

MANUSCRIPTOLOGY AS A RESEARCH METHODOLOGY IN AYURVEDA: BRIDGING TRADITIONAL KNOWLEDGE WITH EVIDENCE-BASED PRACTICE

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ABSTRACT

Manuscriptology represents the systematic and scientific study of handwritten documents, many of which possess significant historical value. In India, a vast proportion of manuscripts remains unexamined, with estimates suggesting that only a small fraction has been critically studied. Reports from the National Mission for Manuscripts indicate that over 20,000 Ayurvedic manuscripts have been identified, yet a large number remain unexplored. This highlights a substantial research opportunity within the domain of *Ayurveda*. The absence of a comprehensive catalogue of Indian medical manuscripts further limits access to this traditional knowledge preserved in libraries and private collections. A structured approach involving collection, conservation, cataloguing, transcription, translation, critical editing, and publication is essential to bring these resources into the academic mainstream. Although recent

efforts by individual scholars and institutions have contributed to manuscript preservation, these initiatives lack coordinated, large-scale collaboration. Integrating expertise from Ayurveda, *Sanskrit*, and allied disciplines is crucial for systematic manuscript study and dissemination. With only a minimal percentage of medical manuscripts available in published form, focused efforts toward their preservation and scholarly editing can significantly contribute to evidence-based research and clinical advancements in *Ayurveda*.

KEYWORDS: Manuscriptology, *Ayurvedic* Manuscripts, Conservation, Transcription, Translation, Critical Edition, Ayurveda Research.

INTRODUCTION

In ancient India, knowledge was first passed down orally from one generation to another.^[1] With the development of writing, this knowledge began to be recorded and preserved in a more permanent form. *Ayurveda*, the traditional system of medicine in India, grew over time through the experiences and understanding of many generations. The wisdom of ancient Ayurvedic scholars was carefully written down and preserved in manuscripts. The classical texts of Ayurveda, including *Bruhatrayee* and *Laghutrayee*, owe their preservation and transmission to the systematic study of manuscripts.^[2]

The word manuscript has its roots in Latin, from "Manu Scriptum", where: Manu refers to the hand Scriptum means to write^[3] A manuscript is a handwritten document created on materials such as *palm* leaves, birch bark, paper, cloth, or metal, which holds scientific, historical, philosophical, or artistic importance.^[4] According to the Antiquities and Art Treasures Act, 1972 Any manuscript, record or other document which is of scientific, historical, literary or aesthetic value,^[5] a manuscript is generally considered to be at least seventy-five years old. It is estimated that India has around five million manuscripts in different scripts and forms, while Europe has about sixty thousand, and other Asian regions together have nearly 1.5 million. Among these, *Sanskrit* manuscripts make up a major portion 67percent , and many of them are related to *Ayurveda*.^[6]

However, most *Ayurvedic* manuscripts stored in libraries are not easily accessible to the public or researchers. To make this knowledge available, these manuscripts need to be studied and published. In the field of Ayurveda, although lakhs of manuscripts exist, merely 2% have been published.^[7] Before publication, each manuscript goes through a careful process called textual criticism, where scholars compare different versions and try to reconstruct the most

accurate original text. This helps in understanding how the text was created and how it changed over time.

Publishing critical editions of *Ayurvedic* manuscripts makes valuable knowledge available to a wider audience. It also helps preserve this knowledge for future generations by converting fragile handwritten materials into more stable printed formats. At the same time, these manuscripts may offer insights that can support further research and improve modern *Ayurvedic* practice. Many unpublished *Ayurvedic* manuscripts may contain forgotten formulations and treatment approaches that could contribute to current clinical practice and research.

AIM

To evaluate the role of manuscriptology in systematically studying and utilizing *Ayurvedic* manuscripts for research advancement.

OBJECTIVES

1. To analyze the processes involved in manuscriptology, including collection, conservation, and critical editing of *Ayurvedic* manuscripts.
2. To assess the significance of unpublished manuscripts in contributing to *Ayurvedic* research and clinical knowledge.

MATERIALS AND METHODS

Information on *Ayurvedic* manuscriptology was systematically collected from classical texts, peer-reviewed articles, and institutional publications. The data was critically analyzed to identify existing gaps, future research opportunities, and the relevance of manuscript studies in strengthening *Ayurvedic* knowledge systems and clinical research.

Manuscriptology

Manuscriptology deals with the systematic collection, classification, preservation, and critical editing of manuscripts.^[8] It allows ancient knowledge to be re-examined using modern perspectives, helping uncover insights that can support future research and strengthen evidence in fields like *Ayurveda*.

Steps in Manuscriptology

Primary Steps

Collection

A large number of manuscripts remain dispersed across India and globally, often lying in unorganized and vulnerable conditions. The systematic collection of these scattered manuscripts is a critical first step in manuscriptology. They are found in diverse repositories such as academic institutions, private collections, temples, trusts, museums, research centers, and archival facilities. Increasing public awareness about the importance of manuscripts is essential, as many valuable texts are still in private possession and at risk of deterioration or loss. Encouraging individuals to contribute such manuscripts to recognized institutions can play a key role in their preservation and scholarly utilization.

Conservation

Conservation involves the application of appropriate techniques to protect manuscripts and prolong their usability. Manuscripts are highly susceptible to damage from environmental factors such as humidity, temperature fluctuations, pests, and improper handling ^[9]. As manuscripts are created on diverse materials like *palm* leaves, birch bark, and paper, each requires tailored preservation methods to prevent deterioration and ensure long-term survival.

a) Preventive conservation^[10]

Preventive conservation focuses on minimizing the risk of future damage to manuscripts. It includes routine inspection, proper storage, and the use of techniques such as microfilming, photocopying, lamination, and digitization. Maintaining controlled environmental conditions such as adequate temperature, humidity, and low light intensity (generally below 40 lux) also plays an important role in preserving manuscripts.

b) Curative conservation

Curative conservation refers to the measures taken to stop or treat ongoing deterioration in manuscripts. These methods include fumigation to control pests, application of protective substances like lemongrass oil or lamp black, repairing physical damage such as holes or tears, re-inking faded text, and strengthening fragile edges.

Cataloguing

Cataloguing refers to the systematic classification and organization of manuscripts in a structured manner. It helps researchers locate specific manuscripts quickly and efficiently. In

manuscriptology, cataloguing is an essential step to improve accessibility and usability of manuscripts for the academic community.

One important resource in this field is the New Catalogus Catalogorum, which is a comprehensive compilation of manuscripts from different parts of the world, arranged based on authors and titles.^[11] The master of catalogue comprised of 1195 pages in all with information on manuscripts in and outside the India^[12]. However, a major limitation of both earlier and updated catalogues is their restricted accessibility, which limits their usefulness for a wider research audience.

Secondary Steps

Secondary steps include transcription, translation, critical edition and publication.

Transcription

Transcription is not merely copying text, but a careful and systematic process that requires understanding of scripts, abbreviations, and context to ensure accuracy. It serves as a bridge between the original manuscript and further processes like translation and critical editing.

Translation

Translation is the process of converting the content of a text from one language into another. In the present context, translation plays a crucial role in making ancient knowledge accessible to a wider audience. It enables people from different regions, languages, and cultural backgrounds to understand and engage with traditional systems such as Ayurveda.

Critical Edition

A critical edition involves reconstructing a text so that it closely reflects the original work of the author, based on all available manuscript evidence. The process begins with the selection of a primary manuscript, followed by the collection of as many related copies as possible. These versions are then carefully compared to identify variations, and the most reliable readings are selected. This process, known as collation, helps in establishing a standardized and authentic version of the text.^[13]

Critical editing requires detailed reading and thorough analysis of the content. The main aim of textual criticism is to produce a reliable and scholarly version of the manuscript that can be used for further research. Such an edition usually includes an *apparatus criticus*, which documents textual variations and editorial decisions, allowing transparency and academic

validation.^[14] The selection of the base manuscript is guided by factors such as antiquity, completeness, textual consistency, and agreement with authoritative commentaries.

Methods of critical edition It includes 2 methods,

- Lower criticism
- Higher criticism

1. Lower Criticism It can be distinguished into three stages

1. Heuristics,
2. Recension,
3. Emendation.

1.1 Heuristics

Heuristics in manuscriptology refers to the systematic process of identifying, collecting, and evaluating all available versions of a manuscript for critical editing. It begins with comparing titles and consulting descriptive catalogues to locate manuscripts with similar or related content. Once the copies are gathered, each manuscript is carefully examined for spelling variations, writing style, and scribal features.

A detailed analysis is then carried out to assess the accuracy and reliability of each version based on its content. Evidence from all available manuscripts is considered, along with references from commentaries, compilations, and related texts. Among these, the most reliable manuscript is selected as the base text, and its readings are compared with others through collation to establish a more authentic version.

It mainly comprises of three steps –

a) Siglum

A siglum is a unique identification symbol assigned to each manuscript used in the process of critical editing. These symbols may include letters, numbers, or a combination of both. The assignment of a siglum is usually based on factors such as the script, source or location of the manuscript, age, or other distinguishing features. It helps in systematically organizing and referring to different manuscript copies during comparison and analysis.

b) Collation

Collation is the process of systematically comparing different copies of a manuscript to identify variations in the text. Typically, one manuscript considered more reliable is selected

as the base text and transcribed with adequate space for annotations. This version is then carefully compared, word by word, with other available manuscripts. Any differences in wording, spelling, or structure are recorded, usually with the help of a collation sheet, to ensure a comprehensive analysis of textual variations. Collating manuscript evidence in this manner helps in understanding the relationships between different copies of a text. These relationships may exist in two forms: one manuscript may be directly copied from another (exemplar and copy), or multiple manuscripts may originate from the same source, known as sister copies. Identifying these connections allows scholars to trace the lineage or transmission history of the manuscripts.

This relationship is often represented in the form of a diagram called a *stemma codicum*, or “family tree” of manuscripts, which visually shows how different copies are related. Constructing such a lineage helps in identifying earlier and more reliable readings of the text by tracking how variations may have developed over time.

c) **Secondary Sources of Evidence**

Secondary sources of evidence refer to works that are related to a manuscript but are not the original documents. These sources provide indirect support for understanding and evaluating the primary text. They include materials that either discuss, interpret, or contain portions of the original work.

Such evidence may be found in commentaries, translations, anthologies, quoted passages, adaptations, summaries, and parallel versions of the text. Even though these sources are not original manuscripts, they can help clarify meanings, confirm readings, and provide additional context. They are especially useful when primary manuscripts are incomplete, damaged, or show significant variation.

1.2 Recension

Recension is the process of carefully analyzing all the collected textual variations to establish a version of the text that is closest to the original. Each variant is critically examined and compared before selecting the most appropriate reading. This detailed evaluation ensures that the final version is reliable, which is why it is referred to as a critical recension

1.3 Emendation

Emendation is applied when, even after careful examination of all available manuscript variants, the text still appears incorrect or unclear. In such situations, the editor makes justified corrections to restore the intended meaning of the text. These corrections are made cautiously and are based on linguistic knowledge, context, and supporting evidence.

Higher Criticism

Higher criticism is an advanced level of textual analysis that follows and develops alongside lower criticism. While lower criticism focuses on selecting the most accurate readings of a text, higher criticism examines the text in a broader and deeper context. It involves studying the authorship, language, style, sources, and historical background of the work.

This approach aims to understand the circumstances in which the text was composed, including the author's life, intellectual influences, and the cultural and literary environment of the time. It also considers how the work relates to other writings and traditions, as well as its overall significance and reception.

Higher criticism is not a completely separate stage but continues throughout the editorial process. It forms the conceptual foundation of critical editing and is usually completed alongside the final recension of the text.

Higher criticism follows 5 steps^[15]

a) Source Criticism

Source criticism involves identifying and evaluating the origins of a text. It examines the documents, individuals, oral traditions, or observations that may have contributed to the creation of the work. The aim is to understand the sources used by the author and assess their reliability and influence on the final text.

b) Form Criticism

Form criticism is a method that classifies sections of a text based on their literary style and structure. It seeks to identify different patterns such as narratives, verses, or instructional passages, and attempts to trace their origin and purpose within the text.

c) Redaction Criticism

Redaction criticism focuses on analyzing how a text has been edited or compiled over time. It studies recurring themes, patterns, vocabulary, and stylistic features to understand the author's purpose and the way the material has been organized or modified.

d) Historical/Tradition Criticism

This approach examines how a text or its ideas have been transmitted and developed through different stages before reaching their present form. It helps in understanding the evolution of concepts and the influence of cultural and historical contexts on the text.

e) Radical Criticism

Radical criticism deals with a deeper examination of the literature and underlying philosophical or religious systems reflected in the text. It attempts to question and analyze foundational assumptions within the work.

Publication-**Publication of Manuscripts**

Publication is the final stage in manuscriptology, where the edited and verified text is made available to a wider audience. Despite the vast number of medical manuscripts, only a very small proportion has been published, highlighting a significant gap in knowledge dissemination.

The process of publication begins with the careful selection of a manuscript, followed by identification of the language and proper arrangement of its content. This is succeeded by steps such as emendation and preparation of a critical edition. Once the text is finalized, it is published through print or digital platforms, ensuring broader accessibility and long-term preservation.

A major initiative in this field is led by the National Mission for Manuscripts, which aims to document and preserve manuscript heritage. Its online database, *Kriti Sampada*, serves as a repository of information on manuscripts available in India and abroad. The mission focuses on key objectives such as collection, conservation, and documentation, guided by the principle of preserving traditional knowledge for future generations.

The mission gathers data based on factors like cultural significance, contribution to intellectual history, and the vulnerability of manuscripts. It has also undertaken the

compilation of printed catalogues of Indian manuscripts, with thousands of catalogues documented so far, thereby facilitating research and access.^[16]

RESULT

The study demonstrates that a structured manuscriptological approach comprising collection, conservation, cataloguing, transcription, translation, and critical editing provides a reliable framework for transforming unpublished manuscripts into academically usable resources.

It reveals that

- A significant proportion of Ayurvedic knowledge remains untapped due to lack of systematic study.
- Critical edition methods ensure textual authenticity and minimize interpretative errors.
- Integration of multidisciplinary expertise enhances the quality and reliability of manuscript research.
- Proper documentation and publication can convert fragile traditional knowledge into durable academic and clinical resources.

The findings indicate that manuscriptology has strong potential to contribute to evidence-based Ayurveda by making unexplored knowledge accessible for research and application.

DISCUSSION

The present study highlights manuscriptology as a crucial but underutilized discipline in the advancement of Ayurvedic knowledge systems. Despite the vast availability of manuscripts, only a minimal proportion has been critically edited and published, which significantly limits their contribution to contemporary research and clinical practice.

One of the major challenges identified is the lack of a centralized and accessible catalogue of Ayurvedic manuscripts. Although initiatives such as national-level documentation projects exist, their limited accessibility and fragmentation reduce their practical utility for researchers. This creates a gap between the availability of knowledge and its application.

Another critical issue is the multidisciplinary nature of manuscriptology. Effective manuscript study requires expertise in *Sanskrit*, *Ayurveda*, paleography, and textual criticism. However, the absence of coordinated collaboration among these domains restricts the quality and scale of research output.

The process of critical editing plays a central role in ensuring the authenticity and reliability of texts. Techniques such as collation, recension, and emendation help reconstruct the most accurate version of a manuscript. Furthermore, higher criticism enables deeper understanding by analyzing authorship, historical context, and textual evolution. Without these rigorous methods, the risk of misinterpretation and loss of original meaning remains high.

Importantly, unpublished Ayurvedic manuscripts may contain unique formulations, diagnostic approaches, and therapeutic principles that are not available in classical printed texts. Their systematic study can open new avenues for evidence-based validation and innovation in Ayurvedic practice.

Thus, manuscriptology is not merely a preservation tool but a research methodology with the potential to bridge traditional wisdom and modern scientific inquiry.

CONCLUSION

Manuscriptology plays a pivotal role in preserving, validating, and disseminating the vast but underutilized knowledge embedded in Ayurvedic manuscripts. Despite the existence of millions of manuscripts, the lack of systematic study and publication has limited their contribution to modern research and clinical practice.

A structured and multidisciplinary approach to manuscriptology is essential to bridge this gap. By applying rigorous methods of textual criticism and critical editing, it is possible to reconstruct authentic texts and make them accessible for scholarly and clinical use.

Focused efforts toward cataloguing, digitization, and collaborative research can significantly enhance the integration of traditional knowledge into evidence-based Ayurveda. In this context, manuscriptology emerges not only as a tool of preservation but as a foundation for future innovation and advancement in Ayurvedic science.

REFERENCES

1. Shankar D. Handbook of Medical Manuscriptology, Bangalore. Institute of Ayurveda and Integrative Medicine, Chapter1- Writing in Ancient India, 2010; 3.
2. Patil S.T., et al. Critical study of manuscript Vaidyaksaar Review Article Int j Res Ayurveda Pharm, Mar-Apr 2016; 7(2): 185.
3. <https://en.wikipedia.org/wiki/Manuscript>.

4. Shankar D. Handbook of Medical Manuscriptology Bangalore, Institute of Ayurveda and Integrative Medicine, 2010 chapter3 - writing material; 27.
5. G, S. K., Mund, J., Nambootiri, V., & Nair, L. P. (2016). Manuscriptology: Relevance for Ayurveda Research Scholar. International Journal of Ayurvedic Medicine, 7(1). <https://doi.org/10.47552/ijam.v7i1.802>
6. <https://www.namami.gov.in> (National Mission for Manuscripts)
7. Manas A. Manuscriptology: An Introduction SlideShare; slide 7 <https://www.slideshare.net/MaanasAjay/manuscriptology-an-introduction-42685069>.
8. Manas A. Manuscriptology: An Introduction Slide Share; 33 <https://www.slideshare.net/MaanasAjay/manuscriptology-anhttps://www.slideshare.net/MaanasAjay/manuscriptology-an-introduction-4268506introduction-4268506>
9. National mission for manuscripts. Available from http://en.wikipedia.org/wiki/National_Mission_f or manuscripts.
10. Basic minimum standards for conservation of manuscripts- National mission for Manuscripts 02, available from; [www. Namami.org](http://www.Namami.org)
11. Leena P. Nair, John J, Shukla A, Nampoothiri V, Mund J Shankar. Basics of Manuscriptology”, Unique journal of Ayurvedic and Herbal Medicines, 2016; 4(1)1.
12. Hiremath Bharathi.B. A study on Ayurveda medical manuscriptology with Special Reference to Vaidya Chintamani (MD Thesis); RGUHS 2012.
13. Vidyanath R, Nishteswar K. A Hand book of history of Ayurveda. 1st ed. Varanasi: Chowkhamba Sanskrit Series Office, 2004. p.192-194.
14. Vidyanath R, Nishteswar K. A Hand book of history of Ayurveda. 1st ed. Varanasi: Chowkhamba Sanskrit Series Office, 2004: 221-223.
15. Anjana R S, Resmi B. A Review on Critical Edition of Ayurveda Manuscripts. International Journal of Ayurveda and Pharma Research, 2022; 10(2): 58-63. <https://doi.org/10.47070/ijapr.v10i2.2281>
16. Gangadharan G.G, Anand Geetha-editors, handbook of Medical Manuscriptology, foundation for revitalisation of local health traditions, Bengal. [http://www. Indaculture.nic.in/manuscripts](http://www.Indaculture.nic.in/manuscripts)