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The World's Earliest
Extant Book Printed
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Chiian Seventy-seven of the Tangut
Translation of the *Garland sutra*

MARTIN HEIJDRÁ AND CAO SHUWEN

As announced in the Spring 1991 issue of the *Gest Library Journal*, two previously unnoticed volumes, representing parts of two early Tangut printings of Buddhist sutras, have recently been brought to our attention.¹ They were acquired for a sizable sum in Peking and were sent to the Gest Collection on December 21, 1937.² Although Dr. Hu Shih (1891–1962), curator of the Gest Library from 1950 to 1952, examined them in 1951–1952, they were not catalogued or completely identified. Thus they had escaped the attention of the library staff until quite recently. One of the two volumes is printed in movable type, in the Hsi-hsia script used for writing the Tangut language from the mid-eleventh century until the fifteenth century, and possibly even later. In announcing the discovery, the article stated (p. 2): “Modern scholars believe that this edition was produced during the early Ming dynasty (1368–1644) and is therefore later than the famous woodblock edition of the *Tripitaka* [the Buddhist canon] in the Tangut language printed at Hangchow around 1302 during the Yüan dynasty.” Even if that were true, this example of movable-type printing would still be ear-

lier than Gutenberg's first printings from movable type in Europe in the middle of the fifteenth century. But since that announcement we have made additional efforts to identify the *Garland sutra* (*Hua-yen ching*), and we can now report somewhat more fully on this important item in the history of printing.

Xylography, or printing from page-size engraved or carved wooden blocks, was developed and used in China from the seventh century on. Movable type came four centuries later, and because of the practical difficulties of dealing with Chinese script, with its tens of thousands of individual characters, did not fully supersede woodblock printing until the late nineteenth or early twentieth century. It has been customary to say that although there are literary records from as early as the mid-eleventh century that describe the use of movable type for printing books, the earliest extant examples of books printed with that technique in China date from the late fifteenth century.³ Yet that fact does not cast any doubt on the much earlier use of the technology; descriptions dating from the Northern Sung dynasty (960–1126), particularly that by Shen Kua (1030–1094) in his famous miscellany *Meng-hsi pi-t'an*, are detailed enough to leave no doubt about this technological breakthrough. Shen was a contemporary of a man named Pi Sheng (fl. ca. 1040) who is credited with having been the "inventor," or at least the developer of a practical technique for printing from individual type made from fired clay and various other materials. Detailed reports of the production of wooden type are recorded in Wang Chen's *Nung shu*; he had overseen its production in 1297–1298. Whether the technology of printing from movable type was then transmitted from China to Europe or was independently discovered there cannot be clearly demonstrated, but transmission from China remains a distinct possibility.⁴

The existence of other volumes from this same set of the *Garland sutra*, eighty volumes in all, comprising the Tangut translation of this important Buddhist sutra, was recorded by other scholars as early as the 1930s, and at least one of them noted that the volumes were printed from movable type. That so early an example of the technology of typography in China did not attract more attention is undoubtedly attributable to the book being written not in Chinese, but in Hsi-hsia script. Tangut has been a dead language in China for possibly five centuries, and knowledge of its script was lost; at first Western scholars even assumed the script was Jürchen. Since the beginning of the twentieth century, scholars (first Western; later Russian, Japa-

nese, and Chinese) have begun to study and decipher it linguistically. Today a small group of specialists, mostly in the Soviet Union and Japan, but lately also in China and elsewhere, can read Hsi-hsia with more confidence. Texts in Hsi-hsia have assumed new importance in scholarship.

The Tangut (Chinese: Hsi-hsia; Tibetan: Mi-nyag) dynasty was founded on the northwestern borders of China in the eleventh century. Until Chinggis Khan obliterated it in 1227, it was a large and important state that had existed in an intimate cultural and political relationship with Sung-dynasty China and with China's other neighbors. Some of its rulers actively encouraged the adoption of Chinese culture, and sponsored the translation into Tangut of Chinese texts. In 1036 an intricate new writing system was developed to expedite this goal. Based primarily on Chinese, the script also contained Jürchen and Khitan precedents. The average number of strokes per character is much higher than in Chinese, giving the page a denser and more uniform impression.

Since the script is not alphabetic, deciphering has proceeded along two separate paths: pronunciation and meaning. Early efforts to reconstruct the sound system were rather unsuccessful, as they were based on the earliest well known Hsi-hsia example, which was found among the multilingual inscriptions at the Chü-yung Pass (1345). As it turns out, the Hsi-hsia characters used to transcribe (not translate) the Sanskrit Dhāraṇī-sūtra belong to a special subset of characters, and real advances could only be made when other texts became available. Fortunately, there exist parts of Chinese and Tibetan glossaries, as well as portions of many contemporary Hsi-hsia monolingual dictionaries and rhyme books. There are some differences in the reconstructions of various authors,⁵ but the differences are of secondary importance, and the solutions do confirm the opinion that the Tangut language belongs to the Tibeto-Burman family.⁶

Dictionaries similar to the Hsi-hsia monolingual ones have also been used to refine investigations into the meaning of characters, but more important are comparisons of Tangut translations with their Chinese (or Tibetan) originals.⁷ The *Garland sūtra* especially has been used for this purpose. A difficulty encountered here is that whereas some texts, produced primarily in the Hsi-hsia capital of Hsing-ch'ing, are of a style imitating as closely as possible Chinese word order, and hence are easy to compare, other texts, like the Gest's *Lotus sūtra (Miao-fa lien-hua ching)*, are in general apparently closer to the spoken language and hence much more difficult to decipher.

Most of the latter group are translations from the Tibetan, and were produced in Liang-chou and Kan-chou; work on this style has not yet advanced very far.

The inscriptions found at the Chü-yung Pass in 1345 were long thought to be the latest occurrence of Hsi-hsia, and the Tangut were assumed to have vanished completely during the Yüan dynasty. Recent finds, however, have established beyond any doubt that at least until the mid-Ming, Hsi-hsia was still understood and written by some Tangut people in Lamaist monasteries. One sutra dates from 1372, there is a stele inscription from 1502, and there are written Hsi-hsia characters on a Tibetan *Kanjur* (or *Kangyur*, the part of the Tibetan Buddhist canon containing the instructions of Buddha) dating from the Wan-li period (1573–1620) preserved in Berlin. The Tangut in these later documents shows more Chinese influence; for example, period names are not translated, but transcribed.⁸

In view of the enthusiastic importation of Chinese and Tibetan Buddhist culture, the transmission of the newly developed Chinese technology of typography to the Hsi-hsia state is thus not surprising. Also, during the period of Mongol rule over both the former Hsi-hsia state and China in the thirteenth and fourteenth centuries, surviving remnants of the Tangut population continued to use their language and to print books, especially Buddhist scriptures, in the Hsi-hsia script. More often those were printed by xylography, but as this example shows, typography was occasionally used. In China, wood came to be the most commonly employed material for making movable type, and it is the material used in this Hsi-hsia printing of the *Garland sutra*. The Gest volume is the only full volume of the text known to exist outside of East Asia, except for forgeries of volume forty-one, most probably based on an original belonging to the same set as the Peking, Kyoto, Ningsia, Kansu, and Gest copies.⁹

The library's catalogue description of this volume tentatively reads as follows:

The [*Ta-fang kuang-fo*] *Hua-yen ching* (Sanskrit: *Avatamsaka-sūtra*; Tangut, tentatively: *Le tshia wah thah fa liuh lur re*),¹⁰ *chüan* seventy-seven, is complete in one full volume, is bound in sutra-fold style, and has yellow silk covers; its front cover bears a title slip. [See illustration 1.] The first page mentions the title, the volume number, the "box" number [see below], and the names of the



1. The title slip on the yellow silk front cover of *chiian* 77 of the Tangut translation of the *Garland sutra*. It bears the title (the first eight characters, corresponding to the Chinese *Ta-fang kuang-fo hua-yen*, plus the Tangut bisyllabic word for "sutra"), the designation "the seventh," and the "box" number corresponding to volumes 71–80 of the series; hence, volume 77.

original, Chinese translator and the Tangut translator and collator. [See illustration 2.] The title is repeated on the last page. There are six columns of seventeen characters per column on each half-page; the block borders are 25.3 cm. high and 11.7 cm. wide. The height of the volume itself is 31.5 cm. There are printed double borders at top and bottom; the page fold is in white-mouth style. Each set of five full pages is printed on one sheet of paper 64 cm. long; at the back, the joinings of the sheets are marked by seal impressions in Tangut and in Chinese giving the sheet number. The Chinese numbers run from one to twenty-three. The paper is of uniform kind and quality throughout the volume; it shows some water stains.

As for the “box” numbers, there is apparently one for each ten *chüan*. Strictly speaking, these are not box numbers at all, as it appears that the Hsi-hsia volumes of this sutra were boxed five, not ten, volumes at a time. Since the early 1930s many Chinese authors have mistakenly equated these numbers with Chinese designations based on the *Thousand Character Classic* (*Ch'ien-tzu wen*), of which slightly different versions were used for the Ming edition and the present edition of the *Tripitaka*. A closer look at all eight designations, their meanings, and their pronunciations, shows no correspondence at all,¹¹ and we must agree with Nishida that the Hsi-hsia apparently used their own ordering system, one that we have yet to figure out, even if the traditional principle of using one designation every ten volumes was followed.¹² The designation of our eighth “box” number (i. e., *chüan* 71–80) is *neh* (N) or *nIn* (S), meaning either “month” or “kind of goat.”¹³

On the back of the pages of our volume (not all volumes are exactly alike in this respect) this “box” number is repeated with the Tangut number for the volume in the box, the Tangut character meaning “the —th,” and the Chinese sheet (not page) number, yielding “the seventh volume of ‘box’ number ‘month,’ sheet no. 23” for illustration 3.

Most Hsi-hsia documents originate from one of two discoveries. The first was made during the excavation of Karakhoto by Colonel P. K. Kozlov in 1908–1909 (this site was also investigated somewhat later by Sir Aurel Stein). The texts found at Karakhoto are now in St. Petersburg, New Delhi, and London. The other discovery occurred in 1917 when the city



3. A page from *chiian* 77 of the Tangut translation of the *Garland sutra*, seen from the back side of the page. The page was printed on one side only, and because the ink bleeds through the thin porous paper, the unevenness of the inking, characteristic of movable type, is more clearly seen on the back of the page than on the side meant to be read. The characters are, of course, reversed. Barely visible in the middle are the printer's marks: the "box" number for set 71-80, the sign for "seven," the ordinalization marker, and Chinese signs for "23."

wall of Ling-wu County in Ningsia Province was repaired, and many Hsi-hsia documents were found.¹⁴ It is not entirely clear where most of these works ended up, but the Peking Library acquired many of them for a high sum in 1929,¹⁵ and the five *chüan* of the *Garland sutra* owned by Chang Chih-sheng also came from Ling-wu.¹⁶ It is most likely that the Japanese and Gest copies ultimately came from the Ling-wu find as well, as the *chüan* come from similar sets. Many of the St. Petersburg and Peking texts were published in 1971 in New Delhi from microfilms acquired during the brief period of Indian-Soviet-Chinese détente in 1958–1959,¹⁷ but it is not known for sure whether the “Peking Library” collection described in 1930 is still there. Grinstead suspects that texts have been moved from the Peking Library to the Central Institute for Nationalities in Peking, and it is indeed strange that later Hsi-hsia discoveries of *Garland sutra* volumes have never been directly compared with the Peking Library originals.¹⁸

This printing of the *Garland sutra* bears very clearly the special signs of having been printed with movable type: some characters are tilted or unevenly placed within the columns; the blackness of the ink is uneven; the amount of ink penetrating to the back of the paper varies from character to character. (See illustration 4.) Some characters have been cut out and replaced by others on small pasted-in patches of paper, apparently to correct typesetting errors. Other *chüan* of the same set held in Japan and China show additional left-over marks of the cutter. Moreover, one author has also found some proof that bisyllabic words rather than single characters were sometimes the units used by the printer.¹⁹ Comparison of this edition with another manuscript version also shows unnecessary duplication, omissions, and a mistaken replacement of one character by another similar one throughout almost the entire text. Most interesting, at the end of *chüan* five held in Kyoto, a colophon mentions that the edition was printed with “broken” (Tangut: *swe* (N); Chinese: *sui*) characters.²⁰ As early as 1930, Lo Fu-ch’ang had mentioned in passing that these volumes were made of movable type.²¹ In 1958 this was further confirmed at the Research Institute for Humanistic Studies in Kyoto.²²

The Gest volume shares all the characteristics mentioned above with other known volumes of the *Garland sutra*: those held at the Branch of Oriental History, Department of History, Kyoto University and the Research Institute for Humanistic Studies in Kyoto,²³ in Peking,²⁴ in Ningsia,²⁵ and in Lin-hsia, Kansu.²⁶ The Gest copy fits exactly with the Peking and Ningsia sets.

Most authors link this edition of the *Garland sutra* with the existence of a Hsi-hsia *Tripitaka* of 3,620 *chüan*. In 1914 Paul Pelliot pointed to a reference in the *Yüan shih* to the printing of a Ho-hsi (i.e., Hsi-hsia; the term “Ho-hsi” means “west of the Yellow River bend,” an area that covers both modern Kansu and Ningsia provinces) *Tripitaka*. The project was canceled in 1294, but resumed in 1302. This is known as the Ta-te-period (1297–1307) *Tripitaka*.

A Tun-huang Hsi-hsia fragment preserved in Paris bears a seal stating that it had been bestowed on Sha-chou by “Kuan-chu-pa” (the name is Tibetan, *bkaḥ ḥgyur-pa*, and means the “Law Priest of the Three Treasures”),²⁷ who had also been involved in the completion of the famous Sung-Yüan *Chi-sha tsang* project, one of the Gest Library’s most noteworthy possessions. Later, a text was found at the end of *chüan* three of the *Ta-tsung ti hsiian wen pen lun*, in which it was explicitly stated that “Kuan-chu-pa” had initiated a Ho-hsi *Tripitaka*, and bestowed more than one hundred sets of it, including the *Garland sutra*, on Ningsia and Yung-ch’ang.²⁸ Also, another book dating from 1308 mentions the existence of the *Tripitaka*.²⁹

Nevertheless, doubts have been expressed as to whether the work was ever printed, and, if so, how. As for the first question, Nishida Tatsuo has concluded from the existence of different “box” numbers for many otherwise nonrelated works (with no “box” numbers being repeated) that they all belonged to one superset printed during the Yüan dynasty. Moreover, we do have printed texts, with “box” numbers, explicitly datable to the period in question, namely 1309, 1312, and, in the case of the Peking Library’s edition of the *Lotus sutra* (and perhaps ours as well), 1309–1315. The beautiful illustration occurring in our volume is here reproduced as illustration five.

It is indicative of the depth of the Gest library collection that we possess both the *Chi-sha tsang* volume linking “Kuan-chu-pa” with the Hsi-hsia undertaking, and a Tun-huang Hsi-hsia fragment with a seal by him.³⁰ As for the text in the *Chi-sha tsang*, the Gest copy has the relevant passage; unfortunately, the volume is incomplete and ends shortly after that passage.

All this does not necessarily mean, however, that our movable-type printing of the *Garland sutra* should be linked with the “Kuan-chu-pa” printing, and we have to investigate in more detail the arguments for dating this work. We can dismiss the only date mentioned in English so far, between 1139–1140 and 1190, as it is based on a severe misunderstanding of

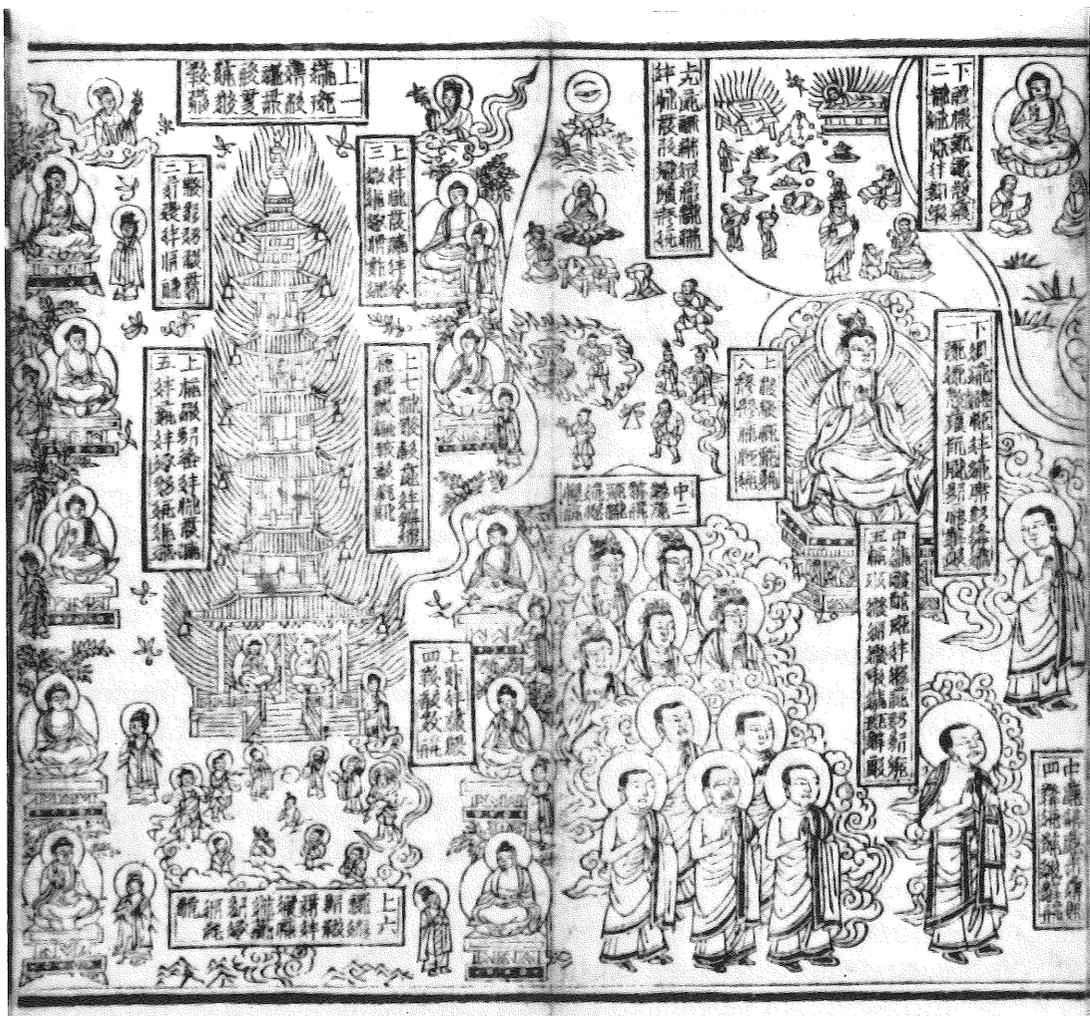
the Chinese original: these dates are simply the dates of the Tangut Jen-tung emperor under whose auspices many Buddhist sutras were translated, and who therefore became the nominal Hsi-hsia translator-collator.³¹

Wang Kuo-wei was the first to date the *Garland sutra* volumes he saw, then in the possession of Shao Chang and Lo Chen-yü, to the Ta-te period. His reasoning is that the printing seems different from a known 1190 glossary, and that the form of six columns of seventeen characters each is the same as the form of the Yüan Chinese sutras.³² One has to counter that "different" does not necessarily mean "somewhat later," that the "Yüan" Chinese sutra style was also common during the Sung and Ming, and that moreover, most of the Hsi-hsia sutras are very different one from another in style and form. And there is no evidence at all that would link the work directly to the Ta-te *Tripitaka*.

Wang Ching-ju's reasons for dating are not given. He only mentions that "experts" at the Peking Library have identified the *Garland sutra* volumes as dating from the Yüan for reasons of style, paper, and printing. He therefore assigns it to the Ta-te period. Chang Ssu-wen simply follows Wang Ching-ju. It must be mentioned here that the early assumption that the Hsi-hsia script was unknown after 1345 has been proven wrong lately, but no Chinese author has considered any later date.

Nishida Tatsuo has cast strong doubt on the Ta-te assignment. Not only is there no explicit linking, but there is also some evidence to the contrary: according to the colophon at the end of *chüan* five, mentioned above, the sponsor was a Tangut named Tu-lo-hui-hsing (in Chinese), not "Kuan-chu-pa." Nishida then goes on to compare the text with some Tenri Library fragments of the work, which are not made by movable type,³³ and with a Ho-hsi manuscript. This comparison shows that the language of the movable-type version is most Chinese-like, with fewer particles and changes in vocabulary, and with some mistakes. This would suggest a later date than the manuscript. Also, where there are different versions of the Chinese translations, the movable-type edition most often, though not exclusively, follows Ming Chinese editions. It may be, however, that the Ming Chinese and the Hsi-hsia texts are based on different, possibly no longer extant, works.

Nishida considers the characteristics, internal and external, of the Tenri printed fragments to be earlier than those of the other, wooden movable-type editions; there are several examples in addition to the *Garland sutra*. As



5. The illustration appearing at the beginning of the *Miao-fa lien-hua ching*, vol. 4 (Tangut, tentatively: *Thu tsier fa se lur re*), the other volume recently discovered in the Gest Library. Notice that every scene has a placement sign ("upper," "lower," and the like), and a number, both in Chinese. The rest of the text is in Tangut.



the nonmovable type seems later than the Ho-hsi manuscripts, he tentatively calls them Yüan, possibly Ta-te (the datable Ta-te printings are all nonmovable type), and considers the movable-type examples as later works, possibly early Ming, although sometimes he mentions Yüan as well.

But again, although the order of the three types seems reasonable, the exact dating is pure conjecture, since the great variety in types of both nonmovable and movable type should guard us against linking all possibly "Yüan" volumes to the Ta-te endeavor, which probably was as much a collection of existing editions as it was a new uniform printing. If the Stein fragments parallel the Tenri early printed ones, then there is nothing to prevent them from dating to the Ho-hsi period even if they are later than the manuscript; and our movable-type edition could be older as well. Moreover, the movable-type *Garland sutra* does not resemble the only known Ming printing (of 1372) either, and Karmay has linked illustrations of the *Garland sutra* with similar ones of the *Chi-sha tsang* dated 1306; the latter are considered lower in quality, and (perhaps therefore) later.³⁴ Thus it is possible that the *Garland sutra* is datable to the Ta-te period or earlier, and the Tenri fragments to an earlier time than the *Garland sutra*.

What, then, can we conclude about the dating of our book? In view of the fact that the *Garland sutra* is apparently later than Ho-hsi times and has "box" numbers, and that the only Ming sutra known is dissimilar, we might be safest to posit a generic mid-to-late Yüan, without necessarily linking our volume to the Ta-te period.³⁵ It would be unlikely to have been printed much later, as references to Ming Hsi-hsia works are scarce indeed, and in view of the fact that paper and ink marks have apparently led some authors to postulate a Yüan date. It is in any case older than the oldest work hitherto proclaimed as such.

Is it therefore the oldest example of movable-type printing? Several other candidates have appeared. A Korean-printed, Chinese-language work *Ko-mun Chinbo taejŏn* was once dated to the twelfth century, but has since been redated to at least after 1400.³⁶ A more likely contender is another Tangut work, available in some fragments, which is a translation of the *Vimalakīrti-nirdeśa* sutra (*Wei-mo-chieh so-shuo ching*). According to Grinstead, this has to be dated 1190 or earlier,³⁷ and Nishida independently arrived at the conclusion that the text, using clay movable type and mixing large and small characters indiscriminately, should be assigned to the very earliest stages of

movable-type printing.³⁸ It certainly should not surprise us that movable type was in use much more extensively among non-Chinese populations: after all, the fact that actual Uighur wood type has been found dating from 1300 is well known. But Chinese technology might still have the last word, as Tsuen-hsuei Tsien recently reported a page dating from around 1103 which might be from movable type.³⁹ This is a circular *dhāraṇī*, however, not a normal book page. Keeping in mind the possible exception of the *Vimalakīrti* fragments, which were done with clay type, we might proudly follow some new printing histories which mention the Hsi-hsia *Garland sutra* as the oldest wooden movable-type book in existence.⁴⁰ The Gest Library is certainly fortunate to have a volume of such an important work.

NOTES

1. *Gest Library Journal* 4:1 (Spring 1991), p. 1.
2. From 1930 to 1937, Chinese customs regulations prevented I. V. Gillis, the collector in residence at Peking for the Gest collection, from shipping any works from China to North America. We have not yet been able to locate the exact date of purchase; however, the collection of more than ninety volumes of Hsi-hsia sutras in the Peking Library was bought in 1929, and it is highly likely that the Gest copies were acquired at around the same time. In 1937 the Hsi-hsia sutras were insured for the then high sum of 225 silver dollars.
3. But see the discussion below on possible earlier examples. The oldest extant work seems to be Hua Sui, *Sung chu-ch'en tsou-i* (1490). See Ch'ien Ts'un-hsün [T. H. Tsien], "Chung-kuo li-tai huo-tzu-pen," in Wu Che-fu, ed., *Ku-chi chien-ting yü wei-hu yen-hsi-hui chuan-chi* (Taipei: Chung-kuo t'u-shu-kuan hsüeh-hui, 1985), pp. 211-223.
4. See the discussion of these historical problems in T. H. Tsien, "Paper and Printing," in Joseph Needham, *Science and Civilisation in China*, 5:1 (London: Cambridge University Press, 1985), pp. 215-216.
5. See Mikhail Viktorovich Sofronov, *Grammatika tangutskogo iazyka*, 2 vols. (Moscow: Nauka, 1968); Nishida Tatsuo, *Seikago no kenkyū*, 2 vols. (Tokyo: Zauhō, 1964-1966); Shih Chin-po, Pai Pin, and Huang Chen-hua, *Wen-hai yen-chiu* (Peking: Chung-kuo k'o-hsüeh ch'u-pan-she, 1983).
6. Luc Kwanten sees an Altaic connection, but the success and the convergence of Sofronov's and Nishida's solutions, which were independently arrived at, have made his position untenable. See, for an overwhelming argument, Sun Hung-k'ai, "Ts'ung tz'u-hui pi-chiao k'an Hsi-hsia-yü yü

- Ts'ang-Mien yü-tsu Ch'iang yü-chih ti kuan-hsi," *Min-tsu yü-wen* (1991), no. 2, pp. 1-11.
7. See Nishida, *Seikago*, and Shih Chin-po, *Wen-hai yen-chiu*, as well as K. B. Keping, V. S. Kolokolov, E. I. Kychanov, and A. P. Terent'ev-Katanskii, *More pis'men: faksimile tangut-skikh ksilografov*, 2 vols. (Moscow: Nauka, 1969).
 8. See Cheng Shao-tsung and Wang Ching-ju, "Pao-ting ch'u-t'u Ming-tai Hsi-hsia-wen shih-ch'uang," *K'ao-ku hsüeh-pao* (1977), no. 1, pp. 133-141, and Shih Chin-po and Pai Pin, "Ming-tai Hsi-hsia-wen ching-chüan ho shih-ch'uang ch'u-t'an," *ibid.*, pp. 143-164.
 9. For identification of the false volume see Fujieda Akira, "Seikakyō — ishi to ki to doro to — genson-suru saiko no moku-katsujitai ni tsuite," in *Ishihama sensei koki kinen Tōyōgaku ronsō*, ed. Ishihama sensei koki kinenkai (Osaka: Ishihama sensei koki kinenkai, 1958), pp. 484-493. The volume 41 owned by Yeh Kung-ch'ō and reproduced in his "Li-tai tsang-ching k'ao-lüeh," in Ts'ai Yüan-p'ei et al., eds., *Chang Chü-sheng hsien-sheng ch'i-shih sheng-jih chi-nien lun-wen-chi* (Shanghai: Shang-wu yin-shu-kuan, 1937), pp. 25-42, might also be a forgery, or the elusive original from which the lithographic reproductions were made. Yeh had worked for the Peking Library at the time the Hsi-hsia sutras were acquired.
 10. The transcription follows Nishida, but, for the sake of simplicity, the necessary diacritics are disregarded here. Henceforth, (N) after a Tangut word denotes a reconstruction by Nishida, (S) one by Sofronov.
 11. See Nishida, *Seikago*, vol. 2, p. 299, for the list. Some of the meanings he gave there have been revised by him and others, but they certainly do not correspond to the Chinese *Ch'ien-tzu wen*. Lo Fu-ch'eng had already expressed his doubts about the *Ch'ien-tzu wen* identifications, but these were not heeded by later Chinese scholars.
 12. Nishida, *Seikago*, vol. 2, p. 298, n. 15.
 13. Wang Ching-ju, "Hsi-hsia-wen mu-huo-tzu-pan Fo-ching yü t'ung-p'ai," *Wen-wu* (1972), no. 11, pp. 8-17, has mistaken this "box" number for another similar one meaning "valley," and is followed in this by others. The meaning "month" comes from Shih Chin-po, Pai Pin, and Huang Chen-hua, *Wen-hai yen-chiu*, entry 0498, translation on p. 426 under 22-272 and on p. 478 as 56-232; and the meaning "kind of goat" from Nishida, *Seikago*, vol. 2, p. 355, no. 41-08g, who, in fact, questions it himself. For the character "valley," see Nishida, *Seikago*, vol. 2, p. 355, no. 41-089.
 14. See Chung K'an, *Ning-hsia wen-wu shu-lüeh* (Yin-ch'uan: Ning-hsia jen-min ch'u-pan-she, 1980), p. 97.
 15. See the foreword in the "Hsi-hsia-wen chuan-hao" of the *Kuo-li Pei-p'ing t'u-shu-kuan kuan-k'an* 4:3 (1930), henceforth cited as *HC*.
 16. See Chang Ssu-wen, "Huo-tzu-pan Hsi-hsia-wen 'Hua-yen ching' chüan shih-i chih chüan shih-wu chien-chieh," *Wen-wu* (1979), no. 10, pp. 93-95.
 17. See Eric Grinstead, ed., *The Tangut*

- Tripitaka . . . from the Collections of Raghu Vira*, 9 vols. (New Delhi: Sharada Rani, 1971–1973). Not all texts have been properly placed or identified, and the provenance and identification of many single items are unsure.
18. See Eric Grinstead, "The Tangut Tripitaka: Background Notes," *Sung Studies Newsletter* 6 (October 1972), pp. 19–23.
 19. See Wang Ching-ju, "Hsi-hsia-wen."
 20. See Nishida Tatsuo, *Seikabun Kegonkyō*, 3 vols. (Kyoto: Kyōto daigaku bungakubu, 1975). For this colophon see vol. 1, p. 23.
 21. See his comment in the *HC*.
 22. See Fujieda, "Seikakyō."
 23. Both sets held there come from the collection of Shao Chang, whose extra name (*hao*) was Cho-an, and are identified as such in earlier publications, as, for example, the *HC*. Volumes 1–5 are at the Branch of Oriental History, Department of History, Kyoto University, and volumes 6–10 and 36 are at the Research Institute for Humanistic Studies in Kyoto.
 24. According to the *HC*, Peking has two sets, which differ in the paper they use, with an overlap of approximately ten *chüan*. Volumes held include 11–12, 14–16, 20–23, 27–35, 37, 39–46, 48, 51, 54, 57, 59–75, 78–80.
 25. Volumes 26, 57, and 76, introduced by Wang Ching-ju in 1972. See his "Hsi-hsia wen."
 26. Volumes 11–15, held by Chang Chih-sheng, introduced by Chang Ssu-wen in 1979; see "Huo-tzu-pan Hsi-hsia-wen 'Hua-yen ching' chüan shih-i chih chüan shih-wu chien-chieh." Additional fragments might be in St. Petersburg and London.
 27. There are different explanations for the name; see Paul Demiéville, "Appendice: notes additionnelles sur les éditions imprimées du canon bouddhique," in Paul Pelliot, *Les débuts de l'imprimerie en Chine* (Paris: Adrien-Maisonneuve, 1953), pp. 121–138.
 28. For the complete texts see Tokiwa Daijō, "Seika moji *Daizōkyō* no chōkan ni tsukite," *Tōhō gaku* (Tokyo) 9 (1939), pp. 1–32. A translation with a not completely accurate description is given in Heather Karmay, *Early Sino-Tibetan Art* (Warminster, Eng.: Aris and Phillips, 1975), pp. 43–45. There have since been found some thirty colophons mentioning "Kuan-chu-pa"; six of these mention the *Hsi Tripitaka*.
 29. Yang Huan, *Shu tzu cheng yün*, mentioned in Wang Ching-ju, "Hsi-hsia-wen," p. 9.
 30. See the picture in the *Gest Library Journal* 3:1–2 (Spring 1989), p. 24, where the date of the Tangut *Tripitaka* printing has been wrongly given as 1340–1350. Our seal is not identical to the one reported in Paris (of which another copy exists in the Tenri Library in Japan; see Nishida, *Kegonkyō*, vol. 1). But so little was known about "Kuan-chu-pa" and Hsi-hsia in the 1930s that it is unlikely we have to worry about the possibility of forgery.
 31. See Luther Carrington Goodrich, "Movable Type Printing: Two Notes," *Journal of the American Oriental Society* 94 (1974), pp. 476–477. Goodrich misreads Wang Ching-ju,

- “Hsi-hsia-wen,” and misunderstands Nishida, *Kegonkyō*. He repeats the mistakes in his “Tangut Printing,” *Gutenberg Jahrbuch* 64 (1976), pp. 64–65, where the text is accompanied by an unnamed Tangut movable-type printing, presumably from 1190. This is certainly not the *Garland sutra*, as it has seven columns instead of six; most probably, it is a reproduction of the *Vimalakīrti* sutra; see below.
32. See Wang Kuo-wei, “Yüan-k’an-pen Hsi-hsia-wen *Hua-yen ching* ts’an-chüan pa,” *Kuan-t’ang chi-lin*, vol. 4 (original edn. 1921; corrected rpt. of the expanded 1927 edn.; Peking: Chung-hua shu-chü, 1959), pp. 1050–1052.
33. See Fujieda, “Seikakyō.” It calls the Tenri fragments movable type, but according to Nishida the Tenri printed *Garland sutra* fragments are not; see *Kegonkyō*, vol. 2, postscript, pp. 28–31. The Stein collection also seems to have some fragments.
34. See Karmay, *Early Sino-Tibetan Art*, p. 43. According to Karmay, the close relationship of Hsi-hsia *Garland sutra* and *Chi-sha tsang* prints has been pointed out by Ogawa Kan’ichi as well. Prints can always have been added later, of course.
35. The Stein and St. Petersburg fragments, were they to belong to our set of the *Garland sutra*, would push the date even earlier, since they predate the fall of the Hsi-hsia state. It is more likely, however, that — if they are indeed printed — they belong to the Tenri set.
36. Goodrich, “Movable Type Printing.”
37. Grinstead, “The Tangut Tripitaka,” p. 23.
38. See Nishida, *Kegonkyō*, vol. 3, postscript, p. 257.
39. See T. H. Tsien, “Recent Discovery of Earliest Movable Type Printing in China: An Evaluation,” *Committee on East Asian Libraries Bulletin* 92 (February 1991), pp. 6–7.
40. See, e.g., Liu I, *Chung-kuo ti yin-shua-shu* (Peking: K’o-hsüeh p’u-chi ch’u-pan-she, 1987), p. 208.

GLOSSARY

Chang Chih-sheng 張贊生
 Chang Ssu-wen 張思溫
 Ch’ien-tzu wen 千字文
 Chi-sha tsang 積砂藏
 Chü-yung 居庸
 Hangchow 杭州
 Ho-hsi 河西
 Hsi-hsia 西夏
 Hsing-ch’ing 興慶
 Hu Shih 胡適

Hua-yen ching 華嚴經
 Jen-tsung 仁宗
 Kan-chou 甘州
 Kansu 甘肅
Komun Chinbo taejōn 古文字珍寶大全
 Kuan-chu-pa 管主巴
 Liang-chou 涼州
 Ling-wu 靈武
 Lin-hsia 臨夏
 Lo Chen-yü 羅振玉

EARLIEST BOOK FROM MOVABLE TYPE?

- | | | | |
|--------------------------------|-------------|-------------------------------|-------------|
| Lo Fu-ch'ang | 羅福長 | Ta-tsung ti hsüan wen pen lun | 大宋地志文
本論 |
| Meng-hsi pi-t'an | 夢溪筆談 | Tenri (University) | 天理 |
| Miao-fa lien-hua ching | 妙法蓮華經 | Tsuen-hsuin Tsien | 錢存訓 |
| Ningsia | 寧夏 | Tu-lo-hui-hsing | 都羅慧性 |
| Nishida Tatsuo | 西田龍雄 | Tun-huang | 敦煌 |
| Nung shu | 農書 | Wang Chen | 王禎 |
| Pi Sheng | 畢昇 | Wang Ching-ju | 王靜如 |
| Sha-chou | 沙州 | Wang Kuo-wei | 王國維 |
| Shao Chang | 邵章 | Wan-li | 萬曆 |
| Shen Kua | 沈括 | Wei-mo-chieh so-shuo ching | 維摩詰所
說經 |
| sui | 碎 | Yüan-shih | 元史 |
| Ta-fang kuang-fo Hua-yen ching | 大方廣佛
華嚴經 | Yung-ch'ang | 永昌 |