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Bulletin of
SUNG YUAN
Studies

BOOK REVIEWS

Paul Heng-chao Ch'en. Chinese Legal Tradition under the Mongols: the Code of 1291 as Reconstructed. Princeton: Princeton University Press, 1979. xix and 205 pp. \$19.50.

During the past decade there has been growing scholarly interest in the legal systems of traditional China. Much of the credit for stimulating this interest should be given to the Center for East Asian Legal Studies of the Harvard Law School, directed by Jerome A. Cohen. Recently the fruits of these new studies have begun to appear in print. Professor Ch'en's book, a revised version of his dissertation done at Harvard, is a noteworthy example.

Chinese Legal Tradition under the Mongols may well serve in some respects as a model to be imitated. As a reconstruction and translation it is superb. The rendering of Chinese legal terms is excellent. If I had a student who wanted to learn to work with Yüan legal texts, I would begin by sending him to Professor Ch'en's work, to study both the vocabulary and the style of his translation. The presence of the Chinese text immediately following the English is especially welcome.

Chapter One, on the development of Chinese codes, is also a well-written piece of work. Professor Ch'en presents the history of codification briefly and lucidly. He argues for particular filiations of materials with skill, and even where his arguments are perhaps not conclusive, he at least presents his alternatives to the accepted lines of development with considerable force.

Chapters Two and Three, on the Yüan penal system and the administration of justice also contain much valuable descriptive material on Yüan legal practices. Unfortunately, there are a number of minor problems in these two chapters as well. Professor Ch'en is very open about the brief that he carries. He sets out to show that through the agency of Mongolian rule many new elements were introduced into the penal and judicial systems of the Yüan and later dynasties. He therefore seeks to discover in the Yüan new and distinctive elements. In doing so he must compare the Yüan to other eras in Chinese history, and it is in making these comparisons that problems emerge. Since he is a specialist on the Mongols, Professor

Ch'en's description of the Yüan half of his comparisons is understandably good. For the comparative material on other periods he depended on the all too sparse secondary sources in legal history or on information from some major primary sources. As a result, at a number of points he either states or implies that a trait or development was born in or especially characteristic of the Yüan when in fact it occurred or was even more highly developed in other dynasties.

He takes pains to prove that the Mongols, far from being bloodthirsty and cruel, were actually noteworthy for the benevolence of their judicial system. For example, he points to the smaller number of crimes carrying the death penalty in the Yüan. However, as he himself notes, the Yüan figures, which are based on the Legal Treatise of the Yüan History, are being compared to the Codes of other dynasties. What would be the result of a comparison between the Legal Treatise of the Sung History and that of the Yüan? I very much doubt if the Legal Treatise of the Sung History mentions as many as half the crimes punishable by death as of the Sung Code. What percentage should we expect to find in the Yüan treatise? In any case the critical figure is not the number of capital crimes, or even the number of men convicted of capital crimes, but the number actually executed, and that we simply do not know.

He also states that the Mongolian rulers granted amnesty more frequently than did the rulers of other dynasties. Unfortunately this is simply not so. Counting from the accession of Qubilai, the Mongols issued great acts of grace (ta-she) on average once every seventy-six months. During the Northern Sung great acts of grace were issued on average once every seventeen and a-half months, and during the Southern Sung once every twenty-four months. The Sung is in this regard merely carrying to an extreme a tradition of frequent amnesties that can be traced back to the Han. The Yüan were carrying on a relatively harsher system which began with the Liao.

He implies that banishment to serve in the armies was a Yüan innovation (p. 48). Here it seems obviously to be a question of his not having made his point clearly, for I am sure he was aware that analogous practices existed in a number of earlier dynasties including the Han and the Sung. On page 59 he says that "Yüan law also developed a scale of twofold fines," but that was a practice that went back at least to the T'ang where it is described in the Code (TLSI 2/10 for example). On page 63 he says that the practice of tattooing criminals began in the Southern Sung and was institutionalized in the Yüan. In fact, it began at least as early

as the Liang dynasty. On page 73 he implies that in earlier dynasties imprisonment was used as a form of punishment. To my knowledge imprisonment was not thought of as a form of punishment by the authorities either before or after the Yüan. That is not to say that it was not in fact a punishment, but it was not thought of as such. It was merely an incident to trial, even in eras like the Ch'ing when it apparently was used on a substantial scale as a result of the assize process. He feels (p. 89) that Yüan officials were more familiar with the law than the officials of other times. Perhaps he is correct, but it should be remembered that in the Han there was a well-developed tradition of law teaching, and it should be noted that the Sung established a most elaborate system for encouraging officials and potential officials to study the law, not only as a means of gaining entrance to the civil service but as a way of gaining accelerated promotion within it.

This last example is perhaps the best case for suggesting the roots of the general problem in which Professor Ch'en finds himself. So little has been written on the traditional legal system that it is difficult to go to secondary sources for reliable information. The Sung system for encouraging the development of legal expertise, on which I have recently completed a study, has to my knowledge never previously even been mentioned by other scholars.

The lesson to be learned then is that, when a scholar is a specialist in a period of time and he wishes to make comparisons with other periods, it is essential that he solicit the advice of those expert in the periods he is using for comparison. In a relatively underdeveloped field like legal history, he cannot rely on published secondary work. The points raised from the Sung materials are all points about which I knew next to nothing ten years ago, points which would appear only in a most cursory fashion if at all in published work, but points that must be raised once known.

The problems noted above may seem to loom large in this review, but that is misleading if it is taken to imply that Professor Ch'en's book is not a welcome and valuable addition to our stock of studies of traditional law. It takes more space to indicate a point of correction than it does to say that a translation is quite simply superb. It should be borne in mind that fully half of this book is taken up by a translation which could not be bettered. The bulk of the material comprising the other half is accurate, well presented, and well argued. Where overt or implied comparisons of the Yüan and other dynasties occur, they should

be treated with care, since some of them are accurate while others are not; but aside from this caveat the book deserves to be widely read and used.

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Shih Shun Liu 劉師舜. Chinese Classical Prose:
Eight Masters of the T'ang-Sung Period. Hong Kong: The
Chinese University Press, 1979. Pp. XVIII + 365. \$14.95

As late as in the early 1940s, elementary school students in China were asked to memorize prose writings written by great masters of the past ages. The youngsters might not understand the pieces, but by reciting them by heart, they would have a solid foundation for further study of classical prose (ku-wen) and for developing their own ability to compose in the wen-yen style. Despite the obvious conflicts between such a way of learning and modern education and the fact that these conflicts have effectively caused an almost total disappearance of classical prose from primary school curricula, those who have had such an experience fondly cherish the experience. As seen in his introduction to Chinese Classical Prose, Shih Shun Liu is among those who affectionately remember their early encounter with ku-wen writings and this translated anthology bears the hallmarks of such a learning procedure: the reverence for the "Eight Masters of the T'ang-Sung Period" 唐宋八大家 as advocated by the Ming essayist Mao K'un 茅坤 (1512-1601) and the influence of the early Ch'ing collection Ku-wen kuan-chih 古文觀止 prepared by Wu Ch'u-ts'ai 吳楚材, one of the standard texts for this kind of beginners' education.

Liu's bilingual volume, with carefully matched Chinese texts and English translations on opposite pages, is a handsome book. To assess it as a contribution, let us focus on the four aspects of purpose, coverage, accuracy, and explanatory materials.

Twenty-seven of the sixty-seven selections in Chinese Classical Prose can be found in the Ku-wen kuan-chih and the selections, as indicated by the subtitle, are confined to the writings of Mao K'un's eight T'ang and Sung masters: Han Yü 韓愈 (768-824) and Liu Tsung-yüan 柳宗元 (773-819) of the T'ang period, Ou-yang Hsiu 歐陽修 (1007-1072), Su Hsün 蘇洵 (1009-1066) and his sons Su Shih 蘇軾 (1036-1101) and Su Ch'e 蘇轍 (1039-1112), plus Tseng Kung 曾鞏 (1019-1033) and Wang An-shih 王安石 (1021-1086) of the Sung period. This attempt to keep alive a cherished heritage, sentimental

as it is, is a misled mission. This book, with its emphasis on translation, is addressed to a clientele fundamentally different from that of *Ku-wen kuan-chih* and other similar collections. In all likelihood, the readers of this book are mainly foreign students of Chinese in their intermediate stage of learning. The predominance of pieces on moral lessons and the emperor-minister relationship, while useful as information on traditional Chinese thought, does not furnish the kind of light, fascinating reading intended for those who have to struggle with sentence structure, grammar, vocabulary, idioms, and the like. Differences in age, cultural background, knowledge, and approach would make a collection so formulated utterly unbearable.

The subjectiveness of Mao K'un's choice of the eight masters can be seen in two ways. One does not have to dispute the greatness of the eight masters to argue that they are narrowly confined to two contemporary groups with close personal contacts. The list includes not a single writer from the first half and the later days of the T'ang period and it excludes everyone from the Southern Sung period. Even if Liu chose to limit himself to the T'ang-Sung period, would he not deem it appropriate to include some pieces from remarkable writers like Wang Po 王勃 (650-675), Yüan Chieh 元結 (723-772), Liu Yü-hsi 劉禹錫 (772-842), Tu Mu 杜牧 (803-852), P'i Jih-hsiu 皮日休 (ca.834-ca.883), Ssu-ma Kuang 司馬光 (1019-1086), Li Ch'ing-chao 李清照 (1083-after 1136), Lu Yu 陸游 (1125-1210), Chu Hsi 朱熹 (1130-1200), Lu Chiu-yüan 陸九淵 (1139-1192), and Wen T'ien-hsiang 文天祥 (1236-1282)?

This uncritical loyalty to Mao K'un is a self-imposed restriction which is further aggravated by Liu's preference for pieces of similar themes and identical backgrounds. Let us take several examples from the Ou-yang Hsiu section. There we find piece after piece where Ou-yang bombards the emperor *ad infinitum* with the evils of his political enemies (pp.140-169). Moreover, Ou-yang's "The Pavilion of Prosperity and Happiness" 豐樂亭記 (pp.182-185) and "The Old Drunkard's Pavilion" 醉翁亭記 (pp.186-189) are identical in theme, in presentational skills (see the similarity of the ending sentences), and in geographical setting. His autobiographical "Biography of Retired Scholar Liu-i" 六一居士傳 (pp.196-199), like these two pieces, was also written during his demotion to Ch'u-chou 滁州. As if we have not seen enough of Ch'u-chou, in a later section we are given another piece, "The Sober Mind Pavilion" 醒心亭記 (pp.316-319), by Tseng Kung, the pavilion in question not only having been built by Ou-yang Hsiu, but also located just a few hundred paces from the Pavilion of Prosperity and Happiness. One more example. After Ou-yang's lengthy "Inscription on the Memorial Tablet for the

Passage to the Shuangkang Tomb" 瀟岡阡表 (pp.200-207) on his long-deceased father, there is simply no need to include "On the Portraits of the Seven Worthy Men" 七賢畫序 (pp.208-209), a much shorter piece on his father. Couple all this with the thematic concentration observed earlier, and it is no exaggeration to say that Liu preferred redundancy to variety.

There is little doubt that Liu understood the selections well, as reflected by the accuracy of his translations. Debatable renderings are rare, though there is the occasional ambiguous line. Accuracy aside, there are three general problems with the translations. One is the occasional disregard for the sentence order and grammatical structure of the original. The second paragraph on p.103 is a case in point. Even though nothing substantial is missed, the degree of liberty taken with the order and structure of the sentences is enough to label this paragraph one of paraphrasing or rewriting rather than translation. This practice, though occasional, compromises the basic function of a bilingual text.

Along the same line, there are instances of no apparent technical problems in which Liu chose to transform direct statements into indirect ones. For example:

- P.103 王曰: "戲也"。周公曰: "天子不可戲"。 When the emperor said that it was just a joke, the duke replied that the Son of Heaven should not speak in jest.
 P.123 曰: "吾不食矣"。 She said that she did not care for it.
 P.323 上曰: "卿所獻書, 為卿留中"。 The emperor ordered that his book be placed in safekeeping.

At the very least, transformation of this kind unnecessarily changes the structure of the sentences and makes it difficult for the reader to identify the corresponding lines in the Chinese texts.

Another disturbing practice is the inconsistent handling of courtesy names, honorific titles, and posthumous titles. The confusing situation can be seen in the following examples:

- Pp.61-67 遠 (Hsü Yüan 許遠, 709-757) is given as Yüan
 巡 (Chang Hsün 張巡 709-757) is given as Hsün
 Pp.91-93 子厚 (Liu Tsung-yüan) is given as Tzu-hou
 Pp.153-155 執中 (Ch'en Chih-chung 陳執中, 990-1059) is given as Ch'en
 Pp.165-167 堯臣 (Wang Yao-ch'en 王堯臣, 1001-1056) is given as Wang
 Pp.179-181 元凱 (Tu Yü 杜預, 222-284) is given as Tu Yü and Tu
 叔子 (Yang Hu 羊祐, 221-278) is given as Yang Hu and Yang
 Pp.241-243 增 (Fan Tseng 范增, 275 B.C.-204 B.C.) is given as Fan

- Pp.245-247 子房 (Chang Liang 張良, ?-189 B.C.) is given as Chang Liang
 Pp.257-259 樂天 and 白樂天 (Po Chü-i 白居易, 772-846) are given
 as Po Chü-i and Po
 P. 273 狄武襄 (Ti Ch'ing 狄青, 1008-1057) is given as Ti Ch'ing
 P. 275 范文正 (Fan Chung-yen 范仲淹, 989-1052) is given as
 Fan Chung-yen
 P. 277 淮陰侯 (Han Hsin 韓信) is given as Han Hsin
 Pp.331-333 范質之 (Fan Shih-tao 范師道, 1003-1061) is given as
 Fan Kuan-chih
 Pp.335-337 王同甫 (Wang An-kuo 王安國, 1028-1074) is given as
 Wang T'ung-fu

Obviously Liu did not set up guidelines in handling these terms, but his preference in using official names or only surnames is apparent. Whenever information is not given to link up the different names, which is generally the case, the uninitiated would easily be at loss. Although we agree that the use of official names in formal documents (like petitions to the emperor) should make the language of the translations more idiomatic, the mechanical use of such names in more personal writings lessens the intimacy and respect expressed in the original texts. Why not just follow the texts except for where idiomatic English of certain kinds of writings dictates the use of official names?

The dust jacket of the volume describes the translator-editor as a "scholar steeped in the Chinese classical tradition," but there is little evidence in the book to support this view. Explanatory materials, which usually speak for one's scholarship, constitute the weakest part of the book. Introduction to the book and biographical sketches of the eight masters are kept to the minimum. This may have been dictated by the nature of the reader. But the real trouble is that so many of the selections are related to the complicated historical issues of the legendary period and the pre-Ch'in period, as well as to political problems of the T'ang and Sung dynasties, that the translator-editor had the obligation to provide the basic information beyond the pedestrian ritual of using a few footnotes to identify isolated placenames, reign titles, and the like. For example, the attacks of Ou-yang Hsiu against his political enemies were not as simple as he presented them and were deeply involved in the factional fights of the second half of the Northern Sung period. Ministers like Lü I-chien 呂夷簡 were really not as bad as Ou-yang Hsiu would like us to believe. In the absence of explanation, how can the uninitiated reader, after seeing round after fierce round of criticism launched by the daring Ou-yang Hsiu, gain the faintest idea about the truth of those cut-throat, partisan conflicts?

Besides the lack of information, there are cases throughout the book which call for at least minimal explanatory notes, and some of the notes provided are plainly erroneous:

- P.109 "Three worms" need to be explained
 P.123 Why "some girls were ordered to play Ch'in music" has to be explained. Answer: Ch'in music was believed to be seductive.
 P.127 "Of the men who went in to drink, she chose only those with big noses, ..." Why big noses? Answer: This has to do with the Chinese belief that men with big noses are better endowed. By the way, Liu Tsung-yüan's "Biography of Hochien" 河間傳 is too erotic for a reader of this nature.
 P.131 Who was Meng Ch'i-tao 孟幾道? Answer: His biographies can be found in both Chiu T'ang-shu and Hsin T'ang-shu.
 Pp.192,320 Why two different notes on Li Yüan-hao 李元昊?
 P.176 To say that the T'ai Mountains is a mountain range in Shantung is not enough. Its significance has to be explained in order to understand the context here. (P.196 has an almost identical footnote).
 P.197 The significance of the Battle of Cho-lu 涿鹿, both historical and folkloristic, has to be explained.
 P.272 Ti Ch'ing is described as "one of the prime ministers of the Sung Dynasty." In history and in popular literature, Ti Ch'ing is known to posterity as a mighty general. His brief stint as the chief executive of the Secretary-Chancellery (T'ung Chung-shu Men-hsia p'ing-chang-shih 同中書門下平章事) in addition to his regular position of commissioner of military affairs (Shu-mi shih 樞密使) towards the end of his career should not make us remember him as a top civil official.

The handling of institutional titles is another serious shortcoming of Liu's work. Throughout the volume, he presents title after title in romanization (not even in italics). If a note is included, it usually gives us vague and speculative information. The following examples should suffice:

- P.68 楊少尹 Shao-yin Yang (Note: title of a subordinate local official). Answer: Shao-yin was deputy prefect. Whatever it was, to render "Yang Shao-yin" as Shao-yin Yang only reminds us of the modern romanized names of Chinese in America. "Chih-chiang Mei" on p.249 is another example of this barbarization.
 P.131 御史尚書郎 Shang-shu-lang of the Censorship (Note: title of a ranking official). Answer: Bureau chief of the Censorate.

- P.181 光祿卿 Kuang-lu-ch'ing (Note: title of a high official in the central government). Answer: Superintendent of the imperial household.
- P.203 判官 and 推官 P'an-kuan, T'ui-kuan (Notes: title of a subordinate official). Answer: P'an-kuan was staff supervisor of a prefectural level district, T'ui-kuan was prefectural judge.
- P.229 司農 Minister of Finance (No note). Answer: Ssu-nung ch'ing 卿 was lord of agricultural supervision.
- P.314 尚書都官郎中知撫州新君厚載, 尚書屯田員外郎通判撫州林君勉 Nieh Hou-tsai, Lang-chung of the Ministry of Justice and Prefect of Fuchow; Lin Ts'ao, Yüan-wai-lang of the Ministry of Works and T'ung-p'an of Fuchow (Note: titles of ministerial officials). Answer: Tu-kuan lang-chung was chief of the Bureau of Correction Facilities in Ministry of Justice; T'un-t'ien yüan-wai lang was division chief of the Bureau of State Lands in the Ministry of Public Works; T'ung-p'an was assistant prefect.

Despite the large number of institutional titles in the selections, most of them are neither uncommon nor tricky and can be located in Huang Pen-chi's 黃本驥 (fl. 1846) Li-tai chih-kuan piao 歷代職官表, whose 1965 reprint is enhanced by the inclusion of several useful modern appendixes. For anyone unaware of such a common traditional reference, it may be too much to expect him to use the extensive works done by Charles O. Hucker, Robert des Rotours, E.A. Kracke, Jr., Bernard S. Solomon, Rafe de Crespigny, and Chang Fu-jui 張馥蕊 in clarifying the institutional titles of medieval China. With this understanding, it should not be a surprise to observe in the bibliography of a volume published in 1979 the absence of landmarks of modern scholarship like Kao Pu-ying's 高步瀛 T'ang Sung wen chü-yao 唐宋文舉要 (1935; rpt.1963) and Chang Shih-chao's 章士釗 Liu-wen chih-yao 柳文指要 (1971).

In sum, the translator-editor's sound understanding of the Chinese texts and his mastery of the English language are not enough to compensate for his apparent lack of scholarly training. Chinese Classical Prose was poorly planned and incompetently done.

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Lam Lay Yong, A Critical Study of the Yang Hui Suan Fa. A Thirteenth-Century Chinese Mathematical Treatise.¹ Singapore: Singapore University Press, 1977. xix + 360 pp.

The University of Singapore Press accepted Dr. Lam's complete manuscript in 1966. At that time readers lacking access to scholarship in Chinese and Japanese could learn little about the efflorescence in the second half of the thirteenth century that brought Chinese algebra to its highest evolution prior to Western influence. By the time this book was published in 1977 it had become one of three useful and competent monographs on the period.

Ulrich Libbrecht's Chinese Mathematics in the Thirteenth Century. The Shu-shu chiu-chang of Ch'in Chiu-shao (Cambridge, MA: MIT East Asian Science Series, no. 1, 1973)² incorporated an elaborate comparative study of indeterminate equations based on its author's ability to use not only Chinese and Japanese but Sanskrit and all pertinent classical and modern European languages. John Hoe's 1976 Paris dissertation, published in part under the same title as Les systèmes d'équations polynômes dans le Siyuan yujian (1303) (Mémoires de l'Institut des Hautes Études Chinoises, 6; Paris, 1977)³, is much more narrowly focussed on the mathematical than on the historic aspects of Chu Shih-chieh's work. Li Yeh's 李冶 writings still await a study in depth, but have been discussed intelligently and with penetration by Mei Jung-chao 梅榮照 in Ch'ien Pao-tsung 錢寶琮, ed., Sung-Yüan shu-hsüeh-shih lun-wen-chi 宋元數學史論文集 (Peking, 1966), pp.104-148, and more briefly in English by Ho Peng Yoke, s.v., in Dictionary of Scientific Biography.

On the strength of this recent work, it is possible to form a rough but accurate idea of the texture of mathematical reasoning in the period. For example, we can now discard the long-lived myth that geometrical proof or geometrical reasoning played no important part in Chinese mathematics. Geometric proof (although certainly not Euclidean demonstration) was employed in the fifth century, while the use of geometrical diagrams and solid models to solve problems is even older (see p.266 of the volume under review and Donald Blackmore Wagner, "Liu Hui and Tsu Keng-chih on the Volume of a Sphere," Chinese Science, 1978, 3: 59-79). Thus, there is much profit in the books by Lam, Libbrecht, and Hoe, even for those sinologists who regard mathematical handbooks with the same uneasy bemusement as dancing fleas. The works studied are collections of practical problems -- even when, as in the case of Ch'in Chiu-shao, this traditional form

¹ 楊輝算法

² 秦九韶, 數書九章

³ 朱世傑 四元玉鑑

sometimes acted as confining vessel for very abstract inspirations. The problems translated throw a great deal of light on administrative practices, dimensions of structures, valuation of currency, and standardization of weights and measures. Libbrecht gathered these data from the Shu-shu chiu-chang and ordered them in a chapter on socio-economic information. They are easily surveyed seriatim in Lam's book and in Hoe's dissertation (unfortunately not in the published part, which is entirely concerned with methods of solution).

The Yang Hui suan fa (1274-1275) is a collection of short treatises which comprise most of a curriculum in elementary arithmetic (the curriculum is itemized at the beginning), a guide to mensurational problem-solving, and an anthology of odd methods from older books that incorporates a very rich discussion of magic squares and circles.

It will be evident to the most casual reader of Lam's book that what constitutes a computational method, and the criteria for choosing one rather than another, differ greatly from corresponding aspects of modern mathematics. We find in the beginner's curriculum nine separately explained and named methods of multiplication -- for instance, the "adding to alternate places (chia-ko-wei 加隔位)" method, used only when the multiplier has three digits, the first of which is 1 and the second 0. This elaboration makes sense once we understand that the object of instruction is mundane: to enable the student to carry out quickly a great variety of basic operations using computing-rods on a board, which when linked by the operator's fingers to his brain form (board, rods, fingers, brain) a moderately powerful but rather cumbersome computer especially adapted to matrix operations. It is less trouble, as everyone knows who has done much mental arithmetic, to multiply by 2 and shift the decimal point than to divide by 5; or, in "adding to alternate places," one can avoid some drudgery if one multiplies 26×102 by adding 2×26 to 2600. The computing-rods, endlessly laid out on the board, shifted about, and taken up, began to fall out of use in the Ming. The abacus made commercial computation, which did not need such sophisticated algebra, quicker and easier. But the abacus offered only a one-dimensional array, a line of digits, whereas it was precisely the two dimensions of the computing board, like a chessboard, that made the high achievements of Chinese algebra possible. The computing-rods were in later times mastered only by a few specialists, just as the pocket calculator is bound to make esoteric aspects of number theory that a decade ago were considered an indispensable part of

everyone's mental equipment.

Lam has translated Yang Hui's entire collection of tractates and has provided a commentary and discussion of roughly the same length, which constitute a splendid basic introduction to Chinese mathematics. This is the second major Chinese mathematical book to be translated into any Western language, and the first with an adequate commentary. It has been preceded only by E.I. Berezkina, "Drevnekitaiskii Traktat Matematika v devjati Knigach," Istoriko-matematicheskie issledovaniya, 1957, 10: 423-584, on which is based Kurt Vogel (tr.), Chiu chang suan shu. Neun Bücher arithmetischer Technik (Oswalds Klassiker der exakten Wissenschaften, n.s., 4; Braunschweig, 1968).⁴ Lam's mathematical and linguistic understanding combine to make possible a faithful translation. The language of such texts is highly stereotyped in construction and diction, so that understanding the mathematics greatly simplifies understanding the expression. This does not make the work easy, but it means that Lam's enormous intellectual labor has produced what with minor qualifications can be considered a definitive translation.

Lam's explanations are clear and amply supplemented with diagrams. She regularly places developments in historical context and compares similar methods in Egyptian, Mesopotamian, Greek, Hindu, and European mathematics, although not always from the best available secondary sources such as those of B.L. van der Waerden and Otto Neugebauer (only one of whose books is listed in her bibliography). Her interest does not extend to social aspects of mathematics or to the socio-economic content of the problems.

Lam is less at home with more belletristic matters, in this text practically confined to book titles. She understands words, but is not always attentive to syntax, as can be seen from two of the titles of Yang's little books. One, Fa-suan ch'ü-yung pen-mo 法算取用本末, cannot mean "Alpha and Omega of a Selection on the Applications of Arithmetical Methods." Here ch'ü can hardly be functioning nominally. "Arithmetical methods" would be suan fa, not fa suan. A closer translation might be "Alpha and Omega of Applications of Methodical Arithmetic." In Hsü ku-chai ch'i-suan fa 續古摘奇算法 the structure has been reassembled to yield "Continuation of Ancient Mathematical Methods for Elucidating the Strange [Properties of Numbers]" (p.xvi). In Yang's preface he explained that two gentlemen brought him some "unusual problems 奇題" and "forgotten

⁴ 九章算術

literature" and asked him to "form a collection;" in it he included "methods and examples of solution by which to perpetuate ancient methods

可以續古法算" (pp.139-140). One would therefore not expect the title to be concerned with "[properties of numbers]," but rather to mean, a bit over-literally, "Mathematical Methods: A Choice of Unusual Problems and a Perpetuation of Old Ways." Analogously, the title of the classic problem, 秦王暗點兵 [法] is rendered "the Prince of Ch'in's secret method of counting soldiers" (p.292), but that would be tien-ping an-fa or something of the sort. An would be more closely translated by an adverb as in "the King of Ch'in's method of secretly counting soldiers."

A final problem has to do with the idiomatic use of English. What the publisher was doing in the decade it took to produce this book I prefer not to guess. Not much of the time could have been consumed in the careful editing that one expects. We thus find a number of puzzling turns of phrase, some of which can only be clarified by reference to the Chinese text. An instance is "the approximation of the shang to the tenth place" when there is no reference in the problem to ten places; "in the tens place" (e.g., the 2 in 321) is what is really meant here (p.264 *et passim*). Among a series of assertions about the number of days needed for pupils to master each part of the curriculum we find such statements as "it is only necessary to take one day for revision," although there is nothing to revise (pp.11-12). The text has 溫習, used not in the usual sense of "to review" but, as the context makes clear, to mean "to become familiar with." When the text speaks of greater precision Lam unfortunately translates "more approximate" rather than "less approximate" or "a closer approximation" (pp.93, 243, 245, 341, etc.; the context makes the inversion of sense clear).

The reader will therefore wish to be a bit cautious about the few aspects of the translation that are not straightforwardly mathematical. With that qualification in mind, I can predict with confidence that this will remain for some time a monograph of the first importance in the history of Chinese mathematics.

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James Chambers, The Devil's Horsemen: the Mongol Invasion of Europe. New York: Atheneum, 1979. 190 pp. \$11.95

Can the review in this specialist journal of a work of second-hand intended for at least a semi-popular reading audience be justified? The response given here is affirmative on the grounds, first, that the work in question fills a gap in the existing literature and, second, that it does so in economic and effective fashion. Although this is a first book by an author who has no pretensions to being an Asian scholar, much less a Mongolist, it succeeds admirably in narrating the unique and dramatic story of the conquests which, on an unparalleled scale, changed the face of history for peoples across Eurasia. Others, Heaven knows, have tried their hand at this as well (indeed, the Mongols must rank right behind the Tao-te-ching among China-related topics as a source of fascination for the amateur). But Chambers, writing in a straightforward, restrained style, remains close to his secondary sources whose contribution he freely acknowledges. The success of the book, therefore, is a tribute not only to the author but also to the scholars whose work in the last few decades has so expanded our knowledge in this area. Since Chambers cites little of the periodical literature, it is difficult to tell how much of it he has covered. One important omission among his English, French and German books is Gian Andri Bezzola's superb Die Mongolen in Abendl ndischer Sicht (1220-1270), ein Beitrag zur Frage der V lkerbegegnungen (1974) which clearly would have added depth to his narrative.

Chambers begins his account with Cinggis' Khwarizmian campaign and takes it down to the final Mongol advances westward -- the defeats of the Il-Khan Mongols at Ain Jalut (1260) and Hims (1282) and the invasion of Poland by the Golden Horde in 1285-87. The centerpiece of the book is the Mongol conquest of Russia, 1237-40, (chap.6) and of Eastern Europe, 1241-1242 (chap.7). The author prepares for these achievements by treatments of the early Mongol reconnaissance into Russia of 1221-1223, political circumstances in the Mongol camp in succeeding years, and the character of the Mongol army (chaps.2-5). He follows his central chapters with accounts of the exchange of missives between the Mongol court and Western rulers (secular and spiritual) and of Hulegu's progress in Syria and his alliance with the Crusaders. China and East Asia clearly receive little space, but, after all, the theatres of Russia, Eastern Europe and Persia are the real subject. Four serviceable maps are provided together a select bibliography, a glossary of special terms, and an index.

The strengths of the volume are its breadth of scope, its usually reliable synthesis, its clear and succinct style, and its balanced, sensible interpretations. It would be difficult, for example, to argue with his assessment of the life of Cinggis and its impact (pp. 42-46) or his account of the horror of the destruction of Baghdad in 1258 (pp. 145-146). While Mongol actions remain the focus, sufficient information is consistently provided on the west (including Russia and the Near East) to make comprehensible the outcome of this series of political, military and cultural collisions. There is, to be sure, the occasional lapse, sometimes of a minor nature such as the identification of the French artist serving at the Mongol court as "Guillaume Buchier" (rather than "... Boucher"). More serious, and the one really irresponsible error in the volume, is Chambers' assertion (p. 24 and alluded to again on p. 38) that Sübötei and Venetian merchants concluded a secret treaty in the Crimea in 1222, a report which appears to go back to the claims of the nineteenth century historian Léon Cahun. Moreover, the author's picture of scores of Chinese literati already being recruited in Cinggis' day for service throughout the Mongol empire is equally fanciful (see p. 25). Finally, the greatest drawback of the volume, characteristic of course of works intended a larger audience, is its lack of annotation, making it impossible to track down any of the sources of information.

Nevertheless, this is on the whole a respectable piece of work, more carefully done and more restrained in tone than most books on the Mongols intended for the general reader (cf. Peter Brent's 1976 volume The Mongol Empire, alternatively entitled Genghis Khan, which is however beautifully illustrated). The Devil's Horsemen (a title not calculated to win scholarly acclaim but which does enjoy some historical basis) provides a handy narrative which can be richly supplemented with readings in Bertold Spuler's History of the Mongols (1972) and the Bezzola book mentioned above. It is, incidentally, a current History Book Club selection.

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