

REVIEWS OF BOOKS

The Invention of Printing in China and Its Spread Westward.

By THOMAS FRANCIS CARTER. New York: COLUMBIA UNIVERSITY PRESS, 1925.

Although the subjects and problems treated in this volume are quite familiar to the majority of orientalists, Professor Carter is the first who gives us in a learned book an intelligent summary of the past research in this interesting subject, particularly based on the important manuscript-discoveries in Turkistan. This general survey of the whole field enables us to discern clearly the many gaps in our knowledge that remain to be filled; and, while the history of rag-paper and printing may be well outlined in its essential features, there are still many problems awaiting solution or wanting further elucidation. The plan of the book is admirably conceived and consistently carried through. The entire work testifies to assiduous study at home and abroad, both in Chinese and European sources; it is attractively written, and the volume is well printed and well gotten up, being illustrated by 37 half-tones, a graphic chart in colors demonstrating the development of rag-paper and printing in China and the West, and a map showing the migration of rag-paper from China to Europe.

While I am grateful to the author for having written this useful book, I feel obliged to dissent from his opinions and conclusions in certain points. First, as to method, I do not share his optimism in regard to Chinese encyclopaedias as being reliable (p. 189); they are, in my opinion, not more trustworthy than our own; they are assuredly helpful for ready reference as a first aid, but a real study must be based on the original texts whenever available. A twenty years' occupation with the *T'u shu tsi ch'eng* has convinced me that numerous quotations in it are incomplete, corrupt, or even senseless and that very important texts are entirely omitted; still less do I have great confidence in the *T's'e yüan* published by the Commercial Press of Shanghai, over which so much fuss is now being made. As to another point of method, Professor Carter has a fondness for evolutionizing and correlating things as being derived one from another; thus, the charm was the transition from the seal to the block print (p. 11), which is merely an unproved

speculation. Considerations of similar phenomena in other cultures tend to make one skeptical about evolutionary reconstructions of this character just in this particular field. Seals were also known in the ancient Near East; the Babylonian inscribed seal-cylinders, which rolled over soft clay and left in it an imprint of the text, represent a method analogous to our book-printing. In India wooden blocks for making impressions on textiles were known, but they were never applied to books; likewise the Polynesians who are ignorant of seals and letters utilize blocks for printing designs on their tapa, and the Dayak of Borneo use them as well for impressing tattoo marks on their bodies. In ancient Mexico paper was manufactured from maguey fibres, but no advance was made toward printing. Carter is still inclined to presume that European typography resulted from block-printing, but he overlooks the fact that wooden types were never made in Europe and that the alleged development from wood-engraving to typography has been successfully contested (bibliography in G. Jacob, *Einfluss des Morgenlands auf das Abendland*, 1924, p. 42).

It is to the merit of Professor Carter that he has elucidated the text of Lu Shen to which Julien's statement of the initiation of block-printing in A. D. 593 goes back (p. 202), and the conclusion is quite plausible that this passage, traceable to an older text which contains nothing about printing, is due to a misunderstanding. It seems to me rather hasty, however, to assert that "there is apparently nothing about printing in the Annals of the Sui Dynasty." To enable one to make such a positive assertion would require reading of a considerable portion at least of the Sui Annals. Julien, by the way, is not the only one who ascribed printing to the Sui or who can be held responsible, as Carter thinks, for the repetition of this statement in most histories of China in western languages. A. Wylie wrote, "Printing was known in the time of the Sui, and practised to a limited extent during the T'ang; but the early efforts at the art do not seem to have been sufficiently successful to supersede the manuscripts." Even Palladius (in his Chinese-Russian Dictionary, I, 264) remarks, "It is supposed that printing began from the Sui dynasty; it is perfectly credible from the Sung dynasty." This point requires further investigation.

In discussing the history of movable type in China, Professor Carter translates a text said to have been written in 1314 under

the Mongol dynasty by Wang Cheng; this text, however, is preserved only in an appendix to a work on agriculture by this author edited in the K'ien-lung period (1736-95). Carter reproduces from this book the illustration of a revolving wheel alleged to have been contrived by Wang Cheng as a type-setting device in 1314, but here he remarks cautiously, "Whether this illustration goes back to the original edition of 1314 or whether it is a reconstruction by K'ien-lung's editors, is uncertain." But this suspicion is ripe for the whole text: the wooden movable types ascribed to Wang Cheng are strikingly similar to a font of wooden types made under K'ien-lung in 1773 for printing the catalogue of his library (not mentioned by Carter), and there is a well-illustrated Chinese book extant which describes the various stages in the manufacture of this type. There are striking coincidences between the descriptions of this book and those of Wang Cheng, and a critical comparison of the two texts would probably clear up the problem in part.

In the biography of Pi Sheng (p. 160) it is justly denied that, as Julien has it, he was a smith (note on p. 251); nevertheless, on p. 181, the author speaks of "Pi Sheng the smith."

The date 1403 as denoting the first use of movable type in Korea is probably correct, but there is a statement in the Annual Report on Reforms and Progress in Chosen 1914-15 by the Government-General of Chosen (Keijo, 1916, p. 17) which would merit investigation: "It is said that a Chinese Book of Etiquette was printed with movable type by Koreans in the reign of Kō-jong (1214-66), the twenty-third king of Koryu." The interesting information is also given there that "old types, whether made of metal, earth, or wood, in the possession of the former imperial household of Korea, numbering about 500,000 pieces, were transferred to the care of the Government-General, and arranged in better order by classifying them according to the Chinese dictionary of K'ang-hi."

For the fact that wall-paper is a Chinese invention, the reader is referred to Grande Encyclopédie, while in our own American literature we have an excellent book on this subject by Kate Sanborn, *Old Time Wall Papers, an Account of the Pictorial Papers on our Forefathers' Walls* (Greenwich, Conn., 1905), with many excellent colored plates. Chinese wall-papers were first introduced into Europe by Dutch traders at the end of the seventeenth

century under the name "pagoda-papers." As early as 1735 they were brought to America. Specimens of Chinese wall-papers are still to be found in colonial houses of Massachusetts, some even imported in 1750 and in good state of preservation. Many of the older American papers exhibit their relationship to the Chinese in that the decoration is not repeated, but runs continuously about the entire room or contains a scenic representation. It is not correct that as stated in the Introduction (p. xii), the scientific study of the invention of paper in the West was begun by F. Hirth. Hirth's article "Die Erfindung des Papiers in China" (*T'oung Pao*, 1890, pp. 1-14) can hardly be called scientific; it is a compilation based on previous studies by J. Edkins and A. Wylie in which most of Hirth's data are anticipated. Another article by Hirth, "Western Appliances in the Chinese Printing Industry" (1886), would have supplied Carter with some useful data.

No reference whatever is made in the book to the name of A. Wylie, and the introduction to his Notes on Chinese Literature, which contains a valuable and critical history of printing in China, has not at all been utilized,—an almost unintelligible omission. A careful perusal of Wylie's study would have made many a slip unnecessary. There is no foundation for ascribing the invention of the writing-brush to the general Mung T'ien in the third century B. C. (p. 2). This is a tradition merely found in the late and apocryphal *Po wu chi*; the contemporaneous records (Se-ma Tsien's *Shi ki*) have nothing to this effect. It is surprising also that a brochure entitled *The Rise of the Native Press in China* by Y. P. Wang (Columbia University, 1924, 50 p.) has not been consulted. Mr. Wang gives very interesting information on the old Peking Gazette, the oldest newspaper in the world, which dates back to the days of the T'ang dynasty. The question as to when and how this newspaper was first printed ought to have been ventilated in a book devoted to printing in China, but the subject is not even touched upon (cf. Mayers, "The Peking Gazette," *China Review*, III, p. 16).

The activity of the Ming and Manchu in printing numerous Tibetan, Mongol and Manchu books is passed over in silence, nor is the Islamic press mentioned with its numerous editions in Arabic, Chinese, and Arabic-Chinese. Ibn Baṭūṭa's account of China is strongly overvalued (pp. 114, 233), and is very far from

“containing a true picture of China.” Whether G. Ferrand is right in his assertion or not that he may never have visited China, many of his data concerning China are unintelligible, absurd, or fictitious. Rashid-eddin is called an Arabic writer on p. 197 and correctly a Persian historian on p. 219.

“Whether picture or text, practically all the earliest block prints on paper that have been preserved are religious. On the other hand, . . . none of the textile prints, whether in Asia or Europe, has a religious motive” (p. 149). Yet, in Tibet, prayer formulæ and incantations with or without religious pictures are printed on cotton and hemp cloth, many examples of which are in the Field Museum, Chicago. Printing on textiles has survived longest among the secret societies of China. In the Heaven and Earth League (T'ien ti hui), a political organization of anti-Manchu tendency, certificates of membership issued after initiation were generally of white cloth on which the characters were printed in black and laid out in the form of an octagon, with the seals stamped in vermilion in the centre; sometimes they were of yellow silk with characters printed in black (W. Stanton, *The Triad Society*, Hongkong, 1900, pp. 71, 76, 78, 85).

In chapter 19 playing-cards are considered as a factor in the westward movement of printing. The author's information on the history of games, however, is rather vague. It is not correct that polo spread from Persia to India and China about the same time; it reached India only under the rule of the Moghuls, while it was in full swing in China under the T'ang dynasty. A sinologue should not be content to refer his readers to the article Polo in the Encyclopaedia Britannica if his nearest colleagues like Parker, Giles, Chavannes (not to speak of myself) have made contributions to the history of the game from Chinese sources. According to Carter, the earliest reference to dice, “which form the background of Chinese playing-cards,” is in the year 501. Dice are mentioned as early as A. D. 406 in the Chinese version of the Brahmajālasūtra (§ 33), translated by Kumārajīva, under the name *po-lo-sai* (anciently *pa-la-sak*), which is a transcription of Sanskrit *prāsaka* or *pāçaka* (“die, dice”); and Giles, in his Chinese Dictionary (No. 9658), even remarks that dice date from the third century A. D., and were first made of baked clay. With reference to another term, *shu p'u*, which occurs in the text quoted by Carter on p. 243, Giles observes, “Said to be of Indian origin, first men-

tioned by Ma Jung, second century A. D. There is no doubt that dice in China are of Indian origin: they are not referred to in any ancient Chinese system of divination. In India, they are of immemorial antiquity, being used both for divination and gambling (cf. Lüders, *Würfelspiel im alten Indien*, 1907). A standard book on Indian dice is mentioned in the literature of the Sui dynasty. As playing-cards are of Chinese origin, it is at the outset not probable that they had dice as their background or, as Carter also puts it, that a transition from dice to cards took place. The two games, in my opinion, represent two distinct developments. The above term *prāsaka* (*po-lo-sai*) denoted in particular the game of backgammon (Persian *nard*), which was introduced into China in the first part of the sixth century (not during the T'ang or a little before, as said on p. 139). There is no doubt that the Arabs transmitted playing-cards to Europe, for Spanish-Portuguese *naïpe*, Old Italian *naïbi*, are of Arabic origin, according to G. Jacob (*ZDMG*, 1899, 349 and *Geschichte des Schattentheaters*, 1925, p. 206) from Arabic *la'ib* ("play"). This rather plausible derivation has unfortunately not been entered in Meyer-Lübke's *Romanisches etym. Wörterbuch*. The date A. D. 969 which Carter quotes as an early reference to playing-cards in China does not mean much; the game was fully developed in the course of the ninth century, as could have easily been ascertained from Schlegel's doctor's thesis of 1869, *Chinesische Bräuche und Spiele in Europa*, p. 20, and in this point Schlegel is right. Carter emphasizes the fact that playing-cards are not mentioned in ancient Arabic records. This may be correct, as gambling games are forbidden by Islam; the Chinese also indulge in many gambling games, no record of which is preserved. The fact remains, however, that the Arabs do play cards (cf. Lane, *Manners and Customs of the Modern Egyptians*, 5th ed., II, p. 46). For myself I do not believe that playing-cards were instrumental in transmitting the Chinese method of block-printing to Europe or that they exerted any tangible influence on the art of printing.

These various points of criticism bearing on details do not detract much from the real value of the book. As a whole it is excellent and serves the interests of both the layman and the scholar in furnishing a guide into a difficult subject which offers attractions to every cultured mind.

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