## Change of Paradigms and Mechanical (Re)discoveries:

Manuscript Cultures and Print Cultures Across Asia

Camillo A. Formigatti

This introduction summarizes the articles included in this section, at the same time presenting some fundamental aspects of the scholarly debate about the so-called 'print revolution.' The attempt is made to draw preliminary conclusions about the impact of printing technology in a wider context, taking into consideration the peculiarities of different Asian book cultures as compared to European book culture. The aim of this short contribution is to elicit a discussion between scholars rather than provide definitive answers.

The issue is not whether the Web produces liberation or submission: it invariably produces both from the very outset. This is a function of its dialectical nature, the two aspects always go together, for the Web is the form that capitalism has taken on in our times, and capitalism is a contradiction in progress at each and every moment. [...] Accordingly, the fight should consist in this: to play on liberation to fight submission. [...] This is however possible only if we stop thinking of technology as an autonomous power, and recognize that it is shaped by ownership and capitalist relations of production, as well as guided by power and class relations. If technology could impose itself only on account of its being innovative, regardless of such relations, the steam engine would have come into use already in the first century BCE, when Hero of Alexandria built the aeolipile. Yet the ancient mode of production had no need for mechanical machines, since all required labour force was provided by slaves and nobody could or wanted to imagine a way to put machines to a productive use.

Wu Ming, Fetishism of Digital Merchandise and Hidden Exploitation: the Amazon and Apple Case [emphasis mine]<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Feticismo della merce digitale e sfruttamento nascosto: i casi Amazon e Apple (http://www.wumingfoundation.com/giap/2011/09

<sup>/</sup>feticismo-della-merce-digitale-e-sfruttamento-nascosto-i-casi-amazon-e-apple/; retrieved 20 May 2016). The Italian original runs as follows (emphasis mine): "La questione non è se la rete produca liberazione o assoggettamento: produce sempre, e sin dall'inizio, entrambe le cose. E' la sua dialettica, un aspetto è sempre insieme all'altro. Perché la rete è la forma che prende oggi il capitalismo, e il capitalismo è in ogni momento contraddizione in processo. [...] La lotta allora dovrebbe essere questa: far leva sulla liberazione per combattere l'assoggettamento. [...] Ma questo si può fare solo smettendo di pensare alla tecnologia come forza autonoma e riconoscendo che è plasmata da rapporti di proprietà e produzione, e indirizzata da relazioni di potere e di classe. Se la tecnologia si imponesse prescindendo da tali rapporti semplicemente perché innovativa, la macchina a vapore sarebbe entrata in uso già nel I secolo a.C., quando Erone di Alessandria realizzò l'eolipila. Ma il modo di produzione antico

As soon as I read the conference program and noticed that our panel was scheduled to open the second day at 8.30 in the morning, I became worried. This is a time that most academics would consider deep night, and I feared the listeners would fall asleep immediately, for the abstract of the panel promised a series of paper on a seemingly very specialized topic: manuscript and print culture. Luckily, my fear gave soon way to great enthusiasm as the discussion after each paper became very lively, engrossing the public beyond my expectations. At the end of the day however, I was still wondering how people could have been so interested in what to me seemed a rather passé field of study. After all, in Western culture the dichotomy between manuscript culture and print culture had been introduced long time ago—to mention the *locus classicus*, already in 1620 Francis Bacon had pointed out the revolutionary influence of the printing press in his well-known aphorism.<sup>2</sup>

Luckily one of the contributors to this volume, Aleix Ruiz-Falqués, came to my help. He told me that to him it had been easy to structure his paper precisely because the aim of the panel was very clear. It was indeed clear (and surely bold too): to challenge the idea of a universal cultural revolution caused by the introduction of the printing press, starting from a re-evaluation of the theories presented in two very influential books, M. McLuhan's *The Gutenberg Galaxy: The Making of Typographic Man* (1962) and E. Eisenstein's *The Printing Press as an Agent of Change* (1979). The discussion triggered by these two studies is still very lively both in academia as well as among non-specialists (above all because we are witnessing in our lives the effect of another agent of change, the electronic medium). The panel addressed some seemingly harmless questions: is the paradigm of a print revolution universally valid? Can we speak of one uniform printing technology around the world or should we rather think of different "printing technologies"? And if the latter case is true, how did these technologies affect different cultural traditions? To my biggest surprise, what I had secretly considered too bold an aim struck the right chords. Maybe it was sheer luck, but I believe that there were deeper reasons. In fact, a few months later a workshop with the title *Printing as an Agent of* 

non aveva bisogno delle macchine, perché tutta la forza-lavoro necessaria era assicurata dagli schiavi, e nessuno poté o volle immaginarne un'applicazione concreta."

<sup>&</sup>lt;sup>2</sup> Francis Bacon, *Novum Organum*, Aphorism 129: "Again, it is well to observe the force and virtue and consequences of discoveries; and these are to be seen nowhere more conspicuously than in those three which were unknown to the ancients, and of which the origin, though recent, is obscure and inglorious; namely, printing, gunpowder, and the magnet. For these three have changed the whole face and state of things throughout the world; the first in literature, the second in warfare, the third in navigation; whence have followed innumerable changes; insomuch that no empire, no sect, no star seems to have exerted greater power and influence in human affairs than these mechanical discoveries."

Change in Tibet and Beyond was to be held at the University of Cambridge.<sup>3</sup> Why this widespread and renewed interest in Asian print culture? Surely there are many possible answers, but the first one that comes to my mind is very simple (maybe even simplistic): the first book ever printed was printed in Asia.<sup>4</sup> It seemed therefore inevitable that scholars of Asian studies would sooner or later start to coordinate their effort, investigating the impact of printing technology in Asia on a wider scale.

Although the studies by McLuhan and Eisenstein date back to more than thirty years ago, their approach still dominate the historiographical debate about the consequences of the introduction of the printing technology in Western societies and cultures. They dictate the agenda of the scholarly discussion to such an extent that sometimes it seems impossible to challenge the very notion of a printing revolution. Yet it is precisely the revolutionary character of printing that is questioned in A. Ruiz-Falqués' article, Notes on Printing Press and Pali Literature in Burma. In this short but incredibly rich article, the author addresses directly and indirectly a wide range of topics, often raising provocative questions—to which he provides equally provocative answers. The very simple observation that "it is generally accepted [...] that the invention of the printing press triggered a major cultural revolution in Europe" is taken as a starting point for a definition of revolution. Revolution is a phenomenon characterized by suddenness and progress: not only "revolution causes events to develop at higher speed," it also implies "a sudden break, a turning point." In the case of the printing press, the sudden possibility of producing an unprecedented quantity of books in much shorter time meant an increased dissemination of information. In the words of the author, quantity is transformed into quality—where quality might be interpreted as a synonym of Progress (capitalized by the author). Although mentioning dissemination (the very first aspect of the cultural change ushered by printing technology, according to E. Eisenstein), the author immediately shifts his focus to McLuhan's analysis of the qualitative changes caused in the human mind by the introduction of the typographical medium. A critique of several tenets of the Canadian thinker are introduced in a style that at times is (unavoidably) as idiosyncratic as McLuhans', mixing examples ranging from the Kabbalah, the use of "the symbolic force of [...] letters [...] in the opening title of the TV series *Breaking Bad*," to a stanza of the Sanskrit classical poem Meghadūta by Kālidāsa. The second part of the article is devoted to an historical excursus of print culture in Burma and accordingly is more "Eisensteinian" in character. It deals with other aspects of print culture as delineated by the American scholar, without however

\_

<sup>&</sup>lt;sup>3</sup> The proceedings of this workshop have been published in Diemberger, Ehrhard and Kornicki (2016).

<sup>&</sup>lt;sup>4</sup> The first printed book is represented either by the series of Japanese *Hyakumantō darani* commissioned by the Empress Shotoku between 764–770, or by the printed *dhāraṇī* discovered inside the Sokkat'ap stone pagoda of the Pulguksa temple in Kyongju in South Korea, traditionally dated before 751 CE; the evidence has been recently discussed by Kornicki (2012).

mentioning directly her works and theories. Although woodblock printing was probably known in Burma due to the intense relationships with China, the introduction of printing is traced back to the early 19th century, when the Baptist Missionary Press in Rangoon, led by George H. Hough, started its activity thanks to a printing press sent from the Indian printing house in Serampore. The diffusion of printing presses in the southern provinces of Burma "after the Second Anglo-Burmese War (1852), in the advent of British occupation of the southern provinces" coincided with an attempt at modernization of the northern kingdom of Mandalay by king Mindon. Notably, instead of introducing printing presses to foster Buddhism by means of distributing the Buddha's message in printed form, this king preferred to "sponsor a monumental edition of the Pali Tipitaka [...] in stone slabs in commemoration of the so-called 5<sup>th</sup> Theravada Buddhist Council." The last part of the paper is devoted to a description of the persistence of manuscript culture in Burma and its relationship with nationalism. Finally, the difficult life of printing in Burma is exemplified also by the diffusion of xerography for the production of photocopied "editions" of Pali Buddhist texts. King Mindon's choice of sponsoring an edition of the Buddhist canon in the form of inscriptions, the persistence of manuscript culture in the 19<sup>th</sup> century, and the use of photocopiers to produce new editions — these three episodes in the history of printing in Burma suffice to call into question the universal revolutionary character of printing.

The preference of printing technologies alternative to the printing press with movable types is not limited to Burma. Asian print cultures are indeed characterized by the use and diffusion of other printing technologies, for instance xylography and lithography. Michela Clemente's article is precisely devoted to some fundamental aspects of woodblock printing. In her insightful contribution she sheds light on the role of craftsmen in the early production of xylographs in the Mang yul Gung thang region of Tibet in the 15<sup>th</sup> and 16<sup>th</sup> century. In her introduction some of the issues central to Eisenstein's tenet of the revolutionary agency of print are tested against the backdrop of Tibetan book culture. Building on the observation of other scholars (Chow 2007; Chartier 2007), she reminds us that at least we ought to rethink our approach to print culture. The different nature of woodblock printing should not be used to discard it as irrelevant in a global history of print, as sometimes Western scholars have done. On the contrary, it was - and partly still is - a highly developed technique, which should arguably be put on the same level as movable-type printing. In Tibet (and I would argue elsewhere too), it fulfilled the same role movable-type printing had in Europe. In my opinion it is not by chance, as Clemente puts it, that "in Tibet, the xylographic technique had such a success since its introduction that it has been only recently superseded by movable type and digital technologies." The core of her article investigates the role of craftsmen and artists in the production

of xylographs in the Tibetan region of Mang yul Gung thang during the 16th century. Based on the preliminary work of two large projects, the analysis of a fairly large body of materials enabled Clemente not only to identify specific persons involved in different printing projects, but also to clarify important aspects of the production process of xylographs that might lead to the identification and assignment of prints to specific printing houses, even in the case of a lack of information in the colophon. The attempt at creating a template for the identification of xylographs brought to light a fundamental and fascinating issue. According to Clemente, "there are at least four distinctive features that may identify a Gung thang xylograph: front page, layout, orthographic peculiarities and woodcut representations." A fifth feature that was originally taken into consideration to identify the style of the edition was the ductus. This had to be excluded because "the variables that influence the writing style of a certain scribe (materials, writing and carving tools, carver's style, etc.) are too numerous and random to make it an element for identification." In this respect, another possibility has to be considered: even though scribe and carver were usually two different persons, yet in some cases they where one and the same person. One example is Vajradhvaja (fl. 1540-63), a scribe who was a carver as well. How is it then possible to recognize the difference between a book printed from a woodblock based on a manuscript by Vajradhvaja and carved by somebody else, and a book printed from a woodblock based on a manuscript by Vajradhvaja and then carved by himself? In other words, the interplay between the manuscript model used for carving the woodblocks and the final result in the form of the printed book creates a situation in which the clearcut division between manuscript and print is blurred.

Eva Wilden's contribution describes yet another case of fluid situation in which the interaction between oral tradition, manuscript culture, and printing technology contributes to the creation of a specific type of textual transmission that adds new layers of interpretation to the issue of the influence of media change on the shape of texts. In her paper she focuses on the transmission of the classical *Cańkam* and *Kilkkaṇakku* corpora of Tamil poems. Although the former corpus probably goes back "to oral predecessors from about two-thousand years ago, collected and presumably written down for the first time around the 6th or early 7th century," due to South Indian climate the "direct sources in the form of palm-leaf manuscripts dat[e] back only some three hundred years." South Asian manuscripts consists of bundles of loose palm leaves kept together by two wooden boards and a string passed through a hole punched in the middle of the leaves and the boards. Due to this type of binding the leaves can get mixed or lost very easily. A similar situation is vividly described at the outset of the article. When the great Tamil scholar U.V. Cāminātaiyar first examined the manuscripts of the *Cańkam* corpus, he "had never read, let alone learned any of the old texts, but he knew of their

existence from an old anonymous stanza he presumably learned from one of his teachers." The structure of these corpora is reconstructed precisely by means of orally transmitted mnemonic stanzas "in terse four-line Venpās" which "preserve essential information about the external and internal order of literary works, their contents, their authors or their commentaries." These floating stanzas are so important for the process of transmission and shaping of these corpora that in some cases not only "they alone preserve crucial bits of information that is not available elsewhere," but they were even made up anew, if traditional information was lost. In her contribution, Wilden examines in detail the transmission of these signature verses and mnemonic stanzas, describing their recent rediscovery and analyzing their numerous functions (for instance, organizing the corpus, structuring the content, and providing the name of authors or commentators). Surviving in the oral transmission, they almost disappeared in the manuscript tradition, to resurface completely in the 19th and 20th century, when the first editions of these corpora of poetry were printed. Incorporated into the prefaces of early editions, these stanzas underwent a process of fixation and "helped to reassemble and shape the corpora that today we know in print." Almost bypassing the manuscript transmission, the trajectory of these oral "satellite stanzas" is a very instructing example, reminding us how we ought to rethink the deterministic and progressive model orality — manuscript — print that still informs much of our thought about textual technologies.

The last article by Ann-Kathrin Bretfeld-Wolf deals with the emergence of print technology in Sri Lanka and the role it played in shaping modern Sri Lankan Buddhism, as exemplified by the case study of the textual transmission of the Mahāvaṃsa, a chronicle of the history of Sri Lanka. The first part of her contribution is devoted to a description of the reception of this work in the European scholarly tradition, followed by a brief examination of the interaction of oral and manuscript transmission of Buddhist texts in pre-modern Sri Lankan Buddhist culture and society. Since the publication of the English translation of the Mahāvaṃsa by George Turnour in 1837, Western scholars have considered this work mainly as a historical source for the reconstruction of Sri Lanka's past, thus examining it from the point of view of its reliability as a historical source. Only recently Western scholars studying the vamsa literature have shifted their interest to other functions of such works, for instance their role in shaping national identity. According to the author, apart from these two, a third type of exegesis of the vamsa literature "centres around the social practice connected to the vamsa literature." This reception and analysis take into consideration the role of orality in the fruition of texts transmitted primarily in manuscript form, such as the dictation to scribes and the widespread ritual recitation. The Mahāvamsa was very popular not only in Sri Lanka, but throughout South-East Asia, serving "as a model and reference text for the composition of autochthonous texts in Sri Lanka and Southeast Asia." Manuscripts of the *Mahāvaṃsa* partook of the ritual aspect of Buddhist book cult, a fact reflected in their various constitutive elements, both physical as well as textual. The status of the *Mahāvaṃsa* changed with the advent of printing in Sri Lanka in the second half of 19<sup>th</sup> century. Although printing had been introduced by the Dutch in Sri Lanka as early as 1736, until the mid-19<sup>th</sup> century it remained an activity confined to the monopoly of colonial powers (first the Dutch, then the British). The author traces the emergence of printing houses run by Sinhalese to the so-called Buddhist Revival Movement in the early 1860s, highlighting the role of printing activities as a means for the diffusion of short anti-Christian texts and pamphlets. The introduction of printing technology marked a change in the textual practices of Sri Lankan Buddhists, giving "rise to creative tension between new and traditional forms of religious learning and engagement, which quite quickly shaped a new form of Buddhism [...] Printing marked a new period in which Buddhist self-confidence and identity grew stronger amidst a British-dominated environment." This tension resulted also in a shift of the reception of the *Mahāvaṃsa*: from being a text strongly rooted in the dimension of religious practice, it quickly became a fundamental historical source for a Buddhist nationalistic discourse.

The geographical area covered by the articles presented here ranges from Tibet to Burma, and further south to Tamil Nadu and Sri Lanka. In her seminal study, Eisenstein narrowed down the scope of her analysis to Western Europe, explicitly stating that

The term "print culture" is used throughout this book in a special parochial Western sense: to refer to post-Gutenberg developments in the West while setting aside its possible relevance to pre-Gutenberg developments in Asia. (Eisenstein 2005: xviii)<sup>5</sup>

We cannot possibly expect that one single scholar could study and assess the impact of print in the whole Eurasian continent. Yet the changes in Western culture triggered by the introduction of printing are considered almost universal — and to a certain extent inevitable, as if they would happen in every historical moment and in each culture in which printing is introduced. In this respect, it is important to notice that Eisenstein does not provide a clear-cut definition of printing, a fact that is bound to yield important consequences in subsequent scholarly studies of the impact of print culture. The following passage, added to the abridged version, comes close enough to a definition — although not a definitive one:

<sup>&</sup>lt;sup>5</sup> See also Eisenstein (1979: 9, fn. 18).

We will take the term "printing" to serve simply as a convenient label, as a shorthand way of referring to a cluster of innovations (entailing the use of movable metal type, oilbased ink, wooden handpress, and so forth). (Eisenstein 2005: 14)

If we follow this definition of printing, then we ought to exclude xylography and lithography from the study of what Eisenstein labels the "pre-Gutenberg developments in Asia." The dismissive attitude of Western historians of the book towards xylography has been recently discussed by K.-W. Chow, who stressed that usually it is not considered a full-fledged printing technique, but rather "a primitive and inferior method of reproducing text, incapable of producing large editions." This was certainly not the case, for in reality it is possible to produce large numbers of books by means of xylography (as witnessed by large printing project such as the printing of the Buddhist canon in Chinese, Tibetan, and Uyghur). Is this dismissive attitude the result of a certain type of "evolutionary historiography," in which we might be tempted to see an indirect attempt to establish a technological advantage of European culture over Asian cultures? In fact, this evolutionary — and in the case of printing, "revolutionary" — historiographical approach has been criticized also in relation to the analysis of the impact of printing technology in Europe. The nature of what ought to be considered printing and its role in shaping modern European culture has been discussed by many scholars. It is impossible to provide here a full account even only of the major contributions in this field. I believe though that the discussion sparked between Elisabeth Eisenstein and Adrian Johns in The American Historical Review in the early 2000s is emblematic of the research directions taken by scholars of print culture (Eisenstein 2002 and Johns 2002). Stripped to its bare essence, this dialogue is an attempt to answer the following question: is history conditioned by print, or print by history? The articles presented here are very helpful in our quest for an answer. While reading the four articles, the first and almost obvious — observation that comes to mind is that printing was introduced in South and South-East Asia only after the contact with colonial powers, while in the Tibetan cultural area xylography was a widespread technology already before the 15th century. The case of Burma is striking, for the contact with China (where xylography was well established) did not result in the adoption of this type of printing technology. What do Burma, Sri Lanka, and Tamil Nadu have in common? In what do they differ from Tibet? Setting aside for a moment the role of the colonial powers, it is noteworthy that the main writing material for manuscripts traditionally used in these

<sup>&</sup>lt;sup>6</sup> Chow (2007: 172); in her insightful article, Chow (2007: 171-180) discusses at length the evaluation of the role of xylography in book history proposed by historians of the Western book.

Or, in Johns' words, should we focus on the history of print culture or on the cultural history of print? (Johns 2002: 116).

three cultural areas is palm-leaf, while in Tibet (like in China, Central Asia, and Japan) paper was adopted relatively early as the main writing material for a wide range of purposes. It could be a mere coincidence, or maybe there was indeed a sort of "palm-leaf line" dividing the Asian continent into two areas. In the first one the use of paper permitted the rapid diffusion of printing, while in the second one the availability of large quantities of palm-leaf, a material unsuitable for hand-press printing, delayed the introduction of this technology. Other factors surely played a role in favoring the continuity of manuscript culture.8 As exemplified in the quote at the beginning of this introduction, technology does not come into existence in the void, it is part of a complex interplay of human power relations. It is influenced by the historical and social conditions in which it exists as much as it influences them. This assertion is corroborated by the role of printing in Burma and Sri Lanka as described in the articles published here. In the case of Sri Lanka, the diffusion of printing in 19<sup>th</sup> century was linked to the Buddhist Revival Movement, while in Burma a political and social program of reform to usher modernization in the northern kingdom of Mandalay linked the fostering of Buddhism to the production of a new edition of the canon in the form of a series of inscriptions. A stark persistence of manuscript culture is witnessed also in the case of the transmission of the Cankam corpus of Tamil poetry. In this case we even see a direct interaction with the oral tradition in the form of mnemonic stanzas, which helped shaping the printed editions of the corpus but were almost lost in the manuscript transmission.

In the light of these remarks, it is evident not only that the evolutionary model orality-manuscript-print is not tenable anymore on many levels, but also that printing had a different (and not always revolutionary) impact on different cultures. As pointed out by T. Ballantyne, "the 'European' and 'non-European' histories of the book and print culture need to be brought more firmly into dialogue" (Ballantyne 2007: 352). It seems to me that if we widen our perspective to non-European cultures, the answer to the question whether history is conditioned by print, or print by history, must be clearly answered in favor of the latter.

## References

Alcorn Baron, Sabrina, Eric N. Lindquist, and Eleanor F. Shevlin, eds. 2007. *Agent of Change: Print Culture Studies after Elizabeth L. Eisenstein.* University of Massachusetts Press.

Ballantyne, Tony. 2007. "What Difference Does Colonialism Make? Reassessing Print and Social Change in an Age of Global Imperialism." In Agent of Change: Print Culture Studies after Elizabeth L. Eisen-

<sup>8</sup> A discussion of some possible factors for the late diffusion of print in South Asia is found in Formigatti (2016: 110-18).

- *stein*, edited by Sabrina Alcorn Baron, Eric N. Lindquist, and Eleanor F. Shevlin, 342-52. University of Massachusetts Press.
- Chartier, Roger. 2007. "The Printing Revolution: A Reappraisal." In *Agent of Change: Print Culture Studies after Elizabeth L. Eisenstein*, edited by Sabrina Alcorn Baron, Eric N. Lindquist, and Eleanor F. Shevlin, 397-408. University of Massachusetts Press.
- Chow, Kai-wing. 2007. "Reinventing Gutenberg: Woodblock and Movable-Type Printing in Europe and China." In *Agent of Change: Print Culture Studies after Elizabeth L. Eisenstein*, edited by Sabrina Alcorn Baron, Eric N. Lindquist, and Eleanor F. Shevlin, 169-92. University of Massachusetts Press.
- Diemberger, Hildegard, Franz-Karl Ehrhard, and Peter Kornicki, eds. 2016. *Tibetan Printing: Comparison, Continuities, and Change.* Leiden–Boston: Brill. doi: 10.1163/9789004316256, http://booksandjournals.brillonline.com/content/books/9789004316256
- Eisenstein, Elizabeth L. 1979. The Printing Press as an Agent of Change: Communications and Cultural Transformations in Early-Modern Europe. Cambridge: Cambridge University Press.
- Eisenstein, Elizabeth L. 2002. "An Unacknowledged Revolution Revisited." *The American Historical Review* 107.1: 87-105.
- Eisenstein, Elizabeth L. 2005. *The Printing Revolution in Early Modern Europe* (2nd ed.). Cambridge: Cambridge University Press.
- Formigatti, Camillo. 2016. "A Forgotten Chapter in South Asian Book History? A Bird's Eye View of Sanskrit Print Culture." In *Tibetan Printing: Comparison, Continuities, and Change*, edited by Hildegard Diemberger, Franz-Karl Ehrhard, and Peter Kornicki, 72-134. Leiden–Boston: Brill.
- Johns, Adrian. 2002. "How to Acknowledge a Revolution." *The American Historical Review* 107.1: 106-25.
- Kornicki, Peter. 2012. "The Hyakumantō darani and the Origins of Printing in Eighth-Century Japan." *International Journal of Asian Studies* 9.1: 43-70.

Camillo Formigatti studied Indology and Sanskrit as a secondary when he was studying Classics at the "Università Statale" in Milan. After that he spent ten years in Germany, learning Tibetan and textual criticism in Marburg and manuscript studies in Hamburg. From 2008 to 2011, he worked as a research associate in the project In the Margins of the Text: Annotated Manuscripts from Northern India and Nepal, in the research group Manuskriptkulturen in Asien und Afrika, funded by the Deutsche Forschungsgemeinschaft. He worked in the Sanskrit Manuscripts Project at the University of Cambridge from 2011 to 2014. Currently he is the John Clay Sanskrit Librarian at the Bodleian Library in Oxford.