



This issue of *IDP News* is dedicated to the *Diamond Sutra*, including an article on its history and transmission (pp. 2–3), a preliminary study of the paper of the printed copy (British Library Or.8210/P.2, detail of frontispiece above) found at Dunhuang (pp. 6–7), as well as extracts from new books on the *Diamond Sutra* (pp. 4–5), one of which showcases the conservation work recently completed at the British Library. We also report on the IDP partners’ business meeting held in October 2011 at the Dunhuang Academy (pp. 10–11), and the exhibition curated by the Dunhuang Academy on historical photographs of Dunhuang (p. 9).

The *Diamond Sutra*: History and Transmission

Sam van Schaik

When the seventh-century Buddhist master Huineng was a boy, he worked in a marketplace selling wood. One day he heard a customer reciting the *Diamond Sutra*, and experienced a sudden clarity of mind. He asked the man where he had learned the sutra. The man replied that he had been to see the fifth patriarch of the Chan school, Hongren, who had told an audience of monks and laypeople that by merely memorizing the *Diamond Sutra* they would see their true natures and become Buddhas. So Huineng went to find Hongren, joined his monastery, and ultimately became the sixth patriarch of the Chan school.¹

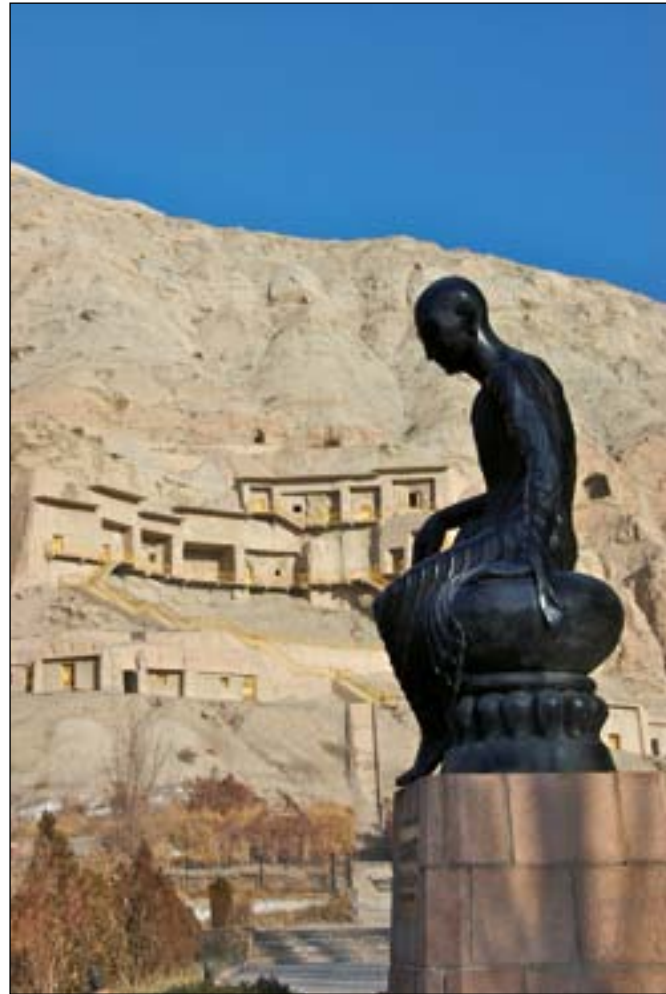
This story shows the high regard in which the *Diamond Sutra* was held by Chinese Buddhists. For centuries this text has been thought to encapsulate all that is important in the Buddha's teachings. Its pithy and paradoxical text is thought to provide the insight into the nature of reality that turns an ordinary being into a Buddha. To understand why the *Diamond Sutra* was revered in this way, we need to understand its place in the Buddhist tradition. For Buddhists, a sutra is a record of the teachings of the Buddha himself, and every sutra begins with the phrase, 'thus have I heard' (in Sanskrit: *evam mayā śrutam*). The sutras were first written in the local languages of India, and later in the sacred and literary language of Sanskrit.

The *Diamond Sutra* was part of a Buddhist movement known as the Mahāyāna, or 'greater vehicle'. By the first century AD followers of the Mahāyāna were writing down new sutras. The content of these texts was quite varied, but some key themes came to characterise the Mahāyāna. One was the altruistic motivation of the bodhisattva, a follower of the path who aims for the enlightenment of all living beings. Another was the doctrine of emptiness (Skt. *śūnyatā*), that all things exist only on the basis of causes and conditions, and therefore nothing has an independent existence.

The latter theme was expounded in a group of texts known as the Perfection of Wisdom (*prajñāpāramitā*) sutras. In Mahāyāna Buddhism, the perfection of wisdom is one of the six perfections: generosity, morality, patience, energy, meditation and wisdom. The Sanskrit term *pāramitā* actually signifies transcendence, rather than perfection. This indicates that the ideal is not to perfect each of these six, but to transcend the concepts of oneself as an independent self performing a truly existent action. This again brings us back to the idea of emptiness.

According to Edward Conze, who specialized in the study of this literature, the earliest Perfection of Wisdom sutra is the version in eight thousand verses. It appeared some time between the first century BC and the first century AD. Over the next two centuries this text was expanded into versions in eighteen thousand, twenty-five thousand, and a hundred thousand verses. These large and unwieldy sutras mainly increased the level of repetition in the original version. Then, by the fourth century AD, a trend in the other direction emerged with the appearance more concise Perfection of Wisdom sutras. These included the *Diamond Sutra*, which contained a mere three hundred verses. However, some Japanese scholars have argued that the *Diamond Sutra* was actually the earliest of the Perfection of Wisdom sutras, the kernel from which the longer texts developed.

The Sanskrit title of the *Diamond Sutra* is *Vajracchedikāprajñāpāramitāsūtra*, which can be translated as *The*



Statue of Kumārajīva at the Kizil Caves in Xinjiang, China.

Diamond Cutter Perfection of Wisdom Sutra. The significance of the *vajra* (translated here as 'diamond') is that it is the hardest and strongest of all substances, which can cut through any other. As such, it is like the doctrine of emptiness, which cuts through all substantialist concepts. The earliest Sanskrit fragments of the *Diamond Sutra*, dating to the late fifth or early sixth century, were discovered by Aurel Stein in the Taklamakan desert site of Dandan Uiliq, near Khotan. More extensive manuscripts, dating from a century or two later, have been found in Gilgit and Bamiyan. Thus we know that the sutra was popular and circulated widely in Gandhāra and Khotan. Both places were key stages on the route between India and China travelled by monks and merchants.

The *Diamond Sutra* reached China by the fourth century. The earliest translation of the *Diamond Sutra* into Chinese was by the Central Asian translator Kumārajīva, and dates from the year 402, pre-dating even the earliest Sanskrit fragments. Kumārajīva's translation became the most widely read, recited and copied version of the sutra throughout China, in spite of the fact that later translations were made by several other translators, including the famous pilgrim monk Xuanzang. As Paul Harrison has shown, Kumārajīva's translation often simplifies and augments the original Sanskrit text, which makes for a better Chinese rendering, but one less faithful to the original than some of the later translations.²

The work of translating the *Diamond Sutra* into Tibetan was carried out by order of the Tibetan emperor in the late eighth or early ninth century. Such translations were usually done by a team consisting of an Indian master and a Tibetan translator, and the canonical *Diamond Sutra* translation is credited to the prolific translation team of Śīlendrabodhi (from India) and Yeshé Dé (from Tibet). Because a technical language was developed in Tibetan specifically to cope with translating Buddhist texts, the Tibetan translation of the *Diamond Sutra* offers a more literal rendition of the Sanskrit text than any of the Chinese translations. Another Tibetan translation, found only in the Dunhuang collections, was made from the Chinese. The *Diamond Sutra* also exists in other languages, including Sogdian, Khotanese and Mongolian, and a unique manuscript from Dunhuang rendering the Chinese version in Brahmi script.

Essentially, the *Diamond Sutra* is a dialogue between the Buddha and his disciple Subhuti. Out of this conversation two main topics emerge. The first is the doctrine of emptiness. This is characteristic of all Perfection of Wisdom literature, but the *Diamond Sutra* takes a particular approach to it, eschewing argument and analysis and not even using the term 'emptiness'. Instead the Buddha repeatedly makes contradictory statements, celebrating the virtuous path of a bodhisattva and the qualities of a Buddha at the same time as denying that they exist. This approach, described as 'the logic of not', is a challenge to dualistic concepts of self and other, existence and non-existence, and the like.³ The use of deliberate paradox as a teaching method had a strong influence on the development of the Chan and Zen traditions.

The other recurring topic in the *Diamond Sutra* is the vast merit that anyone can attain by teaching and reciting the sutra. For example, in one passage the Buddha says that to give away, as an act of generosity, jewels piled up as high as the highest mountain would bring less merit than memorizing and teaching a single verse of the *Diamond Sutra*. The concept of merit in Buddhism is closely related to karma, in that merit is what results from positive actions, and leads to a better life and higher rebirth. In statements such as this one in the *Diamond Sutra*, the Buddha reworks the idea of merit so that true merit resides in that which leads directly to enlightenment. And the words of the *Diamond Sutra* itself are the best path to enlightenment.

This aspect of the *Diamond Sutra* has led Gregory Shopen to identify it as one of the most important texts in the development of a 'cult of the book' in Mahāyāna Buddhism.⁴ This term describes a growing reverence for the written word, which led to the copying of sutras solely for the purpose of generating merit. This should be kept in mind when we look at the copies of the *Diamond Sutra* found in the library cave in Dunhuang. The Dunhuang collections contain hundreds of copies of the *Diamond Sutra*, mostly in Chinese, with around fifty manuscripts in Tibetan and a few fragments in Khotanese.

Some of the Chinese manuscripts of the *Diamond Sutra* contain colophons giving the reasons why the sutra was copied. For example, in a scroll copied in the year 700, the government official who paid for the copying dedicates the religious merit to the empress, to his parents and his family, and then explains that he made a vow to have two copies of the sutra made every month if he was promoted to the fifth grade. But, he explains, recent wars have made paper scarce, and it is only now that he has been able to commission a copy of the sutra. Another copy was commissioned in the year 616 by a nun, who writes that



From Gilgit to the Nalter Valley. Photograph courtesy of Riaz J. Siddiki.

she hopes anyone who hears the sutra read aloud will benefit, and prays that she will soon be able to leave the desert frontier regions and return to the imperial capital.⁵

Sources like the nun's colophon show that the recitation of the *Diamond Sutra* was also considered to be highly meritorious by medieval Chinese Buddhists. In the Tibetan manuscripts, the sutra is often found in scriptural compendia alongside popular prayers and magical formulae (*dhāraṇī*) clearly intended for recitation. By the ninth century Chinese manuscripts of the *Diamond Sutra* were also augmented with mantras and prayers, making their ritual function quite apparent. This can be seen in the famous *Diamond Sutra* printed in the year 868. Here the text begins with a mantra to purify the mouth for recitation, followed by an invocation of eight *vajra* deities. This is followed by the main text of the sutra, after which the manuscript concludes with another mantra.⁶

As we saw in the story at the beginning of this article, hearing the *Diamond Sutra* recited is said to have been the decisive moment that led the Chan patriarch Huineng to practise Buddhism. In the *Diamond Sutra* itself, the Buddha states that anywhere the sutra is recited becomes a sacred place. And the practice of recitation remains the most significant use of the *Diamond Sutra* in modern Buddhist cultures. The sutra is still recited in Asia in languages such as Tibetan, Chinese, Japanese and Korean, and increasingly across the world in new translations into European languages.

NOTES

1. The story is told at the beginning of the *Platform Sutra*.
2. See Paul Harrison, 'Resetting the Diamond: Reflections on Kumārajīva's Chinese Translation of the Vajracchedikā', *Journal of Historical and Philological Studies of China's Western Regions* 3 (2010), 233–248.
3. See the discussion in Shigenori Nagatomo, 'The Logic of the Diamond Sutra: A is not A, therefore it is A', *Asian Philosophy* 10.3 (2000), 213–244.
4. See Gregory Schopen, *Figments and Fragments of Mahāyāna Buddhism in India* (Honolulu: University of Hawai'i Press, 2005), 25–62.
5. These two manuscripts are Or.8210/S.87 and Or.8210/S.2605.
6. The arrangement of ritual texts on *Diamond Sutra* manuscripts, including Or.8210/P.2 is discussed in Yong You, *The Diamond Sutra in Chinese Culture* (Los Angeles: Buddha's Light Publications, 2010).

Restoration of the *Diamond Sutra*

Frances Wood and Mark Barnard

This is an extract from the recent British Library publication on the Diamond Sutra (Or.8210/P2) about the conservation work that took over seven years to complete. The book also contains material from Aurel Stein's diary and notes showing that, despite being given the date and noting that it was printed, Stein himself did not realise the significance of the object. Paul Pelliot studied the Diamond Sutra along with manuscripts from the Dunhuang Library Cave in London in 1910 and noted the correct date of 868 and its significance as the earliest dated printed book. The extract is from pp. 89–100 of the book.

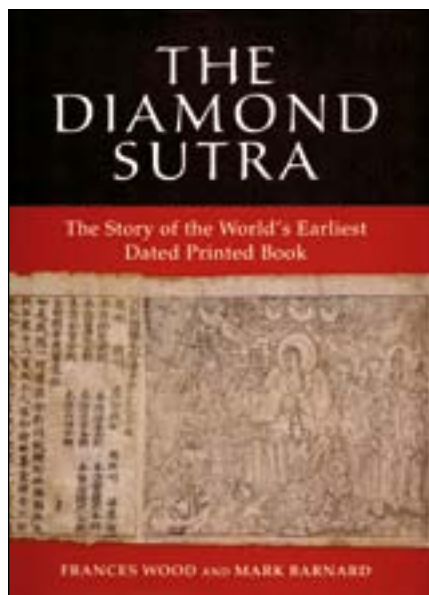
In 1987, a decision was made to set up a long-term project with two broad aims. The first was to understand the nature and the reason for the fading of the horizontal stain across the frontispiece and the background dye; ...The second was to restore the Diamond Sutra to as close as possible to its 'original' condition. The conservation would consist of 'peeling away' up to five paper linings, the removal of the glue and paste residues that had built up over the course of the relinings — this was the most problematic task — and, most importantly, the realignment of the frontispiece.

In 1990, links were established with Kenneth Seddon, Professor of Inorganic Chemistry at Sussex University, latterly at Queen's, Belfast, to explore the chemical constituents of berberine, the yellow dye used on Dunhuang scrolls and possibly to develop a solvent that would allow the removal of the adhesive without dissolving the dye.

In parallel with this research, a trial was undertaken in-house to find a way to remove the linings and the adhesives using various methods, from ultrasonic moisture to super-heated steam. Lessons learnt from this joint research enabled the team carefully to remove the linings and the adhesive residues from two similar printed scrolls, thus paving the way to commence work on the Diamond Sutra in 2003.

The first phase was to remove the old edge repairs that had been carried out around 1950: overly strong, unattractively coloured manila paper on the top and bottom margins, and light, thinner Chinese paper on the side edges. Removal of these was difficult as sutra paper was dyed with berberine which was very light-sensitive and water-soluble. Using a controlled application of water and alcohol mix directly on to the border, it was possible to release the margins slowly. A total of 11 metres worth of border paper was removed in this manner. During this time — a period of six months — exploratory tests were carried out on the linings: when the single lining of one of the panels was removed a multitude of previously hidden vertical creases were exposed.

Additionally, a number of non-destructive analytical tests were undertaken such as measurements of paper thickness, surface pH



The Diamond Sutra: The Story of the World's Earliest Dated Printed Book

Frances Wood and Mark Barnard

London: British Library, 2010

112 pp. £20

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<http://tinyurl.com/cfmngbe>

spot-testing of panels, observation of fibre distribution within panel sheets and examination of adhesives under a polarising microscope. One of the test results revealed that the frontispiece had, surprisingly, five linings, explaining the reason for its rigidity.

The success of the first phase enabled a structured repair programme to be formulated between the Head of the Chinese Section and the Head of Paper Conservation at the Library. A decision was made to fully remove all linings from the scroll and separate the scroll into its component panels. The latter operation was necessary primarily because the scroll was found to have been separated previously and rejoined inaccurately.

In June 2006, the second phase began with the removal of the linings using controlled ultrasonic vapour via a tube to create a microclimate of 85 per cent humidity which released the adhesive bond from the lining paper. A fibre-optic light, a cold light source, was placed underneath the object to highlight areas of damage. The removal of

adhesive residues and linings was vital to the conservation of the sutra because they, together with repair paper patch remains firmly lodged on the surface, had led to areas of stress and distortion: they were physically pulling the weak areas of the original paper apart. To remove the adhesive without affecting the yellow dye has been the greatest challenge to date.

Apart from the essential tools used for paper conservation such as brushes, knives, small scissors and tweezers, various other equipment was used — fine dentistry tools and modified clay modelling spatulas for the initial removal of the heavy deposits, followed by surgical precision tweezers and cotton wool for use when the adhesive was fluid enough to be rolled off the surface as result of the ultrasonic vapour treatment.

The completion of this laborious task, which took 18 months, was rewarded by the return of paper flexibility and character, and the original sheet formation such as fibre distribution and faint laid lines from the paper mould and texture could now be seen. However, this work exposed new problems, namely the fragility of paper due to extensive fracturing and the uneven thickness of the sheets. This discovery went some way to explaining the challenges past conservators encountered when attempting to align the text, not to mention the frontispiece image on which the distortion was most apparent.

Realignment was a slow and exacting process in itself. The problem arising from correcting misalignment in text and image was that it could only be carried out in a humid atmosphere when the paper expanded to draw the fractures together. Any drying during this critical period would have resulted in the newly matched joints separating. Once correctly aligned, they were very carefully reinforced using thin, dyed Japanese kozo (mulberry-fibre) paper strips with a feathered edge which gave a discreet, blending appearance as opposed to a sharp, cut edge. The aim of the strips was to use the absolute minimum of repair paper on the back of the scroll to give the maximum strength. The repaired areas then underwent controlled drying using very light weights placed at strategic points to prevent further movement. Constant monitoring of the

work ensured the sheet dimensions returned to the original size without any distortion of the text or image.

After more than 1000 hours of exacting work, finally completed in 2010, the sutra can now be seen the way it was intended; the frontispiece, in particular, now presents a complete and flowing image instead of our eyes following a series of disjointed lines, which had created a worryingly fragile appearance.

It was extraordinary to find that after 1100 years and much human intervention, the impression of the block print, the three-dimensional evidence of the actual printing process itself, was still present in places after the scroll linings were removed. It is only now that the Diamond Sutra can be fully viewed and handled without the masking of linings. This will open up future areas of research, especially in the area of early printing and papermaking for printing, as this sutra shows a high degree of maturity in these important technologies.

Frances Wood is Head of the Chinese Section at the British Library; Mark Barnard worked as a conservator at the British Library from 1980, and was Head of Paper Conservation from 1996 to 2011.



Mark Barnard working on the *Diamond Sutra* at the British Library.



Infilling the tears in the margin.

Accruing Merit from Copying the *Diamond Sutra*

Joyce Morgan and Conrad Walters

This is an extract from Journeys on the Silk Road (pp. 138–140) telling the story of the discovery of the Dunhuang Library Cave and the Diamond Sutra (Or.8210/P2).

Although the colophon on the block-printed Diamond Sutra reveals little about Wang Jie, other handwritten copies of this sutra found in the Library Cave are more forthcoming about who created them and why. They reveal details that are at times intriguing, amusing and poignant. Merit resulting from the good deed of copying a sutra could be transferred to others — and not only to other humans. One of the most touching copies tells how a farmer commissioned a Diamond Sutra on behalf of his late, lamented ploughing ox. In doing so, the farmer prays that 'this ox may personally receive the merit therefrom, and be reborn in the Pure Land, never again come to life in the body of a domestic animal. May this be clearly ordained by the officers dispensing justice in the underworld, so that there may be no further enmity or quarrel [between the ox and its owner]'. Exactly what caused such ill-feeling between the remorseful farmer and his ox is not revealed.

Some who commissioned copies of the Diamond Sutra did so not just for benefit in future lives but also for aid with pressing problems in this one. An official with an eye on career advancement vowed to have a sutra copied each month if he received a promotion and two a month if he was further upgraded. He had been unable to keep his promise for some time because war had meant paper and ink were unavailable, but at last the materials were at hand.

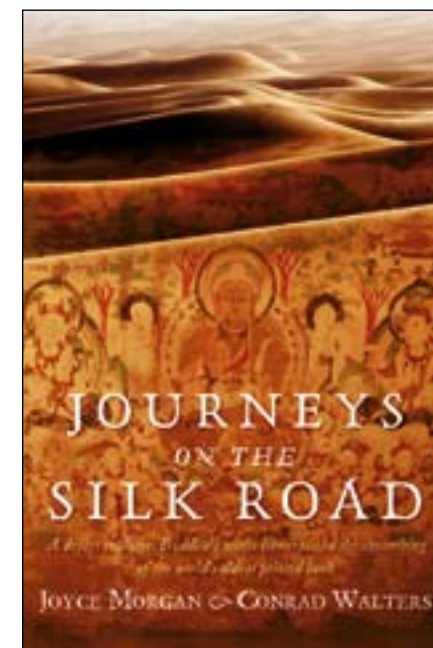
One woman, homesick and fed up with living in far-flung provincial Dunhuang in the seventh century, made a copy of the Diamond Sutra in the hope that she could soon leave the desert frontier region and return to the imperial capital. Perhaps she missed its floating pavilions and secluded gardens.

But miracles could happen, especially, it seemed, when the Diamond Sutra was involved. Documents found at Dunhuang and elsewhere recount supernatural tales, such as one about a recently deceased woman who found herself in hell because she ate meat in a monastery and killed a clam. For her sins, her body was pierced with seven knives. From beyond the grave, she instructed her sister to commission copies of the Diamond Sutra, and as each copy was completed, a knife was withdrawn until all her suffering ceased.

Such tales are rooted in the belief that the Diamond Sutra and other Buddhist texts have

sacred, even magical powers. Buddhist sutras came to be worshipped as sacred objects, rather like relics. Respect for the written word existed in China long before Buddhism arrived — it was an element of Confucian teaching. China has long respected books not just for their content but for their calligraphy too. But the Buddhist veneration of the book as a religious object — what today is termed the cult of the book — was a new development. Offerings of flowers and incense were at times made before sutras. Over time, the veneration extended to places containing the word of the Buddha, a behaviour explained by the Diamond Sutra, which says that wherever it is kept is a sacred place.

Overwhelmingly documents in the Library Cave were handwritten in ink — Stein found only twenty examples of woodblock printing. But among the 500 Diamond Sutras he removed were two in which the Buddha's words were inscribed with an unusual additive. To demonstrate their dedication and self-sacrifice, and perhaps to increase their merit, devotees supplemented the ink with their own blood. Both copies were written by the same elderly man.



Journeys on the Silk Road

Joyce Morgan and Conrad Walters
Sydney, N.S.W.: Macmillan, 2011

323 pp. A\$34.99

ISBN: 9781405040419

<http://tinyurl.com/cvcx6pq>

A Preliminary Study of the Paper of the *Diamond Sutra* (Or.8210/P.2)

Agnieszka Helman-Ważny

The *Diamond Sutra* (Or.8210/P.2) is the world's earliest complete surviving example of a printed book, and is dated to 868. It is a scroll, a continuous length over 5 m long of wood-block printed text made of seven panels of good-quality paper pasted together. The fine quality of print comes from the perfect choice of ink thickness and type of paper. This conscious selection of materials created fine lines with sharp edges, showing a highly refined printing technique. Also the fact that ink is not present on the verso confirms that the paper was originally accurately sized. The best quality printing can be seen in the frontispiece

This study reports preliminary findings drawn from the paper analysis of the *Diamond Sutra* recently conserved by conservators at the British Library. Thanks to this faithful restoration the *Diamond Sutra* can be studied again without the masking of many layers of secondary linings. Thus, it was possible to read technological features, and the type of raw material used.

The visual appearance of paper is affected by the type of raw material used, the technological process of paper production and the tools used, and finally from the preparation of leaves during book production. In the case of the *Diamond Sutra*, information about substances introduced into the paper structure during production has been confused due to previous repairs and conservation.

The *Diamond Sutra* is printed on woven paper using a 'floating' mould with a textile sieve. This mould type is called 'floating' because it is placed on a water surface such as a lake, pond, river or puddle. The other main type of paper mould is usually known as a 'dipping' mould, and is thought to have developed subsequently to the floating mould. The dipping mould allowed faster paper production because it was possible to remove a wet sheet of paper directly from the sieve just after its shaping. This meant that paper-makers did not need to wait until the paper had dried before re-using the mould to begin the next sheet. The main difference between the two types of mould was in their construction. The floating mould had a wooden frame with a woven textile attached to it. In the dipping mould, on the other hand, a movable sieve made from bamboo, reed or another kind of grass was attached to the wooden frame. Independently of the techniques of sheet formation, any papermaking sieve makes an impression that is specific to the construction of the mould and sieve. This print is unaffected by most aging processes, and can be read centuries later. The print of a textile sieve made of cotton, hemp, or flax differs clearly from that of a movable sieve from a dipping mould made of bamboo, reed or other grasses. However, sometimes a floating mould could have been used together with a bamboo sieve placed inside. Fibre distribution in the paper of the



Figure 1. Fibre distribution in the paper of the *Diamond Sutra*'s frontispiece viewed on a light table. The print of the 'floating' mould with a textile sieve is visible in the paper structure.



Figure 2. The paper of panel 6 of the *Diamond Sutra* viewed against light. Faint laid lines suggesting the usage of bamboo sieve attached to a 'floating' mould are visible in this picture.

Diamond Sutra clearly suggests that mostly a 'floating' mould with a textile sieve was used in this case (see fig. 1). However, very faint laid lines are visible in the paper of panel six suggesting the use of a bamboo sieve attached to the 'floating' mould (see fig. 2). The clockwise direction of fibre distribution in the frontispiece, with a patchy circular shape visible in the middle, is typical of woven paper when the papermaker pours pulp on to the sieve floating on the surface of the water, stirs it within the sieve, and then raises the mould. The stirring can be seen from the uneven paper thickness ranging between 0.14–0.22 mm measured at ten different points within the paper sheet (see fig. 1). Additionally, evenly increased thickness along the upper edge suggests that the paper was dried on the

mould standing in a vertical position. This is why the pulp sank down to the bottom of the mould frame while still wet.

Information concerning a type of mould alone cannot be used for the identification of paper origin, nor for dating. According to Dard Hunter,¹ in the southwestern regions of China and the Himalayas the floating mould was most commonly used, whereas further east the dipping mould with a bamboo sieve developed. However, both types of mould were used simultaneously during the first millennium for making paper along the Silk Road, and it is possible that one papermaking workshop used both types of mould at the same time.

In this case we still need data on other features of the paper, such as fibre composition, to indicate the type of paper and locate its source. Fibres constitute the basic component of any paper sheet, and so determining the fibre composition is essential in characterizing the paper. The *Diamond Sutra*'s paper is composed of *Broussonetia* sp. (Paper Mulberry) fibres.

This plant has been used for the finest papers in China since the beginning of papermaking and is usually associated with very fine paper supposedly produced at the imperial court in the first millennium, or early Ming Dynasty (1368–1644) paper of exceptional quality used for art and calligraphy; however, these were made with a fine bamboo sieve characterized by eight or more laid lines of 1 cm. However, according to the recent preliminary typology established together with Sam van Schaik from a group of Tibetan and Chinese manuscripts from Dunhuang it has been possible to distinguish a group of manuscripts from the early ninth century, which seem to have been produced in Eastern Tibet, composed of *Broussonetia* sp. (Paper Mulberry) and made with a 'floating' mould with textile sieve, which was untypical for Tibet. With this reference in mind there is a strong possibility that the paper used for the *Diamond Sutra* could have been produced in southwest China, close to the Eastern Tibetan borderlands. Further research will be needed to confirm this, however.

Agnieszka Helman-Ważny is a paper scientist at the University of Hamburg.

NOTES

1. Dard Hunter, *Papermaking: the History and Technique of an Ancient Craft* (New York: Dover Publications, 1978), 77–138.

Thierry Delcourt

1959–2011



IDP was deeply saddened to learn of the death, following serious illness, of Thierry Delcourt, Director of the Manuscripts Department of the Bibliothèque nationale de France (BnF).

Delcourt trained in the European manuscript tradition but had a vision that extended beyond this world. He obtained his diploma as a palaeographer-archivist at the École nationale des chartes for his work on a critical edition of manuscripts of the prose Tristan cycle, and continued research on this and related topics, publishing widely and curating several exhibitions. His work first with the audiovisual department of the BnF and then as a

consultant in systems technology from 1989–1992, equipped him with a technical knowledge that he put to active use in his next post. He became Director of the Municipal Library of Troyes, making it a leading media centre during his tenure. And his love of the Tristan cycle and his vision and understanding of the power of technology combined perfectly in his joint project with John Hopkins University and Sheridan Library on the Digital *Roman de La Rose*.

This rare combination of scholarship and technical vision was immediately evident when we first met in 2006 just as he started at the BnF. We explained the work of IDP — the BnF had been founder members and hosted conservation conferences, but had not yet made their manuscript collections available online through IDP. Thierry immediately understood IDP's vision and agreed that the BnF must become full partners, hosting an IDP France website. His support and energy ensured that this vision was realized, with the cooperation of the Musée Guimet. IDP France went live in April 2009, giving access to all 8549 Dunhuang manuscripts in the BnF with full catalogues, along with almost 2000 photographs, manuscripts and artefacts from the Guimet.

IDP was looking forward to continuing work with Thierry over the coming years: we are sure his legacy will continue but we will miss him greatly.

Susan Whitfield

John R. Macrae

1947–2011



When I first started work on Dunhuang manuscripts, John Macrae's work on Chan Buddhism was on my initial reading list and remains on my reference shelves to this day. He was one of the few western scholars at that time working on the Buddhist manuscripts from Dunhuang: more attention had been focused on the less-representative social and economic documents. I was therefore

delighted when I had the opportunity to meet him at an early conference of the Electronic Cultural Atlas Initiative in the 1990s and to realize that, in addition to his scholarship, he was also very interested in digitisation and new technologies for making manuscripts accessible and for enhancing their research.

After his PhD at Yale he had taught at Cornell and Indiana universities. Following retirement he moved to Japan, as a visiting scholar at the University of Tokyo and a part-time lecturer at Komazawa University. He returned to the States as Visiting Scholar at the Centre of Buddhist Studies, at Berkeley, during which time he also taught at Stanford, and also spent some time in Taiwan at the Dharma Drum College. He planned to retire to Thailand, but illness intervened.

It was in Japan that we last met and discussed the possibilities for extending the functionality of a small piece of software IDP had developed — which John had beta tested for us. He was always generous in this way with his time and his comments were invaluable to our work. We will miss him.

Susan Whitfield

Publications: Diamond Sutra and Buddhism

Essential Writings of Buddhism: the Diamond Sutra and the Lotus Sutra

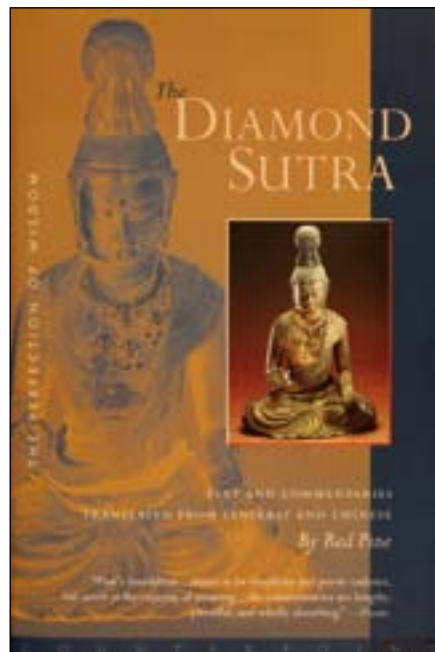
Dwight Goddard; H Kern
St. Petersburg, Florida:
Red and Black Publishers, 2010
217 pp.
ISBN: 9781934941843

The Diamond that Cuts Through Illusion: Commentaries on the Prajñaparamita Diamond Sutra

Nhất Hạnh, Thích.; Annabel Laity; Anh
Huong Nguyen
Berkeley: Parallax Press, 2010
154 pp. US\$14.95
ISBN: 9781935209447
<http://tinyurl.com/82czwzm>

Diamond Sutra: Transforming the Way We Perceive the World

Mu Soeng
Boston, Mass.: Wisdom Publications,
2000
173 pp. US\$13.56
ISBN: 9780861711604
<http://tinyurl.com/88g9xw7>

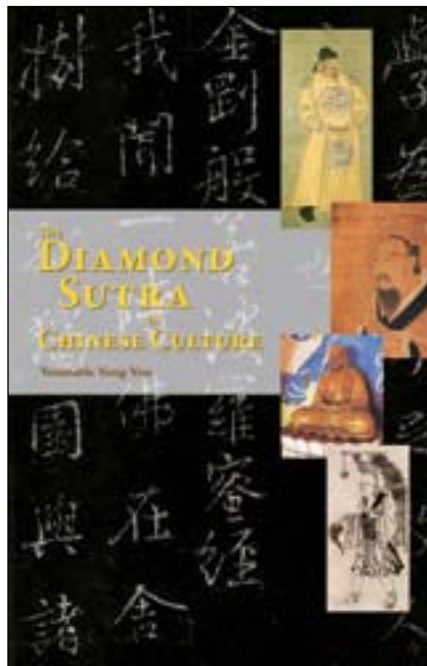


The Diamond Sutra: the Perfection of Wisdom

Red Pine
Washington, D.C.: Counterpoint, 2001
471 pp.
ISBN: 9781582430591

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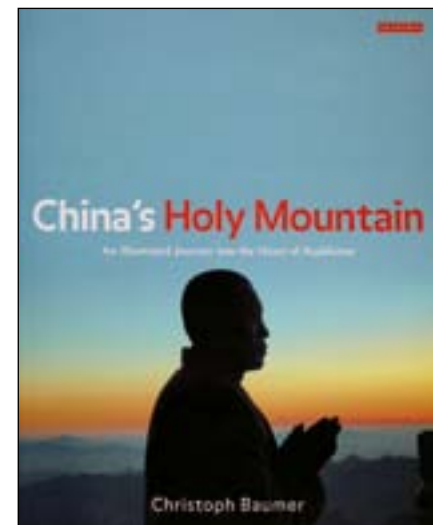
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Documenting Dunhuang

Historical Photographs from the late Qing and Republican Periods

This exhibition provided visitors to the Mogao Caves and local people with the opportunity to see images of the town of Dunhuang and caves from over a century ago. The exhibition was organised by the Dunhuang Academy with the help of IDP, and contained facsimiles of digital copies of photographs from collections at the British Library, the State Hermitage Museum, the Musée national des Arts asiatiques-Guimet, the Needham Research Institute, the Library of the Hungarian Academy of Sciences and the Academia Sinica, Institute of History and Philology. The exhibition opened for two months on 7th October 2011.

The photographs in this exhibition document the condition of the caves, stupas and buildings around the Mogao Caves before the Dunhuang Art Research Institute (predecessor of the Dunhuang Academy) was established in 1944, and before extensive consolidation and conservation of the site took place. The photographs show the Mogao Caves as barren and desolate with damaged wooden walkway structures, collapsed cliff faces, exposed wall paintings, and lower caves buried by sand drifts. Other photographs offer a glimpse into the lives of people who lived in the town of Dunhuang around the early twentieth century and into the 1940s. They are a valuable historical record as there are very few extant photographs of the old town of Dunhuang.

Many of the photographs in this exhibition, for example those taken by Stein and Nouette, are freely accessible online on the IDP website. On the advanced search page, select 'Photograph' under type of artefact, and select the relevant holding institution to bring up the photographs and their catalogue entries.

IDP plans to digitise photographs from other collections not currently on IDP of Dunhuang and the surrounding area. Once this work is complete, it will be announced on What's New on the IDP homepage, on the IDP blog, and in *IDP News*.

A bilingual catalogue in Chinese and English was produced of the exhibition and contains captions, a preface and afterword from the editor. The catalogue was funded by the China Dunhuang Grottoes Conservation Research Foundation, and published by the Shanghai Classics Press.



Cliff face at the Mogao Caves. Photograph by Joseph Needham.
Needham Research Institute CFT3/4.



Vendors by the gate of the Mogao Caves on Vesak, photograph by Charles
Nouette, Pelliot expedition 1908. Musée Guimet AP8448.



Honorary arch, Dunhuang, photograph by Aurel Stein, 1907.
British Library Photo 392/26(275).



Inside the exhibition *Documenting Dunhuang*, Dunhuang Academy.

IDP Worldwide: First Partners’ Meeting in Dunhuang

With ten institutions running eight centres, each hosting a server and website in the local language, IDP is now a complex international collaboration. Running its database on a system implemented over fifteen years ago served on a website now almost a decade old, IDP’s technical infrastructure is long overdue for a major review and update. There are also questions about what should be in scope. IDP now includes not only Dunhuang manuscripts but all archaeological artefacts and archives from the Eastern Silk Road. Should IDP also digitise material, for example, from northern India and Iran relating to the Silk Road?

Previously, partners have met on an ad hoc basis, usually bilaterally or during the IDP conservation conferences. Because of the complexity and importance of the issues to be discussed, it was decided to hold a special meeting devoted to these questions. The Dunhuang Academy very generously agreed to host this, covering all local expenses, and we are immensely grateful for their hospitality. Representatives came from seven IDP Centres, IDP Russia being the only one not represented owing to last minute visa issues.

A brief report is given of the two-day meeting below. An online questionnaire will be prepared in the New Year to get further feedback from users, and technical and academic advisory committees are being established to help guide IDP through the coming years.

Wang Xudong, Luo Huaqing and Susan Whitfield welcomed delegates at the opening which, like the rest of the meeting, was held at the Dunhuang Academy.

Sessions One and Two: Scope and Content

The first day consisted of short presentations by representatives from the IDP centres worldwide on their work and their thoughts on the scope of IDP. The second day started with a discussion on the scope and content of IDP. The issue of the name was raised by Yong-chul Choe. There was a consensus that the name was now so well known that it would be counter-productive to change it. It was pointed out that more often than not the shortened form ‘IDP’ was used anyway. Desmond Durkin-Meisterernst from Berlin — collections which do not contain material from Dunhuang — reiterated the point made by various speakers, including Li Xiao of the Turfan Academy, namely that the rich connections between Dunhuang and other important Silk Road sites, such as Turfan, mean it is not inappropriate to include this material within the project. Zhang Yuanlin of the Dunhuang Academy said he thought that since IDP was so well established it would not be a problem to expand in scope.

It was agreed that an intellectual focus was needed to define the parameters of material to be included but that the eastern Silk Road or perhaps Central Asia was sufficient. Birgit Schlyter brought up the issue of definition, especially of ‘Central Asia’, long under contention. The ‘Silk Road’ has the advantage of having become a ‘brand’ and also giving a time delimitation. But the group agreed that material from areas outside this were also relevant to include if they were connected with the Silk Road material. Ma De gave the example of manuscripts from central Tibet or India connected with those on the Silk Road. Yoon-Hee Hong raised the issue of thinking of the Silk Roads both in terms of land and sea routes, especially for the spread of Buddhism, and this was agreed to be important.

The inclusion of archives was agreed to be in scope, but efforts should not be diverted from the core work of conserving, digitising and cataloguing the archaeological collections. It was stressed by several speakers that this must include both the material excavated in the last century as well as more recent excavations. Li Xiao and Abulkasim Anwar showed the richness of the latter in their presentations on Toyuk and other archaeological sites in Xinjiang

Liu Bo raised the issue of the database having been primarily designed for manuscript and photographic material, individual leaves, rather than for codex style books and archives. He suggested that IDP could offer these in PDF or other formats on the IDP web pages, for example, under ‘research’. Susan Whitfield agreed that this was the basis of its original design but that it had been enhanced to accommodate cataloguing and metadata on archaeological artefacts and paintings as well as archival material including papers, maps and photographs. IDP contains all of these now. She agreed, however, that it would be useful for scholars to

have downloadable pdfs of other material. The discussion moved to the importance of including the archival material but also, as Lin Shitian suggested, modern photographs of excavations such as those shown in the presentations by Abulkasim Anwar and Li Xiao.

Barbara Meisterernst stressed the importance of continuing to cater to our core users, the academics and scholars, and ensuring the material is accessible and relevant for teaching and research. Zhang Yuanlin pointed out that it was also important, for the same reason, to keep abreast of research. Yang Xiuqing concurred and said that, from his position as a scholar, it was important to keep focus. He further raised the importance to scholars of including bibliographies. There was a discussion about various bibliographies and the discussion ended with agreement that this was an issue that would require further exploration.

The issue of limited funding and the other institutional commitments of all partners also came up several times during the two days.

Research

The next session consisted of papers on scientific and humanities research. Sakamoto Shouji and Agnieszka Helman-Ważny each discussed the different methodologies they are employing to collect data about the paper of the Chinese Dunhuang scrolls. It is planned that their combined data, along with that from other previous studies and methodologies, such as Raman spectroscopy for pigment analysis, will form the foundation of a growing data set that can be used to test hypotheses by the researchers and others. Their data is being added to the IDP database and will be made available to all.

This raised the issue of IDP’s role in setting standards, one of its founding aims. In order to avoid the current lack of clarity between terms for paper types in different languages, IDP is adding terms and definitions to its online glossary, in consultation with scientists, paper historians and others. It will promote the use of this vocabulary in all publications.

The importance of catalogues came across in the respective presentations by Ma De and Barbara Meisterernst, the former talking about his work on the Tibetan manuscripts in Gansu (for details of his catalogue see p.8) and the latter about her work on inputting catalogues of the Sanskrit fragments in Berlin onto IDP. There was a discussion about making the catalogues more accessible, especially those not in Chinese or English. This was a point also discussed later by Nathalie Monnet who raised the possibility of translation to increase access. Susan Whitfield said she hoped that this would be an area in which IDP could elicit the help of the user community as the institutions did not have sufficient resources or expertise.

The attendees had the opportunity to view the exhibition ‘Documenting Dunhuang’ to which many had contributed images.



Top row left to right: Sheng Yanhai (Head of IDP Dunhuang, Dunhuang Academy, DHA), Lou Jie (Director, Exhibition Centre, DHA), Liang Xushu (Digitiser, IDP Dunhuang, DHA), Liu Zhijia (Researcher, Turfan Academy), Sakamoto Shouji (Researcher, Ryukoku University), Yoon-hee Hong (Researcher, Research Institute of Korean Studies, RIKS), Chunhee Wu, Ma De (Researcher, DHA), Barbara Meisterernst (Researcher, Humboldt University, Berlin), Agnieszka Helman-Ważny (Paper Scientist, University of Hamburg), Alastair Morrison (Project Manager, IDP UK), Birgit Schlyter (Director, South and Central Asian Studies, Stockholm University), Ann Olsen (Photo Archivist, Ethnography Museum, Stockholm), Vic Swift (Project Manager, IDP UK), Yang Xiuqing (Researcher, DHA), Luo Huaqing (Vice-Director, DHA), Zhang Yuanlin (Director, Information Centre, DHA), Liu Gang (Vice-Director, Digital Centre, DHA), Taeshik Shim (Senior Research Fellow, RIKS), Liu Bo (Head of IDP Beijing, National Library of China, NLC).

Bottom row left to right: Okada Yoshihiro (Director, Digital Archives Research Centre, Ryukoku University), Desmond Durkin-Meisterernst (Director, Turfan Research Group, Berlin-Brandenburg Academy of Sciences and Humanities), Li Xiao (Director, Turfan Academy), Susan Whitfield (Director, IDP), Wang Xudong (Executive Vice-Director, DHA), Lin Shitian (Vice-Director, Rare Books, NLC), Nathalie Monnet (Curator of Chinese collections, Bibliothèque nationale de France), Abulkasim Anwar (Vice-Director, Xinjiang Institute of Archaeology), Yong-chul Choe (Director, RIKS, Korea University).

Technology

Vic Swift gave a presentation of the current technical systems used by IDP, the short-term needs and the issues to be decided in the longer term which include the possibilities of switching to Open Source software. Desmond Durkin-Meisterernst was among those generally supporting this approach. He also gave a presentation on his personal database and the possibilities for incorporating it in IDP. Liu Bo asked whether there would be any issues with exporting data and for further information on Open Source software: there was discussion on this. Okada Yoshihiro suggested several systems that IDP might look at, including using TimeMap or something similar. Vic Swift led a discussion on whether the website CMS should be part of the same database as the cataloguing and other item metadata. Sheng Yanhai and Luo Huaqing both raised the issue of cataloguing data and there was a brief discussion on the current use of XML. Ann Olsén asked how small partners could be incorporated and Susan Whitfield gave some examples, such as that of Harvard and the Chester Beatty Library, whereby the main partners take responsibility and act as regional hubs. Susan Whitfield confirmed that a small technical advisory group would be set up to discuss these issues in more detail and everyone’s views would be gathered and a consensus reached before any change was made.

Localisation

Following Vic Swift’s presentation on the issues to be discussed concerning localisation, Nathalie Monnet followed with some points for discussion. She agreed that the principle of multilingualism was essential and must not be abandoned and that the current database software, chosen in 1993, had been an excellent choice at the time. She raised the issue of access to catalogues in different languages and gave the example whereby catalogues at the BnF had to be submitted in two languages to allow access but agreed this would be difficult for IDP to achieve in terms of cost and time. There was a discussion about the time required for this. Vic Swift stressed the need for partners to give regular time, if not a lot of time, in areas such as checking multi-lingual concordances. These enable users to carry out searches in local

languages. Susan Whitfield said she thought that translation of catalogue and metadata would be something that could best be tackled by crowd sourcing and that a new system should allow this.

Communication

In her presentation, Yoonhee Hong raised several important issues including the need for more convenient direct interaction possibly through internally accessible IDP web pages. Vic Swift confirmed that she had previously tried to use various online communication tools but that many were blocked to British Library users owing to firewalls or were not available to partners in all countries. She encouraged Yoonhee to try to find a suitable system and also encouraged direct interaction between partners. She confirmed that contact details for all the partners were on the IDP database under the mailing list (scholars table).

Yoonhee also made several suggestions regarding enabling more scholarly exchange through, for example, IDP posting scholarly papers and arranging special lectures.

Discussion and Roundup

Susan Whitfield ran through other questions for discussion. The participants were in consensus that the partner meeting was a useful forum and that they should be held regularly. An interval of every two years was tentatively agreed. They agreed with the suggestion that informal and small advisory boards should be established, one scholarly and one technical. Susan Whitfield asked for nominees.

Susan Whitfield gave a brief roundup, reiterating thanks to the Dunhuang Academy for allowing everyone to get together and start discussions on important issues. She stressed that this was just the start of these discussions. She confirmed that the discussions would be written up and circulated to everyone and looked forward to receiving feedback and further suggestions.

After the end of sessions the Dunhuang Academy arranged visits to the Mogao Caves and to other local sites, including Yumenguan, Yulin Caves and Suoyang city (Guazhou). This gave everyone more opportunities to discuss possible further areas of collaboration.

IDP UK

People

We were delighted to welcome interns from China and India to IDP UK during the autumn of 2011. These internships are funded by the World Collections Programme. Hu Wanglin from the Xinjiang Institute of Archaeology in Urumqi started with IDP UK in late September 2011 and will stay for six months. He is working on data entry and checking, catalogue mark-up in XML, as well as carrying out research and translation work. Dr Mandira Sharma from the National Museum Institute, New Delhi arrived at IDP UK in late October and will stay for three months. Dr Sharma will be researching archaeological sites in Central Asia.



Hu Wanglin.

Both interns will spend time at the British Museum working on the Stein and Hoernle collections. The programme is also intended to provide an opportunity to build links between young scholars in India and China and their home institutions.



Dr Mandira Sharma.

Resources

A new scholarly resource for manuscript studies has been launched by IDP. It provides an introduction to the variety of writing styles and palaeographic features found in the Tibetan and Chinese manuscripts from Central Asia. Each page introduces the features and dating of particular styles or aspects of writing, and contains a transcription exercise allowing anyone to test their ability to read a particular style. After gaining a familiarity with these typologies, readers will be able to identify the style of a particular manuscript. This in turn allows a better understanding of context in which the manuscript was created, and, in many cases, to assign an approximate date.

The resource is the result of the palaeographic project funded by the Leverhulme Trust, and was developed by Imre Galambos, Sam van Schaik and Vic Swift.

Education

As a new addition to the popular Sacred Texts workshop, run by the British Library learning team for school years 7-13, groups are now offered the option of a 'Sacred Texts on the Silk Road' add-on. This hour-long session, run by Abby Baker of IDP, introduces students to some of the manuscripts, paintings and artefacts that were uncovered in Dunhuang and other Silk Road sites in northwest China in the early twentieth century. Interested schools should contact the BL learning team for more details, and to book:

<http://www.bl.uk/learning/tarea/index.html>

Collaboration

IDP signed an MoU with the Royal Library, Copenhagen in 2011 leading to the inclusion on IDP of the images, metadata and catalogue of the fourteen Dunhuang scrolls in the Royal Library collections. The scrolls were purchased in 1915 at Dunhuang by Bollerup Sørensen, the chief telegraphist in Shanghai at the Great Northern Telegraph Company, and donated by him to the Royal Library on 29th November 1915. You can access images and data relating to these manuscripts on IDP by selecting 'Det Kongelige Bibliotek' under Holding Institute on the Advanced Search page: http://idp.bl.uk/database/database_search.a4d.



Arthur Bollerup Sørensen in Tibet (1921-22).
Photograph courtesy of the Royal Library.

Digitisation

Around 600 photographs taken by Aurel Stein on his fourth Central Asian expedition (1930-1) held at the British Library have been digitised and can be accessed online on the IDP website.

END OF YEAR APPEAL

IDP has made significant achievements in 2011, including new partners and considerable more material catalogued, digitised and available online. We continue to be largely externally funded and individual donations, whether one-off gifts, through our annual supporters' scheme, or through Sponsor a Sutra (see links on idp.bl.uk to both of these), are invaluable to us and always appreciated. Over the past year they have helped, for example, to fund the photography by IDP of archaeological artefacts from the Silk Road held in the British Museum. We have had no other funds for this work. This material is already going online on IDP and the British Museum website. We hope to complete this work but need your help. Any donation, however small, is welcome. You can make a donation through our online form (<https://forms.bl.uk/international-dunhuang-project/>) or by sending a cheque to IDP at the address below (payable to 'The British Library'). All donations will go directly to the work of IDP and your contribution will be acknowledged online.

Thank you and all best wishes for 2012 and the year of the dragon.

IDP News appears twice a year. It is also available online.

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