On a Particular Aspect of the Identification of Tibetan Xylographs: Preliminary Remarks on the Importance of Craftsmen¹

Michela Clemente

This essay briefly discusses the early history of Tibetan printing by comparing some facets of this subject with the European phenomenon. Printing started to be a means of dissemination of texts in Tibet and Europe at roughly the same time. Recent research indicates that although printing in Tibet does not seem to have had the kind of socially transformative effects highlighted in Elisabeth Eisenstein's study, it did have some important consequences and also similarities with the European printing history. This article also presents a Marie Sklodowska Curie project on Tibetan xylographs entitled Tibetan Book Evolution and Technology (TiBET), which was carried out at the University of Cambridge (Mongolia and Inner Asia Studies Unit) from 2013 to 2015. This paper focuses in particular on one of the aspects of the above-mentioned project, that is to say, the craftsmen who worked on sixteenth century xylographs and their importance for the identification of Tibetan prints. These artists were allowed to sign their work, a peculiarity that was typical of the earliest stage of printing and is extremely relevant for locating the printing house where a certain xylograph was produced. By comparing the different signatures and patterns of carving, writing or drawing, we might learn to distinguish the diverse style of each artist. This would help us in identifying those who worked on xylographs that lack signatures and do not mention them in colophons. From these prints we can also extract information about the craftsmen and the printing projects with which they were associated.

¹ I would like to thank all colleagues and friends who helped me in different ways over the years: first of all my former Professor, Elena De Rossi Filibeck, for introducing me to this subject and for passing the initial idea of the TiBET project on to me; Dr. Hildegard Diemberger for giving me the opportunity of collaborating in the AHRC project and for helping me with the TiBET project; Professor Franz-Karl Ehrhard, Gene Smith, Libby Peachey, Katie Boyle, Burkhard Quessel, Terry Chilvers, Filippo Lunardo, Camillo Formigatti, Agnieszka Helman-Ważny, Jeff Wallman, Paola Ricciardi, Mark Elliott, Rachel Hand, Alessandro Boesi, Bruce Huett, Charles Ramble, Fabio Miarelli, Christopher Kaplonski and Daniel Starling for their help with different aspects of the TiBET project; the late Professor Gherardo Gnoli, former President of IsIAO, and Dr. Francesco D'Arelli, former director of the IsIAO Library; the late Dr. Albrecht Hanisch, the Acting Director of the Nepal Research Centre in 2011, Mr. Nam Raj Gurung, the manager, the staff of the Centre, Dr. Michael Pahlke, Punya Parajuli and the staff at the National Archives for their precious help during my stay in Kathmandu; the organisers of this conference, and Mary-Elisabeth Cox for revising this essay.

1. Introduction

This essay has the twofold aim of briefly discussing the history of Tibetan printing by comparing some facets of this subject with the European phenomenon, and presenting a Marie Sklodowska Curie project on Tibetan xylographs, which was carried out at the University of Cambridge from 2013 to 2015. This paper will focus in particular on one aspect of the project, that is to say, the craftsmen who worked on sixteenth century xylographs and their importance for the identification of Tibetan prints.² This paper does not claim to be exhaustive. It is instead an attempt to pinpoint some aspects of this subject which need to be investigated with future research.

I started to work on printing in 2005 when I was preparing my PhD dissertation, mainly focusing on Mang yul Gung thang xylographs.³ At that time I noticed some distinctive features and started to think about identifying them in a template. In 2010 I became involved, along with Hildegard Diemberger (University of Cambridge) and Franz-Karl Ehrhard (Ludwig-Maximilians University, Munich), in a collaborative project entitled "Transforming Technology and Buddhist Book Culture: The Introduction of Printing and Digital Text Reproduction in Tibetan Societies," organised by the University of Cambridge in cooperation with the British Library.⁴ Aim of this project was to achieve an understanding of the book, not only as text, but also as material culture in the context of Tibetan Buddhism by analysing the factors that promoted printing and its impact on Tibetan society and culture.

At the end of 2011 I was invited to Kathmandu in order to identify and examine the original Gung thang xylographs kept at the National Archives. I was also able to have a look at many books that, over some years, had been microfilmed by the Nepal German Manuscript Preservation Project (NGMPP).⁵ At that time I noticed further minor peculiar characteristics; each xylograph from a printing house located in that area seemed indeed to have its own slight distinctive features. Through

² When I talk about printing in Tibet, I refer to texts produced with the xylographic technique. On the origins of woodblock printing, see Brokaw and Kornicki (2013: xvii-xix). On Tibetan early prints, great printing projects, xylographic procedure and materials, see Clemente (2007); Clemente (2011); Clemente (2014a); Clemente (2016a); Clemente (2016b); Dagyab (1977: 44-46, 58-59); Diemberger (2007: 107-09); Diemberger (2012); Diemberger (2016b); Diemberger and Clemente (2013); Diemberger and Clemente (2014); Ehrhard (2000a); Ehrhard (2010); Ehrhard (2012); Eimer (2010); Eimer (2016); Eimer and Tsering (1990); Jackson (1989); Jackson and Jackson (1986); Schaeffer (2011); Sernesi (2011); Sernesi (2013).

³ Mang yul Gung thang is a small kingdom located in South Western Tibet. In the 16th century this kingdom became a very important centre for the production of Buddhist xylographs. On this subject, see in particular Ehrhard (2000a). For the history of this kingdom, see Everding (2000).

⁴ This project was funded by the British Art and Humanities Research Council (AHRC, 2010-2015) and led by Dr. Uradyn Bulag (MIASU).

 $^{^{\}scriptscriptstyle 5}$ This travel was granted by the AHRC project.

an analysis of the numerous extant Gung thang xylographs collected by the above-mentioned project it seems possible therefore to identify their origin; that is to say, the printing house where each of them was printed, or the network of artists associated with a certain printing house, or a specific project to narrow the research.

This is the reason why I carried out a correlated project entitled "Tibetan Book Evolution and Technology" (TiBET), a Marie Sklodowska Curie Fellowship supported by the European Union and hosted by the University of Cambridge (May 2013-2015). One of the aims of this project was to identify the provenance of early Tibetan prints on the basis of peculiar stylistic features and a study of colophons supported by material analyses.⁶ I examined the fifteenth and sixteenth century xylographs from Mang yul Gung thang and Southern La stod (La stod lHo). Texts come from various libraries in the UK (Cambridge University Library, the British Library, the Bodleian Library and the World Museum of Liverpool),⁷ several libraries in Tibet,⁸ the National Archives of Kathmandu (Nepal) and the Tucci Tibetan Collection of the IsIAO Library in Rome (Italy).⁹ These works are now hosted at the Mongolia and Inner Asia Studies Unit (MIASU, Cambridge) in digital forms and are available on the database of both the above-mentioned projects.¹⁰ We collected about two hundred texts, including reprints and different editions. These xylographs are being studied according to codicological standards and in co-operation with experts from different disciplines. By examining

⁶ On this project, see also Clemente (2016a, 2016b).

⁷ The images of these texts have been collected thanks to a previous AHRC project, "Tibetan and Mongolian Rare Books and Manuscripts", led by Professor Stephen Hugh-Jones (MIASU, University of Cambridge).

⁸ The images of these texts have been obtained thanks to a collaboration between the University of Cambridge and the dPal brtsegs Research Institute in Lhasa, to which we are particularly grateful. Without the help of the dPal brtsegs staff, it would have been impossible to access these sources. These texts are now available in two CDs attached to a book published by the dPal brtsegs Research Institute. See PT 2013.

⁹ The images of these texts have been produced by Laura and Claudia Primangeli (L&C Service) thanks to an agreement between IsIAO and the University of Cambridge within the above-mentioned AHRC project (2010-2015). The images of these texts are particularly precious, since the Institution was closed in 2011 and all works of the Tucci Tibetan Collection are no longer accessible.

¹⁰ A database with a detailed description of these texts, transliteration and mark-up of colophons and entire biographies, entries of personal and place names, information on paper and pigments, if available, has been built by both the abovementioned projects and is available at: http://booksdb.socanth.cam.ac.uk:8080/exist/apps/TTBBC/index.html, and is also accessible from the website of the TiBET Project: http://www.tbevoltech.socanth.cam.ac.uk/database/

The description of each text is linked to its images. The database enables scholars to cross check information extracted by studying early prints from those areas. A map of printing houses located in Mang yul Gung thang and neighbouring areas is available on the websites of both projects. The database is also linked to TBRC and will supplement it with entries of people and places that are not currently available there. The website of the TiBET project is available at: www.tbevoltech.socanth.cam.ac.uk. For a condensed version of the database, see Clemente (in press).

them from several standpoints the project detected characteristic stylistic features to identify the various printing houses located in the Mang yul Gung thang kindgom and the neighbouring areas, especially Southern La stod, and the network of artists who worked in those places.

Over the years these two kingdoms became important centres for the printing of Buddhist texts thanks to the support of their rulers. As underscored by Franz-Karl Ehrhard, the xylographs printed in the Mang yul Gung thang kingdom in the fifteenth and sixteenth centuries played a significant role in spreading the tradition of these Buddhist works.¹¹ The same occurred in Southern La stod, which was a center for calligraphers and scribes from at least the fifteenth century (Ehrhard 2000a: 13).

Important printing projects were undertaken in Tibet starting from the fifteenth century, which was a flourishing period for arts and culture throughout the country (Reynolds 1999: 23). As underlined by Hildegard Diemberger, "the sponsorship of important Buddhist leaders was not only meritorious but also a means to assert political power" (2007: 32). This was particularly relevant at that time when, after the collapse of the Yuan Dynasty (1280-1368), numerous Tibetan local noble families had emerged and were fighting to gain more power and territories. On the other hand, the promoters of printing projects were important religious masters who wished not only to preserve and spread Buddha's teachings, but also to increase the prestige of a given lineage by printing the works of that school's renowned *bla mas*. Turning a profit was therefore not the aim of these enterprises.

According to Elizabeth L. Eisenstein, the situation in Europe after Gutenberg's invention was slightly different:¹² "It seems more accurate to describe many publishers as being *both* businessmen *and* literary dispensers of glory. They served men of letters not only by providing traditional forms of patronage but also by acting as press agents and as cultural impresarios of a new kind. [...] The printer

¹¹ See for example the history of the *Padma thang yig*, the *rGyud bzhi* (Ehrhard 2000a, 14-15) and the *Maņi bka' 'bum*, in particular Clemente (2014b, 2016a: 401-402), Ehrhard (2000c, 2013).

¹² The comparison between the effects of printing in the Tibetan and European societies might be weird at first sight since I am referring to two different techniques for printing, that is to say, the xylographic procedure for Tibet and movable type for Europe. The reason behind such a comparison is the strong impact that printing had on both societies, although they employed different methods. 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. Actually, there is often a direct transfer from xylography to digital technologies. As for xylography in Europe, Chow underlines the fact that this technique "has been ignored by narratives of the history of Western printing. In most standard histories of western European printing, the advent of print is fixed at the point when Gutenberg printed a Bible with movable type no later than 1456. While all scholars of the book know that woodblock printing was used in Europe several decades before 1456, few regard what have been called 'block books' as the ancestor of the Gutenberg Bible" (2007: 171). He also states that contrasting 'xylography' with 'the printed book' means to disregard the former as a true printing method.

could take satisfaction in serving humanity at large even while enhancing the reputation of authors and making money for himself" (1979: 23). Also regarding literacy, things were different in Europe and Tibet: "[...] the advent of printing did encourage the spread of literacy even while changing the way written texts were handled by already literate élites" (Eisenstein 1979: xiii). Concerning the situation in Tibet, Hildegard Diemberger pointed out that the xylographic technique "facilitated access to textual resources, promoted the circulation of standard works, and contributed to the creation of shared standards and editing criteria. Although the spread of literacy remained limited, printing ultimately reshaped the relationship to knowledge in terms of access and control, informing subsequent historical developments, including the rise of clerical power" (2007: 16).

Although the dissemination of the xylographic technique in Tibet had a significant-but still unrecognised – impact in the country, it did not stop the production of manuscripts, although this latter declined, and even froze at times. According to Roger Chartier, the same occurred in Europe: "it is now recognized that printing, at least for the first four centuries of its existence, did not lead to the disappearance of handwritten communication or manuscript publication" (2007: 398). The reasons adduced by Chartier are the following: "[...] writing was cheaper than printing; handwritten texts eluded censorship more easily than printed ones; circulation could be restricted to an elite audience; and manuscript as a medium was more malleable in allowing additions and revisions" (2007: 398). The first and last reasons adduced by Chartier are also valid for Tibet. As for the circulation, it has already been mentioned that one of the aims of undertaking big printing projects in Tibet was the spread of texts, but the restriction of certain works to a specific audience was also embraced. This is true for some of the highest Tantras, which seem not to have been produced by these enterprises. The limited literacy of Tibetans did not restrict the diffusion of most genres of printed works to a minor part of the population. Tibetans indeed used to take paper to monasteries and/or printing houses and ask for a copy of a given text. Since Buddhist books are considered as Buddha's relics, people certainly used to worship them, but they also asked religious masters to visit their houses and read the books to them.¹³ Therefore, even though literacy remained limited, the spread of printing appears to have had an impact on the life of lay people as well, by providing an easier access to sources for their spiritual existence.¹⁴ Nevertheless, as noticed by Hildegard Diemberger: "Il reste cependant nécessaire d'approfondir les recherches concernant la circulation réelle des livres imprimés afin de déterminer à quel point la nouvelle accessibilité de ces ouvrages a effectivement élargi leur lectorat" (2012: 32).

¹³ On this subject, see for example Diemberger (2016a: 297-298).

¹⁴ For further considerations on the impact of the xylographic technique in Tibet, see Clemente (2016a: 402-405).

As Chow underscored: "the role of woodblock printing as an object of study has been greatly depreciated in the history of European printing. Historians often mention block printing as a crude method promptly replaced by the more sophisticated Gutenberg printing" (2007: 175). This view of woodblock printing as an obsolete, unrefined and slow technology would totally change by looking at some of the lavish beautifully illustrated Tibetan xylographs and by watching Tibetans producing them. You cannot imagine how fast the operation managed by well-trained people is. Also, this technique allows for a flexible demand in market: it is possible to print a rather small number of copies and, once a stock runs out, it is easy to pull out the stored blocks and reprint the text without having to waste labour and time on re-composition (Brokaw and Kornicki 2013: xix; Diemberger 2012: 33).

We know that in the fifteenth century printing houses mushroomed in different places of Tibet within a few decades and that in the sixteenth century they were everywhere. Nevertheless, scholars researching this field tend to think about fifteenth and sixteenth century Tibetan printing as a small scale operation. The scanty number of extant prints that have been discovered so far would seem to support this view, but references to big projects, schools of calligraphy and printing, worn out blocks, circulation of prints, reading practices, the emergence of certain works as classics, transformations elicited by the production of xylographs and so on seem to indicate a wider phenomenon. Also, it is worth considering that most of the original works have either not survived, or have not surfaced as yet; however, many of them are now beginning to appear, therefore some years hence the situation might be very different. Furthermore, the number of printing houses, the extensive support and the wide network of patronage that printing projects required are not compatible with the production of few copies. If we think about all these factors, we cannot really support the theory that Tibetan printing in the fifteenth and sixteenth centuries was a small scale operation.

2. Woodcut Representations in Mang yul Gung thang Xylographs and the Relevance of Craftsmen

The creation of a template for the identification of Tibetan xylographs requires the examination of texts from different viewpoints, such as materials analysis, the style of the edition, book cover typology (if present) and the study of the colophon. Since these points have already been explored in detail in two previous articles (Clemente 2011, 2016b), I will confine myself here to a discussion on one of the aspects of the style of editions. Generally speaking, there are at least four distinctive features that may identify a Gung thang xylograph: front page, layout, orthographic peculiarities and woodcut

representations.¹⁵ The style of the edition has also another element that, at first, was taken into consideration as one of the possible distinctive features, that is to say the *ductus*. However, after a deeper examination, I decided to exclud it from facets that may help identifying the provenance of a print. 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.¹⁶ Here I will make some preliminary remarks on the last feature, focusing especially on the relevance of the craftsmen who worked on them.¹⁷

According to Chow, woodblock printing has been treated by European historians only as an art or craft, whereas movable-type is regarded as a technology (2007: 176). I certainly agree with Chow that woodblock printing was a technology but it was also an art. Illustrations on Mang yul Gung thang xylographs are usually depicted on the first and last pages (*le lha'i ri mo*). They represent pictures of renowned religious masters and deities and may either be coloured or black and white. Usually, the first — and sometimes the second — folio carry images of religious masters, often associated with the school to which the text belongs or else with the author's lineage. Deities — also connected to the school or author's lineage — are depicted at the end of texts.

Usually, at least two artists were involved in the creation of these illustrations. The first — the painter (*le lha'i rig byed*) — drew the picture; the second — the carver (*le lha'i rkos byed*) — carved it. Most artists who used to work on these illustrations — but also other craftsmen involved in printing projects — were called *mkhas pa*, which literally means "expert, specialist." This term was used in the western part of the gTsang region (Jackson 1996: 138, n. 302). These artists were allowed to sign their work, a peculiarity that was typical of the earliest stage of printing (Ehrhard 2000a: 69, 75; Eimer 1996: 12) and is extremely relevant for the identification of xylographs. By comparing the different signatures and patterns of carving, writing or drawing, we might indeed learn to distinguish the diverse style of each artist. This would help us in identifying those who worked on xylographs that lack signatures and do not mention them in colophons. The fact that artists involved in printing projects could sign their work indicates their high status, since this was not usually the case for craftsmen who worked on *thangkas*, wall paintings, statues, book covers, and so on. Moreover, the signature was also an effective method to quantify their work in order to pay them (Ehrhard 2000a:

¹⁵ On these features, see Clemente (2016b).

¹⁶ On this subject, see Clemente (forthcoming); Boesi and Helman-Ważny (forthcoming).

¹⁷ Detailed information on these craftsmen are available in the database of the above-mentioned projects. On this subject, see also Clemente (2016b) and Clemente and Lunardo (in press).

69). This is especially true for carvers, since a big printing project required a number of them;¹⁸ indeed a carver could take from seven to ten days to complete an average size woodblock (Richardson and Snellgrove 1998, 229). From the signatures in one of the Gung thang texts, for example, we know that eleven carvers were involved in that production. I am referring to "The [Auto]biography and Spiritual Songs of *rJe btsun 'ba' ra ba* rGyal mtshan dpal bzang (1310-1391)",¹⁹ printed by Nam mkha' rdo rje (1480-1553)²⁰ at rDzong dkar (the capital of Gung thang) in 1540-41. The carvers mentioned in the xylographs are:²¹ mkhas pa bSod nams bkra shis, *dge bshes* mKha' 'gro, *dge sbyong* Nam mkha,' *dge sbyong* mGon ne, *dge sbyor* Nam me, *dge bshes* Tshe 'phel, *dge bshes* Ma gcig, *dge bshes* mGon dbang, Sher rgyal, *bcu dpon* rDo rje rgyal mtshan, Ba dzra dho ja (Vajradhvaja).²²

In another text, printed in 1555 at Brag dkar rta so, there are the signatures of ten carvers.²³ Most of them also worked on the above mentioned 1540 rDzong dkar print. The supervisor of the project was again Nam mkha' rdo rje. This underlines the fact that most masters used to employ the

 $^{\rm 20}$ On this master, see Ehrhard (2000a: 51-66).

 $^{^{18}}$ I also found the signature of the carver of one illustration included in its caption. This is the only one that I have discovered so far. The caption under the image on the left is not entirely readable due to a damage of the folio. The name of the illustrated master is unreadable, but the second part of the caption says: *rdor rgyal rkos* / (Cf. NGMPP L66/5: f. 1b). This signature refers to *bcu dpon* rDo rje rgyal. On this artist, see n. 40.

¹⁹ *rJe* btsun 'ba' ra pa rgyal mtshan dpal bzang po'i rnam thar mgur 'bum dang bcas pa. An original xylograph of this work is kept in the Tucci Tibetan Collection of the IsIAO Library in Rome (vol. 671/1). For its cataloguing, see De Rossi Filibeck (2003: 335). On the printing of this work, see Ehrhard 2000a, 45, n. 38, 61-63. A copy of this work is also available in the CD of the dPal brtsegs book. See PT 2013 (text no. 21). Microfilms of this work are kept at the National Archives of Kathmandu (NGMPP L195/9, L535/5) but are different editions. Further copies seem also available there, but I was not able to check them.

²¹ Carver's signatures: f. 10b: 'di yan le lha stod kyi cha / mkhas pa bsod nams bkra shis rkos //; f. 20b: 'di yan bcu phra<g> gcig bcu dpon rdo rje rgyan rkos //; f. 30b: 'di yan bcu phra<g> gcig / dge slong mkha' 'gros rkos //; f. 40b: 'di yan bcu phra<g> gcig / dge sbyong na<m> mkhas rkos //; f. 44b: 'di yan bzhi mgo<n> nes rkos //; f. 60b: na<m> me lags //; f. 70b: 'di yan bcu phra<g> gcig / dge bshes tshe 'phel rkos //; f. 90b: 'di yan bcu phra<g> gcig / dge sbyong na<m> mkhas rkos //; f. 100b: 'di yan bcu phra<g> gcig / dge bshes ma gcig rkos //; f. 110b: 'di yan bcu phra<g> gcig / dge bshes mgon dbang rkos //; f. 120b: bcu phra<g> gcig / sher rgyal rkos //; f. 130b: 'di yan bcu rdo rgyal rkos //; f. 140b: 'di yan bcu na<m> mes rkos //; f. 150b: 'di yan bcu phra<g> gcig / dge <bsh>es tshe 'phel rkos //; f. 160b: 'di yan bcu phra<g> gcig / dge bshes mgon dbang rkos //; f. 150b: 'di yan bcu phra<g> gcig / dge <bsh>es tshe 'phel rkos //; f. 160b: 'di yan bcu phra<g> gcig / dge bshes mka' 'gros rkos //; f. 150b: 'di yan bcu phra<g> gcig / dge <bsh>es tshe 'phel rkos //; f. 160b: 'di yan bcu phrag gcig / dge bshes mkha' 'gros rkos //; f. 168b: badzra dhwo jas rkos //; f. 170b: 'di yan bcu phra<g> gcig / dge sbyong mgo<n> nes rkos //; f. 180b: 'di yan bcu phrag gcig / dge slong mkha' '>gros rkos //

²² Information on the above-mentioned artists are available in the appendix of this essay.

²³ f. 9b: 'di yan bzhi mgon rgyal rkos /; f. 12b: gsum mgon dbang rkos /; f. 15b: gsum padmas rkos /; f. 18b: 'di yan gsum mgon rdor pos rkos //; f. 21b: 'di yan gsum dge 'dun rkos //; f. 24b: 'di yan gsum mkha' 'gros rkos //; f. 27b: 'di yan gsum mgon pos rkos //; f. 30b: 'di yan gsum mgon nes rkos //; f. 33b: 'di yan gsum mgon rdor dang gis rkos //; f. 36b: 'di yan gsum 'phrin las rkos //; f. 39b: dpal 'byor //; f. 43b: 'di gnyis dge 'dun //; f. 45b: 'di yan gnyis mgon po //; f. 51b: gnyis mgon rdor + //; f. 53b: gnyis mgon dbang /; f. 55b: 'di yan gnyis mgon rdor dang /; f. 67b: dge 'dun //; f. 68b: mgon po /; f. 69b: mgon nes rkos /; f. 70b: 'phrin las /; f. 74b: illegible; f. 136b: lnga dge mdun /; f. 141b: lnga dpal 'byor rkos //; f. 146a: lnga +++ rkos /; f. 151a: 'di yan lnga 'phrin las skos /; f. 169b: mgon pos rkos /See NGMPP L10/22.

same craftsmen in all their projects.²⁴ Furthermore, according to David and Janice Jackson, "[i]n the remote villages and nomadic regions the artisan often went to the dwellings or encampments of his patrons and customers. There he would stay for as long as his services were needed, and then move on. But in all settlements in Tibet, large and small, there was a continuous demand for the various specialized skills and crafts that supported the traditional way of life" (1988: 6). This statement also supports the fact that most craftsmen used to work with the same supervisor in many of his projects, moving around when it was necessary.

From the titles of artists, we understand that several of them were monks (*dge slong*, *dge sbyong*, *dge bshes*, etc.), but we also find some local officers (*bcu dpon*, *dpon chen*, *dmag dpon*, etc.). This might imply that these craftsmen attended the courses at schools of calligraphy and printing after having started their careers as monks or officers. It is possible that during and after the specialisation, they also carried on their first job while practising their new activity. Then, they probably switched job since most of them seem to have been involved with several printing projects. It might be possible that some of the local officers who later became scribes had acted as scriveners of letters before attending the school of calligraphy and printing. It is possible to find different titles that refer to the same person. For example, I found *dge slong* and *dge bshes* associated with the same artist in different texts, but sometimes this also happens within the same work. At first I thought they referred to two different people, but now tend to think that they actually refer to the same person. This also occurs with personal names that can be written in two or three different ways within the same text.

As mentioned above, artists involved in sixteenth century printing projects usually specialised in one particular task, that is to say, carving of woodblocks, carving of woodcut representations or drawing of illustrations or calligraphy. Tim Barrett (2016: 560) reports that a few scholars in Chinese studies attributed the rise of the medical profession based on published, standardised medical classics to the introduction and spread of printing. We might argue that in Tibet this innovation also increased some professions — such as carvers, painters and scribes — in number and quality. If we think about the establishment of schools of calligraphy and printing in the fifteenth century, we might say that this was prompted by the introduction of printing in the country and the consequent increase in the demand for people expert in these arts. At the beginning, promoters of the project might have employed common engravers who used to work on buildings (monasteries, temples, etc.), furniture, statues or book covers, but with the multiplication of printing projects they probably felt the need of specialised carvers as well as scribes. Artists with two different specialisations were

²⁴ On this subject, see Clemente (2007: 15; 2016c).

extremely rare. Unfortunately, we do not have significant information on the course of study in schools of calligraphy and printing; a subject that I would like to investigate in future research. Beyond *bcu dpon* rDo rje rgyal mtshan, Badzra dho ja and mKhas pa bSod nams bkra shis, I also found a few further artists with two specialisations, one of them being *sa skyong yig dpon* dPal ldan rgyal po. He was an expert scribe who used to work at the court of the Gung thang kings, but was also a specialist carver who worked with one of the very active masters of that area, that is to say, *btsun pa* Chos legs (1437-1521);²⁵ dPal ldan rgyal po was indeed involved in printing projects supervised by this latter master between 1514 and 1521 (Ehrhard 2000a: 70; Ehrhard 2013: 145).

David and Janice Jackson stated in *Tibetan thangka Painting* that, "According to Vajrayāna Buddhism, any artist who depicted the deities belonging to the four classes of Tantras had to have been ritually initiated into each of these classes" (1988: 12). Unfortunately, we do not have biographies of artists who worked on illustrations of Tibetan xylographs and we cannot assume that they were initiated during their apprenticeship. David and Janice Jackson also stated that, "In the history of Tibetan art a few paintings are known to have been directly inspired by yogic visions. Such visions, however, were usually experienced by those who were meditators by calling and not by professional artists" (1988: 12). IHa btsun Rin chen rnam rgyal (1473-1557), a *bka' brgyud pa* master who is well-known for his relevant role in the printing history of the Mang yul Gung thang kingdom,²⁶ for example, was one of those people, a master who experienced visions and then used to draw *thangkas* and wall paintings accordingly.²⁷

It seems that borrowing woodblocks from other works to illustrate a different text was common in sixteenth century Europe (Chow 2007: 179); something that is also claimed as true for Tibetan woodcut representations. It has been guessed that the illustrations could be carved on separate panels that could be fixed to the blocks and re-employed.²⁸ This seems to be possible but only two cases of re-employed images have been rediscovered so far. I found instead several very similar woodcut representations in different works, but some minor details distinguish them. For example, if you compare the illustration on the left of f.1b in NGMPP L969/4_1 (Fig. 1) and the representation on the left of f.1b in vol. 657/5, IsIAO Library (Fig. 2), you can observe a very similar framework. They also represent the same figures, namely, Tilopa, Vajradhāra and Nāropa, but they differ in a few

²⁵ On this master, see Ehrhard 2000a, 15; Ehrhard 2000b, IX-XIII; Ehrhard 2000c, 201, 204-09. See also my entry in the database of the above-mentioned projects.

²⁶ On this master, see Clemente (2007; 2009; 2014c; 2015; 2016c); Diemberger and Clemente (2013).

²⁷ On this subject, see Diemberger and Clemente (2013: 136-37).

²⁸ See for example Sernesi (2016: 338-339).

details: the hair of the Tilopa and Nāropa, the position of the arms of Vajradhāra's consort and a slightly different position of the arms of Tilopa and Nāropa. The landscape and throne are also different, but the cloth under both figures of Tilopa is very similar and the one under both icons of Nāropa is the same. The former work bears the title of *mKhas* grub kun gyi gtsug rgyan / pan chen nā ro pa'i rnam thar / ngo mtshar rmad 'by ung and is a biography of Nāropa $(956-1040)^{29}$ written by lHa btsun Rin chen rnam rgyal. The latter xylograph is entitled dPal ldan bla ma dam pa mkhas grub lha btsun chos kyi rgyal po'i rnam mgur blo 'das chos sku'i rang gdangs and is a biography with songs of lHa btsun Rin chen rnam rgyal.³⁰ Both xylographs were produced at Brag dkar rta so, a well-known monastery founded by lHa btsun that soon became a famous printing house. According to his biography with songs, he established his seat there in 1525 and started to produce many xylographs.³¹ We know that the former xylograph was printed some years earlier than the latter, but we might guess that the painter-and maybe the carver-who worked on both illustrations was the same. Unfortunately, we do not have any information on artists who worked on Nāropa's biography but we know that the drawings in the front and back pages of lHa btsun's biography with songs were made by *mkhas* pa dPal chen, a famous painter from Gung thang.³² According to the style, he might also be the painter of Nāropa's biography.³³ From other similar examples, it seems possible to assume that artists who worked on sixteenth century illustrations used the same model to draw them but each time they added different details, so that new illustrations had to be carved again.

3. Conclusion

As Chow wrote: "The study of woodcut illustrations is no longer the exclusive subject of the art historians as scholars in various disciplines have expanded these objects of investigation beyond the concerns of art history" (2007, 179-180). Nevertheless, since I think that art historians have the

²⁹ It is possible to find this work after two other texts with the same reel no. Another microfilm of this xylograph is available at the National Archives of Kathmandu (NGMPP L36/1) but it is unreadable. There is a further copy of this work kept there but it is a handwritten *dbu can* manuscript. On this work, see Clemente (2015: 190; 2016b); PBP 2007, 346; Smith 2001, 76. It has been translated into English by Guenther (1963).

³⁰ For its cataloguing, see De Rossi Filibeck (2003: 331). For a description and a study, see Clemente (2007: 124, 130-35; 2009; 2014c; 2015: 187-88); Diemberger and Clemente (2013). See also Schaeffer (2011: 475).

³¹ On the foundation of Brag dkar rta so and lHa btsun's printing activity, see BKDR: f. 29b2; Clemente (2009: chapetrs 3.6-3.7; 2015); Diemberger and Clemente (2013: 134-37); Schaeffer (2009: 58-63); Schaeffer (2011); Smith (2001: 75-77).

³² See Ehrhard (2000°: 77, 79). He also drew the illustrations of the *lam rim* by Phyogs las rnam rgyal. Cf. PT 2013 (text no. 27, ff. 303a1-2). See also Clemente and Lunardo (in press) and Jackson (1996: 122).

³³ For a study of these illustrations, see Lunardo (forthcoming).

background to better understand most aspects of this subject, as a historian I confined myself here to make some preliminary remarks on the importance of artists who worked on sixteenth century illustrations of Mang yul Gung thang xylographs for the identification of these prints. By reading colophons and looking for possible signatures we can extract information about the craftsmen, try to identify their style and locate the printing houses where they worked or the printing projects with which they were associated. A study of the style of illustrations of Gung thang xylographs has been undertaken thanks to the expertise of Dr. Filippo Lunardo, who collaborated with the TiBET project.³⁴ This will constitute only the first step of this research since many aspects of this topic are in the early stages of study. Also, in order to understand the different facets of this research, it is necessary to collaborate with experts in different disciplines and expand the study in new fields of interest. As mentioned above, one of the topics that I would like to explore in more detail is the specialisation courses that artists attended at schools of calligraphy and printing. Another aspect that I wish to investigate further is calligraphy, in order to understand whether it would be possible to distinguish the diverse styles of scribes. For this purpose, it would be important to collaborate with expert calligraphers.

³⁴ This subject is still understudied, with the exception of some pioneering essays: see Clemente and Lunardo (in press); De Rossi Filibeck (2002); Jackson (1996: 122-31); Lunardo (forthcoming); Pal and Meech-Pekarik (1988); Sernesi (2016).



Fig.1. Woodcut illustration of Tilopa, Vajradhāra and Nāropa (f. 1b, NGMPP L969/4_1, National Archives, Kathmandu). Courtesy of Hildegard Diemberger



Fig.2. Woodcut illustration of Tilopa, Vajradhāra and Nāropa (f. 1b, vol. 657/5, Tucci Tibetan Collection, IsIAO). Credits: L&C Service

Appendix: Information on Artists:³⁵

dge bshes mKha' 'gro = a famous carver who worked on many printing projects in Mang yul Gung thang at least from 1523 to 1555. He also acted as personal attendant of Chos dbang rgyal mtshan (see Ehrhard 2000a: 32). He was at least involved in the production of the xylographs of: Yang dgon pa's spiritual songs, printed at Kun gsal sgang po che in 1523-24 (vol. 286/1); Rig 'dzin mChog ldan mgon po's biography and songs, printed at rDzong dkar in 1527 (NGMPP L189/4); Zhus lan nor bu'i *phreng ba lha chos bdun ldan gyi bla ma brgyud pa rnams kyi rnam thar*, printed at Kun gsal sgang po che in 1538-39 (vol. 361/3); *bKa' rgya / khu chos gnyis / lung bstan / rdor glu / kha skong rnams*, also printed at Kun gsal sgang po che in 1539; 'Ba' ra ba rGyal mtshan dpal bzang's autobiography and songs (vol. 671/1), printed at rDzong dkar in 1540; *sKyes mchog gi zhus lan thugs kyi snying po zab mo'i gter mdzod*, printed at mDzo lhas in 1540 (vol. 671/6); Nam mkha' rgyal mtshan's spiritual songs, printed in 1545 (vol. 709/4); the *lam rim* by Bo dong Pan chen Phyogs las rnam rgyal, printed in 1546 (PT 2013, text. no. 27); the biography of Chos dbang rgyal mtshan, printed at Kun gsal sgang po che in 1555 (NGMPP L66/5); the Commentary of the Jewel Mound Tantra, printed at Brag dkar rta so in 1555 (NGMPP L10/22). In some of these sources he is also called *dge slong* mKha' 'gro (dpal bzang) and *dge slong* Paki.

dge sbyong mGon ne = one of the numerous carvers who came from gTsang, a village located to the south-west of rDzong dkar (see Ehrhard 2000a: 76). This might imply that a school of calligraphy and printing was established there. Ehrhard (2000a: 74) pointed out that "the regions of sNyings and gTsang were the local centres from where the scribes and carvers were first and foremost recruited." *dGe sbyong* mGon ne was active at least from 1538 to 1558. He was involved in the production of the xylographs of: *Jo bo yab sras kyi gsung bgros pha chos rin po che'i gter mdzod / byang chub sems dpa'i nor bu'i phreng ba rtsa 'grel sogs* (vol. 361/4), printed at Kun gsal sgang po che in 1538; 'Ba' ra ba rGyal mtshan dpal bzang's autobiography and songs (vol. 671/1), printed at rDzong dkar in 1540; *sKyes mchog ja ra bas mdzad pa'i sgrub pa nyams su blang ba'i lag len dgos 'dod 'byung ba'i gter mdzod* (vol. 671/5), printed at rDzong dkar in 1540; *sKyes mchog gi zhus lan thugs kyi snying po zab mo'i gter mdzod* (vol. 671/6); Nam mkha' rgyal mtshan's spiritual songs (vol. 709/4); the *lam rim* by Phyogs las rnam rgyal (PT 2013, text no. 27); Nāropa's biography written by lHa btsun Rin chen rnam rgyal, printed at Brag dkar rta so (NGMPP L969/4_1); the Commentary of the Jewel Mound Tantra (NGMPP L 10/22); Mi la ras pa's spiritual songs, printed at Brag dkar rta so (vols. 657/5, 657/6).

³⁵ Artists' names are listed in Tibetan alphabetical order.

dge bshes mGon dbang = he was active in the Mang yul Gung thang area at least from 1540 to 1561. He worked on: 'Ba' ra ba rGyal mtshan dpal bzang's autobiography and songs (vol. 671/1), printed at rDzong dkar in 1540; the xylograph entitled *Ka kha'i gsol 'debs sogs mgur phran tshegs rnams* (vol. 671/4); the xylograph entitled *sKyes mchog 'ba' ra bas mdzad pa'i sgrub pa nyams su blang ba'i lag len dgos 'dod 'byung ba'i gter mdzod* (vol. 671/5); Nam mkha' rdo rje's biography, printed at Glang phug (La 'debs Valley) in 1554 (vol. 709/2); the commentary of the Jewel Mound Tantra (NGMPP L10/22); the xylograph entitled 'Jam dbyangs zhal gyi pad dkar 'dzum phye nas / lung rigs gter mdzod ze 'bru bzheng la / blo gsal rkang drug ldan rnam 'phur lding rol / legs bshad sbrang rtsi'i dga' ston 'gyed pa (vol. 587), printed at gNas in 1561.

bcu dpon rDo rje rgyal mtshan = he worked on many printing projects in Gung thang and was active at least between 1538 and 1563. The particularity of this artist is that he had several specialisations, such as calligraphy, carving and carving of illustrations. On this artist, see Clemente (2007: 131, 132, 133, 134, 135, 137, 138, 145, 146, 152, 153, 154; 2016b: 76-79) and Clemente and Lunardo (in press).

dge sbyong Nam mkha' = he was active in Mang yul Gung thang at least from 1523 to 1540. He also worked at the xylographs of: Yang dgon pa's spiritual songs (vol. 286/1); *bKa' rgya / khu chos gnyis / lung bstan / rdor glu / kha skong rnams* (vol. 363/2) and *Zhus lan nor bu'i phreng ba lha chos bdun ldan gyi bla ma brgyud pa rnams kyi rnam thar* (vol. 361/3), both printed at Kun gsal sgang po che in 1539; 'Ba' ra ba rGyal mtshan dpal bzang's autobiography and songs (vol. 671/1), printed at rDzong dkar in 1540.

dge sbyor Nam me = carver from lHa 'dun/mdun, who worked on: the xylograph entitled *dGe bshes ston pas mdzad pa'i glegs bam gyi bka' rgya*, printed at Kun gsal sgang po che in 1538-39 (vol. 361/2); 'Ba' ra ba rGyal mtshan dpal bzang's autobiography and songs (vol. 671/1), printed at rDzong dkar in 1540; the *bo dong lam rim* (PT 2013, text no. 27) printed in 1546. Several artists involved in printing projects in the fifteenth and sixteenth centuries came from lHa 'dun/mdun. This might imply that a school of calligraphy and printing was established there. We do not know exactly where this place is located. According to local informants, it is situated south from sNyings and Rus and north from Nub ris (personal communication by Hildegard Diemberger).

Ba dzra dho ja (Vajradhvaja) = a famous scribe who acted as carver as well. He was active at least between 1540 and 1563. Beyond the autobiography and songs of 'Ba' ra ba, he also worked as carver on: the xylograph entitled *sKyes mchog 'ba' ra bas mdzad pa'i sgrub pa nyams su blang ba'i lag len dgos 'dod 'byung ba'i gter mdzod* (vol. 671/5); the biography and songs of Gling ras pa (NGMPP E2518/6), printed at Brag dkar rta so between 1525 and 1557; the xylograph entitled *rJe rgod tshang pa'i rnam thar rgyal thang pa bde chen rdo rjes mdzad pa la mgur chen 'gas rgyan pa* (NGMPP L211/3), printed at Brag dkar

rta so in 1563. As scribe, he worked on: rDo rje 'chang's biography written by Tilopa (NGMPP L456/14), printed at Brag dkar rta so; Ko brag pa's spiritual songs (NGMPP E2518/11), printed at Brag dkar rta so between 1525 and 1557; the xylograph entitled *sTon pa sangs rgyas kyi skyes rabs brgyad bcu pa slob dpon dpa' bos mdzad pa* (vol. 707), printed at Brag dkar rta so in 1541 or 1553; Tilopa's biography and songs (NGMPP L1107/4), printed at Brag dkar rta so in 1550; Phag mo gru pa's biography (NGMPP L194/13), printed at Brag dkar rta so in 1552; Marpa's spiritual songs (NGMPP L969/4), printed at Brag dkar rta so in 1552. A particularity related to this scribe is that his name is sometimes written after the title of the text he worked on.

dge bshes Ma gcig = the only female artists found in colophons so far. She worked at the xylographs of three texts produced in 1540, that is to say: the autobiography and songs of 'Ba' ra ba (vol. 671/1); *Ka kha'i gsol 'debs sogs mgur phran tshegs rnams*, also printed at rDzong dkar (vol. 671/4); and *sKyes mchog 'ba' ra bas mdzad pa'i sgrub pa nyams su blang ba'i lag len dgos 'dod 'byung ba'i gter mdzod* (vol. 671/5). However, women had an important role in promoting the production of printings. See for example, Diemberger (2014: 90-91); Diemberger (2016).

dge bshes Tshe 'phel = he worked at the xylographs of: *Zhus lan nor bu'i phreng ba lha chos bdun ldan gyi bla ma brgyud pa rnams kyi rnam thar* (vol. 361/3) and *Jo bo yab sras kyi gsung bgros pha chos rin po che'i gter mdzod / byang chub sems dpa'i nor bu'i phreng ba rtsa 'grel sogs* (vol. 361/4), both printed at Kun gsal sgang po che in 1538-39; the autobiography and songs of 'Ba' ra ba (vol.671/1); the *bo dong lam rim* (PT 2013, text no. 27) printed in 1546.

Sher rgyal = he worked on: the autobiography and songs of 'Ba' ra ba (vol. 671/1); the *Ka kha'i* gsol 'debs sogs mgur phran tshegs rnams (vol. 671/4); the bo dong lam rim (PT 2013, text no. 27).

mkhas pa **bSod nams bkra shis** = He is a famous engraver of illustrations, also called *mkhas pa chen po*, "great expert", but he also worked as carver of blocks. He was involved in many printing projects in Mang yul Gung thang at least from 1523 to 1555. For a detailed list of his activities, see Clemente (2016b: 87-89) and Clemente and Lunardo (in press). See also Ehrhard (2000a: 71-73, 75, 79).

References

Tibetan Sources

BKDR = Brag dkar rta so sprul sku Chos kyi dbang phyug (1775-1837), Grub pa'i gnas chen brag dkar rta so'i gnas dang gdan rabs bla ma brgyud pa'i lo rgyus mdo tsam brjod pa mos ldan dad pa'i gdung sel drang srong dga' ba'i dal gtam. Microfilm kept at the National Archives, Kathmandu (NGMPP L940/8, ff 1a-48a).

- BL 19999a3 = gTsang smyon Heruka (1452-1507), *rJe btsun mi la ras pa rnam thar rgyas par phye pa mgur 'bum.* Xylograph kept at the British Library, London (ff. 1a-250a).
- NGMPP E2518/6 = lHa btsun Rin chen rnam rgyal (1473-1557), edited by, *Grub thob gling ras kyi rnam mgur mthong ba don ldan*. Microfilm kept at the National Archives, Kathmandu (ff. 1a-61b).
- NGMPP E2518/11 = Ko brag pa bSod nams rgyal mtshan (1170-1249), *Khams gsum 'dran bral grub thob ko rag pa'i mgur 'buṃ bzhugs / badzra dho dza*. Microfilm kept at the National Archives, Kathmandu (ff. 1a-16a).
- NGMPP L10/22 = lHa btsun Rin chen rnam rgyal (1473-1557), *dPe chos rin po che spungs pa'i 'bum 'grel.* Microfilm kept at the National Archives, Kathmandu (ff. 1a-170a).
- NGMPP L66/5 = mTshan ldan bla ma dam pa mnyam med chos dbang rgyal mtshan gyi rnam par thar pa / rin po che nor bu'i phreng ba. Microfilm kept at the National Archives, Kathmandu (ff. 1a-129b).
- NGMPP L189/4 = Rig 'dzin mChog ldan mgon po (1497-1531), sPrul sku rig 'dzin mchog ldan mgon po'i rnam thar mgur 'bum dang ldan spro ba bskyed byed. Microfilm kept at the National Archives, Ka-thmandu (ff. 1a-241a).
- NGMPP L194/13 = bSod nams dpal, *bDe gshegs phag mo gru pa'i rnam thar*. Microfilm kept at the National Archives, Kathmandu (ff. 1a-18a).
- NGMPP L211/3 = rGyal thang pa bDe chen rdo rje, *rJe rgod tshang pa'i rnam thar rgyal thang pa bde chen rdo rjes mdzad pa la mgur chen 'gas rgyan pa*. Microfilm kept at the National Archives, Kathmandu (ff. 1a-42a).
- NGMPP L456/14 = Tilopa (928-?), *rGyal ba rdo rje 'chang yab yum gyi rnam thar*. Microfilm kept at the National Archives, Kathmandu (ff. 1a-11a).
- NGMPP L969/4 = gTsang smyon Heruka (1452-1507), *sGra bsgyur mar pa lo tstsha'i mgur 'bum*. Microfilm kept at the National Archives, Kathmandu (ff. 1a-40a).
- NGMPP L969/4_1 = lHa btsun Rin chen rnam rgyal (1473-1557), *mKhas grub kun gyi gtsug rgyan / paņ chen nā ro pa'i rnam thar / ngo mtshar rmad 'byung.* Microfilm kept at the National Archives, Ka-thmandu (ff. 1a-46a).
- NGMPP L1107/4 = gTsang smyon Heruka (1452-1507), *Sangs rgyas thams cad kyi rnam 'phrul rje btsun ti lo pa'i rnam mgur*. Microfilm kept at the National Archives, Kathmandu (ff. 1a-24a).
- PT 2013 = dPal brtsegs bod yig dpe rnying zhib 'jug khang (2013), *Bod kyi shing spar lag rtsal gyi byung rim mdor bsdus*. Lhasa: Bod ljongs bod yig dpe rnying dpe skrun khang.
- PBP 2007 = Pho brang po ta la do dam khru'u rig dngos zhib 'jug khang (2007), Pho brang po ta lar tshags pa'i bka' brgyud pa'i gsung 'bum dkar chag. Lhasa: Bod ljongs mi dmangs dpe skrun khang.
- Vol. 286/1 = Yang dgon pa rGyal mtshan dpal (1213-1258), *rGyal ba yang dgon chos rje'i mgur 'bum*. Xylograph kept in the Tucci Tibetan Collection, IsIAO Library, Rome (ff. 1a-165a).
- Vol. 361/2 = 'Brom ston rGyal ba'i 'byung gnas (1004/5-1064), *dGe bshes ston pas mdzad pa'i glegs bam gyi bka' rgya*. Xylograph kept at the Tucci Tibetan Collection, IsIAO Library, Rome (ff. 120a-123a).

- Vol. 361/3 = 'Brom ston rGyal ba'i 'byung gnas (1004/5-1064), *Zhus lan nor bu'i phreng ba lha chos bdun ldan gyi bla ma brgyud pa rnams kyi rnam thar.* Xylograph kept in the Tucci Tibetan Collection, IsIAO Library, Rome (ff. 124a-246a).
- Vol. 363/2 = A.A.V.V, *bKa' rgya / khu chos gnyis / lung bstan / rdor glu / kha skong rnams*. Xylograph kept in the Tucci Tibetan Collection, IsIAO Library, Rome (ff. 215a-343a).
- Vol. 587 = Shākya btsun pa Kun dga' chos bzang (1433-1503), Jam dbyangs zhal gyi pad dkar 'dzum phye nas / lung rig₅ gter mdzod ze 'bru bzheng la / blo gsal rkang drug ldan rnam 'phur lding rol / legs bshad sbrang rtsi'i dga' ston 'gyed pa. Xylograph kept in the Tucci Tibetan Collection, IsIAO Library, Rome (ff. 1a-124a).
- Vol. 657/5 = lHa btsun Rin chen rnam rgyal (1473-1557), dPal ldan bla ma dam pa mkhas grub lha btsun chos kyi rgyal po'i rnam mgur blo 'das chos sku'i rang gdangs. Xylograph kept in the Tucci Tibetan Collection, IsIAO Library, Rome (ff. 1a-54a).
- Vol. 657/6 = lHa btsun Rin chen rnam rgyal (1473-1557), rNal 'byor dbang phyug lha btsun chos kyi rgyal po'i rnam thar gyi smad cha. Xylograph kept in the Tucci Tibetan Collection, IsIAO Library, Rome (ff. 1a-32a).
- Vol. 671/1 = 'Ba' ra ba rGyal mtshan dpal bzang (1310-1391), rJe btsun 'ba' ra pa [sic] rgyal mtshan dpal bzang po'i rnam thar mgur 'bum dang bcas pa. Xylograph kept in the Tucci Tibetan Collection, IsIAO Library, Rome (ff. 1a-190b).
- Vol. 671/4 = 'Ba' ra ba rGyal mtshan dpal bzang (1310-1391), *Ka kha'i gsol 'debs sogs mgur phran tshegs rnams.* Xylograph kept in the Tucci Tibetan Collection, IsIAO Library, Rome (ff. 206b-222a).
- Vol. 671/5 = 'Ba' ra ba rGyal mtshan dpal bzang (1310-1391), sKyes mchog 'ba' ra bas mdzad pa'i sgrub pa nyams su blang ba'i lag len dgos 'dod 'byung ba'i gter mdzod. Xylograph kept in the Tucci Tibetan Collection, IsIAO Library, Rome (ff. 223a-365a).
- Vol. 671/6 = 'Ba' ra ba rGyal mtshan dpal bzang (1310-1391), *sKyes mchog gi zhus lan thugs kyi snying po zab mo'i gter mdzod*. Xylograph kept in the Tucci Tibetan Collection, IsIAO Library, Rome (ff. 366a-397a).
- Vol. 707 = Āryaśūra, sTon pa sangs rgyas kyi skyes rabs brgyad bcu pa slob dpon dpa' bos mdzad pa bzhugs. Xylograph kept at the Tucci Tibetan Collection, IsIAO Library, Rome (ff. 1a-170a).
- Vol. 709/2 = Chos rgyal lhun grub, Shā kya'i dge slong rdo rje 'dzin pa chen po / na<m> mkha' rdo rje'i rnaṃ par thar pa ngo mtshar gsal ba'i me long. Xylograph kept in the Tucci Tibetan Collection, IsIAO Library, Rome (ff. 1a-53a).
- Vol. 709/4 = Nam mkha' rgyal mtshan (1475-1530), *Shākya'i dge slong nam mkha' rgyal mtshan dpal bzang po'i mgur 'bum*, Xylograph kept in the Tucci Tibetan Collection, IsIAO Library, Rome (ff. 1a-46a).

Secondary Sources

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.

- Barrett, Tim H. 2016. "Pattern Reproduction Possibilities and the Alpha and Omega of Tibetan Printing." In *Tibetan Printing: Comparison, Continuities and Change*, edited by Hildegard Diemberger, Franz-Karl Ehrhard and Peter Kornicki, 560-574. Leiden: Brill.
- Boesi, Alessandro and Agnieszka Helman-Ważny. Forthcoming. "Paper Manufacture According to Jamgon Kongtrul Lodro Taye's 19th Century Treatise Treasury of Knowledge." In *Traditional Paths, Innovative Approaches and Digital Challenges in the Study of Tibetan Manuscripts and Xylographs,* edited by Michela Clemente. Berlin: De Gruyter.
- Brokaw, Cynthia and Peter Kornicki. 2013. The History of the Book in East Asia. London: Ashgate.
- 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.
- Clemente, Michela. 2007. "Colophons as Sources: Historical Information from some Brag dkar rta so Xylographies." *Rivista di Studi Sudasiatici* 2: 121-60.
- Clemente, Michela. 2009. *The Life of lHa btsun Rin chen rnam rgyal (1473–1557) according to his rnam mgur and rnam thar*. PhD Thesis, 'La Sapienza' University of Rome.
- Clemente, Michela. 2011. "From Manuscript to Block Printing: In the Search of Stylistic Models for the Identification of Tibetan Xylographs." *Rivista degli Studi Orientali* 84: 51–66.
- Clemente, Michela. 2014a. "Printing: The Wider Perspective." In *Buddha's Word: The Life of Books in Tibet and Beyond*, edited by Mark Elliott, Hildegard Diemberger, and Michela Clemente, 80-84. Cambridge: Museum of Archaeology and Anthropology, University of Cambridge.
- Clemente, Michela. 2014b. "The *Maṇi bka' 'bum.*" In *Buddha's Word: The Life of Books in Tibet and Beyond*, edited by Mark Elliott, Hildegard Diemberger, and Michela Clemente, 88-89. Cambridge: Museum of Archaeology and Anthropology, University of Cambridge.
- Clemente, Michela. 2014c. "Shedding Some Light upon lHa btsun Rin chen rnam rgyal (1473-1557): A Study of Two Untranslated Works from the Tucci Tibetan Collection." In *Proceedings of the Sino-Italian Seminar of Tibetan Studies, China Tibetology Research Centre, Beijing, 17 June 2011*, edited by Francesco Sferra, 442-510. Beijing: The China Tibetology Research Centre.
- Clemente, Michela. 2015. "The Literary Work of lHa btsun Rin chen rnam rgyal." In *From Bhakti to Bon. Festschrift for Per Kvaerne*, edited by Hanna Havnevik and Charles Ramble, 185-200. Oslo: Novus Forlag.
- Clemente, Michela. 2016a. "The Unacknowledged Revolution? A Reading of Tibetan Printing History on the Basis of Gung thang Colophons Studied in Two Dedicated Projects." In *Tibetan Printing: Comparison, Continuities and Change*, edited by Hildegard Diemberger, Franz-Karl Ehrhard and Peter Kornicki, 394-423. Leiden: Brill.

- Clemente, Michela. 2016b. "Different Facets of Mang yul Gung thang Xylographs." In *Tibetan Manuscript and Xylograph Traditions. The Written Work and Its Media within the Tibetan Cultural Sphere,* edited by Orna Almogi, 67-103. Hamburg: Department of Indian and Tibetan Studies, University of Hamburg.
- Clemente, Michela. 2016c. "The Patronage Network of lHa btsun Rin chen rnam rgyal: From Brag dkar rta so to the 'Phags pa lha khang." In *Studies in Honour of Luciano Petech: A Commemoration Volume 1914-2014,* edited by Elena De Rossi Filibeck, Michela Clemente, Giorgio Milanetti, Oscar Nalesini, and Federica Venturi, 103-109. *Rivista degli Studi Orientali* 89.1.
- Clemente, Michela. Forthcoming. "How to Create a Template for the Identification of Tibetan Xylographs: Methodological Issues". In *Traditional Paths, Innovative Approaches and Digital Challenges in the Study of Tibetan Manuscripts and Xylographs,* edited by Michela Clemente. Berlin: De Gruyter.
- Clemente, Michela, and F. Lunardo. In press. "Typologies of Drawn Frames in Sixteenth Century Mang yul Gung thang Xylographs." In *Manuscript Culture: Textuality and Materiality. Proceedings of the Workshop of the Sanskrit Manuscript Project Held in Cambridge*, edited by Vincenzo Vergiani, Camillo Formigatti and Daniele Cuneo. Berlin: De Gruyter.
- Dagyab, Loden Sherap. 1977. Tibetan Religious Art. Wiesbaden: Otto Harrassowitz.
- De Rossi Filibeck, Elena. 2002. "Una nota sulle immagini decorative delle xilografie tibetane." In *Oriente e Occidente. Convegno in ricordo di Mario Bussagli: Roma 31 maggio-1 giugno 1999*, edited by Chiara Silvi Antonini, Bianca Maria Alfieri and Arcangela Santoro, 92-103. Pisa-Roma: Istituti Editoriali e Poligrafici Internazionali.
- De Rossi Filibeck, Elena. 2003. *Catalogue of the Tucci Tibetan Fund in the Library of IsIAO*. Vol. 2. Roma: Istituto Italiano per l'Africa e l'Oriente.
- Diemberger, Hildegard. 2007. When a Woman Become a Religious Dynasty. The Samding Dorje Phagmo of Tibet. New York: Columbia University Press.
- Diemberger, Hildegard. 2012. "Quand le livre devient relique Les textes tibétains entre culture bouddhique et transformations technologiques." *Terrain, revue d'ethnologie europeénne* 59 (special issue "l'objet livre"): 18-39.
- Diemberger, Hildegard. 2014. "Women as Patrons of Printing and Innovation." In *Buddha's Word: The Life of Books in Tibet and Beyond*, edited by Mark Elliott, Hiledegard Diemberger, and Michela Clemente, 90-91. Cambridge: Museum of Archaeology and Anthropology, University of Cambridge.
- Diemberger, Hildegard. 2016a. "Tibetan Women as Patrons of Printing and Innovation." In *Tibetan Printing: Comparison, Continuities and Change*, edited by Hildegard Diemberger, Franz-Karl Ehrhard and Peter Kornicki, 267-308. Leiden: Brill.
- Diemberger, Hildegard. 2016b. "Early Tibetan Printing in Southern La stod: Remarks on a 1407 Print Produced at Shel dkar". In *Tibetan Manuscript and Xylograph Traditions. The Written Work and Its Media within the Tibetan Cultural Sphere,* edited by Orna Almogi, 105-26. Hamburg: Department of Indian and Tibetan Studies, University of Hamburg.

- Diemberger, Hildegard, and Michela Clemente. 2013. "Royal Kinship, Patronage and the Introduction of Printing in Gung thang: From Chos kyi sgron ma to lHa btsun Rin chen rnam rgyal." In Nepalica-Tibetica: Festgabe for Christoph Cüppers, edited by Franz-Karl Ehrhard and Petra Maurer, 119-42. Andiast: International Institute for Tibetan and Buddhist Studies GmbH.
- Diemberger, Hildegard, and Michela Clemente. 2014. "Printing and Patronage in Tibetan Buddhism". In *Buddha's Word: The Life of Books in Tibet and Beyond*, edited by Mark Elliott, Hildegard Diemberger, and Michela Clemente, 90-91. Cambridge: Museum of Archaeology and Anthropology, University of Cambridge.
- Ehrhard, Franz-Karl 2000a. *Early Buddhist Block Prints from Mang-yul Gung-thang*. Lumbini: Lumbini International Research Institute.
- Ehrhard, Franz-Karl 2000b. Four unknown Mahāmudrā Works of the Bo dong pa School. Lumbini: Lumbini International Research Institute.
- Ehrhard, Franz-Karl 2000c. "The Transmission of the *dMar khrid Tshems bu lugs* and the *Maṇi bka' 'bum.*" In *Vividharatnakaraṇḍaka: Festgabe für Adelheid Mette*, edited by Christine Chojnacki, Jans-Uwe Hartmann, and Volker M. Tschannerl, 199-215. Swisttal-Odendorf: Indica et Tibetica Verlag.
- Ehrhard, Franz-Karl 2010. "Editing and Publishing the Master's Writings: The Early Years of rGod tshang ras chen (1482-1559)." In *Editions, éditions: l'écrit au Tibet, évolution et devenir*, edited by Anne Chayet, Cristina Scherrer-Schaub, Françoise Robin, and Jean-Luc Achard, 129-61. München: Indus Verlag.
- Ehrhard, Franz-Karl 2012. "gNas rab 'byams pa Byams pa phun tshogs (1503–1581) and His Contribution to Buddhist Block Printing in Tibet." In This World and the Next: Contributions on Tibetan Religion, Science and Society. Proceedings of the 11th Seminar of the International Association for Tibetan Studies, Königswinter 2006, edited by Charles Ramble and Jill Sudbury, 149-76. Halle: International Institute for Tibetan and Buddhist Studies GmbH.
- Ehrhard, Franz-Karl 2013. "The Royal Print of the Maṇi bka' 'bum: Its Catalogue and Colophon." In *Nepalica-Tibetica: Festgabe für Christoph Cüppers,* edited by Franz-Karl Ehrhard and Petra Maurer, 143–71. Andiast: International Institute for Tibetan and Buddhist Studies GmbH.
- Eimer, Helmut. 1996. "Two Blockprint Fragments of Mi la ras pa's Mgur 'bum Kept in the Wellcome Institute, London." *Zentralasiatische Studien* 26: 7–20.
- Eimer, Helmut. 2010. "Notizen zu frühen Blockdrucken von Mi la ras pas Mgur 'bum." In *Études tibétaines en l'honneur d'Anne Chayet,* edited by Jean-Luc Achard, 51-66. Genève: Librairie Droz S. A.
- Eimer, Helmut, and Pema Tsering. 1990. "Blockprints and Manuscripts of Mi la ras pa's Mgur 'bum Accessible to Frank-Richard Hamm." In *Frank-Richard Hamm Memorial Volume. Oct. 8, 1990,* edited by Helmut Eimer, 59–88. Bonn: Indica et Tibetica Verlag.
- Eisenstein, Elizabeth L. 1979. The Printing Press as an Agent of Change: Communications and Cultural Transformations in Early-Modern Europe. Cambridge: Cambridge University Press.

- Everding, Karl-Heinz. 2000. Das Königreich Mang yul Gung thang. Königtum und Herrschaftsgewalt im Tibet des 13.-17. Jahrhunderts. Teil 1: Die Chronik Gung thang rgyal rabs. Edition und Übersetzung. Teil 2: Studien zur Geschichte des Reiches. Bonn: VGH Wissenschaftsverlag GmbH.
- Guenther, Herbert V. 1963. *The Life and Teachings of Náropa*. Oxford-London: Clarendon Press.
- Jackson, David P. 1989. "More on the Old dGa'-ldan and Gong-dkar-ba Xylograph Editions." *Studies in Central and East Asian Religions* 2: 1-18.
- Jackson, David P. 1990. "The Earliest Printing of Tsong-kha-pa's Works: The Old dGa'-ldan Editions." In *Reflections on Tibetan Culture: Essays in Memory of Turrel V. Wylie*, edited by Lawrence Epstein and Richard F. Sherburne, 107-116. Lampeter, Wales: The Edwin Mellen Press.
- Jackson, David P. 1996. A History of Tibetan Painting: The Great Tibetan Painters and their Traditions. Wien: Österreichische Akademie der Wissenschaften.
- Jackson, David P. and Janice Jackson. 1986. *Tibetan Thangkha Painting. Methods and Material.* Chicago: Serindia Publications.
- Lunardo, Filippo. Forthcoming. "A Preliminary Analysis of Four Sixteenth Century Woodcut Illustrations in Mang yul gung thang Blockprints." In *Traditional Paths, Innovative Approaches and Digital Challenges in the Study of Tibetan Manuscripts and Xylographs,* edited by M. Clemente. Berlin: De Gruyter.
- Pal, Pratapaditya and Julia Meech-Pekarik. 1988. Buddhist Book Illuminations. Hong Kong: Ravi Kumar Publishers.
- Reynolds, Valrae. 1999. "The Tibetan Renaissance of the 15th Century." Oriental Art 45:3: 23-33.
- Richardson, Hugh and David L. Snellgrove. 1998. *Tibet. Storia della tradizione, della letteratura e dell'arte.* Milano: Luni (Italian translation of: *A Cultural History of Tibet.* London: Weidenfeld & Nicolson: 1968).
- Schaeffer, Kurtis R.2009. *The Culture of the Book in Tibet.* New York: Columbia University Press.
- Schaeffer, Kurtis R.2011. "The Printing Projects of Gtsang smyon He ru ka and His Disciples." In *Mahāmudrā and the Bka'-brgyud Tradition. Proceedings of the Eleventh Seminar of the International Association for Tibetan Studies, Königswinter 2006,* edited by Roger R. Jackson and Matthew T. Kapstein, 453–79. Halle: International Institute for Tibetan and Buddhist Studies GmbH.
- Sernesi, Marta. 2011. "A Continous Stream of Merit: The Early Reprints of gTsang smyon Heruka's Hagiographical Works." Zentralasiatische Studien 40: 179–237.
- Sernesi, Marta. 2013. "Rare Prints of bKa' brgyud Texts: A Preliminary Report." In *Nepalica-Tibetica: Festgabe für Christoph Cüppers*, edited by Franz-Karl Ehrhard and Petra Maurer, 191–210. Andiast: International Institute for Tibetan and Buddhist Studies GmbH.
- Sernesi, Marta. 2016. "Works and Networks of mkhas pa Dri med. On the illustrations of 16th century Tibetan printed books." In *Tibetan Printing: Comparison, Continuities and Change,* edited by Hildegard Diemberger, Franz-Karl Ehrhard and Peter Kornicki, 332–368. Leiden: Brill.

Smith, Ellis Gene 2001. Among Tibetan Texts. History and Literature of the Himalayan Plateau. Boston: Wisdom Publications.

> Michela Clemente is an affiliated researcher at Mongolia and Inner Asia Studies Unit and a member of Clare Hall, University of Cambridge. She worked as collaborator at the Tucci Tibetan Collection of the IsIAO Library (Rome) from 1998 until 2011. In 2009 she obtained her PhD at "La Sapienza" University of Rome. In 2010 she started collaborating with the University of Cambridge in the five year AHRC project *Transforming Technologies and Buddhist Book Culture*. In 2013 she was awarded with the Marie Sklodowska Curie Fellowship for a 2 year project entitled *Tibetan Book Evolution and Technology* (TiBET). She was one of the curators of the Exhibition *Buddha's Word: The Life of Books in Tibet and Beyond* (Museum of Archaeology and Anthropology, Cambridge, May 2014- January 2015), one of the editors of its catalogue (University of Cambridge, 2014) and the convener of the workshop *How to Create a Template for the Identification of Tibetan Xylographs*, Cambridge, January 2015.