

From Dispersal to Dialogue: A Global History and Future Horizon of International Dunhuang Studies

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Dunhuang Studies has transformed from a 20th-century “national sorrow” into a 21st-century global academic subject. The 1900 discovery of the “Library Cave” (Cave 17) initiated a narrative of immense archaeological revelation followed by systematic dispersal to global collections. Historically, this diaspora fueled nationalistic competition and cultural trauma in China; however, a significant paradigm shift has redirected the field toward global collaboration and digital integration. By reviewing regional research traditions—from British archaeological rigor and French philology to Russian linguistics and Japanese socio-historical analysis—this study shows how fragmented efforts have converged into a unified dialogue. Central to this “Holistic Turn” is the emergence of Dunhuang Manuscript Studies, which integrates material codicology with traditional historiography. Furthermore, technological innovations such as 3D spatial reconstruction and artificial intelligence now empower researchers to move beyond isolated scrolls toward a systematic understanding of the Silk Road ecosystem. In future, Dunhuang Studies will still serve as a vital bridge for trans-cultural dialogue, facilitated by “digital repatriation” and the “shared heritage” model. This maturation ensures that the diverse voices of medieval Eurasia reach a global audience, transcending historical divisions and geographic boundaries.

Keywords: Dunhuang Studies, manuscriptology, Silk Road, digital humanities

Introduction

The history of Dunhuang Studies is a compelling narrative in modern humanities, beginning with a paradox of accidental discovery and systematic dispersal of precious materials at the Mogao Grottoes. The acquisition of these materials by explorers like Aurel Stein, Paul Pelliot, Sergey Oldenburg, and the Otani expeditions resulted in their dispersal to London, Paris, St. Petersburg, and Tokyo. Occurring during a period of colonial exploration and Chinese political instability, this event created a legacy viewed differently in China and the West. For early 20th-century Chinese intellectuals, this removal represented a profound cultural trauma. Ji Xianlin once lamented that “Dunhuang is in China but Dunhuang Studies is all over the world,” an indictment of the domestic inability to lead research into its own history that served as a rallying cry to reclaim intellectual heritage (Rong, 2013, p. 256).

Scientifically, the discovery provided an unprecedented corpus for fields ranging from vernacular linguistics to secular administration (Galambos, 2016, p. 33). Chen Yinke defined it as the “new trend of current scholarship”, shifting historical parameters by offering “bottom-up” sources that nuanced official dynastic histories and

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revealed complex inter-ethnic relations (Rong, 2013, p. 519). Today, a paradigm shift has transformed the field from nationalistic competition into an academic subject “all over the world” (Liu, 2022, p. 239). Adopting a “holistic, reflective, and comprehensive perspective”, scholars now move toward a systematic understanding of the Silk Road ecosystem (Sun, 2025, p. 1). This article argues that the field has transitioned from dispersal and suspicion to global collaboration, digital integration, and holistic materiality.

The Regional Evolution of Overseas Dunhuang Studies

The development of Dunhuang Studies outside of China was fundamentally dictated by the geographical distribution of its primary collections, each fostering unique scholarly methodologies rooted in the intellectual traditions of the host nations. The diaspora of Cave 17’s contents did not merely result in a physical scattering of scrolls; it created distinct academic “schools” that approached the Silk Road from divergent perspectives—archaeological, philological, and socio-historical.

The British Tradition: Archaeological Rigor and the IDP

The British collection, housed primarily at the British Library and the British Museum, is largely the result of Sir Aurel Stein’s three major expeditions (1900-1901, 1906-1908, and 1913-1916). Stein’s background in geography and his training in the Survey of India lent a scientific and rigorous attitudes towards his work that was distinct from his contemporaries. Stein’s methodology emphasized the *in situ* context; he meticulously recorded the find-spots of objects, which has allowed modern researchers to reconstruct the original arrangement of artifacts in many Silk Road sites. Taking the *Diamond Sutra* (Or.8210/P.2) as an example. Perhaps the most iconic item in the British collection is the printed version of the *Diamond Sutra*, dated 868 CE. Found among the thousands of manuscripts in Cave 17, this five-meter-long scroll is the world’s oldest dated complete printed book. The study of this artifact required a sophisticated synthesis of Buddhist philology and the history of printing technology. Scholarly analysis of the colophon—noting it was commissioned by Wang Jie on behalf of his parents—has provided deep insights into the merit-making practices of the Tang Dynasty (Whitfield, 2004, p.301). Furthermore, the technical precision of the woodblock printing suggests that by the 9th century, the Gansu corridor was already a sophisticated center for mass-mediated religious propagation.

The British tradition transitioned from a colonial model of “possession and cataloging” to one of global stewardship in the late 20th century. The 1994 establishment of the International Dunhuang Project (IDP) at the British Library marked a milestone in this evolution. The IDP pioneered the large-scale digitization of Silk Road materials. By hosting images of manuscripts from London, Beijing, Paris, and St. Petersburg on a single open-access platform, the project has effectively “reunited” the collection in a virtual, collaborative space, setting the standard for contemporary digital humanities in Asian studies (Galambos, 2016, p. 34).

The French Tradition: The Philological Peak

While Stein approached Dunhuang as a geographer-archaeologist, Paul Pelliot (1878-1945) approached it as a master Sinologist and polyglot. His visit to Cave 17 in 1908 is often described as the “philological peak” of the field. Pelliot was the first scholar with the requisite linguistic training to enter the cave and spend three weeks systematically selecting the most valuable documents. Unlike Stein, who collected broadly, Pelliot focused on manuscripts that were historically unique or linguistically complex. Rong (2013, p. 116) notes that “Pelliot’s selection was so precise that even today, the Pelliot collection remains the most intellectually significant for historical research”. The French school, centered at the Bibliothèque nationale de France, established rigorous

standards for “Pelliot Studies,” focusing on medieval Chinese grammar, phonology, and the decipherment of non-Han languages. Pelliot’s discovery of secular documents—including legal codes, economic records, and census data—provided the primary evidence needed to challenge traditional historiography, which had previously relied solely on official dynastic annals. The Pelliot collection in Paris is noted for its high proportion of non-Buddhist texts, administrative documents, Confucian and Daoist texts, and dated colophons, which has been recognized as valuable for sinological scholarship and may have influenced subsequent studies on textual variants and vernacular elements in Dunhuang manuscripts (Galambos, 2020, p. 5), thus the French tradition remains a cornerstone of international Dunhuang Studies.

The Russian and Japanese Contributions: Linguistic Diversity and Social History

The contribution of Russian and Japanese scholars provided the necessary breadth to turn Dunhuang Studies into a truly cross-cultural discipline. In Russia, the expeditions led by Sergey Oldenburg (1909-1910 and 1914-1915) secured a unique collection now housed at the Institute of Oriental Manuscripts in St. Petersburg. The Russian tradition is particularly valued for its focus on the Tangut (Xi Xia) manuscripts and Central Asian linguistic fragments. Oldenburg’s systematic documentation of the Mogao caves, including the first high-quality architectural measurements and photographs of many grottoes, laid the groundwork for the modern conservation efforts of the Dunhuang Studies (Galambos, 2016, p. 35-36). The Russian collection serves as an essential repository for studying the Northern Silk Road and the “non-Han” history of the Gansu corridor. In Japan, the Otani expeditions (led by Count Kozui Otani) brought a religious and artistic lens to Dunhuang that was often missing in Western secular scholarship. Japanese scholars were pioneers in identifying complex Buddhist Iconography and tracing the evolution of Mahayana art from Gandhara to Nara. More significantly, Japan pioneered the study of “Social History” in Dunhuang Studies. By the mid-20th century, Japanese researchers began using the “secular documents”, such as sheyi society statutes and loan contracts, to reconstruct the “lifestyle and social structures” of Dunhuang’s lay society (Liu, 2022, p.304). They were among the first to move beyond elite Buddhist texts to examine how the common people of the Guiyijun period (851-1036 CE) lived, worked, and interacted with the monastic community. The research practices of Japanese and international Dunhuang scholars since the mid-20th century—particularly their use of secular documents to reconstruct lay society—exemplify the “bottom-up” historical methodology described. This approach remains influential in contemporary scholarship, as reflected in ongoing projects to clear up and interpret everyday documents from Dunhuang. (Liu 2022, p. 324-339).

In summary, the regional evolution of overseas Dunhuang Studies represents a transition from “National Sorrow” and competitive acquisition to a diverse, multi-disciplinary dialogue. The synthesis of British archaeological data, French philological rigor, Russian linguistic diversity, and Japanese social history created the robust foundation upon which the modern global academic subject of Dunhuang Studies now stands.

Current Research Situation (2024-2026): The Holistic Turn

Contemporary Dunhuang Studies have entered a mature phase characterized by what Sun (2025, p. 1) describes as a “holistic, reflective, and comprehensive perspective”. In the current academic climate of 2024-2026, the discipline has moved beyond the “era of accumulation” where the primary goal was the cataloging and publication of source materials. Today, almost all major discoveries from the Mogao caves have been published, allowing scholars to shift their focus toward interdisciplinary synthesis and the application of cutting-edge

technological frameworks (Sun, 2025, p. 1). This “Holistic Turn” is defined by three primary pillars: the digital reconstruction of space, the material science of manuscriptology, and a socio-historical focus on linguistic pluralism.

The Digital Turn and Spatial Reconstruction

The “Digital Dunhuang” initiative has evolved from a preservation project into a sophisticated tool for spatial archaeology and art history. This technological innovation has “empowered researchers to establish novel approaches” to the discipline, moving from two-dimensional photography to high-definition 3D modeling and immersive virtual reality (Sun, 2025, p. 1). This shift allows for the analysis of the “spatial logic” of the grottoes—how the architecture, murals, and sculptures were designed to interact with the medieval devotee. Current researchers utilize 3D modeling to perform “digital peeling”, which allows them to see through layers of 10th-century Song Dynasty over-painting to reveal the original 7th-century Early Tang murals beneath (Sun, 2025, p. 1). By integrating digital scans with family genealogies found in the manuscripts, scholars can analyze how the Zhai family utilized the physical space of the cave for ancestral ritual performances. This holistic approach proves that the cave was not a static museum but a dynamic ritual space where the murals served as a backdrop for the “living” history of a local elite family across three centuries.

Manuscriptology (Xiebenxue 寫本學) and Materiality

The most significant theoretical development in recent years is the rise of manuscriptology. This field treats the Dunhuang scrolls not merely as carriers of text, but as physical artifacts of medieval technology. Some scholars in China advocate establishing a formal “Dunhuang Manuscript Studies” discipline, which focuses on the “codicology” of the scrolls, examining “paper quality, ink types, binding styles, and the physical traces of scribal habits” (Sun, 2025, p. 2). The Sino-Tibetan Buddhist Pilgrim Scrolls are very typical. The research conducted by Sam van Schaik and Imre Galambos (2020) on 10th-century pilgrim documents serves as a definitive example of this material focus. By analyzing the physical properties of these scrolls, researchers discovered that many were composed of “reused or patched” paper, often featuring doodles, practice characters, or unrelated accounts on the reverse side (Galambos, 2016, p. 35-36). This suggests that during the period of Tibetan and Guiyijun rule, paper was a scarce and precious commodity. The “physicality” of these documents provides a raw, unedited history of religious travel, revealing the economic hardships and the improvised nature of medieval pilgrimage that the refined texts of official sutras often mask (Galambos, 2016, p. 36).

Social History and Linguistic Pluralism

Current scholarship has moved decisively toward a “bottom-up” history of the Silk Road. Using the vast corpus of secular documents, researchers are reconstructing the lives of “commoners, women, and marginalized ethnic groups” who were previously invisible in the historical record. This involves the meticulous study of “contracts, loan agreements, and lay society (Sheyi 社邑) documents”—the paperwork of daily life (Liu, 2022, p. 314). Furthermore, the field is experiencing a “Linguistic Renaissance”. Dunhuang was a multilingual hub where Chinese was but one of many administrative and religious tongues. The study of Sogdian, Khotanese, Old Uyghur, and Tangut scripts has highlighted Dunhuang as a center for trans-cultural translation. According to Galambos’ description, scholars are no longer looking for “pure” versions of texts; instead, they are interested in the “negotiated” versions—how a Sogdian merchant understood a Buddhist sutra through the lens of Zoroastrian terminology (Galambos, 2016, p. 33). So, a pluralistic cultural landscape created by the multi-ethnic nature of the Dunhuang region during the 9th and 10th centuries requires constant linguistic mediation. This focus on

linguistic pluralism allows modern historians to view the Silk Road not as a series of isolated nations, but as a continuous, vibrating web of cultural and economic exchange.

In conclusion, the current research situation demonstrates that Dunhuang Studies have matured into a truly interdisciplinary science. By combining the “high-tech” of spatial reconstruction with the “high-touch” of material manuscriptology and the “deep-read” of social history, contemporary scholars are providing a more comprehensive historical research model than ever before (Sun, 2025, p. 3). This holistic approach ensures that Dunhuang remains at the “cutting edge of China’s higher education” and international scholarship (Liu, 2022).

Future Possible Trends: The Next Century of Dunhuang Studies

As Dunhuang Studies enter their second century of systematic research, the discipline is moving toward a synthesis of advanced technology and deep historical reflection. The transition from the “Age of Discovery” to the “Age of Integration” is not merely a change in methodology but a fundamental restructuring of how we define cultural heritage in a globalized context.

Holistic Integration and the Role of Artificial Intelligence

The most significant theoretical trend for the coming decades is the “inclusive and holistic research method” championed by scholars like Shi Rui. This approach seeks to dissolve the traditional silos between the study of text, material, and history. In this framework, “Dunhuang manuscriptology is combined with historiography” to attain a more comprehensive historical research model (Sun, 2025, p. 3). Instead of treating a manuscript as an isolated specimen, future researchers will analyze it as a node in a vast network of social and material factors, considering the history of the book, the economics of paper production, and the rhetorical styles of specific scribal schools (Sun, 2025, p. 3).

Central to this holistic integration is the transformative power of artificial intelligence (AI). While the 20th century was defined by the manual cataloging of scrolls, the 21st century will be defined by Automated Collation and Virtual Reconstruction. AI algorithms are currently being developed to solve the “fragmentation problem”—the result of manuscripts being torn apart or sold in pieces during the early 1900s. For instance, many “butterfly-binding” (hudie zhuang) manuscripts and multi-sheet scrolls were separated, with the beginning of a text residing in London and the end in Paris or Beijing. AI can perform sophisticated pattern recognition to match paper fibers, ink compositions, and handwriting styles across thousands of miles, “rejoining” these fragments in a digital environment to restore their original integrity. Furthermore, Machine Learning will enable the rapid decipherment of faded scripts and the identification of forgeries, a persistent problem in the field that requires the comparison of vast datasets of “standard” 10th-century handwriting (Rong, 2013, p. 505; 516).

Global Intellectual History and the “Shared Heritage” Model

Beyond technology, the conceptual framework of the field is shifting toward global intellectual history. Dunhuang is no longer viewed strictly through the lens of “Chinese History” but as a unique repository of world thought. As Liu (Liu, 2022, p. 190-196) emphasizes, Dunhuang serves as a crucial node for the history of world religions, housing the most complete extant records of Manichaeism and Eastern (Nestorian) Christianity. The future of the discipline involves repositioning the Gansu corridor as a “Global Middle Ages” hub, where the intellectual currents of the Mediterranean, the Iranian plateau, and the Central Plain met and synthesized.

This global perspective necessitates a new ethical framework: the “Shared Heritage” model. The “national sorrow” that characterized the 20th century—defined by the lament over the loss of physical scrolls to overseas

collections—is gradually being replaced by a 21st-century ethic of “Digital Repatriation” (Galambos, 2016, p. 33). In this model, the focus shifts from the nationalistic ownership of physical artifacts to the ethical and academic “Dialogue” between global institutions. As the International Dunhuang Project (IDP) and the “Digital Dunhuang” platform continue to expand, the intellectual sovereignty over the manuscripts is shared by the global community. This collaborative future ensures that Dunhuang Studies will continue to serve as a bridge for trans-cultural understanding, fulfilling its potential as a global academic subject that belongs to the collective memory of humanity (Sun, 2025, p. 1).

Conclusion

The trajectory of Dunhuang Studies over the past century represents a remarkable academic transformation. The field has navigated a complex journey from the “Age of Discovery”—marked by colonial dispersal and accidental findings—to a sophisticated “Age of Integration” defined by the synthesis of philology, material science, and digital innovation. The “national sorrow” once lamented by 20th-century Chinese intellectuals has served as the crucible for an “internationally famous discipline” that reshapes our understanding of medieval Eurasia. As the field enters its second century, the focus has shifted from mere text recovery to establishing a robust framework for “Dunhuang Manuscript Studies”. This evolution treats the corpus not as a closed regional archive, but as a foundational pillar for a broader, comparative specialty in ancient global manuscript cultures. By standardizing methodologies like codicological analysis and digital restoration, scholars are creating templates applicable across the Silk Road. The ultimate goal of this maturation is to ensure the diverse voices within the Library Cave reach a global audience. While the manuscripts are relics of the past, their insights remain indispensable for understanding our interconnected history, promising to dissolve lingering barriers between East and West through an integrated model of global humanities research.

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