords: Manuscript Heritage, Image Restoration, Diffusion Models, Cultural

### Preservation

**Bio:** Akkshita Trivedi is a Senior Research Fellow at the Indian Institute of Technology Jodhpur, specializing in document intelligence and historical manuscript analysis. Her research spans document restoration, denoising, segmentation, layout analysis, and script recognition, with a particular focus on the preservation of degraded historical texts. She has contributed to interdisciplinary projects integrating computer vision, machine learning, and digital humanities, aimed at safeguarding cultural heritage. Akkshita's work bridges cutting-edge Al techniques with the nuanced demands of heritage conservation, enabling scalable solutions for digitizing and restoring rare manuscripts while maintaining their authenticity, structural integrity, and historical value.

# 16. Conservation and Restoration of Manuscripts: Preserving Cultural Heritage for Future Generations

Dr. Vinod Kumar Jain

Manuscripts are invaluable records of human civilization, preserving knowledge in the fields of literature, philosophy, science, religion, and art. Often handwritten and composed on fragile materials such as palm leaves, parchment, or early paper, these documents are highly susceptible to environmental damage, biological deterioration, and human neglect. Conservation and restoration of manuscripts are therefore critical to safeguarding this cultural and intellectual heritage. This paper explores the dual process of conservation which involves preventive measures to stop further deterioration-and restoration, which aims to repair and stabilize damaged manuscripts. Traditional methods such as hand cleaning, paper mending, and ink fixing are being complemented today by modern techniques like de-acidification, digital imaging, and non-invasive diagnostics. The use of digital tools helps in reducing physical handling and increasing global accessibility through digitized archives. However, the field faces challenges such as lack of skilled conservators, limited funding, and poor infrastructure in many institutions. Ethical considerations also arise when deciding how much intervention is appropriate to maintain the authenticity of a manuscript. International organizations like UNESCO and national missions have initiated efforts to raise awareness, standardize conservation practices, and train professionals. Interdisciplinary collaboration between historians, scientists, and conservators is also fostering innovation in manuscript preservation. Ultimately, conserving and restoring manuscripts is not only about preserving documents but also about protecting the wisdom and identity of cultures for future generations.

**Keywords:** Manuscript Preservation, Cultural Heritage, Restoration Techniques, Conservation Challenges, Archival Science

# 17. From Decay to Revival: Restoration Techniques for Fragile Manuscript Heritage

Dr. Shivani Yadav Co-Authors: Dr. Vinod Kumar Jain

Manuscripts are invaluable repositories of historical, religious, literary, and scientific knowledge. However, many ancient and medieval manuscripts have deteriorated due to factors such as aging. humidity, fungal infestation, ink corrosion, and improper handling. The preservation of fragile manuscript heritage is an urgent and evolving concern within the fields of conservation, cultural heritage management, and archival studies. Historical manuscripts often composed of delicate materials such as parchment, early paper, and organic inks are particularly susceptible to environmental degradation, biological threats, and human-induced damage. This paper explores the journey from decay to revival, presenting both traditional and cutting-edge restoration techniques that are instrumental in safeguarding these irreplaceable artifacts. It advocates for a holistic. conservation-driven approach that respects the cultural and intellectual value of manuscripts while ensuring their longevity for future generations. It explores time-honored methods such as manual mending with Japanese tissue, ink stabilization, fungal decontamination, and lamination, which demand both precision and experience. Case studies from various cultural institutions illustrate successful restorations, highlighting the interplay between science, craftsmanship, and ethical considerations. In addition, the paper addresses the challenges of balancing historical authenticity with modern intervention, emphasizing the importance of minimally invasive and reversible methods. It also considers the role of digital technologies not only in restoration but also in accessibility and long-term preservation. Ultimately, this study underscores the interdisciplinary nature of manuscript conservation and advocates for global collaboration to ensure that fragile manuscript heritage continues to inform and inspire future generations. The paper contributes to ongoing discourse by proposing an integrative framework for restoration practices that aligns historical value with technological innovation.

**Keywords:** Manuscript conservation, Restoration techniques, Cultural heritage, Preservation science, Digital reconstruction

**Bio:** Dr. Shivani Yadav is an accomplished academician and researcher in the field of Education. She holds a Ph.D. in Education and has contributed significantly to the areas of pedagogy, curriculum development, and teacher education. With a strong commitment to educational innovation and academic excellence, Dr. Yadav has participated in numerous national and international conferences and published several research papers in reputed journals. Her work reflects a deep engagement with inclusive and holistic teaching methodologies, and she continues to work towards advancing educational practices in India. Dr. Shivani Yadav is actively guiding Ph.D. research; four scholars are currently under her supervision, and one has recently submitted her pre-thesis.

# DECODING MANUSCRIPTS: PATHWAYS TO THE INDIAN KNOWLEDGE SYSTEM (IKS)

## 1. Importance Of MANUSCRIPTS In Indian Knowledge System

Anandita Paul

"Govindavallabha" (G.4031) written by Dvarkanatha is a great drama in the musical drama tradition, following the style of Jayadeva's Gitagovinda. It is divided into tenankas. Lyrical features with 'Dhrupads' are evident in this drama. Manuscript of this play is preserved in The Royal Asiatic Society of Bengal, Kolkata. This play has been composed based on the childhood of Lord Shri Krishna. The grand form of Krishna Bhakti literature that is seen here is rare anywhere else. Utilities of editing and analyzing this manuscript are very valuable. This research will lead to the publication of an unpublished manuscript. The musical drama tradition will be enhanced. New literary facts described in the play Govindavallabha will be presented. The ancient manuscript will be preserved. This work is also important in terms of Krishna devotional literature. This research will provide literature students, researchers and scholars with new text and new research material in this field. Therefore, this research work is entirely justified.

**Keywords:** Govindavallabha, Musical Drama Tradition, Krishna Bhakti Literature, Manuscript Editing and Preservation

**Bio:** Anandita Paul is a Research Scholar at the Ganganath Jha Campus of Central Sanskrit University, Prayagraj. Her academic work focuses on the role of manuscripts in the Indian Knowledge System, with a special emphasis on Govindavallabha, an unpublished musical drama. She is particularly interested in the preservation, editing, and literary analysis of ancient Sanskrit manuscripts.

### 2. Reclaiming Indian Knowledge and Legacy: A Path to Civilizational Self-Renewal

Sachin Beniwal

India's civilizational journey is rooted in a profound and diverse body of indigenous knowledge systems that span philosophy, science, medicine, governance, art, and ecology. However, centuries of colonial disruption, intellectual devaluation, and cultural dislocation led to the marginalization of this legacy. Reclaiming Indian knowledge is not a backward-looking endeavor, but a transformative act of civilizational self-recovery, rooted in critical engagement and modern relevance. This abstract proposes a multidimensional approach to reviving India's knowledge traditions through integration with contemporary academia, research, and policymaking. The Indian knowledge framework encompassing texts like the Vedas, Arthashastra, Charaka Samhita, and Sangam literature—offers insights into sustainable development, epistemology, holistic health, linguistics, and ethics. Yet these contributions remain underrepresented in mainstream discourse. Reclaiming them requires not just translation and documentation, but contextualization, pedagogy reform, and institutional support. The National Education Policy 2020 signals a positive shift, encouraging interdisciplinary inquiry and inclusion of classical knowledge. This paper underscores the urgency to overcome colonial epistemic hierarchies and re-embed Indian thought in global intellectual currents—not as exotic heritage, but as critical knowledge. It argues for fostering academic sovereignty, nurturing indigenous languages, and supporting research rooted in Indian paradigms. Reclaiming legacy does not mean rejecting modernity; it means dialoguing with it on equal terms. Through a careful synthesis of tradition and innovation, India can reconstruct a narrative that is intellectually confident, spiritually rooted, and globally relevant—affirming its rightful place in shaping the knowledge systems of the future.

**Keywords:** Indian Knowledge Systems, Reclamation, National Education Policy (NEP) 2020

Bio: Sachin Baniwal, a law student at Maharaja Surajmal Institute, New Delhi, specializes in criminal and constitutional law with a focus on fairness,

accountability, and equality. He has interned with the Delhi Legislative Assembly, gaining insight into legislative processes and governance. As Public Relations Head of the Criminal Law Society, he organizes workshops and discussions that strengthen his leadership and communication skills. Aspiring to a career in research, advocacy, and public service, he aims to contribute to legal reforms and a more equitable justice system.

# 3. Integrating Kautilya's 'षाड्गुण्य' into Education of Management": An Indic Epistemologies of 'Six Factor Strategy'

Dr. Charulata Londhe

This research explores the enduring relevance of Kautilya's Arthashastra for contemporary management education. As a foundational text in Indic Knowledge Systems (IKS), the Arthashastra offers advanced insights into governance, economic policy, administration, and strategic decision-making—providing early frameworks for management theory, leadership ethics, and risk assessment. The paper has three key objectives: (1) to develop the Sadgunya (Shad-Gunya) Strategic Framework and Indic epistemology within the IKS paradigm, (2) to compare Sadgunya with dominant Western business strategies, and (3) to integrate IKS into management curricula through a contextual pedagogical model. The research reinterprets the six-fold foreign policy doctrine of Sādguṇya—Sandhi (Treaty), Vigraha (War), Yana (Marching), Asana (Halting), Dvaidhibhava (Dual Policy), and Samshraya (Seeking Shelter)—into modern business strategies such as alliances, acquisitions, mobilization, neutrality, dual strategy, and trustbased collaboration. Using qualitative textual analysis of the original Sanskrit text, it maps these strategies onto Western models like Porter's Generic Strategies, Ansoff's Matrix, SWOT, PESTEL, VUCA, and Blue Ocean Strategy, revealing Şādgunya's nuanced flexibility beyond linear frameworks. Ultimately, the paper proposes a decolonised, value-driven curriculum framework rooted in Kautilya's strategic insights, positioning the Vijigīshu (aspirant conqueror) as a model for ethical, adaptive, and visionary leadership in today's business environment.

Keywords: Ṣāḍguṇya (Shad-Gunya) Strategic Framework, Indic Knowledge Systems (IKS), Kautilya's Arthashastra

**Bio:** Dr. Charulata Londhe, a Ph.D. in Management, specializes in traditional entrepreneurship in the textile weaving sector, with her research on Paithani weaving exploring it as a cultural and economic system. With over 24 years of experience in academia, industry, and research, she has authored 18+ papers and holds two copyrights—*Terrorism VUCA (T-VUCA) and Sustainable Work*-

Life Style (SWLS). An ICSSR-sponsored study on Pradhan Mantri Mudra Yojana (PMMY) further reflects her policy-oriented work. Currently a freelance researcher and Advisor at Maharashtra Knowledge Centre under the NEP Task Force, she focuses on Indian Knowledge Systems, sustainability, competitiveness, and entrepreneurship. Her work connects indigenous trade practices and artisanal traditions with modern business strategy, aiming to revive and repurpose India's economic wisdom for contemporary relevance.

# 4. Reclaiming India's Knowledge Legacy: Strategies for Integrating Manuscriptology and Indian Knowledge Systems in Contemporary Higher Education

Sachchidanand Snehi

India's rich manuscript heritage, encompassing diverse disciplines such as philosophy, science, and the arts, stands as a testament to its profound intellectual traditions. However, the integration of this vast body of knowledge into contemporary higher education remains limited. This study explores the imperative of embedding manuscriptology and Indian Knowledge Systems (IKS) into higher education curricula to rejuvenate and disseminate indigenous wisdom. It examines current initiatives by institutions such as Jawaharlal Nehru University, the University of Mysore, and the Oriental Research Institute, highlighting their roles in preserving and promoting manuscript heritage. This study also discusses the challenges faced in this integration, including curriculum development, faculty training, and resource allocation. By analyzing successful models and proposing strategic frameworks, the paper aims to provide actionable insights for policymakers and educators to effectively incorporate manuscriptology and IKS into higher education, thereby fostering a holistic and culturally rooted academic environment. India's rich manuscript heritage, spanning disciplines from philosophy to science and the arts, is a vital source of traditional wisdom. However, higher education has not fully tapped into this potential. Under the National Education Policy (NEP) 2020, there is a clear mandate to integrate Indian Knowledge Systems (IKS) and manuscriptology across academic curricula.

**Keywords:** Manuscriptology, Indian Knowledge Systems (IKS), Higher Education, National Education Policy (NEP) 2020, Curriculum Integration, Digital Preservation, Interdisciplinary Research, Manuscriptology; Indian Knowledge Systems (IKS); Higher Education; Curriculum Integration; Digitization

**Bio:** Dr. Sachchidanand Snehi, Associate Professor of Nyaya Darshan at Central Sanskrit University, Devprayag, holds an Acharya in Sarvadarshan, an M.A.

in Sanskrit, and a Ph.D. in Nyaya-Darshan. With over 15 years of teaching experience, he has published 24 research papers, authored and edited several books, and organized numerous national and international seminars, including collaborations with ICPR, ICSSR, and ICHR. Recipient of the Sanskrit Pratibha Samman by Delhi Sanskrit Academy, he is currently translating *History of Indian Logic* by MM Satishchandra Vidyabhushan and has designed a PG Diploma course in Navya Nyaya. Proficient in multiple languages, he works to bridge traditional Indian philosophy with contemporary scholarship.

# 5. LANGUAGE AND LINGUISTICS IN PROMOTION OF GYAN BHARATAM, INDIAN KNOWLEDGE SYSTEMS & SUSTAINABLE DEVELOPMENT

### RAVINDRA REDDY M

The resurgence of India's knowledge traditions under the vision of Gyan Bharatam aligns with a broader effort to reclaim linguistic and cultural identity. The term Gyan Bharatam symbolizes a national movement to revive India's vast reservoir of knowledge rooted in ancient texts, oral traditions, and philosophical systems. This vision seeks to promote an India that is intellectually self-reliant, culturally rooted, and globally connected. Language and linguistics form the bedrock of this knowledge transmission. This research explores how language and linguistics play a pivotal role in the revival and dissemination of Indian Knowledge Systems (IKS), encompassing philosophy, science, arts, yoga, Ayurveda, and ecology. Through a qualitative discourse on traditional texts, modern policies and sustainable development goals (SDGs), this research reiterates that integrating indigenous languages and linguistic insights into the curriculum and public discourse not only preserves cultural heritage but also enhances epistemic plurality and environmental consciousness. The paper critically analyzes National Education Policy (NEP) 2020, Vedas, Upanishads, Shastra's, ancient manuscripts and the role of Sanskrit, Pali, Tamil, Telugu and vernaculars in building a knowledge-based sustainable future. This research also addresses the question: How can linguistic and discourse-based approaches be used to promote Indian Knowledge Systems in the context of sustainable development and national education. The research also investigates how multilingual strategies and linguistic identity preservation contribute to SDG goals such as quality education (Goal 4), reduced inequalities (Goal 10), and climate action (Goal 13).

**Keywords:** Language, Linguistics, Gyan Bharatam, Indian Knowledge Systems (IKS), Sustainable Development Goals (SDGs).

Bio: Ravindra Reddy M is a multi-disciplinary research scholar in language,

linguistics, environment, Indian knowledge systems, and sustainable development. He is committed to continuous learning and dedicated research on the role and impact of language and linguistics across disciplines, fostering multidisciplinary, interdisciplinary, and trans disciplinary approaches. A passionate, flexible, and open learner, he engages with complex phenomena through diverse perspectives. As a lifelong scholar, he aspires to contribute to society by generating pragmatic research outcomes that promote holistic health, well-being, and sustainable development.

## 6. Shruti and Smriti: Methodological Foundations of the Indian Knowledge System

Monalisha Medhi

The Indian Knowledge System (IKS) is distinguished by its deep-rooted traditions in both structure and transmission of knowledge, primarily encapsulated under the twin pillars of Shruti and Smriti. This paper aims to explore these foundational categories not merely as literary or doctrinal divisions, but as sophisticated methodological frameworks that have shaped the philosophical, legal, and educational contours of Indian civilization for millennia. Shruti, meaning "that which is heard," refers to texts considered divinely revealed and eternally valid, most notably the Vedas and their associated literature. These texts are characterized by their Apaurusheya (authorless) nature, supreme authority, and unalterability, signifying their revered status as the ultimate source of knowledge and dharma. The method of oral transmission, meticulous memorization, and precise recitation inherent in Shruti traditions ensured the preservation of philosophical and ritualistic truths, underscoring a unique epistemological model based on revelation and tradition. Smriti, translating to "that which is remembered," complements Shruti by contextualizing these truths within the human experience. Comprising texts such as the epics (Mahabharata, Ramayana), Puranas, and Dharmashastras, Smriti literature is dynamic and open to reinterpretation, reflecting the evolving needs of society. Its methodological contribution lies in commentary, adaptation, and debate, allowing for the harmonization of immutable principles with societal change. In this context, this paper will analyze how the dialogical interplay between Shruti and Smriti provided a resilient and adaptive framework for the growth and transmission of knowledge. The process of inquiry, debate, and codification grounded in these two traditions helped establish a robust mechanism for both preservation and innovation.

**Keywords:** Shruti, Smriti, Indian Knowledge System, Methodological Foundations

Bio: Monalisha Medhi is a PhD Senior Research Fellow at Dept of Folklore Research, Gauhati University, and also working as an Assistant Professor at

Indian Knowledge Systems Cell, The Assam Royal Global University. Her area of interest lies in Folklore, Oral Tradition, Oral Narratives. Cultural Ecology & Folk Literature. She has done few publications in national and international journals and has presented papers in both national and international conferences. Her recent book chapter has appeared in an edited volume entitled: Identity, Politics, and Narratives of Belonging Northeast Indian in Literature and Contemporary Discourse by Cambridge Scholars Publication.

### 7. भारतीय ज्ञानसंपदा की रक्षा में जैन श्रमण परम्परा का प्रदान

Shri Vairagyarativijay Maharaj

भारतीय ज्ञानसंपदा की रक्षा में जैन श्रमण परम्परा का प्रदान पाण्डुलिपियां भारतीय ज्ञानसंपदा के विविध आयाम जैसे कि भाषा, लिपि, विषय-ज्ञान व कला की संवाहिका है। उनकी सुरक्षा और संवर्धन में जैन परंपरा का महत्त्वपूर्ण प्रदान रहा है। इस विषय में प्रस्तुत इस निबंध में निम्नलिखित बिंदुओं पर विमर्श किया गया है। जैन श्रमण-श्रमणियों के द्वारा पाण्डुलिपि की सुरक्षा में किये गये प्रयास। जैन श्रेष्ठि द्वारा पाण्डुलिपि की सुरक्षा में किये गये प्रयास। जैन पाण्डुलिपि संग्रह की विशेषताएं। जैन देवनागरी लिपि व जैन लेख पद्धित की विशेषता। पाण्डुलिपि विनाश के कारण। पाण्डुलिपि सूचिपल निर्माण का इतिहास। वर्तमानकाल में पाण्डुलिपि संरक्षण में प्रयासरत संस्था, व्यक्ति। १९-२०वीं सदी में पाण्डुलिपि सुरक्षा के प्रयास।

Keywords: पाण्डुलिपि संरक्षण, जैन श्रमण परम्परा, भारतीय ज्ञानसंपदा

Bio: गणिवर श्री वैराग्यरतिविजयजी म.सा. (संस्थापक, श्रुतभवन संशोधन केंद्र, पुणे) वर्तमान में श्रुतरत्न परिवार के अंतर्गत प्राचीन हस्तलिखितों का सूचीकरण एवं संपादन कार्य कर रहे हैं। इन्होंने सन् 2010 में पुणे, महाराष्ट्र में श्रुतभवन संशोधन केंद्र की स्थापना की, जो पाण्डुलिपियों के सूचीकरण और संपादन के क्षेत्र में कार्यरत है। अब तक 30 से अधिक युवाओं को पाण्डुलिपि क्षेत्र में प्रशिक्षण प्रदान किया है और 300 से अधिक अप्रकाशित पाण्डुलिपियों का संपादन कर उनका प्रकाशन किया है। भारत के 70 से अधिक प्राचीन पाण्डुलिपि संग्रहालयों में स्कैनिंग और सूचीकरण का कार्य करते हुए इन्होंने 80 लाख से अधिक पत्नों को डिजिटाइज्ड प्रारूप में सुरक्षित किया है। साथ ही, 10,000 से अधिक शास्त्रों तथा 900 से अधिक शास्त्रकारों की जानकारी का व्यवस्थित संकलन भी किया है।

### 8. Reclaiming Naga indigenous knowledge through museum-based education

ALINO SUMI

The knowledge systems of the Naga communities in Northeast India are largely oral and expressed through material culture—ritual objects, textiles, food, and architecture. These forms of knowledge, though not recorded in classical manuscripts, represent complex understandings of ecology, health, law, and cosmology. As India seeks to revitalise its diverse knowledge traditions, there is an urgent need to broaden the definition of "manuscript heritage" and recognise the value of such non-textual archives. This paper seeks to explore how museums both institutional and community-based—can contribute to the integration of Indian Knowledge Systems (IKS) in education, as envisioned in the National Education Policy (NEP) 2020. The NEP emphasises experiential learning, local knowledge, and cultural rootedness, opening new possibilities for place-based, interdisciplinary pedagogy. Drawing on examples from Naga cultural centres and regional museums, the paper will highlight efforts to use exhibitions, oral histories, and community-curated collections as educational resources. It will argue for partnerships between schools, universities, and cultural institutions to develop curricula that reflect local epistemologies. Museum visits, storytelling sessions, and object-based learning modules can help students engage with IKS in meaningful and respectful ways. By positioning museums as living repositories and learning spaces, this approach not only supports NEP 2020's vision but also strengthens cultural self-understanding among indigenous youth and the broader public.

**Keywords:** Indian Knowledge System, Museum, Naga, National Education Policy

**Bio:** Dr. Alino Sumi is an Indigenous Naga anthropologist whose research focuses on Indian Knowledge Systems, cultural anthropology, heritage studies, and ethnography. She currently serves as an Adjunct Lecturer in the College of Humanities, Arts and Social Sciences at Flinders University. She previously held a three-year postdoctoral fellowship at the Indian Institute of Technology

Gandhinagar, where she also taught a course on Indigenous Knowledge Systems. Her academic contributions include over a dozen research papers and book chapters published by leading international publishers such as Springer, Oxford University Press, and Routledge (Taylor & Francis).

## 9. Manifestation of Shiva in Shivanidhi manuscript - A study of Mysore traditional paintings

Dr Anitha HC

Mysore traditional paintings from Karnataka known for their religious, mythological themes with illustrations, which are based on legends of gods and goddesses. The script Śivanidhi is best example of Mysore traditional paintings and is filled with manifestation of Śiva along with text is chosen for the present study. The concept of Śiva and his manifestations has been developed at length in the epics and the purānas. The purānas wove legends to explain all the characteristics of Shiva and his many aspects as narratives. The early iconographic manuals like Tantra - sara describes several aspects and forms of Śiva. The iconographic representations of Śiva in twenty-five forms are categorized into four groups: Shristi, Samhāra, Anugraha and Nritya. In the present study the Samhāra and Anugraha aspects of Śiva are chosen for their narrative quality.

**Keywords:** Visual Narrative, Mythology, Manuscripts, Traditional Paintings, Shiva.

**Bio:** PhD-Department of Visual Arts, Faculty of Humanities and Social Sciences, Jain University, Bangalore. Thesis Title: "A Study on Elements of Visual Narratives in the Shiva Mural Painting Tradition from South India." 2011-12-MPhil: Painting, Jain University, Bangalore. Dissertation Title: "The Influence of Folklore in Contemporary Paintings of Karnataka." 2005-07-MVA: Painting, Department of Visual Arts, Jnana Bharati, Bangalore University. 2000-05-BFA: Painting, University College of Fine Arts, Kuvempu University, Davanagere, Karnataka. Written research papers on visual narratives depicted in the temples of Shiva from South India. Participated in research seminars, group shows, art camps, workshops and organized seven solo painting shows. Paintings are in the collection of Karnataka Lalitkala Akademy, Department of Kannada and Culture, and private collections.

### प्राकृत एवं जैन पांडुलिपियां - भारतीय ज्ञान प्रणालि का महत्वपूर्ण स्रोत

Kunal Kapasi

प्राचीन भारतीय संस्कृति का एक महत्त्वपूर्ण स्रोत है - जैन प्राकृत साहित्य। प्राकृत जैन साहित्य में भारतीय कला, साहित्य, प्रथाएं, परम्पराएं, भाषाएं, इत्यादिक महत्वपूर्ण जानकारी प्राप्त होती है। प्राकृत साहित्य में वर्णित देशज शब्दों में द्राविडीयन एवं विदेशी भाषाओं के शब्दों के मूल प्राप्त होते हैं। गुजरात के जैनाचार्य श्रीहेमचंद्राचार्य रचित देशीनाममाला में 3000 से अधिक देशज शब्द और उन शब्दों का तत्कालीन अर्थघटन प्राप्त होता है, जो भारत की धरोहर समान है। विपल प्रमाण में प्राप्त प्राकृत कथासाहित्य में विश्व की अनेक कथाओं के मूल (मोटिफ) प्राप्त हुए हैं। अरेबियन नाइट्स, सिन्ड्रेला इत्यादि अनेक कथाओं के प्राचीनतम मोटिफ जैन साहित्य में प्राप्त होते हैं। जैन साहित्य में प्राचीन भारत की लोक संस्कृति के खान-पान, रीति-रिवाज, कला इत्यादि के अंश प्राप्त होते हैं। जैन आगमों में भी प्राचीन भारतीय जीवनशैली के अंश प्राप्त होते हैं। जैन धर्म के प्रवर्तक महावीरस्वामी ने अर्धमागधी में उपदेश दिया, जिसका संकलन उनके शिष्यों ने किया। जैन साधगण ने भारत में पादविहार के कारण विभिन्न प्रदेशों के विभिन्न जातीयों के लोगों से संपर्क से जो भी अनुभव प्राप्त किया, उसका निरूपण साहित्य में किया। जिसके फलस्वरूप आज भारत की गुजराती, हिन्दी, राजस्थानी, कन्नड़ इत्यादि भारतीय प्रादेशिक भाषाओं के प्राचीनतम अंश जैन साहित्य में प्राप्त होते हैं। आज गुजरात में जैन मुनियों की प्रेरणा से अनेक पांडुलिपियां संरक्षित हैं, जिनकी सुरक्षा से अनेक प्राकृत भाषाओं की पांडुलिपियों के अध्ययन से प्राचीन समय के भारत की अनेक अनुपलब्ध जानकारी प्राप्त हो सकती है। जैन पांडुलिपि के अध्ययन पांडुलिपिविज्ञान के लिए महत्वपूर्ण हैं। संस्कृत एवं प्राकृत भाषा के साहित्य के विशेष अध्ययन से ही अतुल्य भारतवर्ष की छवि पूर्ण होगी।

Keywords: जैन, मोटिफ, प्राकृतभाषा, आगम, पांडुलिपिविज्ञान

**Bio:** Dr. Kunal Kapasi is Assistant Professor of Prakrit at P.K.Kotawala Arts College affiliated to Hemchandracharya North Gujarat University, Patan. His research interests are based on Prakrit Language & Manuscriptology. His doctoral subject is - Editing & Study of Santinaha Carium (Prakrit Manuscript). He teaches Jain Literature at Jainology Department of the university. He also teaches language & Manuscriptology at Hemchandracharya Jain Gyanmandir, which is famous for its collection of Ancient Manuscripts written in Palm leafs and papers. He is interested in the ancient Indian Knowledge Systems.

### 11. Integrating Indian Knowledge Systems into the contemporary learning through Manuscript Heritage

Puspa Das

The reintroduced interest in indigenous knowledge frameworks offers a chance to integrate the rich erudite legacy of Indian Knowledge Systems (IKS) into contemporary education. From mathematics, astronomy, medicine, and agriculture to linguistics, ethics, philosophy, and the performing arts, Indian Knowledge Systems is embedded in centuries of analysis, discussion, and holistic knowledge. This valuable inheritance is epitomized by manuscripts that have been preserved through the ages in handmade paper, birch bark, and palm leaves. Composed in Sanskrit, Pail, Tamil, Persian, and regional vernaculars, these books represent not only scientific ideas but also ecological perception, cultural reminiscence, and artistic susceptibility. This paper explores how the legacy of manuscripts might act as a transfiguring link between conventional knowledge and contemporary pedagogy methods. Learners can interact with indigenous ways of thinking, creating, and being sustainable by incorporating decoded manuscript content into curriculum and instructional practices. Models of digital archiving, museum education and experiential knowledge that support this amalgamation are covered in the paper. Additionally, it assesses how educators, historians, technologists, and manuscriptologists might work together across disciplinary boundaries to interpret ancient knowledge within contemporary instructional contexts. According to the paper, a manuscript-based knowledge method makes education more accessible, rooted, and introspective by revitalizing legacy rather than just preserving it. Additionally, it discusses the difficulties associated with deciphering, accessing, and standardizing scripts and offers solutions through teacher training modules, institutional networks, and digital humanities technologies. In the end, incorporating manuscript heritage into the curriculum will help students develop critical thinking skills, ethical awareness, and cultural pride, creating a new generation of globally savvy and locally rooted pupils. With this integrative model, India's knowledge traditions are reframed as dynamic resources for influencing the future rather than as artefacts of the past.

**Keywords:** Indian Knowledge System, Manuscript, Contemporary learning, Heritage

**Bio:** Dr. Puspa Dasholds a Ph.D. and M.Sc. degree in Museology from the University of Calcutta. She is currently serving as Young Professional (Documentation) at Victoria Memorial Hall, Kolkata. With over a decade of experience in museum documentation, education, and curation, her previous roles include Gallery Guide and Documentation Assistant in different museums of West Bengal. A UGC-JRF and SRF awardee, she has also served as UGC Project Fellow for UGC-UPE Project, Phase II. Dr. Das has presented over 40 papers, authored 36 publications, and is a member of ICOM, MAI, and other professional bodies.

## 12. Transformative Wisdom: Analysing the Influence of the Bhagavad Gita on Values and Mental Strength

Dolly Jamwal Co Authors: Rupali Satsangi , Preeti Manani

The Bhagavad Gita, a revered spiritual text of the Indian subcontinent, has long been associated with fostering inner strength, ethical clarity, and balanced living. This research investigates how engagement with the Gita correlates with individual values and mental resilience across diverse demographic and cultural backgrounds. Using a structured questionnaire administered via Google Forms, data was collected on various psychological attributes such as self-discipline, empathy, emotional regulation, honesty, equanimity, and responsibility. Respondents were also asked about their frequency of engagement with the Bhagavad Gita, religious background, and cultural identity. The study adopts a quantitative approach with psychometric Likert-scale evaluations, aiming to identify measurable patterns between exposure to the Gita's teachings and mental strength indicators. Early insights from the data suggest a positive association between regular reading of the Gita and attributes like emotional composure under stress, a sense of duty despite adversity, and reduced material attachment. Furthermore, participants who frequently engaged with the Gita reported greater ethical consistency, higher empathy, and increased psychological awareness. This research contributes to the understanding of ancient spiritual literature as a tool for personal development and psychological fortitude in modern society. The findings hold potential relevance for mental health practitioners, educators, and those interested in the intersection of spirituality and psychological wellbeing. The results advocate for a renewed scholarly and practical engagement with philosophical texts such as the Bhagavad Gita. especially in contexts of stress management, value cultivation, and holistic mental health strategies.

**Keywords:** Bhagavad Gita, mental resilience, personal values, spiritual texts, character strengths, Indian philosophy

Bio: Dolly Jamwal is a Senior Research Fellow at Dayalbagh Educational Institute,

with a keen interest in Indian philosophy, psychological wellbeing, and value-based education. Her interdisciplinary research bridges classical spiritual texts with modern psychological frameworks to understand human behaviour and ethical development. With a background in literature, economics and psychology, she has conducted multiple field-based and survey-driven studies focusing on human behaviour, mindfulness, and character strengths. Passionate about proving spiritual beliefs with empirical research. Dolly Jamwal continues to explore how ancient insights can offer solutions to present-day emotional and ethical challenges.

#### 13. Ghora Nidan and Hastividyarnava: Text, Treatment, and Tradition: Revisiting India's Knowledge System from Assam's Veterinary Manuscript Heritage

Pankaj Protim Bordoloi

Ghora Nidan and Hastividyarnava are premodern Assamese manuscripts on horse and elephant care that illuminate India's traditional veterinary science. Ghora Nidan, likely compiled in Ahom-era Assam, is a vernacular handbook of equine lore. It catalogs local horse types, colors and qualities, and prescribes remedies for ailments using available herbs. Uniquely, it omits many Sanskrit Ayurvedic ingredients (spices rare in Assam) and is organized in two parts (horse characteristics, and diseases with treatments). Hastividyarnava (dated 1734 CE, by Sukumar Barkaith under King Siva Singha) is an illustrated treatise on elephants. It classifies breeds and temperaments, describes capture and training methods, stable management and health care (ailments, longevity, treatments), and even roles of elephants in warfare. This manuscript was commissioned by Ahom royalty and contains 171 paintings on sanchi-bark depicting elephant medicine, rituals and symbolism. Both works were used as official manuals in the Ahom kingdom under the Ghora-chowa Barua (horses) and Hati-Barua (elephants) departments. The paper will try to understand how these texts bridge regional practice and broader Ayurvedic knowledge: they complement Sanskrit veterinary classics (e.g. Ashva-Ayurveda, Hastya-Ayurveda) with Assam-specific experience. Recent scholarship emphasises their value in tracing India's animal husbandry heritage and pharmacopoeia in the Northeast. The paper will shed light on how today these manuscripts exemplify India's rich manuscript tradition and offer insights for holistic livestock care. By preserving and studying Ghora Nidan and Hastividyarnava, scholars and practitioners reconnect modern veterinary and Ayurvedic science with indigenous knowledge, reinforcing the continuity of India's living traditional sciences. This study will also try to understand how these manuscripts, Ghora Nidan and Hastividyarnava are crucial to the Indian knowledge system, showcasing indigenous veterinary practices and the cultural significance of animals in mediaeval Assam. They highlight the interdependence

between humans and animals, predating modern veterinary science. Today, these manuscripts offer primary sources for tracing veterinary practices and preserving cultural heritage.

**Keywords:** Assamese manuscripts, veterinary science, animal husbandry, traditional knowledge, Ghora Nidan; Hastividyarnava

**Bio:** Pankaj is Deputy Director of the Rashtrapati Bhavan Museum & Art Collection and a doctoral candidate researching tribal identity in museums. He's part of the British Museum's Reimagine project and was a 2018 Curatorial Training fellow. He received a fellowship from the Dutch Government and Rijksmuseum. Writing in English and Assamese, he contributes on art, politics, and literature. His 2022 collection *Anuprexon* and research focus on tribal studies, Indian history, and museum management. A cultural advocate, he lives in New Delhi with his wife, enjoying mandolin and community service.

### 14. Cheating Death in Vajrayāna Buddhism: A Comprehensive Analysis of the 'Mṛtyuvañcanopadeśa' Manuscript

Niraj Dahal

The Mrtyuvancanopadesa (The Doctrine of Cheating Death) represents a critically significant yet understudied Vajrayāna Buddhist manuscript that systematically addresses mortality through an innovative synthesis of tantric ritual, medicinal alchemy, and astrological prognostication. This study provides the first comprehensive analysis of Vāgīśvarakīrti's 10th-11th century Mṛtyuvañcanopadeśa (NGMPP Reel B-90/12, National Archives Nepal), examining its four-part structure that progresses from diagnosing death omens (including external/ internal signs and divine wrath indicators) to prescribing active countermeasures (mantras, gemstone therapies, and yogic practices). The research reveals how the text operationalizes core Vajrayāna principles by (1) treating the body as a malleable ritual instrument (Kāya-Sādhanā), (2) employing sonic empowerment through mantra (Mantra-Vīrya Sadhanā), and (3) facilitating the cognitive deconstruction of mortality (Vikalpa-Kşaya). Its sophisticated diagnostic system integrates Ayurvedic humoral theory, planetary astrology, and dream hermeneutics, while its therapeutic sections combine herbal elixirs, prāṇāyāma protocols, and śūnyatā meditation. As a material artifact, the manuscript provides crucial insights into medieval Buddhist engagements with suffering, bridging philosophical inquiry with ritual practice. The study demonstrates the text's radical departure from passive karmic acceptance of death, reframing mortality as an active ritual frontier to be transcended through embodied practice. This analysis not only recovers a lost chapter of tantric literature but also establishes the manuscript's relevance for contemporary studies in comparative thanatology, history of medicine, and ritual studies, while suggesting promising avenues for future research on cross-cultural longevity practices.

**Keywords:** Vajrayāna Buddhism, Mortality and Ritual Practice, Tantric Manuscript Analysis

Bio: Residing in Bhaktapur, I am an Assistant Professor at Valmeeki Vidhyapeeth,

Nepal Sanskrit University, since 2008, with an Ācārya in Buddhist Philosophy and advanced degrees in English Literature. Currently pursuing a PhD in Jain and Buddhist Philosophy at Banaras Hindu University with an ICCR Scholarship, my research focuses on editing and translating rare manuscripts. I have worked on texts like *Mṛtyuvañcanopadeśa, Yogāmbar Samādhi Sādhana*, and the *Sukhāvatīvyūha Sūtra* at the National Archives of Nepal. Proficient in multiple languages and scripts, I have presented at national and international forums and published peer-reviewed articles, dedicating my work to preserving Nepal's and India's manuscript heritage.

### 15. INTERPRETING ANCIENT BIODIVERSITY THROUGH MANUSCRIPTS

Al Shaz Fatmi

Manuscripts are generally considered historical records related to religious practices and other important historical events. But at the same time, they are equally important from the point of studying the ancient biodiversity of a particular region. They are regarded as an authentic record to document the ancient animals that have become extinct. Documentation of various manuscripts will be undertaken through this study, which is depicted with natural history specimens. Manuscripts provide authentic and valuable information about the ancient biodiversity by offering written records of species, ecosystems and human interactions with the environment. It includes a detailed description of flora and fauna, their behaviour, as well as habitat. A detailed account of all types of ecosystems, whether forest, grassland or wetland and how they support life forms is also given. Human-environment interactions of how ancient civilisations interacted with their environment, including hunting, gathering and other agricultural practices. Certain important manuscripts like Panchtantra, Matangalila, Hastyayurveda, and palm leaf manuscripts are important records for the floral and faunal diversity of the region. These manuscripts, along with other such manuscripts, are very well preserved and can be found in different libraries. They are an important record to study the ancient biodiversity and how it has changed over time. There are some notable databases for biodiversity research, like GBIF (Global Biodiversity Information Facility- a comprehensive database of biodiversity observations and species information), BIEN (Botanical Information and ecology Network- a database of plant species information and ecological data) and TRY (a database of plant traits and characteristics) and many more this may include the ancient biodiversity depictions from manuscripts. It will enhance the knowledge about the physiology, nourishment, pathology, consciousness about plant or animal, germination, reproduction, sex, heredity, taxonomy and nomenclature, classification, anatomy and medical anatomy, etc.

**Keywords:** Manuscript, Ancient biodiversity, Extinct, natural history specimens, Ecosystem

Bio: The author is Assistant Director (Natural History), State Museum Lucknow, Department of Culture, Uttar Pradesh, India. She is a distinguished museologist with extensive 16 years of expertise in scientific documentation, museum design, display, digital documentation, interpretation, research and publication. To her credit, there are six books, 3 book chapters, monographs and several research articles in National and International Journals. By serving as nodal officer for the U.P.'s first State-of-the-Art Tribal Culture Museum, Balrampur, and Natural History Museum, Lucknow, she has incorporated the best museum practices. Beyond her professional commitments, Mrs. Fatmi is passionate about scientific innovations, sustainable development, the environment and biodiversity awareness.

## 16. A Survey of Some Hitherto Unpublished Texts on Advaita-Vedānta: Uncovering Indian knowledge System

Somnath Sarkar

The growth of literature on Advaita-Vedānta can be treated in relation to the following periods - ancient, mediaeval and the late mediaeval and the present one. Of these the former extends upto the times of Śrī Śamkarācārya and his contemporaries. The late mediaeval period is the high time of the composition of the primary texts of Vedānta and the prakarana-grantha. A prakarana type of texts or works aims at expounding and illustrating are section of particular śāstra or scientific literature of the subject, as it has been so explained by the experts. In this research article an attempt has been made to analyze and highlight the survey of such prakarana texts on Advaita-Vedanta those are unpublished till date as far as practicable. The texts are Jñānaprabodhamañjarī sometimes ascribed to Śamkarācārya, Advaitamakaranda of Lakshmidharakavi, Darshanakalika of Ramanandatirta, Saddarshanakarika of Nandarama-tarkavagisha, Rasabhivyanjika of Svayamprakashajyoti, Vedantavibhavana and so on and so forth. Those unpublished Manuscripts are deposited in different Manuscript repository of India and abroad. The Asiatic Society, Kolkata and Bombay, BORI, Pune, ORI, Baroda and Mysuru, Adyar Library, Thanjabhur Saraswati Mahal Library and other institutions preserved these valuable texts and their manuscripts.

**Keywords:** Advaita-Vedānta, Primary texts, Prakarana-text, Critical edition, Higher criticism, Critical apparatus, Stema codicum, Survey of Hitherto unpublished texts, Indian knowledge system.

**Bio:** Associate Professor and Head of the Department of Sanskrit, as well as Incharge of the Manuscript Library at Kanchrapara College under the University of Kalyani, West Bengal, India. Previously served as Research Fellow and Cataloguer for the National Manuscript Mission at the Calcutta University Manuscript Resource Centre (CUMRC). Held the prestigious Surendranath Bhattacharya Memorial Fellowship in Indian Textual Criticism, a joint initiative of CUMRC and the Asiatic Society. Edited five unpublished texts on Vedanta as part of M.Phil.

and Ph.D. dissertations and a UGC Minor Research Project. Acts as a full-time resource person for organizations including NMM, CCRAS, ORI-s, IGNCA, and CSU, conducting workshops on Manuscriptology and Palaeography.

#### 17. Reclaiming the Political Ideas in Ancient Manuscripts: From Arthashastra to Dharmaśāstra

Devendra Kumar Dubey

This paper undertakes a comparative political analysis of governance, justice, and statecraft as conceptualized in select classical Indian manuscripts, particularly the Arthashastra and various Dharmaśāstras. By foregrounding the political ideas embedded within these seminal texts, the study challenges modern narratives that overlook the depth and diversity of ancient Indian political thought. Through a critical reading of the Arthashastra, traditionally attributed to Kautilya, we examine its pragmatic approach to power, centralized administration, and realpolitik strategies for securing the state. In contrast, the Dharmaśāstras legal and ethical treatises offer normative frameworks emphasizing justice, duty (dharma), and moral legitimacy as central to governance. Employing a comparative methodology, this research elucidates how these texts diverge in their conceptualization of law, authority, and the role of the ruler. The Arthashastra's utilitarian and sometimes amoral principles are juxtaposed with the Dharmaśāstras' insistence on ethical conduct and social harmony. This intersection highlights the dynamic interplay between the pragmatic and normative dimensions of statecraft in ancient India. By reclaiming and contextualizing these political ideas, the paper demonstrates their relevance to contemporary debates on governance, sovereignty, and ethical leadership. The study not only bridges a significant gap in the understanding of non-Western traditions of political theory but also invites a re-examination of modern governance through the lens of indigenous intellectual heritage. The paper ultimately argues that the plural perspectives found in ancient Indian manuscripts remain vital for informing current discourses on justice, statecraft, and political legitimacy.

**Keywords:** Arthashastra, Dharmaśāstra, Governance, Justice, Statecraft, Manuscripts

**Bio:** Devendra Kumar Dubey is a rising voice in the realm of political science, currently pursuing his PhD at the University of Allahabad with a research focus on the strategic intricacies of the Indo-Pacific Region. A former faculty member at

Ewing Christian College, he merges academic insight with real-world engagement. Now based in Delhi, he mentors a vast cohort of civil service aspirants with precision and passion. Known for his sharp intellect, disciplined guidance, and deep-rooted commitment to nation-building, Devendra exemplifies a rare fusion of scholarship and service, standing at the confluence of research, policy, and public aspiration.

### 18. Reading Ekalingamahatmya in the Historical context of Mewar: Translations and Interpretations

Prof. Nandini Sinha Kapur

This essay is based on the first edition of *Sthala* Purana edited by Dr. Premlata Sharma (*Ekalingamahatmya*, 1976, Varanasi), who received the manuscripts from Rajasthan Prachy Vidya Pratisthan, Udaipur, and Shri Agarchand Nahata, Bikaner. It presents an interpretative analysis of key portions of the *Ekalingamahatmya* in the historical context of Guhila state formation in Mewar, situating the study within cultural translation theory, which emphasizes historical and social contexts. Through both literal and interpretative methods, the essay explores how this Purana, like many others, serves as a repository of political, dynastic, and cultural history. While the text praises Ekalinga Ji (Mahadeva), it reveals that goddess traditions in Mewar—especially that of Vindhyavasini—were more ancient and central to the rise of the Ekalinga cult. The Lakulisha-Pashupata sect established Ekalinga Ji's temple in Nagda (Ekalingaji Prashasti, 971 AD). In the Ekalingamahatmya, Vindhyavasini installs Ekalinga Ji in Nagarhrda and instructs Bappa to worship him (p. 9, v. 15), while Haritarashi, who worshipped both deities, is also directed by the goddess to invoke Ekalinga Ji (p. 27, vv. 39, 41); Ekalinga Ji then grants Mewar to Bappa and Kailasha to Haritarashi (p. 30, vv. 6, 7). The Pashupatas were also responsible for creating the goddess Rashtrasena meaning 'army of the state'—who appears for the first time in this text, described as warlike and emerging from Vindhyavasini's body (p. 33, vv. 15–16), though absent in contemporary inscriptions.

**Keywords:** Ekalingamahatmya, Guhila Dynasty / State Formation, Vindhyavasini (Goddess Traditions)

**Bio:** Prof. Nandini Sinha Kapur, Director of the School of Interdisciplinary and Transdisciplinary Studies (SOITS) at IGNOU, is serving her third term since October 2023. With 34 years of teaching and research experience, she earlier taught History at Lady Shri Ram, ARSD, and PGDAV Colleges, and postgraduate courses at Delhi University South Campus. At IGNOU, she chairs the SOITS

Board and Doctoral Research Committee and is a member of the Academic Council. She also designed and taught IGNOU's interdisciplinary M.A. in Social Anthropology, reflecting her commitment to multidisciplinary teaching and academic leadership.

#### 19. संस्कृत पाण्डुलिपि 'नागकुमारचरित्रम्' में वर्णित धर्मोपदेश

Eirya Jain

धर्म का वास्तविक उपदेश वही है जो जीव के कल्याण का मार्ग प्रशस्त करे। जो वाणी आत्मा को मोक्षमार्ग की दिशा दिखाए, वही उत्तम देशना कहलाती है। संसार रूपी खारे समुद्र से पार उतारने वाला सत्संग ही सच्चा धर्म है। ऐसा उपदेश जो मोह, राग-द्रेष से मुक्त कर शुद्धत्व की ओर ले जाए, वही श्रेष्ठ है। सच्चा धर्म वही है जो ज्ञान, दर्शन और चारिल की लिवेणी से जीव का उद्धार करे। कल्याणकारी उत्कृष्ट देशना ही धर्मोपदेश है। संस्कृत पाण्डुलिपि नागकुमारचरिलम् में पण्डित धर्मधर ने प्रथम परिच्छेद में आचार्यों, मुनिराजों एवं तीर्थंकरों की वाणी के माध्यम से तत्त्वोपदेश की चर्चा की है। इसमें तीर्थंकर महावीर भगवान के समवशरण की अद्भुत रचना, उसमें इन्द्रभूति गौतम गणधर की उपस्थिति, राजा श्रेणिक का समवशरण सभा में आगमन तथा उनके निमित्त उपदेश की प्राप्ति का उल्लेख है। साथ ही, धूलिशाल वन का परकोटा, गोपुर-प्रवेशद्वारों सहित नाट्यशालाएँ, रमणीक चैत्यवन, मंगल द्रव्यों से सुसज्जित प्राकार, तोरण युक्त रलस्तंभ आदि की भव्य व्यवस्था का वर्णन किया गया है। समवशरण के अष्टप्रातिहार्य एवं अष्टमंगल द्रव्यों से सुशोभित स्वरूप का भी उल्लेख मिलता है। इसमें सात तत्त्व, छह द्रव्य, नव पदार्थ एवं रलत्य का स्वरूप भी वर्णित है। अणुव्रत, गुणव्रत, शिक्षाव्रत सहित श्रावक के 12 व्रतों का भी विस्तृत विवरण है, जिसमें उनके भेद-प्रभेद की भी विश्तद चर्चा की गई है।

Keywords: अनुयोग, मानस्तम्भ, तत्त्व, धूलिशाल, परकोटा, प्राकार

## 20. Palm-Leaf Pedagogies: Reclaiming India's Knowledge Legacy through Kerala's Manuscript and Language Traditions.

Dr. Jibin Francis Co Author: Dr. M. Subha

Kerala, often celebrated for its literacy and linguistic richness, is also home to one of the most vibrant manuscript traditions in India. The region's palm-leaf manuscripts-inscribed in Sanskrit, Malayalam, and Tamil-hold centuries of indigenous wisdom in areas such as grammar, poetics, medicine, and spiritual philosophy. These manuscripts are not merely archival relics but are active agents in preserving a living tradition of learning rooted in language, literature, and orality. Drawing from my background in language and literary studies, this paper examines how Kerala's unique scriptorial practices and multilingual heritage can offer fresh pathways to reclaim India's larger knowledge systems that have long been marginalized by colonial historiography. This study underscores the role of philology, translation, and linguistic interpretation in decoding Kerala's manuscript legacy, particularly through the lens of literary works such as Manipravalam texts, Bhakti poetry, and indigenous grammatical treatises. It also highlights the importance of community knowledge keepers, temple archives, and mutts in the transmission of this intellectual heritage. Through a decolonial and interdisciplinary approach, this paper aims to reposition Kerala's manuscript culture as central to India's civilizational memory-urging scholars and policymakers alike to integrate these rich textual traditions into contemporary discourses of education, cultural identity, and national knowledge-building.

**Keywords:** Kerala manuscripts, palm-leaf tradition, indigenous knowledge, language legacy, Manipravalam, Sanskrit-Malayalam texts, philology, literary heritage, decolonial scholarship, cultural preservation, manuscriptology, Indian knowledge systems.

**Bio:** Dr. Jibin Francis, a scholar in English Language Teaching, Educational Psychology, and Business Communication, holds a Ph.D. from Manonmaniam Sundaranar University and the Dr. Kalam Post-Doctoral Fellowship from AMET

University. With 45 publications and numerous conference presentations, his research spans leadership, gender studies, and AI in education. He has received several honors, including the PT Thomas Research Excellence Award (2024) and international recognition as a keynote speaker. Currently, he also serves as an external evaluator for the Kerala Government's Kudumbashree Mentors appraisal process.

### 21. Indian Artistic Traditions, their Revival and Teaching: As Reflected in Early Santiniketan Murals (1920-1950)

Prof. Udaya Narayana Singh Co Author: Pradipta Biswas

This paper examines the revival and pedagogical use of Indian artistic traditions through the early mural works created at Santiniketan between 1920 and 1950. Founded by Rabindranath Tagore, Santiniketan embodied a transformative vision of education that integrated open-air learning, 'Guru-Shishya parampara', or student-teacher collaboration, and a return to traditional Indian ideals, echoing the Gurukul system. Tagore's philosophy was further developed by Nandalal Bose, who, as head of Kala Bhavana, emphasized a hands-on, immersive approach to art education. Bose played a pivotal role in India's artistic revival during colonial rule, integrating indigenous art forms into the curriculum and fostering a strong bond between mentors and students. A distinctive aspect of this education model was the direct engagement with India's classical and folk art traditions, notably through the study and replication of murals from sites such as Ajanta, Bagh, and Aurangabad. These exercises helped students master essential elements of visual language, including line, composition, and symbolism. Santiniketan also became a hub for experimentation in techniques and materials. The introduction of the Jaipuri mural technique by Nrisinghlal and the adaptation of European fresco methods by Pratima Devi showcased the institution's openness to hybrid practices. These innovations encouraged students to develop unique personal styles while preserving foundational elements of traditional art. One of the most significant contributions was the development of mud relief murals under Bose's leadership, drawing from local Santal and tribal traditions. The iconic murals at Shyamali and the Black House reflect a deep engagement with regional culture, combining sustainability, craftsmanship, and communal participation. Through its murals, Santiniketan not only revived and preserved traditional Indian art forms but also redefined their relevance in modern pedagogy and public art, fostering a legacy of innovation rooted in indigenous aesthetics.

Keywords: Santiniketan murals, Indian art revival, Tagorean pedagogy,

#### Indigenous aesthetics, Mud relief technique

Bio: Udaya Narayana Singh, Chair-Professor and Dean, Faculty of Arts, is a noted poet, linguist, and cultural scholar who has lectured in over 20 countries and represented India at global forums, including UNESCO. Recipient of the Sahitya Akademi Award for Poetry (2017) and many other honors, he has served as Director of CIIL and Pro-Vice-Chancellor of Visva-Bharati. Author of 8 poetry collections, 6 essay volumes, 12 plays, and 250 research papers, he has also produced 545 documentary films. His recent works include *The Other India* (2022), *Bhasha, Samaj, Sanskriti* (2022), *Sukumar Sen* (2023), *Antigone Ekavingshat* (2023), and *Chaya* (2024).

#### 22. भारतीय ज्ञान परम्परा में चतुर्दश विद्यास्थान और उनका वर्तमान शिक्षा में सम्प्रत्यय

Dhananjay Mani Tripathi

मुण्डकोपनिषद में विद्या का द्विविध विभाजन किया गया है - पराविद्या' एवं अपराविद्या। कोई भी व्यक्ति तब सुखी बन सकता है जब वह परा-विद्या और अपरा-विद्या दोनों का अध्ययन करता है। पराविद्या के रूप में ब्रह्मविद्या को कहा गया है। पराविद्या का तात्पर्य स्वयं को जानने या परब्रह्म को जानने से है। अपराविद्या के अन्तर्गत ही चतुर्दश विद्याओं का समाहार माना गया है। वेदों में से भौतिक ज्ञान, उनकी सहायक शाखाएँ और भौतिक रुचि के विषय अपरा-विद्या कहलाते थे। वेद और उसके सहायक के रूप में अध्ययन किए जाने वाले विषयों की कुल संख्या चौदह हैं। विद्या की ये चौदह शाखाएँ हैं- चार वेद, छह वेदाङ्ग, मीमांसा, न्याय, पुराण और धर्मशास्त्र। आयुर्वेद, धनुर्वेद, गन्धर्ववेद और अर्थशास्त्र सहित ये चौदह विद्याएं अष्टादश हो जाती हैं। सिदयों से भारतीय-उपमहाद्वीप में सभी शिक्षा संस्कृत भाषा में ही थी, क्योंकि इस उपमहाद्वीप में लम्बे समय तक संस्कृत बोली जाने वाली भाषा रही। इसलिए वेद भी सुलभता से समझ आते थे। आचार्य मधुसूदन सरस्वती ने प्रस्थान भेद में अष्टादश विद्याओं का उल्लेख किया है तथा इसको 'लयी' शब्द से निरुपित किया गया है। सम्पूर्ण संस्कृत वाङ्मय इसी में समाहित है। छान्दोग्योपनिषद में भी नारद एवं सनत्कुमार के संवाद में भी कई प्रकार की विद्याओं का वर्णन प्राप्त होता है। वैदिक मनीषा की यह महत्वपूर्ण संकल्पना है कि शिक्षा हमारे समाज के निर्माण की नींव है जिसकी सहायता से एक सशक्त समाज और राष्ट्र का निर्माण किया जाता है। शिक्षा की सहायता से व्यक्ति अपनी आन्तरिक क्षमताओं और शक्तियों से परिचित होता है। शिक्षा समाज मे होने वाले सकारात्मक परिवर्तनों का बढाता है और शिक्षा की सहायता से समाज की नकारात्मकता को समाप्त किया जाता है। जब हम आधुनिक शिक्षा के साथ सदियों से अनुभूत परम्परागत ज्ञान का मिश्रण करते हैं तो शिक्षा जगत में सकारात्मक परिणाम देखने को मिलता है।

Keywords: ज्ञान परम्परा, शिक्षण विधियाँ, अष्टादश विद्या, विद्या स्थान

**Bio:** Dhananjay Tripathi is an Assistant Professor of Sanskrit with 16 years of teaching experience and a founding member of the Department of Sanskrit at Jamia Millia Islamia. He has published three books and seventeen research papers. As a Ph.D. supervisor, he has guided five scholars to completion, with four more currently under progress. He is presenting a paper on the Indian Knowledge System at the Gyan Bharatam Conference.

### 23. From Palm-Leaf to Pedagogy: Integrating IKS Practices from Rājataraṅgiṇī Corpus into Modern School Curricula

Shaktimaan Vats

The Indian subcontinent has a rich tradition of knowledge preserved in handwritten manuscripts on palm leaves, birch bark, and handmade paper, covering Ayurveda, Sanskrit poetics, dramaturgy, astronomy, philosophy, historiography, and grammar—collectively known as the Indian Knowledge System (IKS). Colonial dominance marginalized these indigenous epistemologies, pushing them out of mainstream education. This paper explores IKS through the Rajatarangini chronicles of Kashmir and argues for their reintegration into modern Indian education via critical editions, translations, and curriculum development. These texts offer valuable insights into historiography, governance ethics, environmental management, cultural memory, and societal values. The study proposes developing multidisciplinary syllabi based on IKS manuscripts, highlighting pedagogical assets like critical historical methods, interdisciplinary links, geographic and environmental detail, ethical leadership, and women's political roles in the Rājatarangiņī corpus. Using comparative historiography and curriculum design, it suggests practical integration methods such as project-based learning, field immersion, and digital mapping to engage students actively. This research contributes to decolonizing education by reclaiming India's intellectual heritage and positioning manuscript traditions as dynamic pedagogical tools for 21st-century knowledge transmission.

Keywords: Indian Knowledge System (IKS), Rājataraṅgiṇī, Decolonizing Education

**Bio:** Shaktimaan Vats is an aspiring Phd scholar (NET and GATE qualified). He is a literature enthusiast who shows his engagement in Bhartiya Darsana and a number of courses including literature, history, decolonisation, arts and graphics, following which he is also working on his debut book. He has successfully presented several research papers in various national conferences and worked as Research Interm at IGNCA.

# 24. Bridging Indian Knowledge System with Educational Psychology: Fostering Academic Resilience and Mindfulness in Adolescents through The Bhagavad Gita

Anindita Mallick Co Author: Dr.Seema Gopinath

Globalisation and Western cultures take the front seat in every sector, from academia to industrialisation, from the root to the top level of society. In this current situation, the Indian Knowledge System (IKS) would be the only medium to bring society back into the mainstream, where the indigenous knowledge is rooted. Indian knowledge system mainly focuses on the culturally embedded framework that addresses indigenous knowledge traditions that have evolved in the Indian subcontinent over a timeframe of thousands of years, comprising philosophical thoughts, empirical-based practice, art, culture, health and education. This paper focuses on establishing a bridge from the traditional practice of psychological wellbeing and resilience in the educational sector to foster academic resilience and mindfulness in adolescence regarding The Bhagavad Gita in this fast-paced, technology-driven society. This conceptual qualitative paper explores the Gita's cognitive, emotional and behavioural guidance related to the principles of academic resilience, stress management and mindfulness practice for overall mental wellbeing. Using a thematic analysis, this paper explores the Dharma (duty), Samatva (equanimity), and Abhyasa (systematic practice), and modern psychological models, including the resilience framework, cognitivebehavioural theory, and mindfulness-based interventions. This paper highlights how The Gita's interpretation of detachment helps in resilience, and the sermons of Shree Krishna help in leading a mindful practice throughout the consciousness. It also highlights how ancient Indian wisdom, with evidence-based psychological strategies, enhances students' coping mechanisms, academic persistence, and overall well-being. The paper concludes that an integrated pedagogical model rooted in IKS has the potential to create sustainable educational practices that nurture both academic excellence and holistic growth.

**Keywords:** Bhagavad Gita, Academic Resilience, Mindfulness, Indian Knowledge System, Educational Psychology, Adolescents.

**Bio:** I am Anindita Mallick, currently pursuing my PhD in Education at the Central University of Rajasthan. I completed my Master's degree in Education at Banaras Hindu University. My primary research focus is in educational psychology, particularly examining factors that influence students' cognitive, emotional, and behavioral well-being.

#### 25. Nididhyāsana as Pedagogical Praxis: Insights from Indian Knowledge Systems for Contemporary Educational Renewal

Dr. Sanjeev Panchal Co Author: Amruta Arvind Malvade

The Indian Knowledge Tradition (Bhāratīya Jñāna Paramparā) offers a rich and time-tested framework for holistic education and comprehensive learning. Unlike contemporary pedagogical models that often emphasize surface-level understanding and rote learning, the Indian system of education emphasizes a gradual and experiential internalization of knowledge. Classical Indian texts delineate a multi-stage process of learning, as seen in authoritative works such as the Vyākaraņa Mahābhāṣya, which outlines four stages: āgama-kāla (the period of receiving knowledge), svādhyāya-kāla (the period of self-study), pravacanakāla (the period of discourse or teaching), and vyavahāra-kāla (the period of practical application). Similarly, the Naisadhīya-carita and other texts describe the universally acknowledged stages of śravaṇa (attentive listening), manana (intellectual reflection), nididhyāsana (deep and meditative contemplation), and sākṣātkāra (direct realization or experiential understanding). While the stages of śravana and manana are relatively well recognized and occasionally integrated into modern educational discourse, the stage of nididhyāsana a critical phase that involves contemplative internalization and sustained meditative engagement with knowledge has largely been neglected in contemporary pedagogy. This neglect has resulted in a superficial grasp of subjects, lacking depth, personal realization, and transformative insight. This research paper seeks to fill this critical gap by offering a detailed examination of nididhyāsana from the lens of traditional Indian philosophy and educational thought. It explores its conceptual foundations, defines its methodological aspects, and argues for its reintroduction into modern educational frameworks. By highlighting its relevance, this study advocates for a reintegration of nididhyāsana as a vital pedagogical component that fosters not only intellectual clarity but also wisdom, character formation, and self-realization hallmarks of the Indian vision of true education.

Keywords: Pedagogy, knowledge acquisition, understanding, IKS

## 26. Echoes from the Palm Leaves: The Pedagogy of Pali Manuscripts and its Integration into Indian Knowledge Systems for Contemporary Education

Satyendra Kumar Pandey

This paper investigates the sophisticated educational system inscribed in the Pali manuscripts of the Buddhist tradition and explores its profound integration within the broader framework of Indian Knowledge Systems (IKS). While contemporary discussions on IKS often gravitate towards Vedic and Brahmanical traditions, this study posits that the educational paradigms found in the Pali Canon particularly within the Vinaya and Sutta Piṭakas—offer a distinct and equally valuable model of holistic learning. The research delves into the core components of this monastic educational architecture, including the symbiotic teacher-student relationship (nissaya), a curriculum founded on the tripartite training of ethics (sīla), concentration (samādhi), and wisdom (paññā), and a dynamic pedagogy emphasizing critical inquiry (vāda), contemplative practice (bhāvanā), and experiential learning. The paper argues that the Buddhist system, characterized by its empirical spirit (epitomized in the Kālāma Sutta) and its theoretical openness to all social strata, engaged in a vibrant dialogue with other Indian intellectual traditions, thereby enriching the subcontinent's educational landscape. It examines the pedagogical methods—from memorization and recitation (sajjhāya) to structured debate—that fostered intellectual rigor and personal transformation. Finally, the study proposes a framework for integrating these time-tested principles into contemporary education. By translating concepts like mindfulness, ethical reasoning, and critical self-reflection into secular, applicable classroom strategies, this ancient knowledge can address modern challenges such as student well-being, information overload, and the need for compassionate citizenship. This research concludes that a more inclusive understanding of IKS, one that fully incorporates the contributions from the Pali tradition, provides a richer, more versatile resource for reimagining and revitalizing modern education in India and beyond.

**Keywords:** Pali Manuscripts, Buddhist Monastic Education, Indian Knowledge Systems (IKS), Contemplative Pedagogy, Holistic Education, Curriculum Integration.

Bio: Satyendra Kumar Pandey, Ph.D., is an Assistant Professor in the Department of Buddhist Studies at the University of Delhi. His research focuses on the pedagogy of Pali manuscripts and their integration into the Indian Knowledge Systems for contemporary education. Dr. Pandey actively contributes to scholarship on Buddhist studies and manuscriptology. He can be reached at skpnld@yahoo.com

### 27. From Palm Leaf to Print: The Role of Translation in Preserving Classical Indian Literature

Ananya Sharma

In a world moving ahead at a breakneck speed, the transition from fragile palmleaf manuscripts to widely accessible printed editions marks a pivotal chapter in the preservation and dissemination of India's classical literary heritage. This paper examines the indispensable role of translation techniques in safeguarding Sanskrit, Prakrit and other vernacular literary works from physical decay, linguistic inaccessibility and cultural marginalisation. The study foregrounds its focus on selected case studies which includes Kalidasa's Abhijnanashakuntalam, the Tirukkural and select Bhakti poetry. It traces their journey from manuscript form to English translations during the colonial and postcolonial periods. The research lays stress on the importance of translation not merely as a linguistic exercise but as an act of cultural mediation. Translation shapes the reception, interpretation and global circulation of these works. Early colonial translations often reframed classical texts through Orientalist perspectives but post-independence scholarship and bilingual editions have sought to reclaim interpretive agency and restore cultural nuance. This study draws on archival research, textual comparison and translation theory. It seeks to analyse the way fidelity, adaptation and editorial intervention influence the transmission of literary meaning across languages and epochs. The paper considers the implications of digital humanities in the twentyfirst century where digitised manuscripts and machine-assisted translation tools offer new possibilities for accuracy and accessibility. The study situates translation within the broader framework of manuscript preservation and underscores its dual function of rescuing endangered literary artefacts and revitalising them for contemporary readerships. Ultimately, the paper argues that translation, when culturally sensitive and critically informed is indispensable to sustaining the civilisational continuity of India's classical literature in a globalised world.

**Keywords:** Translation Studies, Manuscripts, Classical Indian Literature, Digital Humanities, Cultural Preservation

Bio: Ananya Sharma, a writer and public speaker from Jaipur, is pursuing her Master's in English Literature at the University of Rajasthan. She has actively participated in debates, paper presentations, and scholarly discussions, alongside interning with the National Human Rights Commission (NHRC), which deepened her understanding of justice and human rights. Her interests span creative writing, content development, and visual storytelling, including comic design. With research interests in cultural knowledge systems, translation studies, and the role of literature in shaping discourse, she blends analytical insight with creative expression.

### 28. Cultural Literacy through Curriculum: The Educational Relevance of Manuscript Heritage

Dr K Venkatesan Co Author: Prof.O.Muthiah

Manuscripts, as primary cultural artifacts, preserve the intellectual, artistic, and spiritual traditions of civilizations. In the Indian context, palm-leaf, birch-bark, and handmade-paper manuscripts encapsulate vast repositories of indigenous knowledge systems across literature, science, philosophy, medicine, jurisprudence, and art. Far beyond their archival value, manuscripts possess significant pedagogical potential to promote cultural literacy, strengthen identity, and connect traditional wisdom with contemporary education. This paper critically examines the educational relevance of manuscript heritage, situating it within the framework of curriculum development and the National Education Policy (NEP) 2020. Employing a mixed-methods approach-including literature review, curricular content analysis, case study evaluation, and expert consultation it investigates practical models for integrating manuscripts into educational practice. Findings reveal that manuscript-based pedagogy enhances linguistic proficiency, fosters interdisciplinary learning, nurtures ethical understanding, and cultivates visual and aesthetic appreciation. Proposed integration strategies include story-based cultural engagement at the primary level, thematic and script-based projects at the secondary level, and advanced research modules in paleography, conservation, and digital archiving at higher education levels. Case studies from the Saraswathi Mahal Library (Tamil Nadu), Kerala Manuscript Library, and the National Mission for Manuscripts illustrate innovative practices in heritage-based education. Further Indigenous Health Practices of Agasthyar, Siddha Medicine, Ayurveda and other forms of treatment will be taught to the students. Aligning with NEP 2020's vision for experiential, multidisciplinary, and culturally rooted learning, the study recommends the introduction of manuscript literacy modules in teacher training, development of bilingual/digital learning materials, formation of student manuscript clubs, and institutional partnerships with heritage organizations. Embedding manuscript heritage into curricula ensures the transmission of cultural wisdom, fostering critically reflective, culturally grounded, and globally competent learners.

**Keywords:** Manuscript Heritage, Cultural Literacy, Indigenous Knowledge Systems, Curriculum Development, National Education Policy 2020, Heritage Education.

**Bio:** Dr. K. Venkatesan is Associate Professor and Head of the Department of Home Science at Indira Gandhi National Tribal University (IGNTU), Amarkantak, Madhya Pradesh. His research focuses on cultural literacy and the educational relevance of manuscript heritage within the Indian Knowledge System. Dr. Venkatesan actively contributes to interdisciplinary studies on curriculum development and indigenous knowledge preservation. He is presenting a paper on the Indian Knowledge System at the Gyan Bharatam Conference. Contact: kvenkatesa@gmail.com

#### 29. वर्तमान परिप्रेक्ष्य में - भारतीय ज्ञान परंपरा के आधार पर ओडिशा में उपलब्ध पांडुलिपियों की उपयोगिता

Somyaranjan Barpanda Co Author: Pallavi Jena

भारत की ज्ञान परंपरा हजारों वर्षों पुरानी है, जिसका आधार शास्त्र, वेद, उपनिषद, तंत्र, आयुर्वेद, गणित, ज्योतिष, संगीत, नाट्यशास्त्र, वास्तु इत्यादि जैसे विविध विषय हैं। इस ज्ञान का संरक्षण प्राचीन काल में ताड़पत्र या भोजपत्र पर लिखी गई पांडुलिपियों के माध्यम से हुआ। उड़ीसा (वर्तमान ओडिशा) इस परंपरा का एक महत्वपूर्ण केंद्र रहा है जहाँ हजारों दुर्लभ पांडुलिपियाँ आज भी विद्यमान हैं। उड़ीसा में पांडुलिपियों की परंपरा उड़ीसा में पांडुलिपि लेखन की परंपरा लगभग 10वीं शताब्दी ईस्वी से मानी जाती है। यहाँ की विशिष्टता यह रही है कि पाम लीफ (ताड़पत्र) पर लिखी गई पांडुलिपियाँ चित्रांकन और सजावटी सीमाओं से अलंकृत होती थीं। सबसे प्रसिद्ध केंद्रों में पुरी, कटक, गजपित, केंद्रपाड़ा, कोरापुट और बालेश्वर जिले आते हैं। प्रमुख विषय-वस्तुएँ:

- वेद, उपनिषद, रामायण, महाभारत के ओड़िया भाष्य
- श्रीजगन्नाथ संस्कृति
- तंत्र साधना और योग
- आयुर्वेद (चरक संहिता, सुश्रुत संहिता)
- स्थापत्य और वास्तुशास्त्र
- क्षेतीय साहित्य जैसे सरलादास की महाभारत, भक्त कवियों की रचनाएँ

भारतीय ज्ञान परंपरा में इन पांडुलिपियों का स्थान पांडुलिपियाँ केवल ग्रंथ नहीं, बल्कि एक जीवंत परंपरा का दस्तावेज हैं। यह उस समय के वैज्ञानिक, दार्शनिक, धार्मिक और सामाजिक ज्ञान को संरक्षित करती हैं। उड़ीसा की तांत्रिक परंपरा, योग और आयुर्वेद पर आधारित पांडुलिपियाँ भारतीय ज्ञान परंपरा के एक महत्वपूर्ण आयाम को उद्घाटित करती हैं।

Keywords: पांडुलिपि परंपरा, भारतीय ज्ञान परंपरा, उड़ीसा / ओडिशा

### 30. Cosmetic production from plants as referred to in ancient Indian Texts

P.S. Angad Co Author: Akshath Shenoy

The study of plants for extracting their herbal properties, has been there since the Vedic period. The classification or the taxonomy of the plants, as referred in the Rigveda as Vriksha, Oushadhi, and Verudh, is clear evidence of it. Many plants are used for medicinal purposes, some as food resource, some woods are used for shelter etc., whereas some are restricted from doing so as well because they are considered as sacred. Similarly, many plants were specifically used in the cosmetic industry to produce various cosmetic products. As we know the use of cosmetic products has been flourishing day by day in the global level in various countries. The usage of these products began not in a decade or in the last century, but long ago, since the Vedic period. There are several references in Puranas, specifically in Agni Puranam and Vishnudharmapuranam as the processing of gandhayukti or the cosmetic product. Various methods of preparing the cosmetics from the extracts of plants have been carried forward from the puranic period and a few are mentioned in Parashara's Vrikshasyurveda, Sushrutasamhita by Sushruta, Charakasamhita written by Charaka, Gandhasara by Gangadhara, Brihat Samhita by Varahamihira, and Ashtangahridayam by Vagbhata. Udumbara (Ficus racemosa L.), Kharjura (Phoenix dactylifera L.), Bilva (Aegle marmelos (L.) Correa), Tulsi (Ocimum tenuiflorum L.), Neem (Azadirachta indica A.Juss), Turmeric (Curcuma longa L.), Kasturi (Curcuma aromatica Salisb.), Bringaraja (Eclipta prostrata (L.) L.) are some of the commonly used plants, and there are many more references from Vedas, Puranas, and other Sanskrit scriptures. This research paper will focus on the botanical studies in the Sanskrit scriptures and explore the ideas on the production of herbal cosmetics.

Keywords: Herbal Cosmetics, Sanskrit Scriptures, Botanical Knowledge

### 31. An Analysis of Visual Narratives in the Manuscript Paintings of Assam

Gaurav Moral Co Author: Dr Mousumi Deka

The manuscript tradition of India includes both the pictorial and textual aspects. In the culturally rich region of Assam, these illustrated manuscripts show the creativity and intelligence in the development of intellectual and sacred texts. Some of these are the Chitra Bhagavata, Anadi-patan, Hastividyarnava and Gita Govinda. This paper looks at the intersection of several visual art traditions within the Indian illustrated manuscript heritage. It also argues that miniature paintings are not just ornamental elements but rather a powerful domain for conveying meaning compared to the written language. The study analyses the representation of religious stories through images, with a focus on illustrated manuscripts from Assam, more specifically those created during the Neo-Vaishnavite movement under the patronage of the Ahom and Koch kingdoms. It also addresses the role of Sattras, the Vaishnavite monasteries that were centres of text production and instruction in painting. Painter-scribes created a localised visual vocabulary based on devotion and performance. The research focuses on the uniqueness of Assamese illustrated manuscripts in terms of their materials and styles. They use the material widely known as the "sanchipat", treated bark of the Aquilaria agallocha tree, as the material for manuscripts and various colour-generating mineral-based pigments. Through these, the use of visual narratives supports the religious teachings and creates communal identity. The study promotes the inclusion of Assamese illustrated manuscript traditions into the larger context of Indian knowledge systems used in modern academic settings. This integration inspires an appreciation for regional heritage and promotes visual literacy based on native aesthetics. The research concludes that the illustrated manuscripts of Assam are not antiquities to be left behind; they are rich cultural assets that need to be studied and conserved further.

**Keywords:** Assamese illustrated manuscripts, Indian knowledge systems, Neo-Vaishnavism, Sanchipat

Bio: I, Gaurav Moral, am a visual arts professional with a Bachelor of Visual

Arts (BVA) from Assam University, Silchar, and a Master of Fine Arts (MFA) from Rabindra Bharati University, Kolkata. I have worked with ESKAY Movies, IGNCA, SCERT Assam, and several other government and non-government organisations. As an entrepreneur, I focus on advertising, graphic design, and 3D illustration. Currently, I serve as an Assistant Professor at the National Institute for Teachers Education, Khetri, Assam, and I am pursuing my Ph.D. in Fine Arts at The Assam Royal Global University, Guwahati.

# 32. Limbuwan Culture and Tradition: From Manuscript Heritage to the Enduring Indigenous Culture of the Limboos An Anthropological Study in the Eastern Himalayas

Dr. Debashis Debnath

The Limboo, or Yakthung, are as recorded from ancient scripts, an ancient Kirati people indigenous to the mythical Limbuwan region of the Eastern Himalayas, encompassing present-day eastern Nepal, western Sikkim, Kalimpong, and parts of western Bhutan. Traditionally recognized as skilled archers derived from Lingdong ("bow and arrow") the Limboos transitioned from hunting to transhumance, seasonally moving livestock between Himalayan highlands and lower valleys, and later adopting horticulture. Their history is deeply rooted in oral traditions as well as Primary manuscript sources & named Mundhum texts such as Tungdunge Mundhum, Samjik Mundhum, Lepmuhang Mundhum, Sirijunga / Sirijanga manuscripts and preserved through unique scripts like Sirijunga, with early British records acknowledging their indigeneity to Sikkim. Linguistically part of the Tibeto-Burman family, the Limboos share cultural affinities with the broader Kirat group, including the Rai and other highland communities, yet maintain distinctive customs, dress, and social organization. Their settlements historically stretched from the Arun River to the Tista River, structured into thums (local divisions) and clans, often under leaders titled "Subba." The community's identity is marked by attire such as the topri (headgear) and chengwan (coat), and by strong kinship ties. While their relationship with nature has often been romanticized as symbiotic, the Limboos possess a sophisticated indigenous knowledge system encompassing resource management, spiritual beliefs, and adaptive livelihoods. Historical accounts note their displacement from traditional grazing lands such as Khangchendzonga following conservation policies, pushing them into buffer zones. Culturally, they remain linked with Lepchas, Bhutias, and Gurungs, while retaining autonomy in ritual and heritage. This anthropological study examines the continuity of Limboo culture from its manuscript heritage to contemporary expressions of identity, exploring how historical migrations, ecological adaptations, and socio-political changes have shaped an enduring indigenous tradition in the

Eastern Himalayas.

Keywords: Manuscript, Heritage, Himalyan, indigenous, culture, knowledge

**Bio:** Dr. Debashis Debnath, Senior Fellow at ICSSR, New Delhi, holds a Ph.D. in Social Anthropology and has been honored with the Mouat Gold Medal and Premchand Roychand Post-Doctoral Scholarship from Calcutta University. Formerly at the Indian Institute of Forest Management, Bhopal, he also served as Dr. Ambedkar Chair Professor at Dr. B.R. Ambedkar University of Social Sciences, Mhow. He has authored five books, over 90 papers and chapters, and completed 45 research and consultancy projects. His work centers on Indigenous Knowledge Systems, Forest Governance, Applied Anthropology, and Sustainable Development, with international recognition through conferences in Nepal, the UK, Malaysia, and Thailand.

### 33. Leveraging Ashtavikriti - The Inbuilt Scheme For Preserving The Veda

D.K.Hari Co Author: Dr.D.K.Hema Hari

Any Vedic scholar would emphatically vouch that both the content and tone of the Veda Samhita recited today are verbatim the same as those recited over 5000 years ago. This unshakable confidence stems from the highly sophisticated oral methods of preservation and transmission, as the Vedas are Sruti—knowledge that is heard and orally transmitted, not written. Unlike manuscripts, which derive from the Latin root manus (hand) and script (writing), and refer to handwritten texts, the Vedas were preserved without scripting, through rigorous oral traditions. India, while working to preserve its vast manuscript heritage, must also confront the unique challenge of safeguarding the Apauruseya Vedas, which rely on oral continuity. Today, even the Vedas face threats from over-reliance on written texts. This paper explores the Asta-vikrti—eight specially designed oral recitation methods devised to ensure the precise transmission of Vedic knowledge across generations. Through detailed explanation and animation, the presentation highlights how the *Asta-vikṛti* system not only preserves the integrity of the Vedas without written aids but also forms the foundational framework for much of India's knowledge tradition as captured in manuscripts.

Keywords: Śruti, Aṣṭa-vikṛti, Oral Transmission

**Bio:** Dr.D.K.Hari and Dr.D.K.Hema Hari, husband-wife duo are founders of Bharath Gyan, a Bharata Civilizational Study initiative conceptualized in the year 2000 to compile and present knowledge about the Indian Civilization and its global connects over millennia. Their growing Bharath Gyan research compilation currently spans over 500 hours of unique and authentic multimedia content across over 108 different subjects, 100 books published as Autobiography of India collection, 1000 short films, 1000 Blog articles and 5 Documentaries published on SocialMedia besides papers at conferences. They conduct courses on the Bharata Civilization and are visiting faculty at Universities in India and overseas.

#### 34. Towards a Knowledge-Based Future Rooted in Indigenous Wisdom: A Critical Insight into the Assamese Manuscripts Heritage

Dr. Sahab Uddin

This research paper critically explores the heritage of Assamese manuscripts as vital repositories of indigenous wisdom and intellectual tradition. Besides being an integral part of India's national narrative, the Assamese language manuscripts provide considerable support to trace the development of Indian civilization over the centuries. Rooted in the cultural and philosophical foundations of Assam, these manuscripts written on materials such as sanchi (Agarwood) bark, Taal-Paat (palm leaves), and handraade paper and clothes contain a wide range of knowledge across disciplines, including religion, literature, history, medicine, ecology, and governance. By analyzing both the material and intellectual dimensions of these texts, the study highlights how Assamese manuscripts not only preserve regional identities and oral traditions but also contribute significantly to the broader Indian Knowledge System (IKS). In an era increasingly shaped by technological advancement and globalized narratives. the paper argues for a knowledge-based future that acknowledges, revives, and integrates indigenous wisdom embedded in such primary sources. This paper also highlights the importance of conservation, restoration by using preventive and curative methods along with interdisciplinary study in reclaiming these manuscripts as tools for cultural sustainability, academic research, and educational reforms. Eventually, the paper emphasizes a thoughtful engagement with the Assamese manuscript tradition which can contribute contemporary discourse on heritage, identity, and innovation and how Namghars (prayer halls) and its rich Vaishnavite religious content distinguish its manuscripts from others in India.

**Keywords:** Manuscripts, Heritage. Conservation, Culture. Sustainability

**Bio:** Dr. Sahab Uddin is an Associate professor in the Dept. of English in a Degree college in Assam (India). He writes prolifically in English and in Assamese. He has published several articles and research papers, and presented a few in national and international seminars and conferences. He has done his Ph.D from the NEHU, Meghalaya, India. He has edited many books and journals. He is also associated ACTA, AIFUCTO, ELT@I and many other social-cultural and literary organizations. He was a former Member of the Academic Council, Gauhati University, Assam. He has done PGDHRM from the KKHSOU, Assam. He is the recipient of the Award of Honour by the Team IBTC, India.

# 35. Indigenous Medicines: Practices & Related Manuscripts, Their Preservation and Inclusion in Modern Education System

Prof. Neera Raghav

Indigenous medicines are traditional healing practices and remedies developed by native cultures over centuries. These are often rooted in deep spiritual and ecological knowledge. In India these systems are preserved in Ayurveda, probably the oldest documented medicinal text in the world. These texts along with the contents mentioned in original Veda's not only utilizes natural resources like herbs, minerals, and animal products but also illustrates the benefits when combined with rituals, chants, and holistic approaches to treat physical, emotional, and spiritual ailments. Indigenous medicine emphasizes harmony with nature, community well-being, and preventive care, often passed down orally through generations. Despite modern skepticism, many of these practices have scientifically shown validated therapeutic value and continue to influence contemporary medicine and wellness philosophies. Ancient Indian medicine is deeply rooted in the tradition of Ayurveda, a holistic system. The text dates back to the Indus Valley. The earliest references to medicinal practices appear in sacred texts like the Rig Veda, Sam Veda and Atharva Veda. The foundational texts of Ayurveda are available in Charaka Samhita and Sushruta Samhita. The former focuses on internal medicine, diagnostics, and the principles of health and disease. Atreya and Agnivesa also have contributed a lot to Ayurvedic Theory. With the advent of current scientific rigor these manuscripts needs to be preserved in their original form and re-explored with modern concepts for greater acceptability for the benefit of mankind. The presentation will be focused around the basics discussed in these texts, comparison with Greek system, validation in modern medicinal context and necessity for inclusion in modern education system. The procedures to follow for such inclusivity towards holistic education, a mandate in NEP-2020 to design sample curricula in chemistry with interdisciplinary approach will also be discussed.

**Keywords:** Indigenous, Medicines, Manuscripts, Ancient, Inclusivity, Holistic, Education

**Bio:** Prof. Neera Raghav, Professor of Chemistry at Kurukshetra University since 2011 and former Chairperson of the department, has over 30 years of teaching and 36 years of research experience. Founder of the Enzyme Chemistry Laboratory, her work spans enzyme inhibitors, drug delivery systems, and Ayurvedic formulation validation. With 150+ SCOPUS and WoS-indexed papers, an h-index of 25, and 2000+ citations, she ranks among the top global researchers in bio-organic chemistry. Recipient of awards including the WIS Best Researcher Award (2023) and Scholar GPS Top Researcher (2024), she also holds patents and contributes to global collaborations, academic governance, and the promotion of India's scientific knowledge systems.

#### 36. भारतीय ज्ञानपरम्परा के संवर्धन में पुरालिपियों की भूमिका: वर्तमान परिदृश्य, चुनौतियाँ एवं समाधान

Dr. Uttam Singh

भारतीय ज्ञानपरम्परा विश्व की प्राचीनतम और समृद्धतम परम्पराओं में से एक है, जिसमें आध्यात्मिक, नैतिक, ऐतिहासिक, दार्शनिक, साहित्यिक और सांस्कृतिक ज्ञान का विशाल भंडार समाहित है। इस ज्ञान के संरक्षण में ब्राह्मी, शारदा, ग्रन्थ, नागरी, नंदीनागरी, तमिल, तेलुगु, मलयालम आदि पुरालिपियों की महत्त्वपूर्ण भूमिका रही है, जिनके माध्यम से ऋषियों, मुनियों और आचार्यों ने ताडपत्न, भूर्जपत्न, अगरुपत, कपड़े व हस्तनिर्मित कागज़ पर पाण्डुलिपियाँ तैयार कीं। ये पाण्डुलिपियाँ देश-विदेश के विद्वानों के आकर्षण का केन्द्र रहीं, जिससे भारत को 'विश्वगुरु' व 'पाण्डुलिपियों का देश' जैसी उपाधियाँ प्राप्त हुईं। नालन्दा, तक्षशिला, बलभी आदि प्राचीन विश्वविद्यालयों में पाण्डुलिपियों का विशाल संग्रह था, जो ह्वेनसांग, इत्सिंग, फाह्यान जैसे विद्वानों को भारत की ओर आकर्षित करता था। यद्यपि समय के साथ आपदाओं और विदेशी आक्रान्ताओं के कारण अनेक लिपियाँ और पाण्डुलिपियाँ नष्ट हो गईं, फिर भी वर्तमान में भारतीय भाण्डागारों में असंख्य अप्रकाशित पाण्डुलिपियाँ संग्रहीत हैं। हालाँकि संरक्षण और डिजिटलीकरण के प्रयास राष्ट्रीय-अन्तरराष्ट्रीय स्तर पर हो रहे हैं, फिर भी लिपिशास्त्र, पाठालोचन, लिप्यन्तरण, अनुवाद के लिए विशेषज्ञों की कमी, छात्रवृत्तियों का अभाव, और शोध हेत् सीमित संसाधन जैसी चुनौतियाँ बनी हुई हैं। इन समस्याओं के समाधान हेतु बहुआयामी दृष्टिकोण अपनाना होगा, जिसमें भौतिक संरक्षण, डिजिटलीकरण, ऑनलाईन अभिलेखीकरण, लिपियों का प्रशिक्षण और संस्थागत सहयोग प्रमुख हैं। यह शोधपत्र भारतीय ज्ञानपरम्परा में पुरालिपियों की भूमिका, चुनौतियों और संभावनाओं का विश्लेषण कर समन्वित प्रयासों द्वारा इस धरोहर को सुरक्षित रखने और भारत को पुनः 'विश्वगुरु' बनाने की दिशा में योगदान देने का प्रयास करता है।

Keywords: पुरालिपि संरक्षण, भारतीय ज्ञानपरम्परा, डिजिटलीकरण और प्रशिक्षण

Bio: डॉ. उत्तम सिंह पाण्डुलिपि एवं पुरालिपि विद्या के विशेषज्ञ हैं और इस क्षेत्र में 20 वर्षों से सिक्रय हैं। उन्होंने शारदावेन-चिमनभाई शोधसंस्थान तथा आचार्य थी कैलाससागरसूरि शोध संस्थान, गांधीनगर में पाण्डुलिपि संपादन और कैटलॉग निर्माण का कार्य किया। वर्तमान में वे केन्द्रीय संस्कृत विश्वविद्यालय, अगरतला में बौद्धदर्शन एवं पालि विद्याशाखा में महायकाचार्य हैं और कार्यशालाओं व ऑनलाइन प्रशिक्षण के माध्यम से छात्रों को प्राचीन लिपियों का अभ्यास कराते हैं। उनके प्रमुख प्रकाशनों में भारतीय पुरालिपि मञ्जूषा (2016), रासपद्माकर (भाग 1–2) तथा अनेक पाण्डुलिपि-सूचिकरण और संपादन कार्य शामिल हैं।

## 37. Reviving the Roots: Translation Methodologies for Ayurvedic Manuscript Traditions

Sumit Kumar Singh Co Author: Acharya Balkrishna, Swati Arya, Karuna Arya

India's rich manuscript tradition encompasses an unparalleled repository of knowledge across diverse disciplines, with Ayurveda occupying a place of special distinction. Texts such as the Charaka Samhita, Sushruta Samhita, and Ashtanga Hridaya preserve intricate details of health philosophy and various therapeutic systems. However, factors such as linguistic complexity, diversity of scripts, regional vocabulary, multiple synonyms for medicinal substances, textual variations, and scribal errors present multifaceted challenges that hinder their direct application in the modern context. In such a scenario, translation and interpretation become powerful bridges for reclaiming these treasures of knowledge and making them accessible to society at large. Translation is not merely the transfer of words, but a sensitive communication of cultural, linguistic, and scholastic meaning. This demands not only linguistic proficiency but also a deep understanding of classical contexts, technical terminology, and historical background. Here, the role of a team of polyglots and interdisciplinary scholars becomes particularly significant. Through literal translation, interpretive translation, cultural adaptation, and comparative philological approaches, these manuscripts can be rendered into modern Indian and international languages, ensuring both semantic accuracy and cultural depth. The study employs multiple methodologies, including the Textual Criticism Method, Philological Analysis Method, Contextual Interpretation, Interdisciplinary Approach, Technology-assisted Method, and Annotation and Commentary Method, to ensure an authentic, accurate, and comprehensive interpretation of manuscripts. By adopting robust translation strategies, these manuscripts can be liberated from linguistic and cultural constraints, thereby making them accessible to scholars, practitioners, and global healthcare systems. In doing so, the vision of reclaiming India's knowledge legacy through manuscript heritage can be realized, allowing the ancient science of Ayurveda to continue enriching modern health discourse.

**Keywords:** Manuscript tradition, ayurveda, linguistic complexity, cultural adaptation, interdisciplinary scholars, ancient science

#### 38. Agricultural Knowledge in Ancient Manuscripts: Indigenous Techniques for Climate Resilience

Sobibur Rahaman

Farming has been at the heart of Indian civilisation for thousands of years. Over time, farmers developed methods that worked closely with nature and local weather patterns. Many of these methods are written down in old manuscripts in Sanskrit, Pali, Prakrit, and different regional languages. Important works like the Krishi-Parāśara (around the 10th century CE), Vṛkṣāyurveda by Surapala, and the Arthashastra explain in detail how to prepare soil, decide the right time for planting, manage water, and control pests naturally. These manuscripts describe useful techniques such as planting according to the lunar calendar, growing different crops together to keep the soil healthy, making compost from organic waste, and using natural materials like neem, turmeric, and ash to keep pests away. The manuscripts also record smart irrigation systems made for different regions. Examples include the Eri tank systems of Tamil Nadu, step-wells in western India, canal systems mentioned in the Arthashastra, and special rice varieties in Bengal that grow well in flood-prone areas. They also talk about planting calendars based on observing the stars and seasons, and the use of strong, weather-resistant crops like millets that can survive drought. This study looks at these manuscripts directly, along with modern research on farming history and environmental science, to understand how these methods worked and why they lasted so long. The findings show that these old techniques were low-cost, eco-friendly, and well-suited to changes in weather. Today, when farmers face problems like climate change, water shortages, and soil loss, these traditional ideas can offer practical solutions. By bringing this knowledge back into use, India can improve farming in a way that is both sustainable and respectful of its cultural heritage. This research aims to connect the lessons of the past with the needs of the present, helping communities build a safer and more reliable food future.

Keywords: Indigenous farming, manuscripts, climate resilience, Krishi-Parāśara, Vṛkṣāyurveda, irrigation, sustainable practices

## 39. Manuscript Traditions of Kashmir: Sharada Script and Its Intellectual Legacy

Dr. Rajesh Kumar Mishra Co Author: Suman Naskar

Kashmir, historically known as Sharada Deshathe Land of the Goddess of Learning - was a flourishing centre of intellectual activity from the early medieval period. The Sharada script, which emerged in the northwestern Himalayas around the 8th century CE, became a vital conduit for preserving India's vast manuscript heritage in this region. These manuscripts, written on birch bark and handmade paper, encompass a remarkable spectrum: Vedic and Puranic literature, Shaiva and Buddhist philosophical works, scientific treatises, aesthetic theory, grammar, and medical compendia.

Today, much of this heritage is at risk. Many Sharada manuscripts lie in fragile condition in temple treasuries, private households, and scattered repositories in India and abroad. While the National Mission for Manuscripts and other initiatives have begun documentation and digitisation, the pace remains insufficient given the rapid deterioration of original materials. Moreover, the diminishing number of scholars trained to read Sharada script threatens the continuity of research.

This paper examines the historical evolution and intellectual significance of Sharada-script manuscripts, with special attention to their role in shaping India's composite knowledge traditions. It also highlights urgent policy needs such as enhanced digitisation funding, regional manuscript conservation centres, inclusion of Sharada palaeography in academic curricula, and community-based awareness programmes. By reclaiming Kashmir's Sharada manuscript legacy, we not only protect a priceless script but also revive a critical chapter in India's civilisational narrative.

**Keywords:** Sharada script, Kashmir manuscript heritage, intellectual history, conservation policy, cultural revival.

## 40. Integrating Buddhist Manuscript Heritage into Early Childhood Education through a Blended Pedagogy

Nidhi Singh Co Author: Arisha Sajid

The current Indian education system needs to better connect young learners with India's cultural heritage to bridge the gap between their rich intellectual traditions and their current understanding and appreciation of them. This paper addresses this challenge by proposing a solution grounded in the National Education Policy (NEP) 2020 which advocates for the integration of Indian Knowledge Systems (IKS) into modern curricula. Specifically, we argue for the strategic inclusion of Buddhist manuscripts to offer a more comprehensive understanding of India's intellectual and cultural history. The rich philosophical, ethical, and literary heritage found in texts like the Jataka tales, Dhammapada, and Mahavastu provides an invaluable resource for this purpose. The paper presents a conceptual curriculum framework designed for early childhood education that leverages a novel blend of story pedagogy and theatre pedagogy. The framework utilizes carefully selected Buddhist tales to enhance linguistic and imaginative development through storytelling. This is complemented by theatre pedagogy, which transforms these narratives into embodied experiences. Through role-playing, dialogue, and creative expression, children can acquire crucial socio-emotional and cognitive skills, while also exploring universal themes of compassion, wisdom, and interconnectedness. The paper provides a detailed curriculum design, complete with sample lesson plans, activity worksheets, and a comprehensive evaluation framework. This design is not merely a collection of lessons but a replicable model for translating ancient wisdom into a developmentally appropriate and engaging educational experience. By demonstrating a practical method for preserving and propagating the narrative and ethical traditions of manuscript heritage, this work showcases the profound relevance and transformative potential of IKS in foundational education.

**Keywords:** Indian Knowledge Systems (IKS), Buddhist Manuscripts, Story Pedagogy. Theatre Pedagogy, Early Childhood Education, Curriculum Design

Bio: Nidhi Singh is a first-year Ph.D. scholar in Human Development and Childhood Studies at Lady Irwin College. University of Delhi. Her research explores interdisciplinary education with a focus on curriculum innovation and drama pedagogy. She is particularly interested in fostering student engagement and critical thinking through experiential methods and digital integration. Her academic practice includes designing structured lesson plans, assessment tools. and digital learning strategies tailored to diverse learners. With experience in community-based educational initiatives, she works toward bridging traditional pedagogies with contemporary, inclusive approaches. Her work aims to create student-centred learning environments that are both reflective and transformative.

#### 41. रामायण के परिप्रेक्ष्य में प्राचीन भारतीय शिक्षा- प्रणाली

डॉ. सीता

जब किसी देश के विकास की बात होती है, तो आमतौर पर भौतिक प्रगति को प्राथमिकता दी जाती है, परंतु यदि यह विकास आध्यात्मिकता की नींव पर आधारित हो तो मानव समाज की सतत उन्नति संभव है। किसी देश की समृद्धि का आधार उसकी जनशक्ति होती है, जो सुदृढ़ और उत्कृष्ट शिक्षा-व्यवस्था से निखरती है। प्राचीन भारत की विश्वगुरुता उसकी समृद्ध शिक्षा प्रणाली का परिणाम थी। भौतिक और मानसिक परिवर्तन होते रहते हैं, लेकिन साहित्य अपने माध्यम से इस परिवर्तन को उसकी मूल स्थिति में बनाए रखता है, इसलिए प्राचीन शिक्षा प्रणाली को समझने के लिए प्राचीन साहित्य जैसे महर्षि वाल्मीकि की रामायण का अध्ययन आवश्यक है। रामायण में वर्णित शिक्षण प्रणाली पितृसत्तात्मक और गुरुसत्तात्मक स्तरों पर आधारित थी, जिसमें व्यक्तिगत और राजाधीन शिक्षालय दोनों शामिल थे। छात्रों को उनके अध्ययन के आधार पर चार वर्णों में विभाजित कर समाज में भेजा जाता था। इस शोधलेख के माध्यम से प्राचीन शिक्षा-प्रणाली, उसके पाठ्यविषय, उद्देश्य और वर्तमान समय में उसकी प्रासंगिकता का विश्लेषण प्रस्तुत किया जाएगा, जिससे यह समझा जा सके कि जिस शिक्षा ने राम जैसे महानायक का निर्माण किया, क्या वह आज भी लाभकारी हो सकती है। संदर्भ के रूप में तिलक टीका सहित विभिन्न संस्करणों की रामायण का उपयोग किया गया है।

Keywords: प्राचीन शिक्षा प्रणाली, रामायण, विकास एवं जनशक्ति

Bio: डॉ. सीता, उत्तरप्रदेश के ग्राम रेमॉं की मूल निवासी, वर्तमान में श्रीमद्दयानन्द कन्या गुरुकुल महाविद्यालय के संस्कृतसाहित्य विभाग में सहायकाचार्या हैं। प्रारम्भिक शिक्षा के बाद उन्होंने इसी गुरुकुल से स्नातक (2015), रुहेलखण्ड विश्वविद्यालय से परास्नातक (2017) और B.ED (2019) पूर्ण किया। तत्पश्चात पतंजिल विश्वविद्यालय, हरिद्वार से 'अष्टांगहृदय की पदार्थचन्द्रिका टीका' की पाण्डुलिपि पर समीक्षात्मक सम्पादन विषयक शोधकार्य स्व. प्रो. महावीर अग्रवाल के निर्देशन में सम्पन्न किया। अष्टांगहृदय की इस प्राचीन टीका पर किया गया उनका कार्य पाण्डुलिपि सम्पादन के क्षेत्र में महत्त्वपूर्ण योगदान है।

#### 42. Translating Siddha Literature through Semantic and Pragmatic Lenses: From Palm Leaf Manuscripts to Global Digital Platforms

Dr. G. Kaaruniya Co Author: Eugene Wilson

The Siddha system of medicine, an ancient practice developed by the Siddhars, is documented in stone inscriptions, metal plates, and palm leaf manuscripts, which form its primary sources. Over time, many of these manuscripts were transcribed into printed books, mostly in Tamil and a few regional languages, limiting their accessibility and global dissemination. To address this, a major initiative is underway to translate the classical Siddha text Yugi Vaidhya Chinthamani (Perunool 800)—a comprehensive compendium on diseases, their causes, classification, and treatments—into English and Hindi, languages with broader reach. This translation employs semantic and pragmatic methodologies to maintain technical accuracy, contextual meaning, and cultural nuances, presenting original verses alongside detailed translations and examples. This interdisciplinary effort aims to make Siddha knowledge accessible globally, fostering wider understanding, appreciation, and integration of this invaluable medical tradition in contemporary contexts.

Keywords: Siddha system, Translation, Accessibility

**Bio:** I am Dr. G. Kaaruniya, a Siddha physician. I completed my undergraduate in Bachelor of Siddha Medicine and Surgery (BSMS) in 2017, followed by a postgraduate in Gunapadam (Siddha Pharmacology) in 2020. From 2023 to 2025, I served as a Junior Research Fellow (Pharmacovigilance) under the AOGUSY scheme at the Siddha Central Research Institute, Chennai. I am currently working as a Research Associate (Siddha) at the Central Council for Research in Siddha, Ministry of Ayush, Government of India, Chennai under an IMR project. In my present role, I am engaged in the collection of manuscripts, old written scriptures related to Siddha and translation of classical Siddha literatures into global and regional languages, to make this ancient system of medicine accessible to a wider audience.

#### 43. From Vedas to Vision: Integrating Indic Knowledge Systems into Indian Education through NEP 2020

Dr. Shruti Arora Co Author: Arif Md. Sattar

The National Education Policy (NEP) 2020 represents a significant shift in India's education system by prioritizing the integration of India's civilizational heritage and indigenous knowledge systems (IKS) into modern pedagogy. This study explores the foundational role of the Vedic tradition and broader IKS—encompassing Vedic literature, Sanskrit texts, Ayurveda, mathematics, astronomy, Nyaya logic, and metaphysics—in shaping a holistic, inclusive, and multidisciplinary education framework as envisioned by the NEP. It analyzes how NEP 2020 aims to revitalize these ancient knowledge systems through curriculum design, teacher training, research approaches, and governance in higher education. Drawing from policy analysis, ancient scriptures, and contemporary scholarship, the research evaluates the opportunities and challenges in institutionalizing IKS in today's education landscape. It also reviews practical implementations like IKS centers, Gurukul-inspired teaching methods, and regional language use to maintain knowledge continuity. The paper argues that incorporating IKS nurtures cultural identity, cognitive diversity, ethical reasoning, environmental awareness, and interdisciplinary understanding. Ultimately, it offers a roadmap for harmonizing ancient wisdom with global education standards, ensuring Indian education is both deeply rooted in tradition and globally relevant.

**Keywords:** Indic Knowledge Systems, NEP 2020, Vedic Literature, Indian Education, Cultural Integration

#### 44. कश्मीरशैवपरंपरा के पल्लवन में शारदा पांडुलिपिओं की भूमिका

डा० नरेन्द्र भारती Co Author: डा० अजय कुमार सहि

जम्मू-कश्मीर केवल अपने प्राकृतिक सौंदर्य के कारण ही विश्वप्रसिद्ध नहीं है अपितु सम्पूर्ण विश्व को शिवाद्वयवाद की अप्रतिम चिन्तन परंपरा का ज्ञान देने वाला प्रदेश भी है। जो धरा कल्हण, मम्मट, सोमानन्द, उत्पलदेव, अभिनवगुप्त, क्षेमेन्द्र आदि मनीषिओं की जननी है, जिसे शारदा-देश के नाम से अभिहित किया गया, शारदापीठ से जो भूमि विभूषित थी। इसी धरा पर आचार्य सोमानन्द से प्रारंभ होकर शिवाद्वयवाद का शैवशास्त्रीय ज्ञानिर्झर समयकाल के समस्त झांझावतों को सहते हुए बीसवीं शताब्दी में स्वामी लक्ष्मणजू के काल तक निर्बाध गित से प्रवाहित होता रहा। इस चिंतन परंपरा की सम्पूर्ण शास्त्रीय विचारधारा की वाहक शारदा लिपि थी और यह समस्त ज्ञानपरंपरा शारदा पांडुलिपिओं के माध्यम से ही विभिन्न कालक्रमों में पीढी दर पीढी संचरण करती रही। आज यदि समस्त विश्व के आध्यात्मिक रसानुभूति के पिपासु साधक इस विलक्षण दार्शनिक परंपरा का रसास्वादन संसार भर की विभिन्न भाषाओं में कर पा रहे हैं तो इस में शारदा पाण्डुलिपिओं की महती भूमिका है। कश्मीरशैवपरंपरा के पल्लवन में शारदा पाण्डुलिपिओं की इसी ज्ञानयात्रा एवं भूमिका पर प्रस्तुत शोधपत्र केन्द्रित है। शैवशास्त्र की पाण्डुलिपि परंपरा, पाण्डुलिपिओं के संपादन, प्रकाशन एवं अनुवाद में जो विद्वत्परंपरा संलग्न थी, इस महान् कार्य को प्रोत्साहन एवं संरक्षण प्रदान करने वाली जो शासनपरंपरा थी, इन सभी विषयों पर प्रस्तुत शोधपत्र में प्रकाश डालने का प्रयास किया गया है।

Keywords: शिवाद्मयवाद, पाण्डुलिपि, शारदा लिपि, संपादन, प्रकाशन, शैवाचार्य।

Bio: डा० नरेन्द्र भारती, काश्मीरिशवाद्वयपरंपरा में पी०एच०डी०, स्वर्गीय प्रो० तिलोकीनाथ गंजू जी से शारदा लिपि का वर्ष २०११ में अध्ययन तदुपरांत इंदिरा गांधी राष्ट्रिय कला केन्द्र से पाण्डुलिपि विज्ञान एवं लिपिशास्त्र में २०१८ में पी०जी०डिप्लोमा, विभिन्न कार्यशालाओं में शारदा लिपि का अध्यापनानुभव, जम्मू-कश्मीर के इतिहास पर शोध एवं अध्यापन, वर्तमान में शारदा लिपि पर आधारित वृहद् शोध-परियोजना में बतौर शोध-सहायक कार्यरत। २) डा० अजय कुमार सिंह, तन्त्रागम परंपरा, बौद्धदर्शन, तुलनात्मक धर्म तथा लिपिशास्त्र में विशेषज्ञता, भारतीय सामाजिक विज्ञान अनुसन्धान परिषद् द्वारा प्रायोजित वृहद् शोध परियोजना जम्मू कश्मीर में लिपिपरिवर्तन के सामाजिक एवं सांस्कृतिक प्रभावः शारदा लिपि के विशेष सन्दर्भ में के परियोजना समन्वयक।

## 45. The Relevance and Applicability of Kautilya's Arthashastra in Contemporary Public Finance Policy

Prof. Ravindra K Brahme Co Author: Pragati Krishnan

Kautilya's Arthashastra, an ancient Indian treatise on statecraft and economic governance, offers a detailed framework for managing public finance, taxation, and state resources. Though written in a vastly different historical and political context, many of its principles continue to hold significance in the realm of modern fiscal policy. This research explores how select ideas from the Arthashastra can be interpreted and applied within contemporary public finance systems, especially in the Indian context. The study examines key areas such as taxation structures, revenue collection, public spending, fiscal responsibility, and the role of the state in economic development. A comparative approach is used to evaluate the relevance of Kautilya's recommendations alongside modern policy instruments like fiscal responsibility laws, and welfare programs, measure. The research also addresses how the Arthashastra emphasized a balance between resource mobilization and the welfare of the people-a concern central to today's economic policymaking. While acknowledging the limitations of applying ancient frameworks directly to modern democratic governance, the study argues that several core ideas such as financial discipline, ethical taxation, and accountability in public spending are timeless in their utility. These principles offer insights that complement modern theories of public finance and can guide more effective, transparent, and inclusive fiscal policies.

Thus, this paper suggests that a critical and contextual reading of the Arthashastra can provide valuable direction for current public finance practices. Far from being obsolete, Kautilya's economic thought can serve as a meaningful reference point in shaping fiscal governance that is both ethically grounded and practically responsive to the challenges of the present day.

**Keywords:** Arthashastra, Public Finance, Fiscal Policy, Economic Governance, Taxation and Accountability.

**Bio:** Dr. Ravindra K. Brahme, Professor of Economics, has over 13 years of teaching experience and has served as Head of the School of Studies in Economics, Dean of Social Sciences, and Director of the Centre for Indian Knowledge Systems. Guiding more than 30 Ph.D. scholars, he has published widely in SCOPUS, UGC Care, and refereed journals, and undertaken projects with ICSSR, CGCOST, and the Finance Commissions of India and Chhattisgarh. He has represented India at international conferences in Paris, Penang, Poland, and Turkey. Beyond academics, he has held key administrative roles and currently serves as General Secretary of the Indian Economic Association and President of the Chhattisgarh Economic Association.

#### 46. भोगीलाल लहेरचंद इन्स्टीट्यूट ऑफ इण्डोलोजी, दिल्ली में संरक्षित प्राकृत की पाण्डुलिपियों में ज्ञान-विज्ञान की सम्पदा

Prof. Vijay Kumar Jain

भोगीलाल लहेरचंद इन्स्टीट्यूट ऑफ इण्डोलॉजी (बी. एल. आई. आई.) में अविभाज्य भारत की सम्पदा जो विभाजन के समय हमारे महाराज दीवालों में 'चिन्द' करके चले आए थे। जैन श्रेष्ठियों ने द्रव्य खर्च करके दोनों सरकारों के सहयोग से 1962 में भारत में लाने में सफल हए थे, जो आज हमारे संस्थान में सुरक्षित हैं। ये पाण्डुलिपियाँ संस्कृत, प्राकृत, अपभ्रंश, हिन्दी, गुजराती, गुरुमुखी आदि भाषाओं में विविध शास्त्रों-ज्योतिष, आयुर्वेद, खगोल शास्त्र, वनस्पति विज्ञान, धर्म, दुर्शन, साहित्य, व्याकरण, संस्कृति आदि से सम्बन्धित हैं। प्राकृत भाषा में माल 3000 पाण्डुलिपियाँ हैं। पूरे देश में 'प्राकृत' की लाखों प्रतियाँ हैं। इनमें से कुछ-कुछ प्रकाशित हैं। लेकिन अभी भी कई पाण्डुलिपियाँ अप्रकाशित है। प्रकाशित में भी 'क्रिटीकल' अध्ययन, अनुवाद एवं प्रकाशन की आवश्यकता है। यहाँ हम प्राकृत की पाण्डुलिपियों के महत्त्व पर विस्तार से विचार करेंगे। इन प्राकृत की पाण्डुलिपियों में अधोलोक, मध्यलोक, ऊर्ध्वलोक तीनों लोकों का सचित्र वर्णन है। भुगोल, खगोल शास्त्र की दृष्टि से इनका महत्त्व तो है ही, हमारी भारतीय संस्कृति की दृष्टि से यह अमूल्य धरोहर है। प्राकृत कथाओं में तत्कालीन संस्कृति तथा देश-विदेश में भ्रमण के वृत्तान्त हैं। इस तरह यह विविध ज्ञान मण्डप है जिसे विस्तृत लेखों में निर्धारित करने हैं। प्रयास किया जा रहा है कि अभी हम भारत सरकार की योजना द्वारा विशेष ग्रान्ट से 25 का प्रकाशन भी कर रहे हैं। लिप्यन्तरण के अभाव में इन पाण्डुलिपियों का उपयोग नहीं होता, सभी शोधार्थी लिपि ज्ञान नहीं रखते तथा न ही इतना समय देना चाहते हैं तथा लिपि-ज्ञान शोध में प्रवीण नहीं हो पाते अतः कई चरणों में हम यह कार्य करा रहे हैं। जिस पर विस्तार से शोधपत में विचार किया जाएगा। इस सन्दर्भ में आगत कठिनाइयों एवं उनके निवारण के उपाय भी दर्शाये जाएँगे।

Keywords: प्राकृत पाण्डुलिपियाँ, भोगीलाल लहेरचंद इन्स्टीट्यूट ऑफ इण्डोलॉजी, लिप्यन्तरण एवं प्रकाशन

**Bio:** Prof. Vijay Kumar Jain, Director of B.L. Institute of Indology, Delhi, holds an M.A., Ph.D. in Pali, and Acharya in Bauddha Darshan, with over 40 years of teaching and administrative experience at Central Sanskrit University, Lucknow. He has authored 8 books, translated 2, edited 28 works including 8 e-textbooks,

and published 117 research papers. Prof. Jain has participated in 200+ national and international seminars and delivered over 50 extension lectures. Recognized with awards such as Shrut Ratna (2006) and Acharya Gyan Sagar Puraskar (2012), he actively organizes seminars on Jainism, Buddhism, Pali, Prakrit, and Sanskrit, and regularly presents 'Sanskrit Varta' talks on Akashvani Lucknow.

### 47. Painted Texts: Visual Storytelling and Script in Indigenous Manuscript Traditions

Khushi Kesari

In many indigenous manuscript traditions of India, painting and script operate as parts of the same communicative act. Palm-leaf folios from Odisha, illustrated paper manuscripts from Rajasthan, and community-held records in scripts such as Odia, Kaithi, and Shäradā share a common principle: words and images are conceived together to create meaning. The script guides the structure of the painted scene, while the image brings the text into the realm of memory, sensory experience, and emotional engagement. The paper examines two traditions in which this relationship is evident: the palm-leaf manuscripts of Odisha and the illustrated Sharada-script religious manuscripts of Kashmir. In both these manuscripts visual and textual elements are not simply placed side by side but are interwoven. The result is a composite work that carries cosmological ideas, moral instruction, and technical knowledge, functioning as both an artistic creation and a portable archive of indigenous worldviews. These manuscripts embody a form of collaborative authorship, where scribes and painters work in unison to serve both aesthetic and cultural purposes. Recognising this unity has important implications for preservation. While digitisation has made such materials more accessible, it often separates text from image, weakening the dialogue between them. This study also argues for conservation and interpretation practices that maintain the integrity of these manuscripts as complete cultural objects. Keeping image and script together not only safeguards their artistry but also preserves the depth of meaning that emerges from their interaction, ensuring their voices continue to resonate for future generations.

**Keywords:** painted manuscripts, indigenous scripts, Odia palm-leaf, Shäradă script, visual-textual interplay, knowledge preservation

**Bio:** Khushi Kesari is Assistant Professor at SGT University and the Program Officer at the History Lab, Advanced Study Institute of Asia (ASIA), SGT University. Her work focuses on History, heritage, and material culture, with particular interests in traditional knowledge and Geographical Indications (Gls). She contributes to research pertaining to craft economies, digital history, and the creation of knowledge materials.

## 48. Integration of Manuscript Heritage in Indian Education Via Curriculum, Skill Development, And Conservation-Restoration Practices

Ravula Krishnaiah Co Author: Sakshi

India's extensive manuscript legacy, which is written on paper, cloth, birch bark, and palm leaves, is evidence of the country's philosophical, scientific, and cultural heritages. However, this vast amount of information is still mostly ignored in the conversation around education. The theoretical and pedagogical approaches for incorporating manuscript legacy into Indian education through curriculum development, scholarly research, the development of vocational skills, and conservation-restoration techniques are critically examined in this work. It makes the case that reclaiming India's knowledge systems calls for accessible and educational applicability besides archiving. Based on the National Education Policy (NEP) 2020 and current Bharatiya Jnana Parampara (Indian Knowledge Systems) initiatives, the study suggests ways to incorporate manuscript knowledge into the curricula for higher educational institutions and elementary schools. It also emphasises the possibility of interdisciplinary research that connects manuscript studies with ecological technology, philosophy, and philology. To preserve these delicate archives for subsequent generations, the article also discusses the pressing need for professionals with expertise in manuscript preservation, such as archivists, conservators, and restorers. The study advocates an innovative strategy that protects India's intellectual treasures and resurrects them as living reservoirs of knowledge by placing the manuscripts' legacy in the nexus of academic innovations and cultural preservation. A wholly independent and culturally based schooling system will be created by incorporating manuscript learning into instructional habitats, closing the disparity between traditional knowledge and modern research.

**Keywords:** Manuscript Heritage, Indian Knowledge Systems, Curriculum Integration, Skill Development, Conservation and Restoration, NEP 2020

Bio: Dr. Ravula Krishnaiah is an Assistant Professor in the Department of

Education and Education Technology, School of Social Sciences, University of Hyderabad. His research interests include Constructivism, Philosophy and Sociology of Education, Curriculum Studies, and Yoga Education. He has published extensively in UGC CARE journals, authored several books, and presented papers at national and international forums. He has also served as a coordinator and resource person in NEP orientation programs and national workshops, actively contributing to teacher education and educational policy implementation in India.

## 49. Integrating Siddha, an Indian Health Tradition in Education Curriculum: Forward-Looking Perspectives

Dr. A. Sherin Nisha Co Author: Rajendra Kumar, V. Aarthi, S. Selvarajan, N.J. Muthukumar

The Siddha System of Medicine, one of the oldest traditional health sciences in the world, is deeply embedded in the cultural, spiritual, and therapeutic heritage of India with its ethnic roots in Tamil Nadu. Believed to have originated between 10,000 and 4,000 B.C., Siddha offers a holistic approach to health through its unique principles of preventive care (food and nutrition, rejuvenation, Siddhar Yogam etc.,), lifestyle regulations (Daily and seasonal routines), and the effective use of natural resources such as herbs, metals, minerals, and animal/marine products to heal the diseases. This work explores the integration of Siddha traditional knowledge, which is indeed a treasure trove into formal education to encompass basic health education, aligning with the objective of the National Education Policy (NEP) 2020 to revitalize Indigenous Knowledge Systems (IKS). Specific focused areas include Siddha basic concepts, its uniqueness, preventive and promotive health such as daily and seasonal regimen, culinary medicine, herbal gardening and its therapeutic benefits, and Siddhar Yogam etc., as tools for physical and mental well-being. This article also highlights strategies to embed Siddha concepts across various educational levels; the challenges and key considerations involved in integrating Siddha into formal education. This strategic integration not only promotes health literacy and sustainable living, but also fosters a deeper cultural identity and respect for traditional wisdom of our own soil among the young minds of students. Thus, integrating traditional Siddha wisdom into the mainstream curriculum would help nurture a generation that is health-conscious, academically empowered, and culturally grounded.

**Keywords:** Siddha System of Medicine, National Education Policy (NEP), Indigenous Knowledge Systems (IKS), Preventive and promotive health.

# 50. Integration of Indian Knowledge Systems in Education Utilization of Human Resources Inscriptions of Andhra--A Select and Critical Study

Professor Vijaya Kumar Babu

Epigraphs, also called Inscriptions, the Written Records, composed in contemporary Script and Language, divulge, the then SEGPLART--Social, Economic, Geographical, Philosophical, Political, Linguistic, Aesthetic, Administrative, Agrarian, Religious and Technological aspects of Times. Indianly, the Royal Records issued by since Emperor Asoka best examplify contemporary Times. Some Historians and Sociologists of Orient and Occident opine that; Indian Rulers did not maintain Welfare of Subjects-squarely incorrect. Beginning Asoka, the successive rulers have understood the value of Human Resources; hence maintained and utilized, for welfare of Society. Following example stands testimony. Bapatla Inscription (Guntur District, AP, India), a bilingual and biscriptal record composed in contemporary Telugu and Tamil (Grantha) scripts and languages, found engraved on the walls of the Temple dedicated to Bhagawan Bhava Narayana and on Copper Plates too, dated 1028 SE corresponding to 1106 AD, issued during 37th regnal of Kulottunga Chola-I, records the Donation of Raja Raja Madalu (coinage of times), not only for maintenance of 5-Vedic scholars, for recitation of Vedas; but also for providing employment to 24-kinds of workers, such as Priests, Gardens Maintenance Staff, Flowers Pluckers, Garland Makers, Water Pitchers, Premises Cleaners etc. Interestingly all the employees are paid from Temple Revenues, but not from Royal Exchequer. That is, Temples in Bharat functioned, not only as Religio-Philosophical Centres, but also sources for proper Utilization of Human Resources and providing bona-fide Employment. Perhaps no society of times was so visionary as Indian/Andhra rulers. Text and Translation of the Inscription, under study, will be power point presented at the Conference, for scholarly audience.

**Keywords:** Epigraphy and Social History, Temple Economy and Employment Systems, Bilingual and Biscriptal Documentation, Welfare State Concepts in

#### Ancient India, Comparative Administrative History

**Bio:** Professor Vijayakumar Babu, Avadhanula, holds multiple degrees including M.A. in English and Ancient Indian History, Culture, and Archaeology, M.Phil., and Ph.D. He served over three decades at Osmania University, Hyderabad, as Professor and Head of the Department of Ancient Indian History, Culture, and Archaeology. Author of 10 books and presenter of 50+ research articles on Pan-Indian cultural studies, musicology, museology, and tourism, he is currently researching *Sanskrit Inscriptions of South-East Asia: A Study in Socio-Economic Perspective*.

### 51. Manuscript and Sources of Indian Genealogy and the use of Artificial Intelligence

Dr. Devendra Kumar Sharma

Genealogy, the study of family history and lineage, holds significant cultural and historical importance in India, a country with rich diversity and complex recordkeeping practices. This paper explores the key sources of Indian genealogical information, including religious records (Hindu, Christian, and Islamic), community-based archives (e.g., Kayastha and Jain records), and government repositories (e.g., National Archives, census reports, and immigration records). It highlights the role of sacred sites like Haridwar, Varanasi, and Badrinath, where "Panda records" document familial lineages through rituals such as Asthi Visarjan and Pind Daan. The paper also examines the transformative potential of Artificial Intelligence (AI) in genealogical research, emphasizing its applications in digitizing handwritten records, pattern recognition for tracing familial connections, and predictive analytics to bridge gaps in fragmented data. AI tools can overcome challenges like language barriers and incomplete documents, enabling more efficient and accurate family history reconstruction. However, ethical concerns,  $including \, data \, privacy \, and \, the \, handling \, of \, sensitive \, information, must \, be \, addressed.$ The study concludes that collaboration between genealogists, historians, and AI researchers is essential to harness technology's full potential, paving the way for future advancements in preserving India's genealogical heritage.

**Keywords:** Genealogy in India, Panda records / Sacred site archives, Artificial Intelligence in genealogical research

Bio: Dr. Devendra Kumar Sharma is the Assistant Director at the National Archives of India, New Delhi, with expertise in Indian genealogy and archival research. He has curated exhibitions highlighting India's historical and cultural heritage, such as the "Development of Education in North Eastern India." Dr. Sharma actively explores the integration of technology in archival practices, including the use of Artificial Intelligence to digitize handwritten records, identify familial connections, and reconstruct fragmented genealogical data. His work bridges traditional archival methods and modern digital tools, contributing significantly to the preservation and accessibility of India's genealogical and historical heritage.

# MANUSCRIPTS AS TOOLS OF CULTURAL DIPLOMACY

# 1. Indian Manuscripts as Instruments of Cultural Diplomacy: From Ancient Knowledge Preservation to Contemporary Soft Power Projection

Rani Alisha Rai

This article examines India's cultural diplomacy through the lens of its manuscript heritage, analyzing how ancient texts have served as vehicles for knowledge transmission and diplomatic influence from antiquity to the present. Drawing upon analysis of Sanskrit, Tamil, Arabic, and Persian manuscripts spanning two millennia, this study reveals how India's manuscript traditions constitute an underutilized yet extraordinarily powerful cultural asset for contemporary Statecraft. The research employs manuscript studies methodology combined with diplomatic history analysis to trace how Indian texts including the Vedas, Upanishads, mathematical treatises, medical compendia, and philosophical works established enduring intellectual networks across Asia, the Middle East, and Europe. Through systematic examination of manuscript circulation patterns, translation movements, and contemporary digitization initiatives, the study identifies a fundamental disconnect between India's manuscript wealth and its strategic diplomatic Deployment. Key findings demonstrate that while India possesses the world's largest collection of ancient manuscripts, contemporary cultural diplomacy initiatives fail to leverage this intellectual heritage effectively. The analysis reveals how historical manuscript exchanges from Buddhist texts traveling the Silk Road to Sanskrit mathematical works translated in Baghdad's House of Wisdom created lasting cultural bonds that modern diplomacy could revitalize through digital platforms and scholarly collaboration. The study contributes to cultural diplomacy theory by proposing a "manuscript diplomacy" framework that positions textual heritage as a strategic soft power resource. Beyond theoretical insights, the research provides actionable recommendations for digitizing manuscript collections, establishing international manuscript studies centers, and creating collaborative translation projects that could enhance India's intellectual influence globally while preserving endangered textual traditions.

**Keywords:** Manuscript diplomacy, Indian manuscripts, cultural heritage, soft power, knowledge transmission, digital humanities, Sanskrit studies

**Bio:** Rani, a Fulbright Scholar (2021–22, U.S. Department of State), has worked extensively on folklore and intangible cultural heritage through fellowships with the Ministry of Culture, Government of India. Her research focuses on language-based ethnography and communication from a sociological perspective. She also served as a project fellow at NCERT, contributing to the design of the new English curriculum under NEP 2020. Currently, she works with the National Mission on Cultural Mapping, Ministry of Culture, to preserve and promote India's diverse cultural expressions.

# 2. Tracing the Cultural Diplomacy between Ancient India and Sinhala through Manuscripts and Epigraphs

Prity Rawat Co-Author: Dr. Arpita Chatterjee

Manuscripts have played a crucial role in shaping and sustaining cultural diplomacy between countries. This paper explores how manuscripts and inscriptions functioned as powerful tools of cultural diplomacy between ancient India and the Sinhala kingdom (present-day Sri Lanka). Rooted in India's oral tradition, early narratives and philosophical teachings were preserved and transmitted across generations, eventually taking the form of written texts that crossed geographic boundaries. A key example of this cultural exchange is the transmission of the Tripitakas—the foundational texts of Theravada Buddhism—which were preserved and translated predominantly by Sinhalese monks. Inscriptions further affirm the deep ties between the two regions. Ashoka's Rock Edict XIII (3rd century BCE) explicitly mentions Tamraparni (ancient Sri Lanka) as one of the countries where the Dhamma was sent, highlighting early Buddhist missions. The Mahavamsa and Dipavamsa—Sri Lankan Pali chronicles—recount the arrival of Mahinda, Ashoka's son, and the Bodhi tree sapling sent by Ashoka's daughter Sanghamitta to Anuradhapura. Additionally, inscriptions found at Buddhist sites such as Bodh Gaya, Sanchi, and Amaravati record donations made by Sri Lankan pilgrims and monks, demonstrating sustained cultural and religious interaction. These textual and epigraphic sources together reveal a robust framework of cultural diplomacy, where the exchange of religious texts, language, rituals, and ideas helped establish and reinforce a civilizational relationship between the two countries. Far beyond spiritual ties, these manuscripts and inscriptions represent a sophisticated and long-standing dialogue between India and Sri Lanka, grounded in mutual respect and shared cultural heritage.

**Keywords:** Manuscripts, Cultural Diplomacy, India-Sri Lanka Relations, Buddhist Heritage

Bio: Prity Rawat, MA in Ancient Indian History, Culture and Archaeology from

Banaras Hindu University, 2023. She independently researched across the Kaimur Range of Bihar on tattoo cultures amongst the tribal communities, and its relation with Rock Art. In 2025, she is pursuing PhD from Banaras Hindu University.

#### 3. Kalila wa Dimna as a Diplomatic Manuscript: Tracing the Translation and Transmission of Indian wisdom from Sanskrit to the Arabic-Islamic World

Muhammed Uzair Co-Author: Md Yousuf Kamal

The Panchatantra, a Sanskrit compendium of didactic animal fables, is a cornerstone of Indian ethical and political thought. Its transregional journey, from Middle Persian (Pahlavi) under the Sassanian Empire to Arabic as Kalila wa Dimna, remains underexplored as a case of cultural diplomacy and political pedagogy. Current scholarship often foregrounds its literary and moral dimensions, neglecting its function as a strategic tool of soft power in the medieval world. While there is significant philological work on Kalila wa Dimna, few studies situate it within the broader frame of Indo-Persian-Arabic knowledge transfer as an instance of cultural dominance and manuscript diplomacy. The link between Panchatantra's allegorical diplomacy and later political fable traditions (including modern analogues like George Orwell's Animal Farm) has also gone largely unacknowledged, particularly in decolonial approaches to manuscript heritage. This study employs comparative textual analysis of selected Panchatantra, Pahlavi, and Arabic fables, focusing on shifts in allegorical framing and political messaging. Philological evidence is paired with codicological study of key manuscripts and a historiographical review of Arabic-Persian manuscript scholarship. Drawing on translation theory, it examines how narrative restructuring aligned with the ethical frameworks and governance ideals of successive cultures. The study argues that Kalila wa Dimna functioned as a "diplomatic manuscript," consciously reshaped to transmit Indian political wisdom into Persian and Arabic intellectual life. By replacing Hindu elements, reframing morals to fit Islamic-Persian courtly ethics, and embedding counsel in animal allegories, it became both a pedagogical tool and a medium of Cultural Diplomacy, an early model of soft power fostering historical Knowledge Partnerships. Through a decolonial lens, the work reclaims Panchatantra as an Indian intellectual export that shaped medieval Persian and Arabic political culture, showing how the lion, ox, and fox still inform political

allegory from the Abbasid court to Orwell's Animal Farm.

**Keywords:** Panchatantra, Kalila wa Dimna, Cultural Diplomacy, Manuscript Transmission, Decolonial Manuscript Studies

**Bio:** Muhammad Uzair is a Postgraduate Research Scholar in Civilizational Studies at Darul Huda Islamic University, Kerala, while also pursuing Political Science and International Relations at IGNOU, New Delhi. His research explores contemporary Islam, Indian Muslim socio-political dynamics, Islamophobia, South Asian studies, and global Islamic thought. He has presented at several national and international conferences, including the 1st Annual Graduate Student International Colloquium on Southeast Asian Historical Scholarship, hosted by the Chinese University of Hong Kong.

### 4. Reimagining Indian Heritage through Digital Twins

#### सर्वेक्षण से डिजिटल कूटनीति तकः डिजिटल द्विन्स के माध्यम से भारतीय विरासत की पुनर्कल्पना

Ananya Sharma Co-Author: Aishwarya Murali

India's vast and intricate heritage landscape faces the dual challenge of rapid erosion and global invisibility. This paper presents the work of X8 Studio, an immersive digital platform that uses Digital. Twin Technology, XR storytelling, and interactive documentation frameworks to preserve and promote heritage spaces, focusing particularly on lesser-represented remote and ecologically sensitive regions. Our research addresses 3 interconnected areas: (1) survey & documentation standards, (2) integration of Indian knowledge systems into digital education, (3) cultural diplomacy through immersive outreach especially enabling cultural inclusion for underrepresented communities - elderly, physically challenged and global diaspora. Through high-fidelity 3D documentation and immersive reconstruction, X8 uses robust methodologies grounded in international survey standards while remaining deeply rooted in local contexts. Our work and research at the Bateshwar temple complex exemplifies how we blend terrestrial LiDAR, photogrammetry, drones and community-driven narratives to create metadata-rich digital twins. These assets go beyond preservation, they become active pedagogical tools, integrating Indian knowledge systems into digital curricula where students engage with rituals, symmetry, geometry, cosmology, and spatial memory. By creating interactive exhibitions and virtual access to such heritage, X8 positions immersive technology as a form of cultural diplomacy expanding India's soft power and fostering global dialogue around indigenous epistemologies and conservation ethics. This paper argues that immersive digital platforms are totally reshaping how we document, teach, and share our heritage. As the world comes online, it is crucial to remain context-aware, community-involved, and globally legible. The X8 model offers a scalable, replicable framework for future collaborations between technologists, heritage scholars, educators, consumers and governments.

**Keywords:** Digital Twin Technology, Immersive Heritage, Indian Knowledge Systems, Cultural Diplomacy

**Bio:** Ananya Sharma, a conservation architect and photographer from Shimla, holds a Master's in Architectural Conservation and is pursuing doctoral research at SPA, Bhopal, on heritage management in fragile ecosystems. She has worked on heritage documentation, resilience strategies, and conservation projects under AMRUT 2.0. As Lead Architect at X8 Studio, a tech startup, she pioneers immersive mixed-reality heritage experiences using digital twinning, XR, and interactive storytelling, blending indigenous wisdom with innovative methods for sustainable heritage management.

#### 5. Interfaith Dialogues in Manuscript Tradition: Evidence from Indo-Persian, Sanskrit, and Arabic Texts

Homa Fatma

This paper examines the intersections and exchanges between diverse religious communities as witnessed through the manuscript traditions of Indo-Persian, Sanskrit, and Arabic texts in South Asia. By analyzing previously understudied works, the study illuminates how scribes, scholars, and patrons negotiated religious boundaries, facilitated cross-cultural learning, and fostered mutual respect. The manuscripts reveal not only overt references to heterogeneous faiths but also instances of translation, commentary, and adaptation that created shared intellectual spaces. Through detailed textual and codicological analysis, the paper uncovers how philosophical ideas, mystical concepts, and ethical precepts were transmitted and transformed in the process of manuscript production and circulation. The findings show that manuscript culture provided a vibrant medium for pluralistic engagement, in which curiosity, contestation, and conviviality coexisted. Furthermore, the research highlights the agency of scholars often at the courts and in urban centers who deliberately curated interreligious conversations, thus shaping broader societal attitudes towards diversity and coexistence. By moving beyond sectarian readings, this study challenges reductive narratives of interfaith relations marked only by conflict, and instead foregrounds moments of dialogue, hybridity, and intellectual synergy. It demonstrates that manuscript traditions are a rich archive for reconstructing the complex histories of religious interaction and offer valuable lessons for contemporary debates on tolerance and intercultural understanding.

**Keywords:** Religious Pluralism, Manuscript Culture, Textual Transmission, Cross-cultural interaction, Translation studies, Syncretism, Codicology

**Bio:** Homa Fatma, a philosophy scholar with graduate and postgraduate degrees from the University of Delhi, works at the intersections of ethical reasoning, women's rights, and social justice. Her current research explores classical and contemporary philosophical thought, with a focus on manuscript traditions and

Indo-Islamic texts in Persian and Arabic that shaped interfaith dialogues and ethical discourses. By bridging normative ethics with lived realities, she highlights the cultural significance of manuscript heritage in shaping civilizational values and contemporary reflections on identity and pluralism.

# 6. Illuminated Dialogues: Languages, Styles, and Cultural Diplomacy in Jain Manuscript Paintings A Comparative Study of Writing Traditions, Aesthetics, and Cross-Cultural Exchange in Medieval Western India

Prof. Radha Ambekar

In medieval India, Jain manuscript paintings, created from the 12th to the 16th centuries, were an amazing combination of artistic inventiveness, religious commitment, and linguistic diversity. These manuscripts, which served as visual aids for holy books like the Kalpa Sūtra and Kalakācārya Katha, were written in a variety of languages, including Sanskrit, Prakrit, Apabhramsha, Rajasthani, and Gujarati, and were presented in several scripts, such as Devanāgarī, Jain Nāgarī, and Sāradā. The cosmopolitan networks of Jain patronage, which employed calligraphers, painters, and scribes from a wide range of geographical and cultural backgrounds, are reflected in their output. This study examines the writing styles seen in ancient manuscripts, ranging from fluid, locally inspired letterforms that show localized aesthetic preferences to the rigorous precision of formal calligraphy. Additionally, it examines the paintings' visual language, which includes intricate borders, stylized figures that are flat but expressive, and the use of vibrant mineral and organic paints that have retained their beauty for generations. Through a comparative analysis, this study demonstrates how regional schools of art were distinguished by differences in script, layout, and decoration, as well as how Jain visual culture adapted to shifting linguistic and stylistic circumstances. These manuscripts served as instruments of cultural diplomacy, in addition to their devotional function, fostering communication between many cultures and conserving a common artistic legacy. Their multilingual and multi-script nature demonstrates a deliberate commitment to inclusion, enabling the transmission of religious knowledge across linguistic divides in the Philippines. Jain manuscript paintings are dynamic cultural bridges and sacred repositories that provide timeless insights into the heterogeneous ethos of medieval Western India through the intersection of faith, artistry, and cross-cultural interchange.

**Keywords:** Jain manuscript paintings, Prakrit manuscripts, Apabhramsa literature, Medieval Indian art, Cultural diplomacy, Multilingual heritage, Comparative manuscript study, Script and style variations

#### 7. Cultural Diplomacy through Manuscript Repatriation: A Tool for Soft Power in India's Foreign Policy

Dr. Nisikant Nayak Co-Author: Dr. Biranchi Narayan P. Panda

In the 21st century, cultural diplomacy has emerged as a key instrument of soft power. Countries use heritage, arts, and cultural expressions to promote understanding and influence global perception (Nye, 2004). For a civilization as ancient and textually rich as India, the repatriation and international exchange of manuscripts hold immense symbolic and strategic significance. India possesses one of the world's most diverse and large manuscript heritages, estimated at over 10 million items (NMM, 2023). However, a significant portion remains dispersed across global institutions due to "colonial extraction, private collection, or lack of bilateral engagement". This paper investigates the role of manuscript repatriation as a nuanced tool of cultural diplomacy within India's foreign policy framework. The fundamental research problem lies in the limited scholarly attention given to the intersection of manuscript heritage and international relations, particularly in the Indian context. Despite increasing global recognition of cultural restitution (UNESCO, 2020), India lacks a consolidated framework that links manuscript repatriation to strategic cultural engagement. The existing literature is dominated by broader restitution discourse. However, specific diplomatic case studies involving manuscripts as vehicles of trust-building, reconciliation, and cultural identity assertion remain underexplored. This study aims to address this gap by critically examining selected case studies of Indo-foreign manuscript exchanges and repatriation initiatives, such as the return of sacred texts from Germany, partnerships with the British Library, and digital restitution efforts with France and the U.S. Through these cases, the research explores how such acts contribute to India's narrative sovereignty, soft power projection, and postcolonial agency. The methodology adopts a qualitative case study approach with a descriptive analysis supported by archival research, policy document analysis. International conventions (e.g., 1970 UNESCO Convention), bilateral MoUs, and national heritage policies are also critically examined to assess their relevance and efficacy. By embedding manuscript repatriation within the broader aspects of cultural

diplomacy, the paper argues that such efforts are not merely acts of restitution, but strategic instruments to enhance India's soft power capital, reclaim epistemic agency, and construct a globally resonant cultural narrative.

**Keywords:** Cultural Diplomacy, India's Foreign Policy, Manuscript Repatriation, Soft Power

**Bio:** Dr. Nisikant Nayak is an Assistant Professor at the School of Governance and Public Affairs. XIM University, Bhubaneswar. His academic interests span public policy, governance reforms. local self-governance, and participatory development. His research focuses on climate policy, India's foreign policy, decentralization, disaster risk governance, and the role of institutions in sustainable development.

## 8. India and Tibet in Dialogue: A Study of Ancient Buddhist Knowledge Partnership

Karan Kumar

India and Tibet have shared deep rooted cultural and intellectual connections which began to take shape in the 7th century C.E., when king Songsten Gampo looked to India for spiritual guidance and knowledge systems. This led not only to the adoption of Buddhism in Tibet but also the creation of the Tibetan script which was based on the Indian script similar to Gupta Brahmi. The relation between two regions was not only based on religion but also deep exchange of ideas, values and scholarly traditions. In this process, Indian thinkers like Shantarakshita, Padmasambhava, Kamalasheela and Atisha Srijnana Dipankara not only introduced Buddhist Philosophy but also shared a tradition of logic, dialogues, ethics, education and monastic discipline. Over time, Buddhism took a different shape from what prevailed in India and absorbed the native Bon tradition with unique schools of thought within tantric and monastic frameworks. A key part of this cultural diplomacy was the knowledge sharing and large-scale scholarly efforts to translate Buddhist texts from Sanskrit to Tibetan language in which Indian scholars worked closely with Tibetan scholars to produce the bka' gyur(Kangyur) and bstan gyur (Tengyur). Importantly, these Tibetan translations helped preserve many Indian texts which were later translated back to Sanskrit and other languages as most of them were destroyed in India. It showcased the role of Tibet in conserving and transmitting Indian knowledge that has been preserved in the form of Manuscripts. This paper aims to explain how Buddhism served as a medium of cultural diplomacy and knowledge partnership between India and Tibet which shared a legacy that continues to grow into respectful and long standing cultural and intellectual relationship.

**Keywords:** Buddhism, cultural diplomacy, knowledge partnership, Tibetan script, Shantarakshita, manuscripts.

**Bio:** Karan Kumar, an MA in Ancient Indian History, Culture, and Archaeology, is currently pursuing his Ph.D. at Banaras Hindu University. Passionate about

exploring India's past, he focuses on epigraphy, religion, and cultural history, uncovering the stories preserved in inscriptions and monuments. His work blends historical inquiry with cultural interpretation, aiming to bring the voices of the past to life. Through his research, Karan seeks to deepen our understanding of how faith, art, and society have shaped the Indian subcontinent over centuries, making history not just a record of events, but a living dialogue between the past and present.

#### 9. Stefan Norblin and the Visual Legacy of the Manuscripts of Ramayana and Mahabharata in the Royal Courts of Jodhpur: An Artistic Confluence of Indian Epics and European Artistry

Manya Misra Co-Author: Ananya Misra

Juliusz Stepan Norblin de la Gourdaine (1892-1952), a descendant of the renowned French artist Jean-Pierre Norblin, emerged as one of the most versatile Polish artists of the early 20th century. Self-taught with formal training in Antwerp and professional experience in Amsterdam, Paris, and London, Norblin gained acclaim as an illustrator, portraitist, caricaturist, and poster designer during Poland's Second Republic. His career, however, took a transformative turn during World War II, when he relocated to India and became a distinguished court artist in Jodhpur. Between 1944 and 1946, Norblin contributed richly to the royal palaces, notably Umaid Bhawan, through his paintings and interior designs. Despite not having read the Hindu epics himself, Norblin's paintings depict several scenes from the Ramayana and Mahabharata with remarkable accuracy and fidelity, reflecting traditional shruti and smriti sources. His illustrations and paintings of Ramayana and Mahabharata still decorate the royal courts of Jodhpur, serving as a unique visual manuscript heritage that blends Western artistic styles with Indian mythological storytelling, thereby preserving and revitalizing India's intangible cultural legacy through art. His contributions not only enriched the royal aesthetic milieu but also serve as important artifacts of cultural diplomacy, underscoring cross-cultural artistic exchange during a turbulent historical period. This study highlights Norblin's role in visualizing India's manuscript-based epics, advocating for greater scholarly recognition of his oeuvre within the discourse of manuscript heritage and cultural diplomacy. By situating Norblin's paintings within the framework of Indian knowledge systems, this research underscores the multifaceted ways in which manuscript traditions transcend textual boundaries, incorporating visual narratives as vital conveyors of cultural memory and identity.

Keywords: Stefan Norblin, Ramayana, Mahabharata, Indian epics, Jodhpur,

Umaid Bhawan Palace, cultural diplomacy, Indian knowledge systems, manuscript heritage, European-Indian artistic exchange

Bio: Manya Misra, the author, holds a B.A. (Hons) and M.A. in English from Daulat Ram College, University of Delhi, and is pursuing a Ph.D. in English at Chhatrapati Shahu Ji Maharaj University, Kanpur. She has worked with the Directorate of Education, the British Council, and Macmillan Education, and is presently Senior Manager at Opengrowth Media Pvt. Ltd. A trained painter and sketcher, she brings an artistic dimension to her research. Ananya Misra, the coauthor, completed her B.A. (Hons) and M.A. in English from Miranda House, University of Delhi, and holds additional qualifications in Comparative Indian Literature and Indian Music. She has worked with leading institutions including IIT Bombay, the Ministry of Culture, and Gaon Connection, and is currently a Ph.D. candidate in English and Project Assistant with the NMCM Division, IGNCA, Ministry of Culture.

#### 10. Maritime Manuscripts as Cultural Bridges: Interpreting Indian Ocean Records for Reclaiming India's Knowledge Legacy

Komal Thakran Co-Author : Dr. Manish Karmwar

The Indian Ocean has long served as a critical corridor of trade, cultural exchange, and maritime knowledge. Surrounded within this region's extensive manuscript heritage are mavigational charts, trade contracts, community ledgers, and illuminated Qur'anic texts that chronicle centuries of transoceanic interactions. Notable examples include the Kitab al-Fawa'id by Ahmad ibn Majid, a 15thcentury navigational manual detailing celestial navigation and ocean currents, housed at the Bibliothèque nationale de France. Coastal East African Qur'an manuscripts produced between circa 1750-1850 in Swahili city-states (Pate, Siyu, Faza) provide vivid insight into local script styles, colophons, and material culture, now dispersed across collections in Kenya, Tanzania, Oman, the UK, and the USA. In 2024, the National Archives of India, in partnership with the Indian Embassy in Muscat and Oman's National Records and Archives Authority, completed the digitization of over 7,000 diaspora documents, from trade invoices and ledgers to personal diaries, dating as early as 1838, offering fresh perspectives on India-Oman mercantile networks. This paper examines how systematic translation, palaeographic study, and digital archiving can unlock the historical value of such materials. Recent surveys of the Goa State Central Library identified over 1.200 Indo-Portuguese maritime manuscripts, while the Zanzibar National Archives catalogue lists more than 350 Arabic- and Gujarati-script shipping records. By mixing these multilingual sources into accessible digital repositories and applying GIS mapping to historic voyage logs, scholars can reconstruct trade routes, seasonal monsoon patterns, and port linkages. Such initiatives not only reclaim India's maritime manuscript heritage but also strengthen cultural diplomacy by enabling collaborative research between Indian Ocean rim nations. thereby reinforcing India's position as a historical and contemporary maritime knowledge hub.

**Keywords:** Indian Ocean, maritime manuscripts, navigational charts, Kitab al-Fawa'id, East African Qur'an manuscripts, India-Oman trade, digitization, Indo-

Portuguese maritime manuscripts, digital archiving, cultural diplomacy.

Bio: Komal Thakran is a PhD Scholar at the Department of African Studies, University of Delhi. She has completed her undergraduate and postgraduate studies in History from the University of Delhi. Currently, she is working on India and the Swahili Coast, focusing on their cultural heritage from 1800 to 1900. Her research area includes historiography, cultural studies, diaspora studies, and heritage studies. She is a Junior Research Fellow at the University Grants Commission. Additionally, she has published in various Scopus-indexed journals. One of her prominent research areas is "Threads of Connection: Tracing India's Textile Influence in Africa Over Time". Also, some of the book reviews, such as "Book Review: Across the Green Sea: Histories from the Western Indian Ocean, 1440–1640". Her research approach is to explore primary sources. She has presented various research in various national and international conferences.

## 11. Foods of the Past as a Binder for Modern Diplomacy

Prisha Revar

In today's globalized world, culture serves as an invisible thread that transcends borders and connects nations through the exchange of ideas and partnerships. Historically, manuscripts played a vital role in facilitating this exchange, preserving the essence of ancient kingdoms across various subjects. One often overlooked subject, yet deeply embedded in national identities, is cuisine. Cultural diplomacy manifests in many forms, and gastrodiplomacy—using food to build cultural bridges—is visible across all social strata. Manuscripts such as Nimatnama, Bhojana Kutuhala, and Manasollasa offer crucial insights into traditional Indian cuisine. Dishes like curries mentioned in these texts have parallels in other national cuisines, including Persian and Caribbean, illustrating how food connects the past with the present. Recently, Ayurvedic food and millets have gained international prominence, showcasing India's culinary heritage on the global stage. This research explores how manuscripts depicting food can strengthen knowledge partnerships through cinema, global expos, restaurant menus, and academia. It highlights the need to digitize these manuscripts and develop further collaborations to promote India's gastronomy worldwide while integrating food studies into educational curricula. In conclusion, diet and food can serve as powerful tools to foster global collaboration, with food-based manuscripts acting as mediums of cultural diplomacy to advance the vision of a global India.

**Keywords:** culture, manuscripts, cuisine, cultural diplomacy, gastrodiplomacy, Nimatnama, Bhojana Kutuhala, Indian cuisine, digitization, global collaboration.

**Bio :** Prisha Revar is an independent researcher who looks closely at Indian cuisine and its role globally and within Indian culture. Having studied at Delhi University (BA) and University of Warwick (MA) in World Literature with the dissertation on Curries: How Indian is it in a Transnational World. She is currently working in Publishing at Taylor & Francis in Editorial.

#### 12. AR/VR-Enabled Cultural Immersion: Leveraging Manuscript Heritage for Tourism, Scholarship, and Economic Growth in India

Sanmay Das

India's manuscripts-spanning themes from philosophy and geography to erotica, art, and science-are more than historical records. They are living windows into the country's knowledge traditions, creative genius, and cultural depth. While initiatives like the National Mission for Manuscripts (NMM) have worked to preserve and digitize these treasures, they often remain out of reach for the public imagination. This paper presents a concept to bridge that gap: an AR/VR-powered Manuscript Heritage Experience that transforms static archives into immersive, interactive journeys. The idea is to create engaging installations in government cultural centres, museums, educational institutions, tourism hubs, and even Indian cultural spaces abroad. Visitors-whether scholars, tourists, or digital nomadscould step inside vivid, multi-sensory worlds built around authentic manuscripts, visual storytelling, and related heritage assets like art, crafts, and music. The proposed model begins with manuscripts under Indian ownership, using Trusted Digital Repositories (TDRs) for authenticity, metadata accuracy, and long-term preservation. It would also draw on the Digital Manuscripts Library-a proposed NMM initiative-as a foundation for secure access and integration. Over time, the framework could invite privately held collections into the fold, expanding both public access and national heritage holdings. Beyond preservation, this approach aims to boost cultural tourism, spark new forms of education, and strengthen India's cultural economy. By linking immersive technology with heritage storytelling, and fostering India-international institutional partnerships, the project positions India as a global leader in cultural innovation-making its ancient knowledge systems relevant, accessible, and inspiring in the 21st century.

**Keywords:** India, manuscripts, National Mission for Manuscripts, AR/VR, immersive experience, digital preservation, cultural tourism, heritage storytelling, Trusted Digital Repositories, cultural innovation.

Bio: Sanmay Das, a 2024 B.Tech graduate from Sister Nivedita University, is a

young technologist, software developer, and Viksit Bharat Young Leader 2025 finalist. He has gained professional experience as a software developer during and after his graduation, and is currently serving as a Gandhi Fellow under the Piramal Foundation. Passionate about enriching society's softer dimensions—culture, art, humanity, and mindset—Sanmay strives to leverage technology not only for innovation but also for creating meaningful social and cultural impact.

# 13. Buddhism as Soft Power: Monastic Travels and Manuscript Diplomacy in Ancient India-Korea Relations

Aditi Singh Co-Author: Sanskriti Ahuja

The root of Indo-Korean cultural ties date back to the early centuries of the Common Era, with Buddhism serving as the bridge of civilizations. One of the earliest Indo-Korean mytho-historical links is found in the Samguk Yusa, a 13th-century Korean legend-and-history chronicle, which narrates the story of an Ayodhya princess, Suriratna marrying King Su-ro of Korea's ancient Kaya kingdom in the 1st century A.D.. This symbolic relationship was followed by centuries of monastic travel and scholarly exchange. Monks such as Marananta (Kumaranandin) (372 CE), Kyōmik (526 CE), Ado played key roles in this transmission and Hyecho's Wang ocheonchukguk jeon, a travelogue written after his pilgrimage across India, started from Vaisali in 723 CE which offers rare insights into the religious life and manuscript traditions of ancient India. These exchanges, carried out through texts in Pali, Sanskrit, and Classical Chinese, spread from theology to ethics, aesthetics, and governance. Their long-term legacy continues to this day with projects such as the Gyan Bharati Mission that promotes the digitization and scholarly preservation of Indian manuscripts. Here, Buddhism appears not just as a faith, but as a lasting cultural diplomacy medium, strengthening Indo-Korean relations based on shared heritage, academic collaborations, and soft power engagement. This study takes a qualitative methodology to analyze the transmission of Buddhism through pilgrimage and manuscript traditions that contributed to the development of both spiritual and intellectual exchange between India and Korea. Through the concept of manuscript diplomacy, it explores how Buddhist monks and their works served as soft power, disseminating common cultural and religious heritage over time and space. The study will be grounded on reading historical manuscripts and available literature to investigate and respond to the key questions of the research.

**Keywords:** India-Korea Relations, Buddhism, Manuscripts, Hyecho, Cultural Diplomacy, Soft Power

**Bio :** Aditi Singh, researcher in Korean Studies at JNU. She has a keen interest in cross-cultural communication and Indian-Korean cultural diplomacy, actively participates in key conferences on diplomacy and global affairs, providing space for discussion on international relations and cultural exchange.

## 14. Kashmir's Manuscript Heritage: A Confluence of Indic and Persianate Knowledge Systems

Dr. Jahangir Iqbal

Kashmir's manuscript heritage stands as a profound testament to the region's historical role as a crucible of diverse intellectual traditions. Nestled at the intersection of South Asia and Central Asia, Kashmir emerged over centuries as a vibrant centre where Indic and Persianate knowledge systems not only coexisted but deeply interacted, resulting in a rich and multifaceted manuscript culture. The region's scholars, mystics, and patrons cultivated and preserved an extensive range of manuscripts in Sanskrit, Persian, Sharada, Arabic, and Kashmiri, encompassing disciplines as varied as theology, metaphysics, poetry, law, medicine, astronomy, historiography, and Sufism. While Sanskrit texts rooted in Kashmir Shaivism, Buddhism, and Nyaya philosophy represented the depth of Indic thought, the introduction of Persian during the medieval period brought with it the intellectual frameworks of Islamic mysticism, Persian poetry, ethics, and rational sciences. The Sufi khanqahs, royal courts, and madrasas became centres of cross-cultural translation and discourse, where Sanskrit scriptures were rendered into Persian (such as the Rajatarangini and Yogic treatises), and Persian texts were interpreted through Indic metaphysical lenses. This manuscript heritage reflects a dynamic confluence-where textual production was not mere preservation but a creative act of synthesis. It demonstrates how Kashmir's intellectuals navigated multiple epistemological worlds and built bridges between them. Moreover, these manuscripts serve as enduring symbols of Kashmir's composite culture, embodying the spiritual and philosophical pluralism that defined its past. In an era of cultural rediscovery and knowledge repatriation, the study and preservation of this manuscript tradition are not only crucial for regional identity but also for understanding broader patterns of Indo-Persian civilizational exchange.

Keywords: Kashmir, manuscript heritage, Sanskrit, Persian, Sharada, Indo-Persian exchange, Kashmir Shaivism, Sufism, cross-cultural synthesis, intellectual pluralism.

Bio: Prof jahangir Iqbal is head Dept. of Persian University of Kashmir srinagar

and coordinator MRC, NMM ,wrote 14 books 146 research papers completed 4 major projects of UGC and ICHR 3 minor project are in hand, recipient of national galib award by Galib institute new Delhi and international literature award 2023 by ministry of education Govt of iran for outstanding contributions in persian language literature and culture,19 PhD awarded under his supervision. Interpreter/translator for external affairs ministry to the central asian countries. The area of specialization of prof iqbal is Indian culture tradition, knowledge and languages.

# 15. Across Centuries and Continents: Tracing Knowledge Networks of Indian-Origin Heritage Communities for Cultural Diplomacy

Srijana Jaiswal Co-Author : Shrishti Pandey

As one of the world's oldest continuous civilizations, India possesses a vast cultural and intellectual legacy, preserved not only within its borders but also across heritage communities dispersed worldwide. These long-settled and recently settled communities retain and reinterpret elements of language, ritual, and art, often carrying forward fragments of literary and scholarly traditions. This paper examines how establishing knowledge partnerships with ancient, medieval, and early modern heritage communities can serve as a foundation for enhancing cultural diplomacy. It explores the migration patterns of various tribes, focusing on the transmission of their unique works, cultural practices, names, and intellectual legacies, as evidenced in original manuscripts and historical documents. Manuscripts-encompassing original religious texts, philosophical treatises, literary works, and historical records that travelled with migrants or were recreated in new cultural contexts-will play a central role in this study. The discussion will reveal how their traditional knowledge, art forms, and societal customs were exchanged and assimilated in host countries, enabling an examination of the evolution of collective identities, which can serve as a strong foundation for cultural diplomacy. Knowledge partnership programmes between India and these communities can involve libraries, universities, and cultural institutions to enhance intercultural understanding, with the common goal of preserving shared heritage and strengthening international relationships. By integrating cultural diplomacy based on knowledge partnerships with these heritage communities, India can leverage its unique position to strengthen its soft power while contributing to global knowledge. Such initiatives not only reaffirm historical ties but also position heritage communities as co-curators of a shared civilizational legacy, transforming dispersed histories into active channels of cultural exchange in the twenty-first century.

Keywords: Heritage communities; Manuscript heritage; Collective identity;

Intercultural understanding; Civilizational legacy; Diaspora diplomacy

**Bio :** Srijana Jaiswal has qualified NET, GATE, and CTET, and holds a M.A. in English Literature as well as B.A.(Hons) in Political Science. With a B.Ed. to her credit, she combines a strong foundation in social sciences with a deep passion for literature. Currently working as a content writer, she excels in simplifying academic books and materials, making complex subjects accessible and engaging for readers. Her interdisciplinary academic background and enthusiasm for educational content shape her unique approach to writing and knowledge sharing.

#### 16. Buddhist Pathways as Cultural Diplomacy: Reframing Intercultural Exchange in Buddhaland Brooklyn and The Dharma Bums

Ms. Disha Mondal Co-Author: Dr. Shubhankar Roy, Prof. (Dr.) Indrani Singh Rai

This paper explores how literary connections with Buddhism can serve as tools for cultural diplomacy and international knowledge partnerships. They transform spiritual traditions into means of cross-cultural negotiation. Drawing on Homi K. Bhabha's idea of the "third space," Joseph Nye's concept of soft power, and Emily Apter's "translation zones." the analysis places Buddhaland Brooklyn (2012) Richard C. Morais and The Dharma Bums (1958) by Jack Kerouac within the wider discussion of literary cosmopolitanism. In Buddhaland Brooklyn, a Japanese Buddhist priest is displaced to a diverse New York congregation. This creates a lively setting for mutual adaptation. The story shows how Buddhist practices are reinterpreted in varied cultural environments, fostering intercultural understanding and questioning fixed ideas of authenticity. In contrast, The Dharma Bums, which comes from the Beat Generation's countercultural spirit, redefines Buddhist asceticism as a challenge to capitalist modern life and promotes an ecological ethic. Kerouac's use of Zen principles demonstrates how spiritual traditions are reshaped to suit the social and political needs of a particular time. Both narratives act as cultural translation zones where Buddhist ideas are transformed and spread beyond their original settings. They show literature's ability not just to represent but to perform cultural diplomacy, building ethical connections based on mutual respect instead of a one-sided exchange. In this way, they uncover how narrative can build lasting global intellectual ties, highlighting literature as an active force in sharing ideas and promoting cross-cultural understanding.

**Keywords:** Buddhism, cultural diplomacy, soft power, cultural translation, third space, intercultural ethics.

**Bio :** Ms. Disha Mondal is a researcher and educator specializing in English and French literature, with a keen interest in postcolonial studies, gender theory, and cultural narratives. Her work explores intersections between literature, identity,

and spirituality, particularly through the lens of migration and transformation. She has presented at national and international conferences and is currently pursuing a PhD focused on Buddhist influences in American literature. She is passionate about multilingual education and interdisciplinary approaches.

## 17. Reclaiming Ancient Environmental Knowledge: Manuscripts as Instruments of Climate Diplomacy

Mohit Dalal Co-Author: Prof. (Dr.) Harpreet Kaur, Dr. Kavita Singh

Historical manuscripts across the Indian Ocean world encapsulate centuries of environmental observations and offer a powerful foundation for contemporary climate diplomacy. A key example is Ahmad ibn Mäjid's Kitab al-Fawa'id (15th century), which documents monsoon wind patterns and ocean currents that guided Arab mariners, a precursor to today's understanding of maritime climate systems. Similarly, the 1st-century Periplus of the Erythraean Sea (via a 14th/15thcentury manuscript) provides itineraries and port descriptions reflecting seasonal navigational hazards linked to monsoon variability. In archival landscapes, the French Institute of Pondicherry safeguards approximately 8,500 palm-leaf manuscripts, particularly on Saivashänt arguments, though primarily religious, the environmental references embedded in marginalia and botanical notes represent untapped paleoclimatic data. Meanwhile, modern paleoclimate science reveals strong correlations between historical monsoon variability and broader climatic epochs. For instance, the Sahiya 8180 record registers monsoon intensification during the Medieval Climate Anomaly (~800-1200 CE) and weakening during the Little Ice Age, providing empirical baselines that complement qualitative insights from the manuscripts. This paper argues that cross-disciplinary integration, combining manuscript translation, palaeographic methods, and paleoclimatology, can transform ancient environmental logs into diplomatic tools. By making accessible the monsoon routes, seasonal logs, and ecological notes embedded in manuscripts, institutions can foster climate diplomacy rooted in shared heritage across Indian Ocean nations. Leveraging this dual legacy of environmental wisdom and cultural connection provides a foundation for transnational collaboration on climate resilience based on centuries-old knowledge.

**Keywords:** Indian Ocean manuscripts, climate diplomacy, Kitab al-Fawa'id, monsoon wind patterns, Periplus of the Erythraean Sea, palm-leaf manuscripts, paleoclimate, Medieval Climate Anomaly, Little Ice Age, transnational collaboration.

**Bio :** MOHIT is a PhD Research Scholar in the Department of African Studies at the University of Delhi, with a research focus on climate change diplomacy. My work explores how African nations engage in global climate negotiations, particularly within the United Nations Framework Convention on Climate Change (UNFCCC), and how these interactions influence issues of climate justice, finance, and sustainable development. Grounded in political science and international relations, my research emphasizes the role of African states in shaping climate diplomacy while navigating the complexities of global governance. I am especially interested in the intersections of climate policy, South–South cooperation, and the geopolitics of energy transition.

# 18. Reframing Manuscript Exhibitions: Integrating Curatorial Innovation and Outreach Campaigns for Inclusive Public Engagement

Jhilam Roy

Traditional manuscript exhibitions in museums often rely on conventional display modes with concise labels and minimal context, leading to limited visitor engagement with complex historical, textual, and visual content. In contrast, academic libraries provide deeper scholarly annotation and layered interpretation for close reading, while museums prioritize brevity, clarity, and aesthetics to avoid visitor fatigue within limited timeframes. This paper proposes a curatorial framework bridging this gap by enhancing accessibility, intellectual depth, and multisensory engagement, while respecting conservation and institutional protocols. Through a comparative analysis of manuscript-centred exhibitions such as Ragamala: Picturing Sound at The Metropolitan Museum of Art, Ragamala: Pictures for All the Senses at Museum Rietberg, and Ragamalas: Picturing Music & Emotion at Virginia Museum of Fine Arts—it demonstrates how soundscapes, olfactory cues, light design, and immersive scenography can transform static displays into multisensory environments. It further explores expanded interpretive tools, including layered labels, digitization, and hybrid publication strategies (catalogues, guidebooks, zines, digital archives, social media campaigns, QR codes, enriched websites) to broaden audience engagement. The study concludes with a design proposal and outreach campaign for a rare Bengali Gita Govinda manuscript (76 illustrated folios) at Victoria Memorial Hall, showcasing how integrated curatorial, technological, and public engagement can revitalize manuscript displays. Ultimately, the paper advocates for experiential, inclusive, and dialogic exhibition models that reimagine manuscripts as living cultural artefacts within ongoing public dialogue.

**Keywords:** Manuscript Exhibitions; Curatorial Innovation; Multisensory Engagement; Interpretive Strategies; Public Outreach in Museums.

**Bio:** Jhilam Roy is a postgraduate student of Museology at Banaras Hindu University, with a strong academic interest in Art History, Provenance Research,

and the study of Visual and Material Culture. Her research focuses on innovative curatorial strategies, interpretive frameworks, and the public communication of cultural heritage. Complementing her academic pursuits, she brings over seven years of professional experience in editorial excellence and content curation, marked by results-oriented, detail-driven work. This combined scholarly and professional background informs her approach to exhibition design, museum interpretation, and heritage outreach, fostering a balance between academic rigour and accessible public engagement.

# LEGAL AND ETHICAL FRAMEWORKS FOR MANUSCRIPT CONSERVATION AND ACCESS

## 1. The Legal Framework for Custodianship of Manuscripts in India: A Critical Analysis

Abhishek Kumar Rai

India's vast manuscript heritage, which encompasses sacred texts, historical records, and literary treasures, is under threat from neglect, deterioration, and illicit trafficking. Custodianship—covering preservation, access, and ethical responsibility—is crucial for protecting this irreplaceable cultural patrimony. However, India's legal framework is critically fragmented and inadequate. This article presents a comprehensive critical analysis of the laws governing manuscript custodianship in India, examining statutes such as the Antiquities and Art Treasures Act (1972), the National Archives of India Act (1993), state-specific library and endowment laws, religious institution regulations (e.g., Hindu Religious and Charitable Endowments Acts), and copyright provisions. The analysis highlights tensions between state control (through bodies like the ASI and National Mission for Manuscripts) and the autonomy of religious institutions or private collectors, as well as between mandates for preservation and public access/ scholarly use, and between traditional stewardship and centralized oversight. Importantly, "custodianship" lacks a coherent legal definition, which creates ambiguities in responsibilities and accountability. The current legal regime is reactive and piecemeal, failing to address pressing issues such as digital surrogacy, climate vulnerability, and the rights of knowledge-holding communities. The article calls for substantive legal reform and proposes principles for a holistic legislative framework that defines custodial duties, empowers stakeholders, balances competing interests, and secures India's manuscript heritage for future generations.

**Keywords:** Manuscripts, Custodianship, Heritage, Indigenous Knowledge, Digitisation.

**Bio :** I, Abhishek Kumar Rai, am pursuing my Ph.D. in Law from Sikkim University. I have completed my B.A., LL.B. and LL.M. from Banaras Hindu University. I have a deep interest in the Indian Knowledge system especially Smritis and Philosophies and worked upon them thoroughly while writing few articles.

# 2. Preserving the Past, Respecting the Rights: A Critical Study on Legal and Ethical Challenges in Manuscript Custodianship in India

Ansarul Co-Author : Araj Sekh

Manuscripts are invaluable cultural assets that carry the intellectual, historical, and spiritual heritage of civilizations. In the Indian context, the custodianship of manuscripts—spanning ancient, medieval, and early modern periods presents complex legal and ethical dilemmas. This paper critically examines the overlapping responsibilities of state institutions, private collectors, religious trusts, and academic bodies in preserving manuscripts, with a focus on legal ownership, access rights, and the ethics of preservation and digitization. The study explores the gaps in existing heritage laws such as the Antiquities and Art Treasures Act, 1972, and their limited scope in addressing the rights of original communities, scholars, and descendants. It also highlights ethical tensions involving consent, misrepresentation, commercialization, and cultural appropriation, especially in the digitization and international display of manuscripts. The paper uses case studies of disputed manuscript collections and draws insights from international frameworks such as the UNESCO Memory of the World Programme. By evaluating both legal instruments and ethical frameworks, this research argues for a rights-based and community-inclusive approach to manuscript custodianship. It emphasizes the need for transparent policies, stakeholder consultation, and a balance between preservation and public accessibility. This study contributes to the broader discourse on heritage justice and the responsible stewardship of knowledge systems in postcolonial societies.

**Keywords:** Manuscript Custodianship, Heritage Law, Ethics, India, Cultural Preservation.

## 3. Manuscripts Custodianship in India: A Historical Review and Related Contemporary Aspects

Dr. Mohit Sharma

UNESCO's Memory of the World Program champions the preservation and accessibility of global documentary heritage, acknowledging the richness of Bharat's knowledge traditions found in over five million manuscripts spanning medicine, philosophy, mathematics, and more. These resources inform contemporary practices, intersecting with legal, ethical, and educational concerns, especially in the era of digitization. This study traces the evolution of manuscript custodianship from traditional libraries to colonial and modern archives, analyzing legal frameworks like the Art Treasure Act 1972 and copyright laws, as well as ethical questions around public access and community rights. It examines national digitization initiatives and global best practices, metadata protocols, and highlights the integration of manuscript content into education as advocated by NEP2020 to revitalize Indian knowledge systems. The paper proposes a three-tier model for sustainable custodianship: preservation, ethical access, and educational use—aiming to revitalize cultural heritage for contemporary relevance.

**Keywords:** Cultural Heritage, Manuscript Custodianship, Ethical Access, Digitization, NEP2020, Indian Knowledge System.

Bio: Dr. Mohit Sharma is an Associate Professor of Literature and Communication Skills and Head of the Centre of Excellence for Indian Knowledge Systems (IKS) at Chandigarh University. With over a decade of teaching and research experience, he has played an important role in integrating IKS into academics through curriculum design, research, interdisciplinary projects. and pedagogy. He has introduced open electives and value-added courses in areas such as IKS, oral traditions, and storytelling. A certified Master Trainer in IKS by the Ministry of Education, Dr. Sharma has delivered awareness sessions to over 200 faculty members and thousands of students. promoting IKS integration across disciplines.

# 4. Legal obligations, ethical responsibilities, and moral imperatives to ensure the preservation, accessibility, and respectful handling of manuscript custodianship

Dr. Chander A Pawar Co-Author : Likha Chandran, Jyotsna Cherukuri

In India, ethics originates from its rich religious and philosophical traditions, which have shaped moral conduct since ancient times. Every major faith and school of thought in India emphasizes righteous living (dharma) as essential for a fulfilling life and ultimate liberation (moksha). However, the manuscript custodianship involves the preservation, access, and ownership of historical, literary, or religious texts. It carries significant legal responsibilities and ethical dilemmas, especially when dealing with culturally or research based sensitive or sacred documents. For manuscript custodianship, one can understand the importance of ownership and intellectual property rights (IPR), cultural heritage and antiquities laws, indigenous knowledge and exploitation through the commercialization. Therefore, best practices for ethical custodianship are included as transparent provenance documentation means avoiding stolen artifacts, fabrication of data, misconduct of experiments, wrong data interpretation etc. with due considerations of legal, ethical and moral issues, The Government of India (GOI) has launched KAPILA Scheme (Kalam Program for IP Literacy and Awareness) to promote Intellectual Property (IP) literacy and patent awareness among students, researchers, and scientists in higher educational institutions.

Keywords: Ethical responsibilities, Intellectual Property, Literacy, Patent

**Bio :** Dr. Chander A Pawar earned his Ph.D. in Nanoscience and Technology (2018) from the University of Hyderabad, India, following his M.Sc. in Chemistry (2008–10) and M.Tech in Nanoscience and Technology (2011–14) from the same institution. After his Ph.D., Dr. Chander joined in Zhejiang University (ZJU), China, as a Post-Doctoral Research Fellow under Prof. Tang Guping. Following two productive years at ZJU, China, he secured a second post-doctoral position at

Texas A&M University, USA, further advancing his research expertise. Currently Dr.Chander is serving as Assistant Professor of Chemistry in the VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad.

## 5. Ancient Wisdom vis-a-vis Modern Law: Preserving Ancient Indian Manuscripts in the Digital Era

Dr. Mayank Kapila Co-Author : Manish Kumar

Traditional knowledge held by the local and traditional communities is considered an intellectual asset preserved, nurtured, retained, and developed by these communities over generations. A vast amount of ancient Indian knowledge systems is contained in manuscripts and oral traditions. Since TK includes various cultural expressions (TCEs), its application to religious, cultural, customary practices, sacred arts and beliefs is undisputed. According to WIPO (1998-99), "intertwined within practical solutions, traditional knowledge often transmits the history, beliefs, aesthetics, ethics and traditions of particular people." It often carries a symbolic value for the community, and the sculptures, paintings, crafts, etc., are created according to strict rituals and traditions of such communities. Thus, TK has the potential to contribute significantly towards conserving the environment sustainably and has helped improve and foster the growth of biodiversity at the grassroots level while further helping maintain healthy ecosystems. The introduction of the Bhartiya Gyan Parampara\_ (Indian Knowledge Tradition) in higher education through the National Education Policy, 2020, is a pragmatic move to explore its relevance and application in modern research. Further initiatives like the Digital Library of India (DLI) are making significant progress in digitising and hosting ancient Indian manuscripts to make them accessible for academic research; however, at the same time, it enhances risks for their misappropriation. While the Traditional Knowledge Digital Library (TKDL) has substantially opposed and prohibited patent applications for inventions based on traditional knowledge, ensuring adequate copyright protection for the vast literary heritage contained in ancient manuscripts remains a complex issue involving legal and ethical concerns. The authors, through this paper, will try to highlight the challenges raised by the digitisation of ancient manuscripts and also search for possible legal solutions within and beyond the existing IPR regime or a sui generis system specially designed for preventing its misappropriation.

**Keywords:** Traditional Knowledge, Traditional Cultural Expressions, Manuscripts, Folklore, Copyright

**Bio :** Dr. Kapila is working as an Assistant Professor (Senior Scale) at Department of Law, M.S. College, Motihari. He did his LL.B. from Vivekananda Institute of Professional Studies affiliated to Guru Gobind Singh Indraprastha University, Delhi in 2011 and pursued LL.M from NALSAR University of Law, Hyderabad with specialization in Intellectual Property Laws in the year 2013 where he also received the prestigious Nani A. Palkhivala Memorial Gold Medal in Comparative Constitutional law. He has been awarded Ph.D. from Guru Gobind Singh Indraprastha University, Delhi and his research is dealing with Protection of Traditional Knowledge.

#### 6. Manuscript Heritage as Commons: Legal and Ethical Mechanisms for Protecting Indian Knowledge Systems in the Digital Age

Udaya Sidhharrth S Kumaar

India has a lot of manuscripts, more than 10 million, that were written on palm leaves, birch bark, copper plates, and handmade paper. These manuscripts keep the intellectual core of the Indian Knowledge System (IKS) in areas like Ayurveda, Jyotish, Vastu Shastra, and Yoga. Al that oversimplifies things could damage, steal, use, or misread these documents. The Traditional Knowledge Digital Library (TKDL) and the Geographical Indications (GI) Act have helped curb biopiracy in medicinal information, but they aren't adequate to stop it in non-medicinal areas that are found in manuscripts. This research examines legal, ethical, and technological methods for safeguarding manuscript history. These methods are consistent with the objectives of the Gyan Bharatam Mission, which include preservation, digitization, and educational integration. A survey of 500 stakeholders, including custodians, archivists, scholars, legal experts, and public users, reveals that 78% perceive a significant risk of commercial exploitation, 52% favor hybrid access models, and 70% of scholars express concerns regarding Al's inability to discern contextual nuance. There are substantial gaps in awareness: 42% of custodians don't know about the protections that are already in place, and most of them don't know what rights they have over Al-generated outputs from manuscript content. Some of the most important suggestions are to add Jyotish and Vastu manuscripts to TKDL, make rules for Al-based digitization and translation, start a National Manuscript Custodian Network, promote tieredaccess digital repositories, and run an International Manuscript Registry with WIPO's help. India can turn its manuscripts into a protected, accessible, and globally acknowledged commons by using new laws, ethical business practices, and cutting-edge technologies like blockchain and Al verification tools. This will make sure that they are still relevant in cultural diplomacy, education, and economies that are based on information that lasts.

**Keywords:** Manuscript heritage, Indian Knowledge Systems, Al ethics, intellectual property, Traditional Knowledge Digital Library, cultural commons

**Bio :** Sidhharrth S Kumaar is the founder and chief astrologer at NumroVani. He is an award-winning practitioner and author who combines old Indian Knowledge Systems (IKS) with modern research and applications. He has written a book and other research papers about IKS, legal protections, and ethical business practices. His work has been shown at several top schools, such as IIM Ahmedabad, IIM Nagpur, the University of Delhi, Central Sanskrit University (Delhi), and Shri Lal Bahadur Shastri National Sanskrit University, to name a few. He often talks about IKS in the modern world. He focuses on bringing together manuscript legacy, legal frameworks, new technologies, and cultural diplomacy to create a sustainable global knowledge leadership.

## 7. Codifying Custodianship: A Legal and Ethical Framework for India's Manuscript Heritage

Anubhav Mishra Co-Author : Dr. Pinky

India's vast and diversified manuscript heritage embodies an unmatched knowledge legacy that covers centuries of human advancement in philosophy, science, literature, and art. However, preserving this invaluable heritage also brings complicated legal and ethical challenges. This research paper, titled "Codifying Custodianship: A Legal and Ethical Framework for India's Manuscript Heritage" examines the numerous issues surrounding the ownership, custodianship and accessibility of Indian manuscripts. The paper attempts to provide an in-depth overview of current legal frameworks, ethical principles, and practical issues that determine the fate of these manuscripts. The research begins by studying the international and state legal instruments that regulate the transfer of cultural property. It focuses on the UNESCO Convention of 1970 as a fundamental text for global cooperation in fighting the illegal trade of cultural assets. Regarding the Indian context, the research critically examines the Antiquities and Art Treasures Act of 1972, analysing its efficiency in protecting manuscripts from illegal export and unauthorised possession. This section will use case studies of repatriation attempts, especially which published in the Ministry of Culture's publication "Re(ad)dress: Return of Treasures," to highlight the merits and shortcomings of existing legal systems. Finally, the paper highlights the various challenges and possibilities brought forth by modern technology, particularly digitisation. It examines the ethical consequences of developing digital surrogates, including concerns of access, intellectual property rights, and the possibility of a digital divide. This paper concludes by making recommendations for a balanced approach to manuscript custodianship that combines robust legal enforcement with a strong ethical framework, ensuring that India's knowledge legacy is not only protected but also made available to future generations.

**Keywords:** Manuscript Heritage, Legal Framework, Manuscript Custodianship, Knowledge Legacy

**Bio:** Anubhav Mishra is a doctoral candidate in Library and Information Science

at the University of Delhi, specializing in the preservation and conservation of India's documentary heritage. His research focuses on manuscript conservation centres under the National Mission for Manuscripts. He also holds an MLISc. from the University of Delhi and is pursuing a PG Diploma in Manuscriptology and Palaeography from IGNCA. A former guest lecturer at CSA University, Kanpur, he has published several research papers and a book chapter, aiming to integrate traditional and modern conservation practices.

#### 8. Preserving Manuscripts under Private Custodianship with special reference to Shankrachary Math, Bodhgaya

Shanker Sharma

India is claimed to be repositories of uncountable volumes of manuscripts that yet not statistically matrixed by any authority. These include larger portions of such valuable manuscripts preserving under the private custodianships. These are not attended and remained unaware for the generations from the centuries and waiting to get proper attention from the agencies those are the authorized for executing such works related to preservation and deciphering as of its original expression to achieve our historical metadata for the researches. Amongst which, the present paper will an attempt to highlight such case analysis of a repository of manuscripts kept unattended by scholars since its existence of Shankracharya Math located at Bodhgaya. Though, the Bodhgaya Math is an ancient monastery of the Hindu Sanyasis (Saints), styles Girs, who belong to one of the ten orders of Sankara Acharya's Sivite School. It traces its origin back to the middle of the 16th Century CE. As far as collections of manuscripts are concern, these are compiled tikas over various Sanskrit Philosophical and Literary historical chronicles. These were composed and written by the Sanyasis living in the Math or some have been obtained from other saints from different Hindu Monastic orders during the past. The manuscripts recorded on the palm leaf in scroll are kept unattended by the researchers for long time. And not properly deciphered by competent authorised scholars. Thus, they may prove valuable historical records if gets its proper decipherment. Besides this, there are numerous records of Bodhgaya Math related to various matters those only can be known to the public domain if these get documented and published. Some are being getting affected deteriorating day by day, which required immediate attention. But, due to private custodianship and unawareness facts about these valuable manuscripts and records the things can go out from our original context. Similarly, there may be numerous such private collections in this country which are being failing same issues of documentation and preservation.

Keywords: India, manuscript repositories, private custodianship, Shankracharya

Math, Bodhgaya, Sanskrit manuscripts, preservation, decipherment, Hindu monastic orders, historical records.

**Bio:** Shanker Sharma is an Assistant Professor in the Department of Ancient Indian & Asian Studies at Magadh University, Bihar. He previously served as Assistant Superintending Archaeologist with the Archaeological Survey of India (2003–2024) and as Research Officer at the National Museum, New Delhi. An archaeologist specializing in field archaeology, heritage management, and cultural resource management, he has also presented research papers at international conferences in South Korea, Thailand, Sri Lanka, Cambodia, and Australia.

## 9. Custodians of India's Written Heritage: Legal and Ethical Dimensions of Manuscript Custodianship in India

Sapresh Devidas Co-Author : Miss. Parita Udai Naik

Manuscripts are a vital part of cultural heritage, embodying the intellectual, spiritual, and historical consciousness of societies. In India, these repositories of knowledge are preserved by diverse custodians, including state institutions, religious bodies, private collectors, and academic repositories. The legal and ethical dimensions of manuscript custodianship in India involve a complex interplay of statutory protections, constitutional values, international obligations, and moral responsibilities related to access, preservation, and cultural sensitivity. This paper undertakes a doctrinal and comparative analysis of India's legal framework, primarily the Antiquities and Art Treasures Act (1972), the Public Records Act (1993), and the Copyright Act (1957), alongside relevant constitutional provisions and UNESCO conventions. Ethical considerations such as equitable access, community consent, prevention of commercial exploitation, and the preservation-access dilemma are examined to highlight gaps between law and practice. To enrich this inquiry, the paper compares India's regime with the Vatican City's custodianship framework, focusing on the governance of the Vatican Apostolic Library under canon law and papal decrees. The comparison reveals significant contrasts in ownership concepts, access policies, ethical priorities, and conservation standards, reflecting the secular – sacred divide in heritage stewardship. Historical preservation practices and India's commitment to public accessibility and plural cultural representation are also explored. By integrating legal analysis with ethical critique, and domestic insights with comparative perspectives, this study contributes to the evolving discourse on cultural heritage law. It argues for a harmonized custodianship model that safeguards manuscripts as both legal property and shared human heritage, ensuring their survival and accessibility for future generations.

**Keywords:** Manuscript Custodianship, Cultural Heritage Law, India, Vatican, Legal Ethics, Access and Preservation.

**Bio:** Sapresh Devidas is an Assistant Professor of Law at Govind Ramnath Kare College of Law, Margao, affiliated with Goa University, with over five years of teaching experience. He holds an LL.M. from Savitribai Phule Pune University and is pursuing a Ph.D. at Goa University on mainstreaming marginalized communities in Goa. His research interests include Intellectual Property Rights, AI and Law, Environmental Law, Taxation, CSR, and Constitutional Law in South Asia. He has published widely and presented papers internationally, including at the National University of Singapore and Sri Lanka Law College, Colombo.

## 10. Custodianship of Ancient Hindu Law Manuscripts: Legal and Ethical Dimensions

Sharda

The custodianship of ancient Hindu law manuscripts-particularly those encompassing the Dharmashastra, Smritis, Nibandhas, and related juridical literature-holds profound significance in the preservation of India's legal, cultural, and intellectual heritage. These manuscripts, often preserved in temples, mutts, royal archives, and private collections, serve not only as repositories of historical jurisprudence but also as living sources that inform contemporary interpretations of Hindu law. The legal dimensions of custodianship encompass questions of ownership, possession, copyright, and intellectual property rights, especially in light of the Antiquities and Art Treasures Act, 1972, the Copyright Act, 1957, and international conventions such as the UNESCO 1970 Convention. They raise complex issues about whether these manuscripts are the private property of individuals or collective heritage of the nation, and how such distinctions affect their use, reproduction, and accessibility. Ethically, custodianship requires balancing preservation with accessibility, ensuring that manuscripts are maintained in conditions that prevent physical decay while also facilitating scholarly engagement. Ethical considerations extend to the responsibilities of custodians in preventing illicit trade, unauthorized reproduction, and cultural misappropriation. The debate further involves the tension between respecting traditional custodial rightssuch as those of hereditary temple librarians or family archives and the need for institutional intervention to ensure public access and conservation. This study aims to critically examine both the legal frameworks and ethical imperatives surrounding the custodianship of ancient Hindu law manuscripts. It draws upon statutory provisions, case laws, international guidelines, and philosophical perspectives rooted in Dharma. By integrating jurisprudential analysis with heritage ethics, the research seeks to propose a balanced model of custodianship that safeguards these manuscripts as shared cultural heritage, respects the rights of traditional custodians, and fosters their role in enriching contemporary legal scholarship.

Keywords: Custodianship, Hindu Law Manuscripts, Dharmashastra, Legal

Dimensions, Ethical Preservation, Intellectual Property, Cultural Heritage

Bio: I have done B.A from bharti college (du) Masters from Miranda house after that I have completed M.Phil on this topic "धर्मशास्त्र में व्यवहार और प्रायश्चित प्रकरणों में आपराधिक कृत्यों का स्वरूप" from Delhi University. Now I am pursuing PhD in hindu law.

## 11. Need for A Policy Framework and Model Reference Manual for Manuscript Custodian and Conservation Centres

Dr. Vijay Srinath Kanchi

Since the establishment of the National Mission for Manuscripts (NMM) in 2003, the Government of India has invested significantly in locating, conserving, and digitizing manuscripts. Several centres with traditional manuscript collections have been designated as Manuscript Resource Centres, responsible for custodianship and preventive conservation, while Manuscript Conservation Centres focus on curative conservation and restoration of deteriorating manuscripts. Despite these efforts, many centres face challenges such as lack of regular training, inadequate laboratory facilities, insufficient guidance, and poor supervision. Moreover, there is no clear policy framework for custodians and conservation centres outlining their responsibilities and procedures, resulting in ineffective monitoring and guidance by the apex body. This has led to custodians and conservation centres functioning without coordinated leadership. In light of the Jnana Bharatam Mission, it is imperative for the apex agency to develop a comprehensive policy framework and guidebook detailing every aspect of manuscript conservation—from surveying, locating, acquiring, transporting, storing, handling, conserving, and exhibiting to digital preservation—to safeguard manuscripts for future generations. Alternatively, manuscript centres may create their own policy documents to serve as reference manuals for conservation staff. This paper proposes a policy framework and elements of a model reference manual aimed at optimizing efforts and enhancing the effectiveness of manuscript custodianship, conservation, and digital preservation centres.

**Keywords:** Policy Framework, Model Reference Manual, Manuscript Custodianship, Guidelines.

**Bio :** Dr. Vijay Srinath Kanchi, Director of the Knowledge Resource Centre at Moolji Jaitha College, holds doctorates in Philosophy and Library & Information Science, with specialization in manuscript conservation and conscious dreaming. Since 2018, he has led Manuscript Conservation and Resource Centers under

the National Mission for Manuscripts, conserving hundreds of manuscripts. He has authored books including *Sleeping to Dream and Dreaming to Wake* (2021) and *Manuscript Conservation in Maharashtra* (2022). Recipient of the Yoga Ratna Award (2024), he serves as a research guide, journal editor, and international conference committee member, with numerous publications and global presentations to his credit.

#### 12. राजस्थान में पांडुलिपि संरक्षण का एक लोक नीति विश्लेषण: प्रशासनिक बाधाएँ और भविष्य की राह

Dr. Renuka Choudhary

ज्ञान भारतम् मिशन के राष्ट्रीय आह्वान के बावजूद, राजस्थान की समृद्ध पांडुलिपि विरासत एक गहरे विरोधाभास का सामना कर रही है। लाखों पांडुलिपियों का भंडार होने के बावजूद, उनके संरक्षण हेतु एक सुसंगत और एकीकृत लोक नीति का अभाव स्पष्ट रूप से परिलक्षित होता है। यह शोध पत्न इस नीतिगत विखंडन का विश्लेषण प्रस्तुत करते हुए एक महत्वपूर्ण अनुसंधान अंतर को संबोधित करता है।

यह अध्ययन विधानसभा कार्यवाही, ऑडिट रिपोर्ट्स और नीतिगत मसौदों जैसे आधिकारिक दस्तावेज़ों की गहन समीक्षा को विगत दशक के अकादिमक शोध एवं मीडिया अभिलेखों के गुणात्मक विश्लेषण के साथ संयोजित करता है। शोध में प्रशासनिक समन्वय की कमी, अस्पष्ट कानूनी संरचनाओं, निजी संग्रहों में सीमित पहुँच, और वित्तीय अस्थिरता जैसी प्रमुख बाधाओं को उजागर किया गया है। इसके साथ ही, परंपरागत ज्ञान धारकों के बौद्धिक संपदा अधिकार और राज्य के ओपन-एक्सेस जनादेशों के मध्य उभरती नैतिक दुविधा भी एक प्रमुख चिंता के रूप में उभरती है।

शोध रेखांकित करता है कि तदर्थ और विखंडित प्रशासनिक प्रयास इस सांस्कृतिक चुनौती से निपटने में अपर्याप्त सिद्ध हो रहे हैं। इसके प्रत्युत्तर में, यह पत्न "राजस्थान पांडुलिपि विरासत संरक्षण रोडमैप, 2030" का प्रस्ताव करता है—एक नीति-आधारित ढाँचा जो एकीकृत राज्य प्राधिकरण, पारदर्शी सार्वजिनक-निजी भागीदारी (PPP) मॉडल, और विधिसम्मत लाभ-साझाकरण प्रोटोकॉल के माध्यम से कार्यान्वित किया जा सके। यह रोडमैप न केवल राजस्थान को ज्ञान भारतम् मिशन के राष्ट्रीय लक्ष्यों के साथ संरेखित करेगा, बल्कि इस अमूल्य सभ्यतागत विरासत के सतत संरक्षण को भी सुनिश्चित करेगा।

Keywords: पांडुलिपि संरक्षण, लोक नीति, प्रशासनिक सुधार, सांस्कृतिक विरासत, ज्ञान भारतम् मिशन, राजस्थान

Bio : डॉ. रेणुका चौधरी राजस्थान के राजकीय महाविद्यालय, सिणधरी में लोक प्रशासन विभाग में

सहायक आचार्य हैं। उन्होंने लोक प्रशासन और राजनीति विज्ञान में मास्टर डिग्री तथा लोक प्रशासन में पीएचडी प्राप्त की है। उनकी शोध रुचियों में शासन, सार्वजनिक नीति-निर्माण, और प्रशासनिक सुधार शामिल हैं। वह अपनी अकादिमक विशेषज्ञता का उपयोग भारत की प्रशासनिक चुनौतियों के लिए व्यावहारिक और नीति-प्रासंगिक समाधान खोजने में करती हैं। उनका वर्तमान शोध ज्ञान भारतम् मिशन के उद्देश्यों के अनुरूप संरक्षण नीतियों के कार्यान्वयन पर केंद्रित है।

#### 13. Custodians in Conflict: Case Studies of Ownership Disputes and Ethical Challenges in Indian Manuscript Collections

Sujauddin S.K.

India's vast manuscript heritage is preserved across a diverse spectrum of custodians—including temples, monastic orders, private families, royal libraries, and community bhandars. As digitization of cultural heritage accelerates, issues of ownership, access, and ethical use have become prominent. This paper explores these ethical and legal tensions through four carefully selected case studies:

- 1. Sarasvati Mahal Library (Tanjore)
- 2. Jain Bhandars in Gujarat and Rajasthan
- 3. Sharada script manuscripts in post-displacement Kashmir
- 4. Palm-leaf collections in Odisha's temple archives

These cases illuminate conflicts between traditional custodianship and institutional demands, as well as between sacrality and scholarly inquiry. Through qualitative analysis of archival sources, published disputes, and stakeholder interviews, the paper reveals how manuscript custodianship is entangled in postcolonial contestations, cultural rights, and epistemic hierarchies. The study argues that current preservation frameworks, dominated by institutional protocols, often overlook indigenous ethical worldviews and consent-based access models. Unresolved ownership disputes hinder not only digitization and translation but also the integration of manuscript knowledge into national educational and cultural initiatives. This paper calls for a pluralistic, culturally sensitive protocol for manuscript ethics developed through dialogue among scholars, communities, and legal institutions. By foregrounding real-world cases, it contributes to a deeper, more just approach to manuscript studies in India.

**Keywords:** Manuscript Custodianship, Ethical Access, Indigenous Knowledge, Cultural Conflict, Digitization, Legal Disputes

# INVITED INTERNATIONAL SPEAKERS

#### Bharat Rao (Yagyandevam)

**Bio:** Sh. Bharath Rao, known online as Yajnadevam, is a cryptographer and computer scientist who has worked extensively on deciphering the Indus script. He holds a Master's degree in Computer Engineering and has professional experience at leading institutions, including Goldman Sachs and Motorola Labs. His research interests span cryptography, ancient scripts, political theory, and Indian philosophy. He also maintains the complete Indus script corpus at indusscript.net

#### Dr Bryan K. Wells

**Bio:** Dr Bryan K. Wells is an archaeologist and epigrapher with a Ph.D. in Anthropology (Archaeology) from Harvard University. His research focuses on undeciphered scripts, particularly the Indus script, and he has conducted fieldwork in South Asia and beyond. Dr. Wells has authored several books, including The Archaeology and Epigraphy of Indus Writing (2015), as well as numerous scholarly papers. He has held academic and research positions at Harvard University, the University of Calgary, and the Institute of Mathematical Sciences, Chennai.

#### Dr Heather Brown

**Bio:** Dr. Heather Brown is the Education and Sector Standards Librarian at the Australian Library and Information Association (ALIA), specializing in disaster risk management for cultural heritage institutions. She focuses on safeguarding manuscripts and archival collections through preventive conservation, emergency planning, and post-disaster recovery strategies. Dr. Brown has contributed to international initiatives, including UNESCO's toolkit on disaster preparedness for India's manuscripts, and her work supports the long-term preservation and accessibility of invaluable cultural heritage.

#### Dr Andreas Fuls

**Bio:** Dr Andreas Fuls is a geodesist specialized in mapping and surveying. He has been working at the Technical University of Berlin's Institute of Geodesy and Geoinformation Science since 1988. He holds a Ph.D. in the field of History of Mathematics, Natural Sciences, and Techniques from the University of Hamburg. His publications cover archaeoastronomy as well as the epigraphy of the Maya, Indus, and Minoan cultures. Since 2007, he has been developing and managing an online database for Indus inscriptions in cooperation with Dr Bryan Wells, the Interactive Corpus of Indus Texts (ICIT).

#### Farrukh Haidar Naqvi

**Bio:** Sh. Farrukh Naqvi is a senior engineer with over three decades of professional experience in system design, safety engineering, and electronic warfare technologies. He holds degrees in Engineering and Telecommunications from Allahabad University and Swinburne University of Technology. Mr. Naqvi has served as Safety Manager at BAE Systems since 1998, overseeing system safety across large-scale defense programs. His expertise includes radar and missile systems, system integration, and certification processes. Alongside his engineering career, he has contributed research on the Indus script through his platform indus-script.com

#### Dr. Nikolas Sarris

**Bio:** Dr. Nikolas Sarris is a book and paper conservator at the National Library of Greece, specializing in historic bookbinding and manuscript preservation. He holds a PhD from the University of the Arts, London, and has worked with major institutions, including the British Library and the Monastery of St. Catherine in Sinai. His international projects span Egypt, Ethiopia, Iraq, and Europe, with a focus on conservation training, historic bookbinding, and large-scale preservation efforts. Dr. Sarris has published widely on conservation methods and continues to play a leading role in safeguarding manuscript heritage globally.

#### Michael Louis Grasa

**Bio:** Sh. Michael Grasa is an independent researcher, author, and linguist with a focus on deciphering ancient scripts, manuscript heritage, and cross-cultural symbolism. He holds a B.A. in Communications and Organizational Management from Wingate University, North Carolina. His forthcoming works include Veil Removed (2025) and The Forgotten Treaty. He has delivered public lectures on ancient manuscripts and the interpretation of symbols, and actively engages in educational outreach. His mission is to preserve forgotten knowledge and honor cultural memory.

#### Senior Prof. M.K. Weerasinghe

**Bio:** Senior Professor M.K. Weerasinghe, Head, Cadre Chair, and Senior Professor of Library and Information Science at the Palm Leaf Manuscripts Study and Research Library (PLMSRL), is a distinguished academic specializing in the preservation, conservation, and accessibility of traditional knowledge systems. With extensive experience in library and information science, he has led pioneering initiatives in safeguarding palm leaf manuscripts, focusing on both

the scientific and cultural dimensions of their conservation. At the conference, he will present his paper titled "Conservation and Preservation Challenges of Palm Leaf Manuscripts in PLMSRL", in which he addresses the critical issues facing these fragile repositories of knowledge and explores strategies for their long-term protection and integration into modern research frameworks.

#### Dr. Alino Sumi

Bio: Dr. Alino Sumi, Adjunct Lecturer (Academic Level B) at the College of Humanities, Arts and Social Sciences, Flinders University, is a scholar whose research focuses on indigenous knowledge systems, cultural preservation, and the role of education in sustaining community heritage. Drawing on her expertise in indigenous studies and museum pedagogy, she works at the intersection of heritage, identity, and public engagement, with a particular emphasis on Naga traditions and knowledge practices. At the conference, she will present her paper titled "Reclaiming Naga Indigenous Knowledge through Museum-Based Education", where she explores how museums can serve as transformative spaces for reclaiming, transmitting, and revitalizing indigenous knowledge for future generations.

#### M. Jamaâ BAIDA

**Bio:** M. Jamaâ Baida, Director of the Archives of Morocco and Professor-Researcher at Mohammed V University in Rabat, also serves as Vice Chairperson of the International Advisory Committee of UNESCO's Memory of the World (MoW) Programme. An authority on archival studies, heritage management, and historical research, he has played a pivotal role in strengthening Morocco's archival infrastructure and advancing the safeguarding of documentary heritage at both national and international levels. His work integrates scholarship with policy, bridging the academic and institutional dimensions of cultural preservation. He continues to make significant contributions to global initiatives on memory, access, and heritage sustainability.

#### Jan Bos

Bio: Jan Bos, Chair of the Register Subcommittee (RSC) of UNESCO's Memory of the World (MoW) Programme, is a leading expert in documentary heritage preservation and international archival cooperation. With a career dedicated to safeguarding cultural memory, he has contributed extensively to the evaluation and recognition of documentary collections of global significance through

UNESCO's MoW framework. His work reflects a commitment to advancing preservation standards, promoting accessibility, and enhancing international collaboration in the fields of archives and documentary heritage.

#### Dr VU THI Minh Huong

Bio: Dr. Vu Thi Minh Huong, Vice Chairperson of the Memory of the World Committee for Asia and the Pacific (MOWCAP) under UNESCO's MoW Programme, is a distinguished scholar and heritage professional with extensive experience in archival management, cultural preservation, and international cooperation. She has played a pivotal role in advancing the recognition and safeguarding of documentary heritage across the Asia-Pacific region, working to ensure that diverse cultural records are preserved and made accessible for future generations. Through her leadership, she continues to strengthen regional collaboration and promote the importance of documentary heritage as a vital resource for education, research, and cultural identity.

#### Ms Mandy Gilder

Bio: Ms. Mandy Gilder, Deputy National Archivist of South Africa and Interim President of the Africa Regional Committee of UNESCO's Memory of the World (ARCMoW), is an accomplished professional in archives and records management with extensive experience in safeguarding Africa's documentary heritage. In her leadership roles, she has been actively engaged in promoting the objectives of the MoW Programme across the continent, strengthening regional cooperation, and advancing strategies for the preservation, accessibility, and recognition of Africa's diverse documentary collections. Her work reflects a strong commitment to ensuring that archival heritage remains a vital resource for cultural identity, education, and sustainable development.

#### Dr. Phil Lothar Jordan

Bio: Dr. Phil Lothar Jordan, a Member of UNESCO's International Advisory Committee (IAC) for the Memory of the World (MoW) Programme, is an experienced heritage professional and scholar dedicated to the preservation and accessibility of documentary heritage. Through his role with the IAC, he contributes to the evaluation, recognition, and safeguarding of collections of world significance, while also promoting the integration of documentary heritage into education, cultural policy, and sustainable development. His expertise and international engagement demonstrate a strong commitment to preserving

cultural memory and promoting collaboration across borders, ensuring the enduring relevance of archives for future generations.

#### Dr. Udaya Cabral

Bio: Dr. Udaya Cabral, Deputy Director and Head of the Conservation and Preservation Division at the National Library of Sri Lanka, is a specialist in the safeguarding of fragile cultural heritage, with a particular focus on traditional manuscripts. With extensive experience in conservation science and library preservation, he has led significant initiatives to protect and restore palm-leaf manuscripts, ensuring their survival as invaluable sources of knowledge and cultural heritage. At the conference, he will present his paper titled "Conservation and Preservation of the Palm Leaf Manuscripts", where he discusses the challenges, methodologies, and innovations in protecting these delicate records for future generations.

#### Dr. Krishna Maheshwari

Bio: Dr. Krishna Maheshwari, Founder and CEO of Hindupedia Corporation, is an entrepreneur and scholar dedicated to advancing knowledge sovereignty and integrating Indian knowledge systems with emerging technologies. His work focuses on developing innovative frameworks that bridge artificial intelligence with cultural heritage preservation, particularly in the context of India's manuscript traditions. At the conference, he will present his paper titled "Countering AI-Driven Epistemic Marginalization: The SanatanAI Approach" (alternatively "AI, Knowledge Sovereignty, and Bharat's Manuscript Heritage"), in which he explores how AI can be harnessed responsibly to protect indigenous epistemologies and ensure equitable representation of India's heritage in global knowledge ecosystems.

#### Prof. M. Wijithadhamma

Bio: Prof. M. Wijithadhamma, Senior Professor in the Department of Pali and Buddhist Studies at the University of Jayewardenepura, Nugegoda, Sri Lanka, is a distinguished scholar specializing in Buddhist studies, Pali literature, and manuscript traditions. With extensive academic and research experience, he has made significant contributions to the analysis and interpretation of Buddhist texts and the cultural history of Sri Lanka. At the conference, he will present his paper titled "Drawings in the Sinhala Palm Leaf Manuscripts of the SOAS Library, University of London", in which he examines the artistic, cultural, and historical significance of visual representations in Sinhala palm leaf manuscripts preserved in

one of the world's leading repositories of Asian heritage.

#### Jonathan Vines

Bio: Jonathan Vines, Senior Imaging Technician and Commercial Services Photographer at the British Library, UK, is a specialist in the high-resolution imaging and digitization of rare and fragile collections. With expertise in advanced photographic techniques and preservation-focused imaging, he plays a vital role in ensuring that manuscripts, archival materials, and cultural heritage objects are captured with accuracy and care for both scholarly research and public access. His work supports the British Library's mission of safeguarding and sharing global knowledge, contributing to the long-term preservation and accessibility of documentary heritage through cutting-edge digital practices.

# INVITED NATIONAL SPEAKERS

#### Prof. Malhar Kulkarni

Bio: Prof. Malhar Kulkarni, Professor at the Cell for Indian Sciences and Technologies in Sanskrit (CISTS), IIT Bombay, is a leading scholar in Sanskrit studies with a special focus on the application of computational tools to traditional texts. His research combines philological expertise with digital methodologies, exploring how critical editions of foundational works can be enhanced through the use of technology. At the conference, he will present his paper titled "My Experiments of Critically Editing the Text of the Kāśikāvṛtti with Computational Tools", in which he discusses innovative approaches to editing this seminal grammatical commentary, demonstrating how computational methods can support accuracy, accessibility, and new interpretative possibilities in Sanskrit scholarship.

#### Prof. M. Alwar

**Bio:** Prof. M. Alwar, Professor at the Sanskriti Foundation, Mysore, Karnataka, is a scholar of Sanskrit and Indian knowledge systems with a focus on bridging traditional scholarship and modern technology. His research explores the intersection of classical texts, digital tools, and innovative methodologies for preserving and interpreting India's manuscript heritage. At the conference, he will present his paper titled "From Palm Leaf to Pixel: Unlocking Knowledge", which examines strategic software solutions for deciphering ancient texts and disseminating their timeless insights, highlighting how technology can open new pathways for accessing, understanding, and sharing India's cultural and intellectual tradition.

#### Prof. Girish Nath Jha

**Bio:** Prof. Girish Nath Jha, Professor at the School of Sanskrit and Indic Studies, Jawaharlal Nehru University, New Delhi, and a member of the Advisory Committee of the conference, is a leading scholar in Sanskrit studies, computational linguistics, and digital humanities. He has been instrumental in advancing research on Indian language technologies, manuscript digitization, and the integration of traditional knowledge with modern computational tools. At the conference, he will present his paper titled "Complexity of Indian Manuscripts: Solutions for Digitization and Beyond", where he examines the challenges posed by diverse manuscript traditions and proposes innovative approaches for their preservation, digital accessibility, and scholarly study.

#### Prof. Joy Sen

Bio: Prof. Joy Sen, Professor at the Indian Institute of Technology, Kharagpur, and a member of the conference's Advisory Committee, is a distinguished academic with expertise spanning architecture, cultural heritage, Indian knowledge systems, and interdisciplinary studies. He has contributed extensively to research and teaching that integrate traditional wisdom with contemporary perspectives, with a focus on sustainable development, heritage conservation, and Indic knowledge frameworks. As an Advisory Committee member, he brings valuable insights and guidance to the conference, supporting its vision of bridging heritage and innovation. His forthcoming presentation will reflect his wide-ranging expertise in the field.

#### Prof. Vasant Kumar Bhatt

**Bio:** Prof. Vasant Kumar Bhatt, Professor and Former Director of Bhasha Sahitya Bhawan, Gujarat University, Ahmedabad, is a noted scholar in Sanskrit and Indian literary studies with expertise in textual criticism and philology. Throughout his career, he has made significant contributions to the study, editing, and interpretation of classical Indian texts, while also developing methodologies for their preservation and critical analysis. At the conference, he will present his paper titled "Textual Criticism for Indian Texts – A New Approach", in which he discusses innovative perspectives and strategies for revisiting traditional frameworks of textual study to make them more relevant for contemporary scholarship.

#### Shri P.L. Shaji

Bio: Shri P. L. Shaji, Senior Manuscript Conservator at the Oriental Research Institute and Manuscripts Library, University of Kerala, is an expert in manuscript conservation and the study of South Indian scripts. With extensive experience in preserving fragile palm leaf manuscripts and archival materials, he has made significant contributions to both the practical aspects of conservation and the scholarly understanding of script evolution. At the conference, he will present his paper titled "Vattezhuthu Script: Its Origin and Development. Epigraphy to 15th Century Palm Leaf Manuscripts", in which he examines the historical development of the Vattezhuthu script and its transition from epigraphic records to manuscript culture, shedding light on its cultural and linguistic significance.

#### Dr. T.S. Ravishankar

Bio: Dr. T. S. Ravishankar, Former Director of Epigraphy at the Archaeological

Survey of India (ASI), Mysore, is a distinguished scholar of Indian epigraphy, palaeography, and manuscript studies. With decades of experience in researching and interpreting inscriptions, he has made significant contributions to understanding the evolution of scripts and their cultural contexts across the Indian subcontinent. At the conference, he will present his paper titled "Palaeographical Elements of Siddhamatrika, Early Nagari and Sharada Script: A Comparative Study of Epigraphs and Manuscripts", in which he explores the structural and stylistic features of these scripts, highlighting their interconnections and importance in the broader history of Indian writing traditions.

#### Dr. V Ramanathan

Bio: Dr. V. Ramanathan, Associate Professor at the Indian Institute of Technology (IIT), Banaras Hindu University (BHU), is a scholar of Sanskrit, Tamil, and Indian knowledge systems with a research focus on manuscripts, traditional sciences, and the history of ideas. His work bridges philology and the history of science, particularly exploring how classical texts preserve indigenous systems of knowledge. At the conference, he will present his paper titled "Cūḍāmaṇi Uḷḷamuḍaiyān: A Tamil Astronomy Manuscript Revealing Hitherto Unknown The Uyirêluttu (Vowel-Based) Numeration System", in which he highlights the discovery of a unique numeration method embedded within a Tamil astronomical manuscript, offering new insights into the intellectual history of South Asia.

#### Prof. Chandra Shekhar

Bio: Prof. Chandra Shekhar, Professor in the Department of Persian at the University of Delhi, is a leading scholar of Persian language, literature, and manuscript traditions in South Asia. His research spans Indo-Persian cultural exchanges, manuscript history, and the role of texts in shaping intellectual and political life in early modern India. At the conference, he will present his paper titled "Manuscripts as Soft Power in Early Modern India: Important Indian-Originated Persian Manuscripts Beyond the Borders", where he explores how Persian manuscripts produced in India traveled across regions and functioned as instruments of cultural influence and diplomacy, highlighting their enduring significance in transregional knowledge networks.

#### Dr. Jitendra B. Shah

**Bio:** Dr. Jitendra B. Shah, Director of Shrut Ratnakar and Former Director of the L.D. Institute of Indology, is a renowned scholar of Jain studies, manuscriptology,

and Indian intellectual traditions. Over his distinguished career, he has contributed extensively to the preservation, cataloguing, and critical study of rare manuscripts, with a particular focus on Jain canonical and philosophical texts. His leadership at premier institutions of Indology has advanced both scholarship and conservation, ensuring that invaluable manuscript collections remain accessible for research and cultural preservation. As Director of Shrut Ratnakar, he continues to play a pivotal role in promoting manuscript heritage and fostering deeper engagement with India's knowledge traditions.

#### Dr. Bharat Gupta

**Bio:** Dr. Bharat Gupta, Vice Chairman of the National School of Drama, is a cultural historian, classicist, and arts administrator with expertise spanning Sanskrit poetics, theatre, aesthetics, and comparative studies of Indian and Western traditions. As a scholar, he has written and lectured widely on performing arts, literature, and cultural policy, while his leadership role at the National School of Drama reflects his commitment to nurturing India's rich theatrical and cultural heritage. He continues to play a significant role in bridging classical knowledge systems with contemporary practice, ensuring that traditional art forms remain vibrant and relevant in modern cultural discourse.

#### Dr. Abhijit Dixit

**Bio:** Dr. Abhijit Dixit, Regional Director of the Indira Gandhi National Centre for the Arts (IGNCA), Regional Centre Varanasi, is a scholar of manuscript studies, textual traditions, and classical Indian knowledge systems. His research engages with the structural and visual dimensions of manuscripts, exploring how text arrangement and page design reflect deeper principles of knowledge transmission.

#### Prof. P. R. Mukund

**Bio:** Prof. P. R. Mukund, Founding Trustee of Tara Prakashana, is a scholar and technologist dedicated to the preservation and dissemination of India's manuscript heritage. With a distinguished career that bridges engineering, digital innovation, and cultural preservation, he has pioneered initiatives to digitize and conserve rare palm-leaf and paper manuscripts, ensuring their accessibility for future generations. Through Tara Prakashana, he has combined traditional knowledge with modern archival methods, contributing significantly to safeguarding India's intellectual legacy and fostering global awareness of its cultural treasures.

#### Dr. Sanjay Prasad Gupta

Bio: Dr. Sanjay Prasad Gupta, Scientist-B at the National Research Laboratory for Conservation of Cultural Property (NRLC), is a conservation scientist specializing in the preservation of cultural and documentary heritage. His work focuses on the scientific analysis, treatment, and preventive care of manuscripts, archival materials, and cultural artifacts, contributing to the development of effective conservation methodologies. At the NRLC, he has been actively involved in projects that safeguard fragile heritage resources, combining research with practical conservation to ensure their longevity and accessibility for future scholarship and public engagement.

#### Dr. Nitin Kumar

Bio: Dr. Nitin Kumar, Director of INTACH (Indian National Trust for Art and Cultural Heritage), Bangalore, is a heritage professional committed to the conservation, documentation, and promotion of India's tangible and intangible cultural heritage. With expertise in heritage management and cultural preservation, he has led initiatives to safeguard architectural, archival, and manuscript traditions, while also fostering community participation in conservation practices. Through his leadership at INTACH Bangalore, he continues to advance the organization's mission of protecting cultural resources and making them accessible for education, research, and sustainable cultural development.

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