A Phonological Study in the 'Phags-pa Script and the Meng-ku Tzu-yün

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Faculty of Asian Studies in association with Australian National University Press

Canberra 1971
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A Phonological Study in the 'Phags-pa Script and the Meng-ku Tzu-yün

Oriental Monograph Series No. 7
Faculty of Asian Studies:
Oriental Monograph Series

These monographs are a continuing series, on the languages, cultures, and history of China, Japan, India, Indonesia, and continental Southeast Asia.

## Contents

 Acknowledgments ................................................. 1  
 Abbreviations ................................................. 2  
 Introduction .................................................... 7  
 I  A Biography of Bla-ma 'Phags-pa .................. 24  
 II  The 'Phags-pa Alphabet .............................. 39  
 III  'Phags-pa Orthography in Chinese Documents .... 59  
 IV  The Sound System in the Meng-ku Tzu-yün ....  

Appendix: 'Phags-pa Materials ........................... 134  
 Bibliography .................................................... 147  
 Postscript ...................................................... 171  

v
ACKNOWLEDGEMENTS

THIS paper is a preliminary to an intended Study in Middle Chinese Phonology, which I hope to complete within the next few years and which has for some time formed the major topic of my research. Generally speaking, the study of Middle Chinese still lags behind that of Ancient Chinese, which has been rapidly advanced by Professor B. Karlgren and other scholars, although even in Ancient Chinese studies there are still wide gaps.

The index to the whole body of characters in the Meng-ku Tzu-yün will be published separately in the near future, and it will include a table of the phonetic values of each character in comparison with Ancient Chinese and the Chung-yüan Yin-yün. This will, I hope, complement the Analytic Dictionary of Chinese and Sino-Japanese (Paris, 1923) compiled by Professor Karlgren, which deals very little with Middle Chinese.

In the course of this research, I have been much indebted to Professor E. G. Pulleyblank of the Department of Asian Studies of the University of British Columbia, who has given me a number of valuable suggestions and has encouraged me to publish this paper.

I should also like to express my sincere gratitude to Professor J. W. de Jong and Mr A. Yuyama of the Department of South Asian and Buddhist Studies of the Australian National University. They have given me constant support in the project of publishing this paper and have made many useful suggestions, especially on Sanskrit and Tibetan sources. I also owe a special debt of gratitude to Professor A. Tōdō of the University of Tōkyō, who has guided my studies in this field. Finally, I am most grateful to Dr A. Fraser and Dr K. H. J. Gardiner of the Australian National University for their help in improving my written English.

In making these acknowledgements, however, I intend in no way to disclaim my responsibility for the inadequacies and imperfections of this work.

M. Nakano

The Australian National University, Canberra.
4 April 1968.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AA</td>
<td>= Acta Asiatica (= Bulletin of the Institute of Eastern Culture) (Tokyo)</td>
</tr>
<tr>
<td>AM</td>
<td>= Asia Major (Leipzig, later new series in London)</td>
</tr>
<tr>
<td>AO</td>
<td>= Acta Orientalia (Leiden, later Copenhagen)</td>
</tr>
<tr>
<td>AOH</td>
<td>= Acta Orientalia Academiae Scientiarum Hungaricae (Budapest)</td>
</tr>
<tr>
<td>AS</td>
<td>= Bulletin of Academia Sinica (= Chung-yang Yen-chiu-yüan Li-shih Yü-yen Yen-chiu-so Chi-k’an 中央研究院歷史語言研究所集刊) (Peking, Shanghai, later Taipei)</td>
</tr>
<tr>
<td>BA</td>
<td>= The Blue Annals (= Deb-ther sñon-po) tr. by G. N. de Roerich.</td>
</tr>
<tr>
<td>BEFEO</td>
<td>= Bulletin de l’École Française d’Extreme-Orient (Hanoi, later Paris)</td>
</tr>
<tr>
<td>BSO(A)S</td>
<td>= Bulletin of the School of Oriental (and African) Studies (London)</td>
</tr>
<tr>
<td>Bulletin</td>
<td>= Bulletin de la Classe des Sciences Historiques, Philologiques et Politiques de l’Académie Impériale des Sciences de Saint-Pétersbourg (St Petersburg)</td>
</tr>
<tr>
<td>CAJ</td>
<td>= Central Asiatic Journal (The Hague/Wiesbaden)</td>
</tr>
<tr>
<td>CG</td>
<td>= Chügoku Gogaku 中國語學 (Tokyo)</td>
</tr>
<tr>
<td>CGKR</td>
<td>= Chügoku Gogaku Kenkyûkai Ronshû 中國語學研究會論集 (Tokyo)</td>
</tr>
<tr>
<td>CKRS</td>
<td>= Chügoku Kankei Ronsetsu Shiryô ..... Bungaku, Gogaku, Geijutsu 中國關係論說資料 ..... 文學，語學，藝術 (Tokyo: Hokushin Shoten)</td>
</tr>
<tr>
<td>CYYY</td>
<td>= Chung-yüan Yin-yûn 中原音韻 by Chou Te-ch’ing.</td>
</tr>
<tr>
<td>CTT</td>
<td>= Ching-yü T’ien-chu Tsu-yüan 景祐天竺字源 by Wei-ching.</td>
</tr>
<tr>
<td>EYT</td>
<td>= Erdeni-yin Tobê by Saran Sechen Qong Tayijî.</td>
</tr>
<tr>
<td>FJHC</td>
<td>= Fu-jen Hsüeh-chih 輔仁學誌 (Peking)</td>
</tr>
<tr>
<td>FLT</td>
<td>= Fo-tsu Li-tai T‘ung-tsai 佛祖歷代通載 by Nien-ch’ang.</td>
</tr>
<tr>
<td>FSK</td>
<td>= Fa-shu-k’ao 法書考 by Sheng Hsi-ming.</td>
</tr>
<tr>
<td>GK</td>
<td>= Gengo Kenkyû 言語研究 (Tokyo)</td>
</tr>
<tr>
<td>Code</td>
<td>Publication</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>HC</td>
<td>= <em>Hsing-chuang</em> 行状 by Wang P'an.</td>
</tr>
<tr>
<td>HCCS</td>
<td>= <em>Huang-chi Ching-shih T'ien-sheng Ti-yin T'u</em> 皇極經世天聲地音圖 by Shao Yung.</td>
</tr>
<tr>
<td>HDGGK</td>
<td>= Hokkaido Daigaku Gaikokugo Gaikokubungaku Kenkyü 北海道大学外国語外国文学研究 (Sapporo)</td>
</tr>
<tr>
<td>HJAS</td>
<td>= Harvard Journal of Asiatic Studies (Cambridge, Mass.)</td>
</tr>
<tr>
<td>HYHP</td>
<td>= <em>Hsin-ya Hsiieh-pao</em> 新亞學報 （Hong Kong : New Asia College 新亞書院, Chinese University of Hong Kong)</td>
</tr>
<tr>
<td>HYS</td>
<td>= <em>Hsin Yuan-shih</em> 新元史 by K'o Shao-min.</td>
</tr>
<tr>
<td>IAN</td>
<td>= Izvestija Akademii Nauk SSSR (Moscow)</td>
</tr>
<tr>
<td>IBK</td>
<td>= Indogaku Bukkyōgaku Kenkyū 印度學佛教研究 (Tokyo)</td>
</tr>
<tr>
<td>JA</td>
<td>= Journal Asiatique (Paris)</td>
</tr>
<tr>
<td>JAOS</td>
<td>= <em>Journal of the American Oriental Society</em> (Boston/New Haven/New York)</td>
</tr>
<tr>
<td>JASB</td>
<td>= <em>Journal of the Asiatic Society of Bengal</em> (Calcutta)</td>
</tr>
<tr>
<td>JOS</td>
<td>= <em>Journal of Oriental Studies</em> (Hong Kong)</td>
</tr>
<tr>
<td>JRAS</td>
<td>= <em>Journal of the Royal Asiatic Society</em> (London)</td>
</tr>
<tr>
<td>JSFOu</td>
<td>= <em>Journal de la Société Finno-Ougrienne</em> (Helsinki)</td>
</tr>
<tr>
<td>KSz</td>
<td>= <em>Keleti Szemle = Revue Orientale pour les Études Ouralo-Altaïques</em> (Budapest)</td>
</tr>
<tr>
<td>MAB</td>
<td>= <em>Memoirs of the Asiatic Society of Bengal</em> (Calcutta)</td>
</tr>
<tr>
<td>MIO</td>
<td>= <em>Mitteilungen des Instituts für Orientforschung</em> (Berlin)</td>
</tr>
<tr>
<td>MKJI</td>
<td>= <em>Möko Jín</em> 蒙古字韻, a facsimile edition of the <em>Meng-ku Tzu-yūn</em> published by Kansai University.</td>
</tr>
<tr>
<td>MKTY</td>
<td>= <em>Meng-ku Tzu-yūn</em> 蒙古字韻 by Chu Tsung-wen.</td>
</tr>
<tr>
<td>MS</td>
<td>= <em>Monumenta Serica</em> (Peking, later Nagoya and Los Angeles)</td>
</tr>
<tr>
<td>MSOS</td>
<td>= <em>Mitteilungen des Seminars für orientalische Sprache an der Friedrich-Wilhelm-Universität zu Berlin</em> (Berlin)</td>
</tr>
<tr>
<td>NCGH</td>
<td>= <em>Nihon Chūgoku Gakkaigō</em> 日本中國學會報 (Tokyo)</td>
</tr>
<tr>
<td>NDBKR</td>
<td>= Nagoya Daigaku Bungakubu Kenkyū Ronshū 名古屋大學文學部研究論集 (Nagoya)</td>
</tr>
<tr>
<td>NSTH</td>
<td>= <em>Nü-shih Ta-hsūeh Hsūeh-shu Chi-k'an</em> 女師大學學術季刊 (Peking)</td>
</tr>
</tbody>
</table>
OJDK = Ochanomizu Joshi Daigaku Jinbun Kagaku Kiyō 水女子大学人文科学紀要 (Tokyo)
ODKN = Ōtani Daigaku Kenkyū Nenpo 大谷大学研究年報 (Kyoto)
PCH = Po-chia-hsing 百家姓.
PCTH = Pei-ching Ta-hsüeh Kuo-hsüeh Chi-k'an 北京大學國學季刊 (Peking)
PPTS = Pei-p'ing T'u-shu-kuan Kuan-k'an 北平圖書館館刊 (Peking)
PSPT = Pa-ssu-pa-tzu yü Yüan-tai Han-yü 八思巴字與元代漢語 (資料彙編) edited by Lo Ch'ang-p'ei and Ts'ai Mei-piao.
RO = Rocznik Orientalistyczny (Lwów)
SO = Studia Orientalia (Helsinki)
SSHY = Shu-shih Hui-yao 書史會要 by T'ao Tsung-i.
SZ = Shigaku Zasshi 史學雑誌 (Tokyo)
THG = Tōhōgaku 東方學 (Tokyo)
Tōhoku = Chibetto Senjutsu Butten Mokuroku 西藏搗迪佛典目錄 (A Catalogue of the Tōhoku University Collection of Tibetan Works on Buddhism) (Sendai, 1953)
TP = T'oung Pao (Leiden)
TPS = Tibetan Painted Scrolls by G. Tucci.
TSNP = Ti-shih Nieh-p'an 帝師涅槃 by Te-hui ch'an-shih.
TSTP = Ti-shih Tien-pei 帝師譜碑 by Shih-yüan tsung-chu.
TVOIRAO = Trudy Vostochnago Otdelenija Imperatorskago Russkago Arxeologičeskago Obščestva (St Petersburg)
TYGH = Tōyō Gakuhō 東洋學報 (Tōkyō)
VDL = The Fifth Dalai Lama's Chronicle.
WW(TK) = Wen-wu (Ts'an-k'ao Tzu-liao) 文物 (參考資料) (Peking)
WZKM = Wiener Zeitschrift für die Kunde des Morgenlandes (Vienna)
YCHP = Yen-ching Hsiieh-pao 燕京學報 (Peking)
YS = Yüan-shih 元史 by Sung Lien and others.
YSLP = Yüan-shih Lei-pien 元史類編 by Shao Yüan-p'ing.
ZDMG = Zeitschrift der deutschen morgenländischen Gesellschaft (Leipzig, later Wiesbaden)
ZIAN = Zapiski Amperotorskoj Akademii Nauk' (St Petersburg)
ZKM = Zeitschrift für die Kunde des Morgenlandes (Göttingen)
ŽMVD = Žurnal' Ministerstva Vnuternnix del' (St Petersburg)
ZSOIRGO = Zapiski Sibirskago otdelenija Imperatorskago Russkago Geografičeskago obsčestva (St Petersburg)
ZSPANO = Zapiski Sankt'-Peterburgskago Arxeologiceskago i Numizmatičeskago Obsčestva (St Petersburg)
ZY = Zhongguo Yuwen (= Chung-kuo Yü-wen) 中國語文 (Peking)

General (mainly used in tables)
abbr. = abbreviation(s), abbreviated.
AC = Ancient Chinese.
Bibl. = Bibliography in this paper.
c = ch'ü-sheng 去聲 (= falling-tone).
Ch(in). = Chinese.
E(group) = cerebral group. See Table 1.
F(group) = supradental and affricated alveolo-palatal group. See Table 1.
fasc. = fasicle(s).
fol(s). = folio(s).
G(group) = sibilant group. See Table 1.
h.k. = ho-k'ou 合口 (= rounded-mouth sounds).
I./init. = initial consonant(s).
j = ju-sheng 入聲 (= entering-tone).
k.k. = k'ai-k'ou 陽口 (= open-mouth sounds).
MC = Middle Chinese.
M./med. = medial(s).
Mong. = Mongolian.
N./nuc. = nucleus(-clei).
<table>
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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>OM</td>
<td>Old Mandarin.</td>
</tr>
<tr>
<td>p</td>
<td>p'ing-sheng 平聲 (=level-tone).</td>
</tr>
<tr>
<td>Pek.</td>
<td>Pekinese.</td>
</tr>
<tr>
<td>'Pgs.</td>
<td>'Phags-pa (script, alphabet).</td>
</tr>
<tr>
<td>repr.</td>
<td>reprint, reprinted.</td>
</tr>
<tr>
<td>rev.</td>
<td>revised.</td>
</tr>
<tr>
<td>s</td>
<td>shang-sheng 上聲 (=the falling-rising-tone).</td>
</tr>
<tr>
<td>Skt.</td>
<td>Sanskrit.</td>
</tr>
<tr>
<td>Tib.</td>
<td>Tibetan.</td>
</tr>
<tr>
<td>tr.</td>
<td>translation, translated.</td>
</tr>
<tr>
<td>trsc.</td>
<td>transcription, transcribed.</td>
</tr>
<tr>
<td>Ugr.</td>
<td>Uighur.</td>
</tr>
<tr>
<td>Wu</td>
<td>Wu dialects.</td>
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</table>
INTRODUCTION

The 'Phags-pa script was invented by Bla-ma 'Phags-pa and was officially used by the Mongol Empire. The original plan of this script, mentioned in the Imperial decree that promulgated it in 1269, was to transcribe Mongolian and other neighbouring languages. As the time that the 'Phags-pa script was in official use was limited to the Mongol Empire, 'Phags-pa material at our disposal is extremely limited, and the only available material in the script is written in Mongolian, Chinese, and Tibetan.

The Mongolian documents in the 'Phags-pa script are mostly inscriptions, and in conjunction with documents in the Uighur script, which was adopted by the Mongols after 1204, they are very important material for the study of the Mongolian language in the thirteenth and fourteenth centuries.

The period of the Yuan dynasty (the Mongol Empire) can be regarded as a new stage in the history of the Chinese language, which had undergone great phonological changes since the late T'ang dynasty, and the phonetic system of Chinese in the Yuan dynasty should be strictly distinguished from Ancient Chinese. The 'Phags-pa documents are most important materials for the study of Chinese in the Yuan dynasty because they represent each Chinese character with a phonetic symbol. These documents show the features of Middle Chinese phonology more accurately than the rhyme dictionaries such as the Chung-yüan Yin-yün 中原音韻 (abbr. CYYY) (1324). During the T'ang dynasty, the Chinese language was transcribed by the Uighur and Tibetan scripts, but the 'Phags-pa


transcription of Chinese in the Yuan dynasty provides much more systematic material.

Tibetan materials, mostly seals, in the 'Phags-pa script were produced after the fall of the Yuan dynasty, much later than the Mongolian and Chinese materials. From the Tibetan viewpoint, the 'Phags-pa script was very probably a variant of Tibetan script, or simply seal-characters. As I will discuss later, some Tibetologists regard the 'Phags-pa script as Tibetan seal-characters or as Tibeto-Mongol characters, and it is difficult to decide whether the Tibetans, in using 'Phags-pa script for seals, had any great knowledge of the script. Even if the Tibetans had invented a seal-script based on the Tibetan dbu-can (printing characters), this would naturally resemble the 'Phags-pa script, which was also derived from the dbu-can. In this paper, however, Tibetan seal-characters will be regarded as a form of the 'Phags-pa script.

A brief history of 'Phags-pa studies is as follows.

The first systematic reference to 'Phags-pa studies was made by H.C. von der Gabelentz in 1839, although a few scholars had touched upon it earlier. Von der Gabelentz dealt with the epigraph of The Edict of Buyantu Qan 1314, which he reproduced from the Shih-mo Chüan-hua 石墨續華 (1618) by Chao Han. In that text the 'Phags-pa inscription is written in the Chinese way, by vertical columns from right to left. Von der Gabelentz first transcribed it in this way, then rearranged it correctly in the Mongolian way, in vertical columns from left to right. He also gave a romanisation of the parallel Chinese inscription, with a German translation and some commentaries. As the reproduction of the
'Phags-pa inscription in the Shih-mo Chüan-hua was not sufficiently clear, von der Gabelentz could not reconstruct the correct phonetic value of some letters. For example, he did not make any distinction between \( g \), \( q \) and \( \cdot \) (intervocalic sign) but transcribed them all as \( g \).\(^6\)

In 1857 a Mongolian coin with the 'Phags-pa script was discovered by E. Netscher in Surabaya, in Java, and it was described and discussed by G. Pauthier.\(^7\) In 1862 Pauthier described a Chinese inscription in the 'Phags-pa script.\(^8\) His approach to 'Phags-pa orthography in Chinese documents was first to translate into French a biography of Bla-ma 'Phags-pa from the Yuan-shih 元史 and another passage concerning 'Phags-pa script in the Shu-shih Hui-yao 書史會要 (abbr. SSHY). He then demonstrated the phonetic value of each letter in comparison with the Tibetan, Sanskrit, and Mongolian alphabets. His comment on the disappearance of the final consonants of the entering-tone is very likely the first reference to Middle Chinese phonology by a Western scholar.\(^9\)

In 1871 six parallel inscriptions on the Wall of Chü-yung-kuan 居庸関 were described by A. Wylie.\(^10\) These inscriptions were of the [Sarvadurgati-parisodhandhusinga-vijaya-nama-dhāraṇī (cf. Taishō, Nos. 967-71) on the east wall, and the Samantamukhapraśa-raśmi-vimalaśūnya-prabhāsa-sarva-tathāgata-hṛdaya-samaya-vilokita-nāma-dhāraṇī (cf. Taishō, No. 1025) on the west wall, and were written in Sanskrit (Lāñchāsa), Tibetan, Mongolian ('Phags-pa), Uighur, Hsi-hsia and Chinese.\(^11\) Wylie translated the Sanskrit inscription on the east wall and reproduced the original texts in the six scripts. In 1894-5 reports appeared after the lesser Chinese,

\(^6\) For example, kiegen (read ihe-en), erkegud (read 'erk'e-ud), iruger (read 'hiru-er), etc. But he corrected this point in his ‘Nachtrag zur Erklärung der altmongolischen Inschrift’, ZKM, III (1840), pp. 22-57.

\(^7\) ‘Rapport sur deux médailles en cuivre jaune trouvées à Sourabaya, ...’, JA, V, 15 (1860), pp. 321-37 + 3 illustr. Two coins introduced in this article have Arabic and 'Phags-pa inscriptions. The 'Phags-pa inscription was deciphered as Ta-Yuan t'ung-pao 大元通寶 by Pauthier.

\(^8\) ‘De l’alphabet de Pa’sse-pa,...’, JA, V, 19 (1862), pp.5-47.

\(^9\) Ibid., p. 39.


\(^11\) Wylie (ibid.) gives a full account of 'Phags-pa studies until his time. He also (p. 26, n. 3) gives a specimen of 'Phags-pa script which he reproduced from a pillar
Tibetan, Uighur, and Mongolian inscriptions of both walls had been de­
ciphered. In 1835 R. Bonaparte published photo-reproductions of the wall
inscriptions of Chü-yung-kuan and some other 'Phags-pa documents such as The Edict of Buyantu Qan 1314, which von der Gabelentz and Wylie had
already reproduced from Chinese sources. The publication of the Chü-
yung-kuan inscriptions was an epoch-making event in oriental palaeo-
graphical studies. Until then, for example, the Hsi-hsia script had been
completely unknown. G. Devéria, who provided many reproductions of
Chü-yung-kuan inscriptions to Bonaparte, also contributed to the decipher­
ment of some 'Phags-pa inscriptions.

Besides inscriptions of epigraphs in the 'Phags-pa script, some silver
tablets (p'ai-tzu) had been found in Siberia, inscribed in Mongolian in the
'Phags-pa script. D. Banzarov successfully identified the Minusinsk
p'ai-tzu inscription as the 'Phags-pa script, although it had earlier been

also gives a similar specimen to his own. The 'Phags-pa alphabet in this speci­
men is arranged in the Tibetan alphabetical order, i.e., om, a, ä, ...k, kh, ..., and
it is most interesting that this specimen lacks voiced consonants, i.e. the g, ã, b,
...series. But some of the letters are indecipherable either because the repro­
duction was inadequate or because the original was illegible. As regards other inscriptions, he mistakenly identified the Hsi-hsia script as Neuchih (Jurchen) script.
For further details, see E. Teramoto, 'Kyoyōkan no hekibun oyobi sono chōkoku
bijutsu ni tsuite', ZZ, XX (1910), pp. 351-54, 609-17, 1514-16; J. Murata (ed.),
Kyoyōkan, 2 vols.

12 'Note préliminaire sur l'inscription de Kiu-yong koan': E. Chavannes, 'Première par­
tie. Les inscriptions chinoises et mongoles', JA, IX, 4 (1894), pp. 354-68; S. Lévi,
'Deuxième partie. Les inscriptions chinoises', ibid., pp. 369-73; W. Radloff,
'Troisième partie. Les inscriptions mongoles', ibid., pp. 546-50; G. Huth, 'Quat­

13 Documents de l'époque mongole des XIIIe et XIVe siècles..., 65 pp + 15 plates.

14 After Wylie identified the Hsi-hsia script as the Jurchen (op. cit., pp. 36-44), De­
véria corrected Wylie's mistaken assumption in his 'L'écriture du royaume de Si­
hia ou Tangout', Mémoires présentés par divers savants à l'Académie des Inscrip­
tions et Belles-Lettres de l'Institut de France, sér. I, tome XI (1901), pp. 147-75.

15 'Notes d'épigraphie mongole-chinoise', JA, IX, 7, 8 (1896), pp. 94-128, 395-433.

16 In 1846 a p'ai-tzu was discovered in Minusinsk and introduced for the first time

17 'Über zwei mittelasiatische Alphabeten...', Bulletin, V, 4 (1848), Sp. 49-57; 'Erklä­
believed to be the Hsi-hsia script.\(^\text{18}\)

The first scholar to study the 'Phags-pa script from the Tibetan sources was B. H. Hodgson (1828).\(^\text{19}\) He provided a 'Phags-pa specimen among his plates, to which an explanation written in dbu-med (Tibetan cursive script) letters is added.\(^\text{20}\) S.C. Das also gives a full account of various ornamental characters in which three 'Phags-pa specimens are included (1888).\(^\text{21}\) However, Das did not identify these specimens as the 'Phags-pa script but regarded them as Khoṅ-seṅ, Śin-tu brjod-pa, and Yu-gur (Uighur) characters.\(^\text{22}\) Apparently he had no knowledge of the Uighur script, which continued to be used by the Mongols even after the invention of the 'Phags-pa script.

In 1905 two seals of the Dalai Lama were reproduced by L. A. Waddell.\(^\text{23}\) One of these is a Laṅtsha monogram\(^\text{24}\) and the other is in the rung einer mongolischen Inschrift ...', ibid., V, 9 (1848), Sp. 129-39; 'Pajze, ili metalličeskija doščešči s' povelenijami' mongol'skix xanov', ZSPANO, II, 1 (1850), pp. 72-97.

\(^{13}\) For example, V. Grigor'eev, 'Ob'jasnanie drevnej mongol'skoj nadpisi, najdennoj v' Sibiri', ZMVD, XVI (1846), pp. 126-49; Otvet' akademiku Šmidt-u na zametanija ego o mongol'skoj nadpisi vremen' Möngke-xana, najdennoj v' Sibiri, Otechestven-nyja Zapiski (St Petersburg, 1846), pp. 114-20. Grigor'eev suggested that the invention of the 'Phags-pa script was not made during Qubilai's reign but in the eleventh century by Li Yüan-hao (李元昊) of Tangut. Since on this p'ai-tzu there are the words 'Möngke Qan' Grigor'eev maintained that this script must have been used before Qubilai's reign. I.J. Schmidt opposed Grigor'eev's view and rendered the word 'Möngke' as an adjective 'eternal' (\'über eine mongolische Quadratinschrift aus der Regierungszeit der mongolischen Dynastie Jüan in China', Bulletin, IV, 9 (1848), Sp. 129-41). But Banzarov advanced on these interpretations by Schmidt and Avvakum ('O nadpisi, naxodjaii<s>jesja na skale u Mangutskoj peščery', ZSOIRGO, II (1865), pp. 87-8) and concluded that the words 'Möngke Qan' on this p'ai-zu were a copy in 'Phags-pa of an original in Uighur script written in Möngke Qan's reign.

\(^{19}\) 'Notices of the Languages, Literature, and Religion of the Baudhhahs of Nepal and Bhot', Asiatic Researches, XVI, (1828), Article No. XII, pp. 409-49, esp. see the third plate after p. 420.

\(^{20}\) This explanation can be read 'di-yan hor-yig rigs gcig luṅ ('This is also a kind of authorized Hor-yig'). Hor-yig means the letters (yig) used in Mongolia (hor).

\(^{21}\) 'The sacred and ornamental characters of Tibet', JASB, LVII (1888), pp. 41-8 + 9 plates.

\(^{22}\) Ibid., pp. 45-6, plates V(b) (Khoṅ-seṅ), (e) (Śin-tu brjod-pa), plate VII, No. 1 (Uighur).

\(^{23}\) Lhasa and its Mysteries, p. 448.

\(^{24}\) Cf. Hodgson, op. cit., the fifth plate after p. 420; Das, op.cit., p.47, plate V(d).
'Phags-pa script. S.W. Bushell gave a reading of the 'Phags-pa seal, of which A.H. Francke and Waddell both gave different interpretations. Francke also published some other Tibetan seals and E.H. Walsh gave many further examples. In these Tibetan pieces, some letters are slightly different in shape from those in Mongolian and Chinese materials.

This period, from the second half of the nineteenth century to the early part of the twentieth, was thus the discovery period for materials in the 'Phags-pa script from Mongolian, Chinese, and Tibetan sources. However, while the two former sources have been dealt with by scholars of Mongolian and Chinese in collaboration, the Tibetan sources have always been treated only by students of Tibetan.

25 Bushell reads: 'Talai bLamai...Thamka rgyalva [ta-la'i bla-ma'i...tham-ka rgyal-bal] ('The royal seal of the Dalai Lama') (review of Waddell, op. cit., JRAS, 1906, p. 478). Bushell states: 'The inscription seems to be rather an archaic form of the Tibetan script, and is to be read in vertical columns, passing from left to right, like the Bashpa script of the thirteenth century'. W.H. Walsh ('The coinage of Tibet', MASB, II, 2(1907), p. 17) also gives a short comment on this seal, but apparently he did not consult Bushell's review. Walsh states: 'This character of the Dalai Lama's seal is called in Tibetan Shintu-Jod-pa [Sin-tu brjod-pa] or "perfectly finished" and resembles the Uighur characters, known in Tibet as Gyaser Yige [rgya-ser yi-ge] or "Great golden letters", and is found in almost all old seals of Tibet.'

26 Francke ('Note on the Dalai Lama's seal and the Tibeto-Mongolian characters', JRAS, 1910, p. 1206) reads: 'talai blamai ru thamka rgyal [ta-la'i bla-ma'i ru tham-ka rgyal] ('Standard seal of the Dalai Lama, bene!).' But Waddell ('Seal of the Dalai Lama', JRAS, 1911, pp. 204-6) opposed this reading and gave another version as 'Oṃ ta-la'i bla-ma'i rtsa-t'amka rgyal-va [Oṃ ta-la'i bla-ma'i rtsa-tham-ka rgyal-bal] ('Oṃ! The original seal of the Dalai Lama, the Jina'). Francke ('The Dalai Lama's seal', JRAS, 1911, pp. 523-33), however, did not accept Waddell's criticism.


29 For example, the letters which are equivalent to the Tibetan ph, ts, tsh, dz, etc. Cf. Francke, 'Note on the Dalai Lama's seal...', pp. 1211-12 (comparative table of Hor-yig, Koň-seň, and Šin-tu brjod-pa).
At almost the same time another great problem arose, concerning the inventor of this script. According to the Yüan-shih (1370), Bla-ma 'Phags-pa invented a new Mongolian script and offered it to the throne in 1269, and this statement has been followed by many Chinese sources. However, the famous Tibetan chronicles, Hu-lan deb-ther (The Red Annals) (1346) and the Deb-ther shon-po (The Blue Annals) (1476–8), make no mention of this.30 The Sūni-tshil (Mong. Jirüken-i Tolla), which is said to have been written by Chos-kyi 'Od-zer, a monk of the Yüan dynasty, and which was translated into Mongolian between 1723 and 1735,31 states that while Sa-skya pañjita was staying in Liang-chou (1247–51), intending to confer the benefit of a script upon the Mongolians, he fell one night into a fit of abstraction. In the early morning a woman appeared with a notched-stick for tanning leather. Sa-skya pañjita responded to this apparition by creating a Mongolian script in the shape of the notched-stick, embodying masculine, feminine and neuter genders as follows:

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30 See Chapter I.
But, as the time was not yet ripe, Mongolian translations of Buddhist texts in this script did not appear.\(^{32}\)

The *Bolor Eripe* (1774-5) copies this passage of the *Jirüken-ü Tolta*, \(^{33}\) the *Hor-chos-byuün* by Jigs-med rig-pa’i rdo-rje (1819),\(^{34}\) also copies this passage and adds the fact that Chos-kyi ’Od-zer revised the new Mongolian script invented by Sa-skya pandita.\(^{35}\) The accounts in the above sources have been adopted by Klaproth, de Lacouperie, Koeppen, Francke, Teramoto, and Krause,\(^{36}\) although their interpretations often differ. The Mongolian script referred to by these sources is generally supposed to be the Uighur script which the Mongols began to use no later than 1230.\(^{37}\) Probably the Mongolian sources mentioned above ascribe the invention of the Mongolian script to Sa-skya pandita because of their respect for him as the person who first introduced Buddhism to Mongolia. The reason these sources make no mention of the ’Phags-pa script was

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\(^{34}\) The name of the author of the *Hor-chos-byuün* was mistakenly believed to be Jigs-med nam-mka’ until G. N. de Roerich (*The author of the Hor-chos-hbyuün*, *JRAS*, 1946, pp. 192-6) assigned it to Jigs-med rig-pa’i rdo-rje.


probably because after the fall of the Mongol Empire it was no longer officially used and therefore Tibetan and Mongolian sources ignored it.

P. Pelliot demonstrates that Chos-kyi 'Od-zer corresponds to Shuo-ssu-chi-yüeh-chi-erh in the Yuan-tai Hua-so-chi 元代畫塑記 or Shuo-ssu-chi-o-chieh-erh-pa-ha-shih 楊思吉幹節兒八哈失 in the Yuan-shih (fasc. 99), but these Chinese sources do not mention his revision of the Mongolian script. Pelliot instances a story that Tatatunga, a Naiman minister, taught the Uighur script to Cinggis Qan’s princes and that the first Mongolian chronicle Monyol-un n'uca tobči'an (The Secret History of the Mongols) was written in the Uighur script in 1240,38 and he then notes that:

...Mais par là les deux lamas [Sa-skya paṇḍita and Chos-kyi 'Od-zer], formés à la grammaire tibétaine inspirée elle-même de la grammaire hindoue, ont fait œuvre de phonéticiens exerçant leurs facultés d'analyse sur un système d'écriture qui existait déjà. Ils n'ont rien inventé, et si leurs noms doivent être retenus peut-être dans l'histoire de la grammaire mongole, l'écriture mongole elle-même, à mon sens, ne leur doit rien.39

Points made by Pelliot are now regarded as self-evident, but they were not clearly grasped until Pelliot’s deductions. Before Pelliot, B. Laufer had already concluded that Bla-ma 'Phags-pa invented the 'Phags-pa script but he also believed that the revision of the Uighur script was made by Chos-kyi 'Od-zer between 1307 and 1311.40 M. Ishida also contributed

Philippe le Bel (see Bonaparte, op. cit., plate XIV, No. 1) from Cinggis Qan can be also regarded as one of the earliest Mongolian documents in the Uigur script.


39 Pelliot, op. cit., p. 289.

to this problem from the same viewpoint as Pelliot.41 G.N. de Roerich, following V. Vladimircov42 and Pelliot on Chos-kyi 'Od-zer, suggested that he lived somewhat earlier (—1292?) than the date given in the Yüan-shih (—1321?).43

Until this time, most scholars of 'Phags-pa studies had dealt with Mongolian and Chinese epigraphs and Tibetan seals. Very rarely, discoveries of 'Phags-pa specimens in block-prints or printings were also noted. In the Chinese block-print Rgya-dkar-nag rgya-ser ka-smi-ra bal bod hor-gyi yi-ge dañ dpe-ris rnam-grañs mañ-ba, there are three 'Phags-pa specimens, which were described by O. Böhtlingk44 and A. Schiefner.45 As their descriptions were too cursory, it is regrettable that Das, who also dealt with this text, did not identify them as 'Phags-pa script.46

The so-called Mannerheim fragment, discovered by the C.G. Mannerheim expedition (1906–8) to Eastern Turkestan, was first described by G.J. Ramstedt.47 Later P. Aalto identified this as part of a Mongolian transcription of the Subhāṣītaratnaṇidhi.48 These discoveries in block-print or printing stimulated the new idea that the 'Phags-pa script had been

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41 'Mōko moji no kigen to enkaku', Tōa, III, 12 (1930), pp. 84-92.
42 Sravnitel'naja Grammatika Mongol'skogo Pis'mennogo jazyka i Xalxaskogo Narečija. Vvedenie i fonetika (Leningrad, 1929), pp. 23-36.
45 'Nachträge zu den von O. Böhtlingk und I.J. Schmidt verfassten Verzeichnissen der auf Indien und Tibet bezüglichen Handschriften und Holzdrucke im Asiatischen Museum der Kais. Akademie der Wissenschaften', Bulletin, V, 10 (1848), Sp. 147 (No. 125aaa), n. 1.
46 The nine specimens in Das's plate V are exactly the same as those in this text, fols. 13b–14b. As regards this text, see A. Yuyama, Indic Manuscripts and Chinese Blockprints (non-Chinese Texts) of the Oriental Collection of the Australian National University Library, Canberra, pp. 84-100; Nakano, 'The Rgya-dkar-nag ... and some remarks on the 'Phags-pa script', Indo-Asian Studies, III (1971), pp. 1–16.
47 'Ein Fragment mongolischer Quadratschrift', JSFOu, XXVII, 3 (1911), pp. 1-4.
48 'Altaistica I. The Mannerheim fragment of Mongolian "Quadratic" script', SO, XXII, 7 (1952), pp. 1–9. In 1925 T.F. Carter provided a fragment similar to the Mannerheim fragment in his The Invention of Printing in China and its Spread
used not only in epigraphs and seals but also in printing.

Although many scholars such as Maspero, Karlgren, and Simon had steadily advanced Archaic and Ancient Chinese studies,49 studies of Middle Chinese had been ignored until A. Dragunov and H. Oshibuchi produced parallel contributions in 1930.50 Dragunov referred to about 700 Chinese characters and their 'Phags-pa equivalents which had been found in epigraphs, and discussed some peculiarities of Middle Chinese phonology. Oshibuchi also chose a matching number of Chinese characters in the CYYY to those in 'Phags-pa inscriptions, and assigned their phonetic value. The works of Dragunov and Oshibuchi provided a form of material on Middle Chinese sounds and a realistic methodology for dealing with Chinese documents in the 'Phags-pa script. At this stage M. Lewicki systematised almost all the Mongolian 'Phags-pa inscriptions ever found,51 and W. Kotwicz also clarified some problems regarding Mongolian transcription of Buddhist texts and some initial formulae in Mongolian inscriptions, especially edicts.52

The new stage of 'Phags-pa studies begins with two significant contributions by N.N. Poppe and S. Hattori.

Westward, plate facing p. 120, and Aalto again identified this fragment in his 'A second fragment of the Subhaṣitarātanidhi in Mongolian quadratic script', JSFOu, LVII, 5(1954), pp. 1-6 and 'Frangmente des mongolischen Subhaṣitarātanidhi in Quadratschrift', MIO, III (1955), pp. 279-90. As to Carter's book, Pelliot gives a full account of critical and additional study (Les débuts de l'imprimerie en Chine) (=Oeuvres posthumes de Paul Pelliot, IV) (Paris: Librairie d'Amérique et d'Orient, 1953), viii+120 pp. + 'Appendice' by P. Demiéville (pp. 121-38)), but Pelliot gives no mention of this fragment.

49 For example, see H. Maspero, 'Le dialecte de Tch'ang-ngan sous les T'ang', BEFEO, XX, 2 (1920), pp. 1-124; B. Karlgren, Études sur la phonologie chinoise (=Archives d'Études Orientales, vol. 15); W. Simon, 'Zur Rekonstruktion der altchinesischen Endkonsonanten', MSOS, XXX (1927), pp. 147-67, ibid., XXXI (1928), pp. 175-204.


51 Les inscriptions mongoles inédites en écriture carrée (=Collectanea Orientalia, 12).

Poppe's work was first written in Russian and then translated into Japanese. According to Poppe's preface to the Japanese edition, the original Russian text was published a few days after the beginning of Russo-German War in 1941, and he had fortunately retained one copy of the Russian edition. The Japanese edition, however, lacks the main part of his book, the texts of the inscriptions and the translations. In 1957 J.R. Krueger translated the whole text into English and, under Poppe's supervision, added some new materials to the new edition. This English edition includes thirteen 'Phags-pa texts and their transliterations, transcriptions, and translations, with exhaustive commentaries. Although most of the 'Phags-pa documents in Poppe's book had been studied since von der Gabelentz, it can be said that Poppe was the first to give a full account of these materials. He has also produced some articles on the 'Phags-pa script.

Hattori's book was also damaged during the war. Two-thirds of his draft was destroyed by fire, and only the remainder was published in 1946. This book was intended as an approach to the Mongolian language of the Secret History of the Mongols through the Chinese transcription of Mongolian. As the first step in this attempt he tried to clarify the sound system of Chinese in the period between the Yuan and the early Ming dynasties, when the original text and the Chinese translation of this text were composed. In particular, description and analysis of the Meng-ku Tzu-yün (abbr. MKTY) was made by Hattori for the first time. He concluded that the sound system employed in the MKTY was the Pien-ching 函京 dialect transplanted to Lin-an 臨安 by the transfer

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55 Genchōhishi no Mökogo o arawasu Kanji no Kenkyya.
of the capital. The CYYY, the famous rhyme dictionary composed at almost the same time as the MKTY, represented the sound system of the North, which is one source of modern Mandarin. In his analysis of the MKTY, Hattori made an important contribution to Middle Chinese studies. Furthermore, his tentative romanisation of the 'Phags-pa alphabet is more accurate for dealing with Chinese documents in the 'Phags-pa script than any other romanisation which had ever been tried (see Table 1).

As to the Chinese transcription of the Mongolian language, Lewicki adopted Dragunov's method by using the Hua-i I-yü 華夷譯語. These attempts to relate 'Phags-pa transcriptions of the Chinese language and Chinese transcriptions of Mongolian and 'Phags-pa script have been successfully adopted by L. Ligeti.

Ligeti's first work, written in Hungarian, was never in general distribution, but his article on the Po-chia-hsing 百家姓 (abbr. PCH) in the 'Phags-pa script was an advance upon the achievements of Dragunov, Oshibuchi, and Lewicki and enriched the body of Chinese material in the 'Phags-pa script. Also, in another article, Ligeti gives a full account of three difficult problems concerning 'Phags-pa orthography in Mongolian and Chinese documents.

Since the 1950s, more authentic and concrete materials such as the MKTY and PCH have been available for research. In 1956 the MKTY based on a manuscript held in the British Museum was published in Japan. Also, in 1959 two texts of the PCH were published in China: one based on the Chih-yüan 至元 edition and the other on the Genroku 元禄 edition (originally based on the T'ai-ting 泰定 edition) with a reproduction of the MKTY in the British Museum. Comprehensive introduc-
tions and commentaries on these texts and some more materials in the 'Phags-pa script, such as epigraphs held in the Peking University, coins, p'ai-tzu, seals, etc., some of which were unknown, are given by Lo Ch'ang-p'ei and Ts'ai Mei-piao in this Chinese edition.

E.R. Hope's monograph in an attempt to criticise Karlgren and his followers deals in great detail with the existence of the glottal stop initial in Ancient Chinese. 63 Hope's argument begins with the assumption that the ying' initial 影母 is a clear null pitch and that the yu' initial 喻母 is a muddy null pitch, both being vocalic anlaut with differences of tone pitch. He gives schedules to indicate how in 'Phags-pa transcriptions an alternation occurred between the k, t, p, ... series and the g, d, b, ... series. It is extremely difficult to summarise Hope's discussions, 64 but this problem will be discussed later. As P.L.M. Serruys maintains, 65 it is difficult to accept Hope's argument that Ancient Chinese had no glottal stop initial: he tries to deal with an extraordinarily wide field, from the Indic, Tibetan, Mongolian, and Chinese to Japanese with few references, 66 so that his hypothetical conclusions lack any evident consistency.

Hope also discusses the problem of shapes in other scripts which are supposed to have been influenced by 'Phags-pa script; that is, the problem of Korean Önmun, Tibetan seal-characters, a certain variation of Manchurian script. As to the Korean Önmun, it has long been recognised that the letter shape of Önmun was influenced by the 'Phags-pa script, 67 and Hope again pointed out this fact, using the theory of

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63 Karlgren's Glottal Stop Initial in Ancient Chinese, ...
64 See K. Whinnom, review of this book, JOS, II (1955), pp. 158-72, which is rather a summary of Hope's work.
65 See Oriens, VIII (1955), pp. 135-41.
66 For instance, Hope does not use important reference by Pauthier, Chavannes, Francke, Walsh, Oshibuchi, Hattori, Lewicki, etc. mentioned above. He ought especially to have referred to Hattori's work in which the MKTY and its initial consonantal system are discussed.
dichotomy between muddy and clear pitch sounds which he had sought to prove in his previous work.  

Li Te-ch'i presented some materials on Manchurian sigillary letters which seem to me to have been influenced by the 'Phags-pa script. Even after the fall of the Mongol Empire, the 'Phags-pa script was used in lamaist monasteries in Tibet and Mongolia for seals, so it is not surprising that the Manchurians who adopted the Uighur script with some modifications created sigillary letters by making their script square, and that the seal script would naturally resemble the 'Phags-pa script.

As far as seals are concerned, most of the 'Phags-pa seals recently discovered are written in either Chinese or Tibetan, but the silver seal of Qan Olan-a ergütdgesen, which was introduced by Rintchen, and which

68 'Letter shapes in Korean Önmun and Mongolian 'Phags-pa alphabet', Oriens, X (1957), pp. 150-9. Hope suggests that 'some letters of the Önmun alphabet such as l, m, n, etc. might have been modelled on the Tibetan dbu-med series rather than the dbu-can series.

69 See Li Te-ch'i, 'Man-chou wen-tzu chih lai-yüan chi ch'i yen-pien', PPTS K, V, 6 (1931), plate 9 (= lakiyaya ulmengge fukjingga zergen 蘭 igen 筆), plate 11 (= seal of Xan i boobal) and plate 12 (= seal of Forgon be badarambure boobal).

70 See Li Te-ch'i, ibid; L. Ligeti, 'A Propos de l'écriture mandchoue', AOH, II (1952), pp. 235-301. Besides, the official seal of the Dalai Lama shown in Walsh, 'Examples of Tibetan seals', pp. 5-4 is supposed to be a variant of the Uighur script, whose letter shape was made square, although this seal inscription is indecipherable.


72 'A propos de la sigillographie mongoles...', AOH, III (1953), pp. 25-31, esp. see p. 30 (= plate of this seal). The 'Phags-pa part of this seal is also written in Tibetan (Bstan-srid zün-'brel 'dzin-byed ŋi-'od-can rje-rgyal-po'i tha-ma-ka),
is written in the Soyombo,73 Uighur and 'Phags-pa scripts, is worthy of note.

G.L.M. Clauson, who had already contributed to this field in collaboration with S. Yoshitake,74 clarified the phonetic value of each letter of the 'Phags-pa script in Chinese documents by using the thirty-six tzu-mu (initials) and some Mongolian inscriptions.75 P. B. Denlinger also tries to clarify the phonetic value of each letter of the 'Phags-pa script in the MKTY in comparison with Ligeti's treatment of the PCH.76 Some mistakes in both Clauson and Denlinger's articles will be discussed later.

The most recent contributions have been made by Y. Ozaki, P. Aalto, T. Keiya, Cheng Tsai-fa, and myself and, except for Aalto, all have dealt with the MKTY from the viewpoint of Chinese historical phonology. Ozaki maintained that the manuscript of the MKTY held in the British Museum was written during the Ch'ien-lung reign (1736-95), basing his argument on the evidence of tabu characters, a Chinese philological tradition to prevent identification with emperors' names. Ozaki then mainly discussed the meaning of a certain passage in Chu Tsung-wen's preface to the MKTY, and suggested that in the thirteenth century the ki-series had already undergone palatalisation.77


74 'On the phonetic value of the Tibetan characters У and и and the equivalent characters in the hPhags-pa alphabet', JRAS, 1929, pp. 843-62 (cf. Hope, Karlgen's Glottal Stop Initial......, pp. 50-2, xi).
75 'The h'P'ags-pa alphabet', BSOAS, XXII (1959), pp.300-23.
77 'Daiei Hakubutsukan-bon Mokojin sakki', Jinbun, VIII (1962), pp. 162-80. In this article Ozaki criticises A. Tōdō's hypothesis on palatalisation ('Ki-to tsi-no kondō wa 18 seki ni hajimaru', CG, 94 (1960), pp. 1-3, 12). For further details on palatalisation in Chinese, see Tōdō, 'Development of Mandarin from 14c. to
Aalto, who discussed the Mongolian translation of the *Subhāśitaratnanidhi*, produced a brief but accurate sketch of the ‘Phags-pa script in the Mongolian documents.78

Keiya deals in great detail with the process of the extinction of the final consonants -k, -t, -p of the entering-tone in the *MKTY*.79 An outline of his successful argument will be introduced later.

Cheng Tsai-fa gave a full account of textual criticism of the *Kuchin Yün-hui Chü-yao* and *MKTY*.80 He also provides useful materials for ‘Phags-pa transcription, mainly textual criticism of ‘Phags-pa spellings, in Chinese documents.81

I also have treated the sound system employed in the *MKTY*, but I have abandoned some ideas and developed others here.

The history of ‘Phags-pa studies can thus be divided into three periods: the 1830s to the 1920s, the 1930s to the 1940s, and the 1940s to the present. When ‘Phags-pa studies began in the last century, the three aspects in the Mongolian, Chinese, and Tibetan languages were completely confused, but they have been treated separately since the 1920s. In the future, however, as our studies progress, they should again be synthesised. It may be hoped, moreover, that materials for ‘Phags-pa studies, epigraphs, seals, coins, etc. in Mongolian, Chinese, and Tibetan will be discovered and introduced. We may yet discover the original manuscript of the *MKTY*, or some other, hitherto unknown, rhyme dictionary.

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80 Meng-ku Tzu-yūn ken ken Pa-ssu-pa-tzu yu-kuan te yun-shu (=Kuo-li T'ai-wan Ta-hsūh Wen-shih Ts'ung-k'an, 15).
A BIOGRAPHY OF BLA-MA ’PHAGS-PA

§ 1. Sources

A. CHINESE SOURCES

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   - Authors: Sung Lien 宋濂 and others
   - Date: 1370

2. *Yüan-shih Lei-pien* 元史類編, fasc. 41, ‘Tsa-hsing chuan 雜行傳’ (abbr. YSLP)
   - Author: Shao Yüan-p'ing 邵逸平
   - Date: 1720s.
   - Edition: *Sao-yeh Shan-fang* 掃葉山房, 1795 ed., pp. 15a-b

   - Author: K'o Shao-min 柯劭忞
   - Date: 1919

4. *Fo-tsu Li-tai T'ung-tsai* 佛祖歷代通載 (abbr. FLT), fasc. 21, ‘[Fa-ssu-pa] Hsing-chuang [髮思八] 行狀’ (abbr. HC)
   - Authors: Wang P'an 王磐 and others
   - Date: 1280(?)

5. Ibid., fasc. 22, ‘Ti-shih tien-pei 帝師殿碑’ (abbr. TSTP)
   - Author: Shih-yüan Tsung-chu 釋源宗主
   - Date: 1321

   - Author: Te-hui ch‘an-shih 德輝禪師
   - Date: 1360s(?)
7. *Chih-yüan Pien-wei lu* 至元辯僞錄, vols. 3,4  
   **Author:** Hsiang-mai 紙邇  
   **Date:** 1291  
   **Edition:** *Taishō*, No. 2116, vol. LII, pp. 770c-4c

8. *Shih-chien Chi-ku-lüeh hsü-chi* 釋鑑稽古略續集  
   **Editor:** Huan-lun 幻輪  
   **Date:** 1627  
   **Edition:** *Taishō*, No. 2038, vol. XLIX, p. 906b-c

B. TIBETAN SOURCES

9. *Hu-lan deb-ther* or *Deb-ther dmar-po* (*The Red Annals*)  
   **Author:** Kun-dga’ Rdo-rje  
   **Date:** 1346  
   **Edition:** *The Red Annals*, Part I (Gangtok : Namgyal Institute of Tibetology, 1961), fol. 22a  
   **Translations:**  

    **Author:** Gos-lo-tsa Gzon-nu-dpal  
    **Date:** 1476-8  

Author: Ñag-dbañ blo-bzañ rgya-mtsho (The Fifth Dalai Lama)
Date: 1643

12. *Dbus-gtsañ-gi gnas-rten rags-rim-gyi mtshan-byañ mdor-bsðus dad-pa’i sa-bon*
Author: Dge-bses karma bkra-sis chos-’phel
Date: 1892

C. MONGOLIAN SOURCES

13. *Qad-un ündüsün-ü Erdeni-yin Tobči* (abbr. EYT)
Author: Saran Sečen Qong Tayiji
Date: 1662
Translations:

Author: Chos-kyi ’Od-zer
Date of Mongolian tr.: 1723-35
§ 2. Sa-skya-pa—Ancestors of Bla-ma 'Phags-pa

Bla-ma 'Phags-pa was descended from the Sa-skya-pa clan of Tibet.1 According to Tibetan chronicles, the earliest ancestor of this clan was Jo-bo 'Khon-par skyes (‘The Lord Born Amidst Quarrels’)2 who was a son of gYa’-span skyes-gcig of Yar-kluṅ-šar by Si-li-ma. 'Khon dpal-po-che, a son of Jo-bo 'Khon-par skyes, was appointed ‘Confidential Minister’ (nah-blon) to King Khri-sron lde-btsan.3 He had four sons: Khri-mdzes lha-legs, Tshe-la dbaṅ-phyug, 'Khon klu’i dbaṅ-po bsruṅ-ba, and Tshe-'dzin.

1 The Sa-skya-pa is one of the four largest Buddhist clans of Tibet (Rțin-ma-pa, Bka’-brgyud-pa, Dge-lugs-pa, and Sa-skya-pa) and occupied the south-west part of Gzis-ka-rtse. This clan was founded by Dkon-mchog rgyal-po in Sa-skya, west of Bkra-śis Lhun-po, in 1072. For further details, see TPS, I, pp. 81–93, ‘The Sects’. On the geography of Tibet, see A. Ferrari, op. cit., Map. A.
3 This passage perhaps corresponds to the following passage in Chinese sources; TSTP says: ‘In ancient Tibet, there lived a “National Preceptor” (kuo-shih) Ch’an-heng-lo-chia 錢恒陵吉達 (HC, Ch’an-t’a-lo-chia 錢怛羅乞答), who gained an accurate knowledge [of Buddhism] and had miraculous powers. Each generation [of his descendants] has successively conducted itself in the correct [Buddhist] way. The kings [of Tibet] have for generations respected them as preceptors.’ Ch’an-heng (or t’a)-lo-chia in the Chinese sources cannot be identified. Prior to the above passage, these sources state: ‘After about seventeen generations, [his
The descendants of Rdo-rje rin-po-che, a son of Tshe-'dzin, were Šes-rab yon-tan, Yon-tan 'byuñ-gnas, Tshul-khrims rgyal-po, Rdo-rje gtsug-tor, Dge-skyabs, Dge-mthoṅ, Bal-po, and Šákya blo-gros. They were all well versed in the Old Tantric texts. Šákya blo-gros had two sons: the elder, Šes-rab tshul-khrims, became a monk; the younger, Dkon-mchog rgyal-po, who was born in the year Wood-Male-Dog (šin-pho-khyi, i.e. 1034), founded the monastery of Sa-skya in the year Water-Male-Mouse (chu-pho-byi-ba, i.e. 1072). Dkon-mchog rgyal-po's son, Sa-chen Kun-dga' sñiñ-po, was born in the year Water-Male-Ape (chu-pho-spre'u, i.e. 1092), and learned the doctrine from 'Jam-dbyans (Skt. Manjughosa), Bir-wa (Skt. Virūpa) and others. Sa-chen had four sons: in order of age, Kun-dga' 'bar, Slob-dpon rin-po-che Bsod-nams rtse-mo, Rje-btsun Grags-pa rgyal-mtshan, and Dpal-chen 'od-po.

Of the sons of this last, the eldest was Sa-skya paṇḍita Kun-dga' rgyal-mtshan dpal-bzañ-po, who was born in the year Water-Male-Tiger family] arrived at Sa-ssu-chia-wa 薩斯加哇 (Sa-skya paṇḍita). But reckoning seventeen generations backwards from Sa-skya paṇḍita, we find no trace of his ancestors in the Tibetan chronicles.

YS states: 'Legend says that more than ten generations ago, [’Phags-pa’s] ancestor To-li-ch’ih 爽麗赤 helped the kings [of Tibet] to conquer the West (Tibet) by the [Buddhist] law.' To-li-ch’ih in the above quotation must be identified as Rdo-rje [rin-po-che].


BA (p. 210) states that this was in the year Water-Female-Ox (chu-mo-glan, i.e. 1073).

BA makes no mention of this.

BA (p. 211) states: 'Kun-dga' 'bar went to India, was a learned man, and died in India at the age of 22.'

BA mentions his name as Sa-skya pañ-chen (Kun-dga'-rgyal-mtshan). *FLT*, fasc. 22 (Taishō, No. 2036, vol. XLIX, p. 725c) states: 'When Shih-tsu 世祖 (Qubilai) was still in the Heir Apparent’s Palace, hearing about Ch’o-li-che-wa 薩理哲瓦 (Tib. Chos-rgy-je-ba) in the West (Tibet).’ *Hor-chos-byuñ* mentions his name as Dharma-svāmin ('Master of the Law') which corresponds to the Tibetan Chos-
He learned the five vidyās under the guidance of Pan-chen Śākyāśriabhadrā and many other learned men. Having given Bla-brañ śar-pa to Śer-'byun, he founded Bzi-thog and lived there. Prince Godan of Mongolia, who was suffering from leprosy, dispatched an envoy named Doorda Darqan and requested him to come to
Mongolia. This was just as had been previously prophesied by Rje-btsun Grags-pa rgyal-mtshan, who said:

At some later age, from the North, a man whose language is different, wearing a hat which looks like a falcon flying and putting on shoes like the nose of a hog, will issue an invitation and render service to the teaching. 

When Sa-skya paṇḍita was aged sixty-three, in the year Wood-Male-Dragon (śiṅ-pho-'brug, i.e. 1244), he started towards the North with his two nephews, Phags-pa and Phyag-na. They reached Liang-chou in the Horse year (rta, i.e. 1246). Prince Godan returning from the ‘Great Conference’ (Mong. quriltai) and the Coronation of Güyük Qan (Tib. Go-yug), met Sa-skya paṇḍita in the Sheep year (1247). He carved an image of Avalokiteśvara Bodhisattva Simhanādin and gave a

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15 See Schmidt, p. 111. This passage suggests the Prince Godan cordially invited Sa-skya paṇḍita. But in fact, the Mongolian court threaten Sa-skya paṇḍita saying that if he did not go to Mongolia, the Mongols would have to attack Tibet. See TPS, I. p. 9; Okada, op. cit., pp. 97-9.

16 RA, p. 108. This episode is also mentioned in EYT, Bolor Erkike and Jirühen-ū Tolta. See Okada, ibid., pp. 100-6.

17 BA (p. 211) states: ‘At the age of 63 in the year Wood-Male-Dragon (1244) he visited the Emperor (i.e. Godan in Kan-su)’.


19 EYT mentions the years of Sa-skya paṇḍita’s departure from Tibet and meeting with Godan, but does not record the year of his arrival in Mongolia. On Liang-chou, see n. 32.

20 See ‘Ting-tsung pen-chi 定宗本紀’ of YS; i.e. ‘In the first year [of Ting-tsung] (1246), autumn, seventh month, [Ting-tsung] mounted the Imperial throne.’ Ting-tsung corresponds to Güyük Qan. EYT makes a miscalculation, ascribing the reigns of each Qan as follows:

<table>
<thead>
<tr>
<th>EYT</th>
<th>real reign</th>
</tr>
</thead>
<tbody>
<tr>
<td>1189-1227</td>
<td>Činggis Qan</td>
</tr>
<tr>
<td>—</td>
<td>Tului (Prince Regent)</td>
</tr>
<tr>
<td>1227-1233</td>
<td>Ögedei Qan</td>
</tr>
<tr>
<td>—</td>
<td>(Queen of Ögedei)</td>
</tr>
<tr>
<td>1233</td>
<td>Güyük Qan</td>
</tr>
<tr>
<td>1234-1251 (Godan Qan)</td>
<td>(Queen of Güyük)</td>
</tr>
<tr>
<td>1252-1260</td>
<td>Möngke Qan</td>
</tr>
<tr>
<td>1260-1294</td>
<td>Qubilai Qan</td>
</tr>
</tbody>
</table>

21 This accords with the description in EYT. BA gives no mention of this.

22 EYT (Schmidt, p. 113). In Schmidt’s text, this is mentioned as Arslan
consecration to Prince Godan. Sa-skya pandita gained the highest rank of the servants of Heaven, and propagated Buddhism throughout Mongolia.23 At the age of seventy, in the year Iron-Female-Hog (lcags-mo-phag, i.e. 1251), he passed away in the North.24

§ 3. Bla-ma 'Phags-pa

Sa-skya pandita’s youngest brother was Zaṅs-tsha bsod-nams rgyal-mtshan,25 born in the year Wood-Male-Dragon (sin-pho-brug, i.e. 1184). He had two sons by his wife Jo-mo dkon-mchog-skyid; ‘Gro-mgon 'Phags-pa Blo-gros rgyal-mtshan and Miña’-bdag phyag-na rdo-rje. He also had a daughter Slob-dpon-ma mdo-sde and a son Slob-dpon Rin-chen rgyal-mtshan by another wife Jo-mo ’bro.26 Zaṅs-tsha died at the age of fifty-six in the year Earth-Female-Hog (sa-mo-phag, i.e. 1239).

'Phags-pa was born in the year Wood-Female-Sheep (snih-mo-lug, i.e. 1235).27 When he was seven years old, he was already able to recite a few hundred thousand words of scriptures and to understand their con-

Daquda Qomsim Bodhisatu, in which Qomsim is a Mongolian corruption of Chinese kuan-shih-yin 觀世音 (the character 音 was pronounced yin in the Yuan period) [In Mongolian, the final m sometimes alternates with n. See N. N. Poppe, Introduction to Mongolian Comparative Studies (=Suomalaise-Ugrilaisen Seurakunnan Toimitus, 110) (Helsinki: Société Finno-Ougrienne, 1955), p. 101.]. The Chien-cheng (p. 173, line 10) translates this as 鵞吼觀音 which corresponds to the Skt. original term, but Schmidt does not transcribe the whole Mongolian term but only Chongschim Bodhisatwa (p. 113). Cf. Mahāvyutpatti, No. 685.

23 Sa-skya pandita is said in the Hor-chos-byun to have created a new Mongolian script between 1247 and 1251 (Huth, pp. 133-4). See ‘Introduction’.

24 VDL states the place of his death as Sprul-pa’i-sde (TPS, II, p. 626a). BA (p. 511) says that Sprul-pa’i-sde is one of the four monasteries in the vicinity of Liang-chou. According to Roerich (‘Mun-mkhyen Chos-kyi khot-zer and the origin of the Mongolian alphabet’, p. 54), Sprul-pa’i-sde was situated east of Liang-chou, and the stupa (sku-gdu mchod-rten) containing his mortal remains is still preserved in the semi-ruined monastery.

25 His name is mentioned in TSNP as So-nan-kan-tsang 喏南紹藏 which corresponds to [Zaṅs-tsha] bsod-nams rgyal-mtshan. (The character 南 was pronounced as nam in the Yuan period.)

26 BA makes no mention of his wives and daughter.

27 YS and HC do not state the year of his birth. But TSNP says: ‘[he] was born on the thirteenth day of the fourth month in the year of Chi-hai 己亥 (1239)’, and this accords with the following passages; YS, ‘In the year Kuei-ch’ou 癸丑 (1253),
People called him an infant genius, so he was named 'Phags-pa. He was also called Pan-mi-t’a.

In 1244, at the age of ten, he and his younger brother Phyag-na followed their uncle, Sa-skya panḍita, in his journey to the North. They reached Liang-chou. Since Sa-skya panḍita met Prince Godan in 1247 and became a monk of the highest rank, 'Phags-pa is supposed to have remained in Liang-chou even after the death of his uncle in 1251.

...when he was fifteen years old, 'Phags-pa's birth was very likely 1239. Inaba follows this (RA, p. 116, n.38 'Gen no teishi ni kansuru kenkyü,' ODKN, XVII (1964), p. 102). However, according to the RA and BA, Zaṅs-tsha bsod-nams rgyal-mtshan, 'Phags-pa's father, died in 1239. Moreover, Mha’bdag Phyag-na rdo-rje and Slob-dpon Rin-chen rgyal-mtshan, 'Phags-pa's younger brothers, were born in 1239 and 1238 respectively. If only Chinese sources are followed, the years given for his father's death and his brothers' births would lack consistency, unless 'Phags-pa and Phyag-na were twins and Rin-chen was elder-step-brother of 'Phags-pa. Therefore I prefer to follow the Tibetan sources. EYT also gives the year of his birth as 1235 (Schmidt, p. 115).

See YS, TSNP states: '[When he was] seven years old, [his] comprehension of the [Buddhist] laws and expansion of [Buddhist] knowledge had [already been] completed.'

In the Chinese sources, the name 'Phags-pa is transcribed as Pa-ssu-pa, Pa-ho-ssu-pa, Pa-ssu-fa, Pa-ho-ssu-pa, etc. The word 'Phags-pa originally means the 'distinguished', 'excellent', 'glorious' and refers to 'holy persons, things, places, etc; title of saints, and teachers of religion' (H. A. Jäschke, A Tibetan-English Dictionary, p. 355b), which corresponds to the Skt. ārya. See n. 11.

YS. This is supposed to correspond to the Skt. panḍita. See n. 11.

BA, p. 212. RA (p. 108) states: 'At the age of 9, he proceeded to the North in the retinue of his uncle.' 'Phags-pa was born in 1235; therefore in 1244 he should have been in his tenth calendar year.

Hor-chos-byun (Huth, p. 133) states: 'Er (Sa-skya panḍita) begab sich daher im 65. Lebensjahre, (männlichen)Feuer-Pferde-Jahre(1245) [read 1246], nach dem grossen Palaste Lan ju.' But Roerich (op. cit., p.53) states: '... Tibetan transcriptions Lan-ju ~Laṅ-gru [pron. La­-d’u] ~Lyaṅ-ju stand for Liang-chou in Kansu, in the vicinity of which still stands the ruined monastery of Sprul-pa'i-sde, the former residence of the Sa-skya panḍita.' Moreover, FLT, fasc. 22 (Taishō, XLIX, p. 725c, line 23ff.) states: 'When Shih-tsu (Qubilai) was still in the Heir Apparent's Palace, hearing about Ch'o-li-cho-wa (Tib. Chos-rje-ba) in the West (Tibet), ... he dispatched an envoy to Hsi-liang 西涼 (＝Liang-chou), where the King Godan was
In 1253, when 'Phags-pa was aged nineteen, Prince Qubilai dispatched an envoy to Prince Godan in Liang-chou, and asked to see Sa-skya pandita. As Sa-skya pandita had already passed away, Prince Godan recommended 'Phags-pa to Qubilai. Prince Qubilai sent an escort of one hundred Mongolian cavalrymen to Liang-chou. Thus, 'Phags-pa was received in audience by Prince Qubilai at his Palace in Lu-pa'i-šan. From that time on, Prince Qubilai and 'Phags-pa were closely associated, the one as material patron, the other as spiritual guide and refuge (mchod). He gave the consecration of Kei Vačir to Qubilai. In the year Wu-wu (1258), when 'Phags-pa was twenty-four years old, he attended a big conference between Buddhists and Taoists to engage in polemical discussion of the books Hua-hu-ching 化胡經 and some others.

YS states: 'In the year Kuei-ch'ou (1253), when 'Phags-pa was fifteen years old, [he] was received in audience by Shih-tsu (Qubilai).' If the year of his birth was 1235, he should have been in his nineteenth calendar year. RA gives his age in 1253 as eighteen.

In the year Chia-yen 夏 (1254), on the date Keng-tzu 庚子 of the fifth month, [Qubilai] stayed at Liu-p'an-shan. In the Tibetan documents, the Chinese character Ac is normally transcribed as lug which corresponds to the AC liuk. So it is possible that the Tibetans transcribed this character as lu after dropping the final consonant -k in Mandarin. Pa'i is a genitive form of pa. It is supposed to have been influenced by the Tibetan nominal or verbal suffix -pa (-pa) or by the north-western dialect of Chinese p'an. See B. Csongor, 'Some Chinese texts in Tibetan script from Tun-huang', AOH, X (1960), No. 304 in 'Index' (絃, AC xuan; Tib. trsc. hwan, hwa). (But it is difficult to be sure whether this accords with 'Lu-pe san (Liu-pin shan)' (BA, II, p. 505).

According to the EYT, the first meeting was not very friendly; in 1264 Qubilai’s queen, Qubilga Cambui Gooa, suggested to Qubilai Qan that Mati Dhuvajwa (see n. 52) (Skt. Mati-dhvaja) should succeed to the post of Bla-ma (Mong. bogda), and that the Qan should receive the Kei vačir-u abisig (=Skt. hevajrābhisēka)-; Mong. kei-vačir=Skt. he-vajra-[Tib. kye-rdo-rje, or dgyes-]; Mong. kei, Tib. kye, dgyes =Skt. he (interj.) oh!’ vačir=Skt. vajra-[Tib. rdo-rje] 'thunderbolt' [hevajra-,
Möngke Qan commanded 'Phags-pa to analyse the discrimination of right or wrong laid down in those books. The Taoists could not continue the argument and were eventually defeated. 38

In the first year of the Chung-t'ung 中統 reign (1260), Qubilai Qan ascended the throne. 'Phags-pa was appointed kuo-shih 國師 (National Preceptor) and was invested with a jade-seal.39 Thus, 'Phags-pa formally name of a Täntric deity or a work]; Mong. abisig=Skt. abhisêka= ‘consecration’ [Tib. dban-bskur-ba] (cf. Mahâvyutpatti, No. 4306 金剛頂成金剛頂頂); also F.D. Lessing, Mongolian-English Dictionary, pp. 4b and 1174a). The Qan agreed with her, but objected to sitting under ‘Phags-pa to receive this consecration, but finally consented to do so. Furthermore, when the Qan and 'Phags-pa discussed the tantra of Kei-vatir (hevajra-tantra, see above), 'Phags-pa could not understand the words of the Qan, who kept the only scroll of it. In the night Mahâkâla's apparition (see Mahâvyutpatti, No. 3162) brought this scroll to 'Phags-pa. On the next day, the Qan could not equal him in argument. Thus Qubilai Qan came to respect him. For further details, see Schmidt, pp. 114-7.

38 See HC which states: ‘In the year of Wu-wu (1258), when he was twenty [read twenty-four] years old, Buddhists and Taoists discussed on the Hua-hu-ch'ing. Hsien-tsung 憲宗 (Möngke Qan) commanded them to analyse the right or wrong [of this book]. The Taoists could not reply.’ For this argument between Buddhists and Taoists, details are given in the Pien-wei lu by Hsiang-mai. In 1222 Chinggis Qan invited to his court Ch'ang-ch'un chen-jen 長春真人 (Chi'u Ch'u-chi 丘處機, 1148-1227), a famous patriarch of the Ch'uan-chen sect of Taoism. Therefore, the Taoists, mainly followers of Ch'ang-ch'un chen-jen, had continuously attacked the Buddhists; destroying nearly five hundred Buddhist monasteries and changing them into Taoist shrines. Conversely, the Buddhists also burnt Taoist apocrypha and recaptured monasteries occupied by the Taoists. Möngke Qan issued an edict prohibiting the Taoists' subversive activities against Buddhism, but it was of no effect. According to the Pien-wei lu, in the year of Ting-ssu 聯辛 (1256), Möngke Qan convened several hundred representatives of the Buddhists, Confucians, and Taoists in the Palace. 'Phags-pa also attended this conference (Taishô, LII, 771a, line 7ff.) and asked the Taoists to explain the essence of Taoism and its miracles (Taishô, LII, 771c, line 16-772a, line 3). After the conference, Möngke Qan again issued an edict saying that Taoists apocrypha such as the Hua-hu-ch'ing, Pa-shih-i-hua-t'u 異聞等華語, etc. should be burnt. For further details, see, for example, the following works: Li Chih-ch'ang 李志常 Ch'ang-ch'un chen-jen Hsi-yu-ch'i 長春真人西遊記 (1228) (Wang Kuo-wei 王國維, Hai-ning Wang Ching-an hsiien-sheng I-shu 海寧王靜安先生遺書, fasc. 39); Yeh-lü Ch'ü-ts'ai 耶律楚材, Hsi-yu-lu 西遊錄 (1228) (Lo Chen-yü 羅振玉 ed. based on the Kanda Kichiho 神田喜一郎 ed., 1927); Ts'ai Mei-piao, Yüan-tai Pai-hua-pei Chi-lu (Peking, 1955), pp. 101-6; S. Nogami, 'Gendai Dô-Butsu nikyô no kakushitsu', ODKN, II (1943), pp. 213-75.

39 YS ('Shih-tsu pen-ch'í') states: 'On the twelfth month of the first year of Chung-
started to control Buddhism in Mongolia. In 1265 he returned to Tibet,\(^40\) but in 1268, he was again invited to Mongolia.\(^41\) Having been commanded by Qubilai, 'Phags-pa invented a Mongolian script and presented it to the throne.\(^42\) This new script was promulgated by Imperial decree in

\[^{40}\text{See } BA, \text{ p. 212. }\]

\[^{41}\text{See } BA, \text{ p. 212. }\]

\[^{42}\text{It is difficult to ascertain the year in which the 'Phags-pa script was invented. }\]

\(^{YS}\) states: ‘In the first year of the Chung-t’ung reign (1260),...Qubilai appointed him kuo-shih,...[Qubilai] commanded ‘Phags-pa to invent a new script. He did so and presented it to the throne. This script includes about a thousand words and consists of forty-one [alphabetical] signs,...In the sixth year of the Chih-yüan reign (1269),[this new script] was promulgated by Imperial decree.’ On the other hand, \(^{HC}\) and \(^{TSNP}\) state: ‘In the seventh year of the Chih-yüan reign (1270),[Qubilai] commanded him to invent a Mongolian script. He was absorbed in tracing lines, [and after a few days (TSNP)] he completed it. [This script] satisfied [Qubilai’s] intention, and was immediately promulgated by Imperial decree.’ The date of the promulgation of the 'Phags-pa script was possibly the second month of the year Chi-ssu 己巳 (March/April, 1269) as \(^{YS}\) (‘Shih-tsü pen-chí’) and \(^{FLT}\), 21 (Taishö, XLIX, 705b, lines 3–4) state. Ts’ai Mei-piao (Yüan-tai Pai-hua-pei Chi-lu, pp. 23–4, n. 1; Pa-ssu-pa-tzu yü Yüan-tai Han-yü, p. 9) maintains that this script is supposed to have been tentatively used in 1268, because The Edict of Chou-chih Ch’ung-yang Wan-shou-kung 故皇帝萬壽聖旨碑 in the 'Phags-pa script is dated the year of Dragon, which corresponds to 1268. But this cannot be cited as evidence because it is quite possible that the epigraph dated 1268 was actually carved after 1269. \(^{VDL}\) states: ‘He (‘Phags-pa) returned to the imperial
1269. 'Phags-pa was promoted to *ti-shih* (Imperial Preceptor) and was given a title of *ta-pao fa-wang* 大寶法王. Qubilai again invested him with a jade-seal.

Then he again returned to Tibet, and in the eleventh year of Chih-yüan reign (1274), Qubilai dispatched an ambassador to invite him. At the end of this year, 'Phags-pa arrived at the capital. In the year Fire-Male-Mouse (*me-pho-by-i-ba*, i.e. 1276), he again returned to his monastery. In 1277 he held a religious assembly at Chu-mig, and rendered perfect religious service to about hundred thousand men. In the year Iron-Male-Dragon (*lcags-pho-'brug*, i.e. 1280), on the twenty-second day palace and since he had submitted a specimen of an alphabet representing a new method of learning the Mongolian writing, the king conferred upon him the supreme diploma of “*ban-de progeny of Manu (śed-skyes)*” (TPS, II, p. 626a). This passage in the *VDL* is the only Tibetan source for assigning the invention of the Mongolian script to 'Phags-pa.

The French and English translations of this decree quoted in the *YS* are given by Pautheir (op. cit., pp. 12-15) and Poppe (*The Mongolian Monuments*, ...p.5).

His promotion to *ti shih* is supposed to have taken place just after the promulgation of the new Mongolian script. *YS* gives no mention of this title.

No account of the year of his returning to Tibet at this time is given in the sources.

*HC* states: 'In the year of *Chia-shu* 甲戌 (1274), he was thirty-six [read forty] years old. This year was in the eleventh year of the Chih-yüan reign. The Emperor [Qubilai] dispatched an ambassador to invite him. At the end of this year, he arrived at the capital.' *TSNP* also follows this. But *YS* states: 'In the eleventh year [of the Chih-yüan] (1274), 'Phags-pa petitioned [the throne] for sanction to return to the West [Tibet]. [Qubilai] urged him to stay [at his post], however, he refused [Qubilai’s request].’ It is difficult to conclude when he finally returned to Tibet, because *BA* ascribes the date for this as 1276. If we follow both the Chinese and Tibetan sources (e.g. *BA*, p. 212), 'Phags-pa returned to Tibet some time after 1270, and came to Mongolia in 1274, again returning to Tibet in 1276. In addition, *EYT* gives the date of his return to Tibet as 1280 (Schmidt, p. 119), but this is evidently incorrect.

*YS* gives the year of his death as the sixteenth year of Chih-yüan reign (1279). Other Chinese sources accord with the Tibetan sources.
of the eleventh month,49 'Phags-pa passed away aged forty-six50 in the Lha-khaṅ bla-bran.51

Qubilai Qan, being informed of his death, was deeply grieved, providing his burial expenses and granting him a posthumous title.52 Qubilai also built a great stūpa dedicated to 'Phags-pa in the capital to enshrine his relics.53

During the Chih-chih 玄 定 reign (1321–3), Gegen Qan issued an Imperial edict that shrines should be dedicated to 'Phags-pa in each district and prefecture. In the first year of the T'ai-ting 泰定 reign (1324), Yesün-temur Qan further commanded that eleven portraits of 'Phags-pa should be distributed to each province in his honour.54

49 See HC and TSNP.
50 HC naturally gives the age of his death as forty-two. See n. 27.
51 See VDL (TPS, II, p. 627a).
52 His posthumous title is 'divine son (Devaputra) of India below the sky and upon the earth, inventor of the alphabet, incarnated Buddha, maintainer of the kingdom's prosperity, source of rhetoric, Paññita 'Phags-pa, master of the Emperor.' According to FLT, fasc. 22 (Taishö, XLIX, 732c, lines 12–5), Ying-tsung (Gegen Qan) granted 'Phags-pa this posthumous title. Cho-keng-lu 織耕錄 by T'ao Tsung-i 陶宗儀 also mentions this title (Ch'in-tai Pi-shu 津逮祕書 ed. vol. 12, p. 17a). Besides, the TSNP gives his sacred name as Hui-ch'uang hsien chi-hsiang 惠幢賢吉祥, which consists of 惠 (is supposed by later scholars to be a mistransliteration of 慧 because of its identical sound) corresponding to the Skt. mati-dhvaja (mati='intelligence'; dhvaja='a banner, flag, standard'), 贤 corresponding to the Skt. paññita ('wise man') and 吉祥 corresponding to the Skt. ēri and Tib. dpal ('holy, glorious'). In the EYT, 'Phags-pa's name appears as Mati Dhuvajva which exactly corresponds to the Skt. mati-dhvaja. P. Ratchnevsky gives 'Phags-pa's sacred name as Blo-gros rgyal-mtshan dpal bzan-po (Skt. Ārya Matidhvaja śrībadra) ('Die mongolischen Grosskhane und die buddhistische Kirche'. Asiatica. Festschrift für Friedrich Weller zum 65. Geburtstag, p. 492, n. 29). In the Tsoa-hsiang-liang-tu-ching yin 聖像畫經引 (= 'Introduction to the Buddha-pratimā-lakṣaṇa') (cf. Taishö, No. 1419, XXI, p. 939a), Gombojab (Tib. Mgon-po skyabs) (1690–1750 ?) gives 'Phags-pa's name as Lo-chui-chien-ts'an 洛追鍾燁 which is supposed to be Chinese transcription of his Tibetan name Blo-gros rgyal-rtshan.
53 HC and TSNP.
54 YS. In addition, Ferrari (op., cit. p. 64, cf. pp. 150–1) states: 'In its (Gā-thog Bla-bran) lower part there is the universe-conquering (khams-gsum-zil-gnon) chair of 'Phags-pa Rin-po-che.
The following books are believed to have been written by 'Phags-pa.

(1) Chang-so-chih lun 彰所知論, 2 vols. (Taishō, No. 1645)

(2) Ken-pen-shuo i-ch'ieh yu-pu ch'u-chia-shou-chin yūan-chieh-mo i-fan 根本說一切有部出家授近圓羯磨儀範, 1 vol. (Taishō, No. 1904)

(3) Ken-ken-shuo i-ch'ieh yu-pu pi-ch'u hsi-hsiieh lüeh-fa 根本說一切有部苾蒚習學略法, 1 vol. (Taishō, No. 1905)

The Tibetan texts of his complete works will appear in the near future.55

II
THE 'PHAGS-PA ALPHABET

§ 1. The Invention of the 'Phags-pa Script

According to the YS, there were forty-one letters in the 'Phags-pa alphabet when it was invented by Bla-ma 'Phags-pa in 1269. In both the YSLP and HYS the editors give commentaries quoted from the SSHY written by T’ao Tsung-i, which follows almost identically the description in the FSK written by Sheng Hsi-ming in the Yuan dynasty. The FSK states:

There are forty-one letters: 1 No. 1. 则, 蒐; 2. 五, 濴; 3. 旨, 嗷; 4. 乏, 嘰; 5. 早, 著; 6. 月, 車; 7. 旨, 嫱; 8. 旨, 倪; 9. 旨, 倳; 10. 旨, 嫿; 11. 旨, 赂; 12. 旨, 那; 13. 旨, 錫; 14. 旨, 傳; 15. 旨, 末; 16. 旨, 麗; 17. 旨, 傳; 18. 旨, 汛; 19. 旨, 壱; 20. 旨, 綬; 21. 旨, 若; 22. 旨, 薊; 23. 旨, 阿; 24. 旨, 耶; 25. 旨, 島; 26. 旨, 麓; 27. 旨, 送; 28. 旨, 閶; 29. 旨, 詞; 30. 旨, 厘; 31. 旨, 張; 32. 旨, 臥; 33. 旨, 篤; 34. 旨, 污; 35 旨, 污 (light-expiration); 36. 旨, 霞; 37. 旨, 法; 38. 旨, 惠; 39. 旨, 也; 40. 旨, 旨; 41. 旨, 耶 (light-expiration).

The above letters are represented by their Chinese phonetic equivalents. They are pronounced with an open-mouth. Among them three letters, Nos. 25, 35, and 38, have been omitted and four letters, Nos. 42, 51, 43, 54, and 45, have been added instead. The spelling is mostly based upon the Sanskrit rules.

In the FSK, the Chinese transcription of the initial consonants of 'Phags-pa script follows that in the Ching-yu T’ien-chu Tzu-yüan 景祐天竺字源

1 According to the FSK (Ssu-k’u Ch’üan-shu 四庫全書 ed.) and SSHY, there are forty-three letters notwithstanding that the actual number of letters is forty-one. But the FSK (Ssu-pu Ts‘ung-k’an hsu-pien 四部叢刊續編 ed.) and YSLP based on the SSHY mention forty-two letters, the same as the description in the YS, so I follow the FSK (Ssu-pu Ts‘ung-k’an hsu-pien ed.) and the table of the SSHY.

2 This passage means that to the pronunciation of each letter the vowel a must be attached because the letter a is not included, in accordance with the Tibetan and Sanskrit rules. See Krueger’s ‘Supplementary Remarks’ added to Poppe’s The Mongolian Monuments..., p. 146.

3 This quotation from the SSHY is also translated into English in Poppe, ibid., p. 14. Clauson also gives a translation of this passage in the FSK (‘The k’P-agar-pa alphabet’, pp. 302-3). Pauthier translates this passage in the SSHY into French (‘De l’alphabet de Pa’sse-pa,’ , pp. 24-31).

39
(abbr. CTT) which was written by Wei-ching 晃淨 in 1035. This transcription of the Sanskrit alphabet seen in the CTT had itself been derived from the traditional way of transcribing Sanskrit since Fa-hsien 法顯, T’an-wu-ch’an 建無盡 (Skt. Dharmakṣema?), etc. Since the T’ang dynasty, however, Chinese transcription had been partly influenced by the northwestern dialects of China, in which certain phonetic changes occurred at that time. Therefore, characters which are used in the CTT are mostly identical with transcriptions used by Pu-k’ung 不空 (Skt. Amoghavajra) and his followers. 

4 According to R. H. van Gulik, Siddham, ... (=Sarasvati-Vihara Series, 36), pp. 91-2, ‘this book, in seven chapters, was translated from the Sanskrit by an Indian monk called Dharmaraka, and the text was edited by the Chinese monk Wei-ching.’ But it is still doubtful whether Dharmaraka really translated this book from Sanskrit or not. Moreover, the most recent study indicates that Dharmaraka (Chin. Fa-hu 法護) should be corrected to Dharmapala (see Jan Yün-hua, ‘Buddhist relations between India and Sung China’, History of Religions (Chicago), VI, 1 (1966), pp. 39-41). Therefore, I do not follow van Gulik, but simply state the editor or compiler of the CTT to be Wei-ching. This text was published in a facsimile edition by Lo Chen-yü in 1916 based on the text held in the Tōkyō Imperial Museum.

5 For example, Wen-tzu-p‘in 文字品 in the Ta-pan-ni-huan-ching 大般泥洹經 (Skt. Mahāparinirvāṇasūtra) (Taishō, No. 376), tr. (A, D, 417) by Fa-hsien 法顯; Ju-lai-hsing-p‘in 如來性品 in the Ta-pan-nieh-p‘an-ching 大般涅槃經 (Skt. Mahāparinirvāṇasūtra?) (Taishō, No. 7), tr. (414-21) by T’an-wu-ch’an 建無盡 (Skt. Dharmakṣema?); Tzu-mu-p‘in 布多品 in the Wen-shu-shih-li-wen-ching 文殊師利問經 (Skt. Manjūśrīparipṛcchā) (Taishō, No. 468) tr. (518) by Seng-chia-p‘o-lo 僧伽婆羅 (Skt. Sanghabhara?); Fo-pen-hsing-chi-ching 佛頂行集經 (Skt. Abhiniḥkramaṇasūtra?) (Taishō, No. 190), tr. (589-92) by She-na-chüeh-to 邵那崛多 (Skt. Jñānagupta); Shih-shu-p‘in 示書品 in the Fang-hueng-ta-chuang-yen-ching 方廣大莊嚴經 (Skt. Lalitavistara) (Taishō, No. 187), tr. (685) by Ti-p’o-ho-lo 地婆罗 (Skt. Divākara); Hsi-t’an Tzu-chi 昌遠字記 (Taishō, No. 2132) (780-804) by Chih-kuang 智廣. For further detail see Lo Ch‘ang-p‘ei, ‘Fan-wen o-yin wu-mu te Tsang-Han tui-yin yen-chiu’, AS, III, 2 (1931), pp. 263-76. However, it is still doubtful whether the Chinese Buddhist texts were directly translated from Sanskrit or not. It is quite possible that the original Sanskrit Buddhist texts were first translated into the Tocharian, Sogdian, or other languages, and then translated into Chinese. Here, I simply follow the alphabetical tables of Sanskrit in the Chinese Buddhist texts regardless of the possibility of the existence of intermediary languages. This is because the rules for transcribing Sanskrit in the Chinese Buddhist texts had already been fixed, and it is impossible to estimate the influence of intermediary languages. See T. Haneda, ‘Kanyaku no Butten ni tsuite’, repr. in Haneda Hakushi Shigaku Ronbunshū, II, pp. 348-57.

6 For example, Yu-chia-chin-hang-ting-ching Shi-tzu-mu-p‘in 瑜伽金剛頂經釋字母品
The forty-one letters in the FSK are arranged in Table 1 with the hypothetical transcriptions given by various scholars.

Nos. 1–41 in this table are mentioned both in the FSK and SSHY, and they are supposed to be the letters invented by Bla-ma 'Phags-pa. Nos. 25, 35 and 38 were omitted later and Nos. 42–45 were added instead as a result of the needs of transcribing.

It should not be surprising that there are five letters (Nos. 42–45) in the MKTY, which the FSK mentions. It is supposed that these five letters were added by Chu Tsung-wen, a compiler of the MKTY, as a result of transcribing the Chinese (non-Mandarin) sounds.

After the invention of the 'Phags-pa script, the Mongolian government tried to enforce the use of this new script; to establish Meng-ku Tzu-hsüeh 蒙古字學 (schools for the Mongolian script) in each province, to write edicts, epigraphs, codes, and rhyme dictionaries in the 'Phags-pa script. It remained in general use throughout the Yuan dynasty; but, after the Yuan dynasty fell it was no longer used and disappeared. Nevertheless, the 'Phags-pa script has occasionally continued in use as seal-script by the Tibetans, by whom it is known as one of the Hor-yig.

(Skt. ?) (Taishö, No. 880) and Wen-shu-wen-ching Tzu-mu-p'in 文殊聞經字母品 (Taishö, No. 469), both tr. (771) by Pu-k'ung 不空 (Skt. Amoghavajra); Pien Wen-tzu Kung-te chi Ch'u-sheng Ts'u-li-pien 譬文字功德及出生次第篇 in the I-ch'ieh-ching Yin-i-hih Sa-pan-mieh-p' an-ching—切音義釋大般涅槃經 (Taishö, No. 2128) (788-810) by Hui-lin 慧琳; Shittan Jibo Shakugi 悉昙字母釋義 (806-35) by Kükai 空海; CTT by Wei-ching. For further details, also see Lo Ch'ang-p'ei, ibid., especially his 'Comparative table of Chinese characters used in transcribing the forty-nine letters of the Sanskrit alphabet in sutras'.

7 See the FLT (Taishö, XLIX, p. 705c), which states that the establishment of Mongolian schools took place in the seventh year of the Chih-yüan reign (1270), probably after the eleventh month of this year.

8 On the enforcement of the 'Phags-pa script in the Yüan dynasty, see Lo Ch'ang-p'ei and Ts'ai Mei-piao, PSPT, pp. 1-30. On the rhyme dictionaries in the 'Phags-pa script, see Cheng Tsai-fa, MKTY ken ken Pa-ssu-tzu-yu kuan te yün-shu, pp. 15-77. According to Cheng Tsai-fa, at least the two rhyme dictionaries, the Meng-ku Yün-lüeh 蒙古韻略 and Meng-ku Yün-pien 蒙古韻編, are known to have existed before the MKTY was compiled. Also the MKTY is very likely based on these books, or is rather a revision of the Meng-ku Yün-lüeh.

9 Even in the Yüan dynasty, however, the Uighur script was occasionally used in official documents. For example, see A. Mostaert and F. W. Cleaves, 'Trois docu-
§ 2. The Phonetic Value of Individual Letters

The letters in Table I are divided into eleven groups mainly, in accordance with the traditional Chinese classification except groups J and K, as follows, and will be discussed in this order:

A : Velar group (牙音)
B : Bilabial group (唇音)
C : Labio-dental group (齒音)
D : Plosive dental group (舌音)
E : Cerebral group (舌上音)
F : Supradental (齒上音) and Affricated alveolo-palatal (正齒音) groups
G : Sibilant group (齒擦音)
H : Laryngeal group (喉音)
I : Liquid (= Lateral + Vibrant retroflex) group (半舌音)
J : Vowels
K : Miscellanea

A : Velar group

The characters Nos. 1–4 refer to the Sanskrit alphabet ka, kha, ga, na respectively. In the CTT, or the other Chinese Buddhist texts, the character ं is added from the necessity of transcribing the Sanskrit gha, which does not exist in the Chinese language. Similarly, in the FSK no other initial group has a character for the Sanskrit aspirated voiced initials.

No. 3 is represented by the character ः which has an initial ṣ,11

10 Karlgren proposes that Ancient Chinese voiced initials had an aspiration, but this is still doubtful. However, the fact that no character has been used to transcribe the Sanskrit gha, dha, bha, ... series cannot be cited as evidence against Karlgren's hypothesis, because in Ancient Chinese voiced initials there was phonological opposition between aspirate and non-aspirate as in Sanskrit.

11 This character gives trouble to Clauson (op. cit., p. 309, n. 1). Because 'the character used is not in Grammata Serica Recensa nor in Giles' dictionary,' he
<table>
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<th>No.</th>
<th>'Pgs. equivalent</th>
<th>FSK</th>
<th>MKTY</th>
<th>Gabelen</th>
<th>Pauthier</th>
<th>Dragunov</th>
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<td>j</td>
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<td>ʃ+e/ʃh</td>
<td>ʃ+e/ʃh</td>
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46
although the Tibetan and Sanskrit equivalents of this letter have a phonetic value \( g \). A similar kind of alternation between \( y \) and \( g \) can be seen in Nos. 11, 15 and 19, which are represented by \( d, b, \) and \( dz \) respectively, not only in the FSK and CTT but also in other Chinese Buddhist texts since the T'ang dynasty, as Table 2 shows:

**Table 2**

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<tr>
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<tbody>
<tr>
<td>( ga )</td>
<td>伽 (=g)</td>
<td>哥, 诶, 咛(=y)</td>
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<td></td>
</tr>
<tr>
<td>( da )</td>
<td>陀, 扪(=d)</td>
<td>婆, 颇, 掳(=n)</td>
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</tr>
<tr>
<td>( ba )</td>
<td>婆 (=b)</td>
<td>娑, 摩, 末(=m)</td>
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</tr>
<tr>
<td>( ja )</td>
<td>闍, 社(=dz)</td>
<td>若, 惹(=nzd)</td>
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</table>

Conversely, we find other examples which show Chinese nasals transcribed by the Tibetan or Uighur plosives as Table 3 shows:

**Table 3**

<table>
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<tr>
<th>AC</th>
<th>Tibetan trsc.</th>
<th>Uighur trsc.</th>
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</thead>
<tbody>
<tr>
<td>( m- )</td>
<td>'byehu, 莫 'bag [S];</td>
<td>摩 ba, 味 bai,</td>
</tr>
<tr>
<td></td>
<td>'ba, 襲 'bi, 微 'byi [C1];</td>
<td>萬 ban, 說 bou,</td>
</tr>
<tr>
<td></td>
<td>漠 'bag, 鬥 'bun [H]</td>
<td>黑 bāg [C2]</td>
</tr>
<tr>
<td>( n- )</td>
<td>民 'don, 念 'dyam (or nyam 12)</td>
<td>no example</td>
</tr>
<tr>
<td></td>
<td>[S]; 那 'da', 納 'dab [C1]</td>
<td></td>
</tr>
<tr>
<td>( y- )</td>
<td>五 'gu (or 'go), 碌 'ge [S];</td>
<td>元 gon, 彫 gen,</td>
</tr>
<tr>
<td></td>
<td>業 'geb, 譜 'gi [C1]; 華 'gan,</td>
<td>盾 gü, 義 gi [C2]</td>
</tr>
<tr>
<td></td>
<td>粵 'ge'i [H]</td>
<td></td>
</tr>
<tr>
<td>( ŋ- )</td>
<td>二 zhī, 人 ŋin [S]; 而 zhí (or ẑe),</td>
<td>癸 nźim(or ẑim)</td>
</tr>
<tr>
<td></td>
<td>入 ẑib [C1]; 弱 ẑag [H]</td>
<td>仁 ŋān, 如 ẑu,</td>
</tr>
<tr>
<td></td>
<td>日 ẑir [C2]</td>
<td></td>
</tr>
</tbody>
</table>

assumes that the phonetic value of this character is \( x̂w`i \)'on the assumption that the "mouth" radical is not part of the character, but a sound modifier.' However, it is very easy to find this character in any Chinese dictionary by the fan-ch'ieh system; i.e. 牙切, 膖切, and 許貨切. The CTT annotates 五剖切 for the Sanskrit \( ga \) which is equivalent to No. 3, therefore in this case this character should have an initial. \( y \)

12 It is believed that the characters which have the nasal finals \(-n, -m, -y\) have
Abbreviations in this table are follows:

The above examples suggest that the Chinese transcription of Sanskrit and the Tibetan and Uighur transcriptions of Chinese have been influenced by the denasalisation which occurred in the northwestern dialects in the T’ang period. This denasalisation can be theoretically deduced as follows:

\[
\begin{align*}
m & > mb > b \\
n & > nd > d \\
y & > yg > g \\
n & > nh > zr \ (or \ y)
\end{align*}
\]

According to this assumption, it is not surprising that the Sanskrit *g*, *d*, *b*, *j* were represented by the Chinese *y*, *n*, *m*, *h* respectively, and that the Chinese *m*, *n*, *y*, *n* were transcribed as *b*, *d*, *g*, *zh* by the Tibetans and Uighurs.

This phenomenon, however, did not continue in the succeeding Sung and Yuan periods, because the capital returned to the Middle Plain after the fall of the T’ang dynasty. However, the Chinese transcription of never undergone the denasalisation. Examples of this can be seen in the Tibetan and Uighur transcriptions and in the Kan-on version of Sino-Japanese. But this rule is not always applicable, as seen in two variant transcriptions for the character  and the Kan-on version used in the Tendai sect (Tendai Kan-on 天台漢音). For further details, see H. Arisaka, ‘Mei, nei no tagui wa hatashite Kan-on nara-zaruka?’, *Kokugo On'inshi no Kenkyu* (rev. ed.), pp. 369-74.


In the Tô-on version of Sino-Japanese which was influenced by some Middle Plain dialects of the Sung and Yuan periods, these phonemes have no longer been
Sanskrit apparently still followed the pattern fixed in the T'ang time as seen in the CTT. Sheng Hsi-ming, the author of the FSK, also followed the CTT.

The phonetic values of Nos. 1-4 are, therefore, $k, k', g, y$ respectively, in accordance with the Chinese system of phonology.

On the other hand, this alternation between nasals and plosives in the CTT, FSK, and other Chinese Buddhist texts suggests that the phenomenon of alternation between voiced and voiceless initials of Chinese in the 'Phags-pa script does not occur through the aspiration of voiced initials as Karlgren explained but through the difference of phonological opposition between Chinese and Mongolian. This problem will be discussed in further details in the next chapter.

B: Bilabial group

In this group the phoneme $p'$ does not appear in Dragunov's, Hope's, and Poppe's materials, because the phoneme $p'$ has never existed in Mongolian. The PCH, according to Ligeti,\(^{15}\) includes many letters denoting $p, p', \text{ and } b$, which are considerably confused in this book. Even in the FSK, No. 13 representing $p$ is given mistakenly as $\equiv$ which is exactly the same as $b$. Also, No. 14 has a shape which can be easily confused with No. 15. Comparing this with the Tibetan equivalent of No. 15, No. 14 might have had a shape somewhat similar to the Tibetan $\equiv$ as seen in some modern Tibetan seals.\(^{16}\) However, the Mongolians have never used this No. 14, and its lack of use might have increased the possibility for it to have become confused with No. 15.

C: Labio-dental group

It is supposed that Bla-ma 'Phags-pa invented only Nos. 37 and 20 in

\(^{15}\) 'Le Po kia sing en écriture 'phags-pa', p. 15, n. 49.

\(^{16}\) In Das' plate, Francke's table ('Note on the Dalai Lama's seal...', pp. 1211-
this group. As far as the phoneme $f$ is concerned, he may well have invented No. 37, which has a compound shape consisting of a combination of Nos. 29 $h$ and 40 ʰ, by analogy with the fact that the phoneme $h$, when accompanied by a ho-k’ou 合口 (rounded-mouth) medial ʰ, can easily become an expiratory $f$. Originally, as shown by Pelliot and Aalto, the phoneme $f$ did not exist in the Tibetan and Mongolian languages.\(^{17}\) In Chinese, the phoneme $f$ came into existence in the Northern Sung time,\(^{18}\) and the earliest metarial indicating this fact is the Huang-chi Ching-shih T’ien-sheng Ti-yin T’u 皇極經世天聲地音圖 (abbr. HCCS), which is a simple rhyme table written by Shao Yung 郭英.\(^{19}\) In this rhyme table the four bilabial initials pang- 幫, $p’$ang- 僅, ping- 彈 and ming- 明 initials which had the third-degree final and the medial ʰ in Ancient Chinese might have changed to the labio-dental initials fei- 非, fu- 敷, feng- 奉 and wei- 微 initials. Theoretically speaking, this change can be shown by the following schema:

\[
\begin{array}{c|c|c|c}
\text{AC} & \text{OM} \\
\hline
\text{幫} & p > & \text{非} & f \\
\text{傍} & p’ > & \text{敷} & f’ \\
\text{並} & b > & \text{奉} & v \\
\text{明} & m > & \text{微} & w \\
\end{array}
\]

In fact, however, the phoneme $f’$ ought not to exist because the phoneme $f$ is always accompanied by an aspiration, so this schema should be

\(^{12}\) and the Rgya-dkar-nag..., the variant shapes of No. 14 can be seen as \(\text{佔, }\), \(\text{佢, }\), \(\text{訨, }\), etc.


\(^{18}\) Perhaps Ch’ien Ta-hsin 錢大昕 is the first scholar to mention the derivation of labio-dentals from bilabials. See ‘Ku wu ch’ing-ch’en-yin 古無輕聲音’, Shih-chia-chai Yang-hsin-lu 十駱齋新錄, vol. 5 (Ch’ien-yen-t’ang Ch’üan-shu, ed.), pp. 15a-27a.

corrected to \( (f) \). In the Mandarin-speaking area the phoneme \( v \) has never existed because the voiced initials have been assimilated to either voiceless non-aspirated or voiceless aspirated initials depending on their tones, although in the non-Mandarin area the voiced initials have been partly retained. From this fact, it is not difficult to suppose that Blama 'Phags-pa invented only two letters denoting the phonemes \( f \) and \( w \) to transcribe the sounds of the Mandarin-speaking area. Nevertheless, appearance of another two letters, Nos. 42 and 46 in the MKTY, is probably due to the fact that No. 42 was needed to represent the southern dialects which retained the voiced initials, and No. 46 was fitted in by Chu Tsung-wen's adherence to the traditional concepts of Chinese phonology. Although Denlinger states: 'The distinction between \( f \) and \( v \) is probably an archaizing distinction with no basis in the spoken language of the time,'\(^{20}\) Chu Tsung-wen's archaising is, as mentioned above, limited only to No. 46. Denlinger mistakenly supposes it also affects No. 42, but this conflicts with what we know of the phonology of Middle Chinese. He also fails to distinguish the letter shapes of Nos. 37, 46, and 42. He maintains that Nos. 37 and 42 are apparently identical, but it is very difficult to distinguish No. 46 from Nos. 37 and 42 in any original material. However, a study of the MKTY reveals clear distinctions in the use of Nos. 37, 46, and 42, and thus Denlinger is somewhat wide of the mark when he transliterates \( x\hat{u} \) for Nos. 37, 42 and \( y\hat{u} \) for No. 46 and also gives the Chinese phonemes \( v \) for Nos. 37, 42 and \( f \) for No. 46. Nos. 37 and 46 should be transcribed \( f \), as Clauson did, or \(  RelativeLayout \) in Hattori, and No. 42 should be transcribed as \( v \) (or \( \hat{a} \) in Hattori). (See Table 1.)

D: Plosive dental group

According to the CTT, the Chinese equivalent of the Sanskrit \( da \) is \( \hat{u} \), which also illustrates alternation by the denasalisation. The character 鼻 in the FSK is used for the Sanskrit \( d\hat{ha} \) in the CTT and other Chinese Buddhist texts. Nevertheless, this mistake by Sheng Hsi-ming suggests that his spoken language had not undergone the denasalisation

of the northwestern dialects in the T'ang period. He might simply have followed his own spoken language while on the other hand adopting the traditional usage of characters for Sanskrit. Therefore, from the viewpoint of traditional Chinese Buddhist texts, Sheng Hsi-ming's 迨 is a mistake, but from the viewpoint of Chinese as spoken in the Middle Plain, this transcription is of course correct.

E: Cerebral group
F: Supradental and Affricated alveolo-palatal groups

A full account of the cerebral group is given by Lo Ch'ang-p'ei.21 This group has been assimilated to the group F since the eleventh century.22 In the Mandarin-speaking area the phonetic changes of the groups E and F can be shown as follows:

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>F (2nd-degree):  qi, ti, ti, tsi</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F (3rd-degree):  qi, ti, ti, tsi</td>
</tr>
<tr>
<td></td>
<td>E:  ri, di, ti, ti</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 2</th>
<th>F (2):  qi, ti, ti, tsi</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F (3):  qi, ti, ti, tsi</td>
</tr>
<tr>
<td></td>
<td>E:  ri</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 3</th>
<th>F (2):  qi, ti, ti, tsi</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F (3):  qi, ti, ti, tsi</td>
</tr>
</tbody>
</table>

| Stage 4 |  q, t, t' |

Note: * chih-she 止損 k'ai-k'ou 開口
** others

---

21 'Chih, ch'e, ch'eng, niang yin-chih k'ao', AS, III, 1 (1931), pp. 121-57.
22 The earliest indication of this change can be seen in the HCCS. In this rhyme table, affricated alveolo-palataals have been assimilated to the supradental group. However, this table is too simple to illustrate fully the structure of the sound system.
In these schema, stages 1-4 signify Ancient Chinese, Old Mandarin (11-17 C.), Middle Mandarin (17 C.), and Modern Mandarin respectively. The CYYY and MKTY are the products of stage 2, but it must be noted that in these rhyme dictionaries there is no phonetic distinction between s, ts', ts and j, t', tf, although the CYYY distinguishes them in the case of vowels either as i or i. In the Wu dialects, however, the sounds of the Ancient Chinese E and F groups have been assimilated to the simple sibilant group except in the Kiuchow and Kinahua dialects, in which [t', t', d, j, s] appear very often. This fact suggests that in the Wu dialects the Ancient Chinese t, t', j, series was still preserved in the Yuan period. So if the MKTY employed one of the Wu dialects, Nos. 5-7, 27, and 43 might have had the values [t', t', d, j, s].

Denlinger's transliteration of this group follows Ligeti, Poppe, and Clauson, but his ascription of the Chinese phonemes t's, t's', d'z to Nos. 7, 6, 5 respectively is a great mistake. According to his transliteration, there is no distinction between groups E and F and group G. This seems to be a misprint.

As regards No. 8 which was a nasal cerebral (niang- 娉 initial) in Ancient Chinese, it appears only once in the PCH as a character 鈄. In the MKTY, this phoneme is distributed to n, n or t, although it has been completely assimilated into n in the CYYY. The feature of confusion between these three phonemes is similar to that in the Wu dialects. This also suggests the similarity of the dialect employed in the MKTY and the Wu dialects. Denlinger again interprets this fact mistakenly: 'careful comparison between MKTY and Kuang-yün 廣韻 with regard to

---

23 Source materials for Middle Mandarin include: Chiao-t'ai-yü 宗部 (1606) by Lü Kun 呂坤; Hsi-ju Erh-mu-tzu 西儒耳目資 (1926) by Nicolas Trigault; Wu-fang Yuan-yn 五方音 (1626-7?) by Fan Teng-feng 樊騰鳯; Yün -lueh Hui-t'ung 阅略匯通 (1642) by Pi Kung-ch'ien 毕拱辰. The phonetic changes shown in stage 3 of my schema can be obviously seen in the Ssu-ma Wen-kung T'ung-yün T'u-ching 司馬溫公等耕圖經 (1606) by Hsü Hsiao 徐孝, which is supposed to have employed the sound system of Shun-t'ien 順天.

24 See Chao Yuen-ren, Hsien-tai Wu-yü te Yen-chiu, Table I, 4.
26 See Chao Yuen-ren, ibid; N. Osada, 'Soshūgo on’in taikei no sho tokuchō ni tsuite', CGKR, I (1953), pp. 35-50.
his initial suggests that in this area the "archaising" of the *MKTY* was completely unsuccessful."27

With regard to the distinction between Nos. 27 and 43, No. 43 occurs only in the *MKTY* which has retained all voiced initials. Clauson and Denlinger explain that No. 43 is 'peculiar' or 'archaising' without any specific reference to the *MKTY*.28 It is natural that Bla-ma 'Phags-pa did not invent No. 43 because it is supposed to be difficult to distinguish Nos. 43 from 7. Therefore, the phonetic values of Nos. 5-7, 27, 43 are phonetically denoted as \([t§, t§', d§, s, z]\) in Mandarin, and \([tf, tf', d§, f, s]\) in the Wu dialects, but they can also be phonologically interpreted as \(t§, t§', d§', s, z\) respectively.

G: Sibilant group

Nos. 17-19 are much different in shape from the Tibetan equivalents. Later, however, we find many other variants which are equivalent to the phonemes *ts, ts', dz* in the Tibetan seal-script as follows:

**Table 4**

<table>
<thead>
<tr>
<th>'Phags-pa</th>
<th>Devanāgari</th>
<th>Chin. trsc.</th>
<th>Tib. equivalent</th>
<th>Tib. seal-script**</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>FSK</td>
<td>Mong.*</td>
<td>Old</td>
<td>New</td>
</tr>
<tr>
<td>5. 薦</td>
<td>े</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6. 車</td>
<td>े'</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7. 悟</td>
<td>ज</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8. 悟</td>
<td>ज</td>
<td>जिन</td>
<td>न</td>
<td>ना</td>
</tr>
<tr>
<td>27. 晉</td>
<td>ग</td>
<td>न</td>
<td>न</td>
<td>न</td>
</tr>
<tr>
<td>17. 晉</td>
<td>ग</td>
<td>ज ca  ज,  ज</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. 晉</td>
<td>ज cha  ज</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. 晉</td>
<td>ज ja  ज</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. 晉</td>
<td>ज sa  ज</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. 晉</td>
<td>ज za  ज</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. 晉</td>
<td>ज ज  ज</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


** Examples of Tibetan seal-script are collected from Francke, op. cit., Walsh, op. cit. and the Rgya-dkar-nag....

In this table, one should note that the Chinese transcription of the Sanskrit *ca*, *cha*, *ja*, *jha* has two different forms, as also in the case of the Sanskrit *ga*, *da*, *ba*. Lo Ch’ang-p’ei suggests that this might be result of three factors; 1. Indic dialects, 2. phonetic changes in Indic phonology, 3. differences between the Buddhist sects.\(^{29}\) In the *FSK*, the old Chinese transcription of Nos. 17–19 is removed to Nos. 5–7 and the new Chinese transcription of Nos. 17–19 is used for ‘Phags-pa Nos. 17–19 respectively.

On the other hand, Nos. 17–19 of the ’Phags-pa alphabet much more resemble in shape the Devanāgarī *ca*, *cha*, *ja* than the Tibetan equivalents *tsa*, *tsha*, *dza*.\(^{30}\) According to Poppe, Nos. 17–19 have been rarely used except for the phonemes of Chinese origin, because these phonemes have never existed in the Mongolian language.\(^{31}\) Therefore, Bla-ma ‘Phags-pa has apparently invented Nos. 17–19 for Chinese phonemes only, and the Tibetans who have referred to Mongolian documents in ’Phags-pa script might have felt it difficult to find ’Phags-pa equivalents of the Tibetan *tsa*, *tsha*, *dza*. They might also have invented Tibetan seal-script by analogy from the shape of *dbu-can*. The difference of shape between ’Phags-pa script and the Tibetan equivalents of Nos. 17–19 is supposed to have been caused by Bla-ma ’Phags-pa’s desire to avoid confusion. Otherwise, the Tibetan equivalents of Nos. 5–7 and 17–19 might easily have been confused. Hence it is considered that Bla-ma ‘Phags-pa invented Nos. 17–19 on the basis of the Devanāgarī alphabet, and not on that of the Tibetan *dbu-can* as in other letters.

The use of the character 窝 for No. 19 is also the result of denasalisation. This character has *jih* initial 日母, which is supposed to have a phoneme *tz* and which was always transcribed by the Tibetans as *z* or Uighur ژ (see Table 3). Therefore, it is not strange that the Tibetan

\(^{29}\) ‘Fan-wen o-yin wu-mu ...’.

\(^{30}\) The three Tibetan letters *tsa*, *tsha* and *dza* were evidently differentiated from the palatals *ca*, *cha* and *ja* respectively. ’Phags-pa perhaps tried to avoid the confusion of letter shapes between sibilants and palatals when he invented the ’Phags-pa script. Also see Clauson and Yoshitake, ‘On the phonetic value of the Tibetan characters......’, p. 845, which gives a simple account of this problem.

\(^{31}\) Poppe, op. cit., p. 21.
dza and izabeth are transcribed by the Chinese jih initial, since it would have been different for the Chinese to distinguish the Tibetan dza from izabeth.

However, from the standpoint of Chinese phonology, the phonetic value of the jih initial in the Yuan period had already acquired a vibrant element which resulted in izabeth. In the MKTY, there is a distinction between dz (chao initial 照母), izabeth (ch’an initial 神母), izabeth (hsieh initial 邪母) and izabeth, but the first three of these phonemes are assimilated to abeth s and abeth in the CYYY. According to Karlgren, the phonetic value of the jih initial in modern Mandarin is izabeth ( = [z]), which is apparently the conclusion of a theoretical process from n > abeth > abeth > abeth to abeth. Careful observation of modern Pekinese illustrates that this phoneme has a strong retroflex element [z] and that the actual value of modern utterance might have been derived from abeth ( = [t]) at some stage in Old Mandarin. Also, Karlgren’s process abeth > abeth > abeth is inconsistent with the MKTY. Why was it necessary for Karlgren to distinguish abeth from abeth, which are both regarded as the same in the MKTY? The character izabeth for No. 19 is, thus, the result of traditional transcription since Amoghavajra.

The character abeth for No. 28 in the FSK should be corrected to abeth, according to the CTT, and the character abeth for No. 22 should be also corrected to something which has an initial abeth.

Thus, the phonetic values of Nos. 17–19, 28 and 22 in this group are abeth, abeth, abeth, abeth, abeth, respectively.

H: Laryngeal group

This group has given us many difficulties. The problems will be discussed in the next chapter (§ 4).

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32 Han-yü Fang-yin Tzu-hui (Paking, 1962) also adopts Karlgren’s abeth. Phonetically speaking, abeth is a voiced of abeth in the retroflex group. But the jih-mu is not derived from the voiced of the shen-mu 神母; in other words, there is no phonological opposition between abeth ( = [s]) and jih-mu in modern Pekinese. Therefore, this phoneticisation is inconsistent.

33 Maspero gives only the formulae associated with m, n, y. But according to Ogawa (op. cit., p. 8) this formula is also applicable to the jih-mu. Karlgren (op. cit., pp. 466–9) gives a different formula: abeth > abeth > abeth.
I: Liquid group

Phonetic values of Nos. 26 and 21 are $l$ and $r$. This phoneticisation $r$ is adequate to avoid confusion between $z$, $dzi$, and $jih$ initial, as mentioned above.

J: Vowels

Nos. 31, 32, 34 should undoubtedly be $i$, $u$, $o$ respectively. Ligeti’s observation on the variant of No. 34 (ಜ) (=No. 34a), which appears both in the PCH and MKTY, is correct, but he does not mention the peculiar final $u$ accompanied by No. 34a. This problem will be discussed in the next chapter (§ 2).

Ligeti’s suggestion as to No. 39 (central vowel symbol) is incorrect, and has been rectified by Clauson and Denlinger. Nos. 39 and 41 are very similar in shape; in the MKTY they are identical. Nos. 40 and 41 and No. 34a are medials. In the MKTY, No. 33 is mistakenly described as $\equiv$ and Denlinger follows this, but in fact the equivalent should be $\equiv$ or $\leftarrow$. Oshibuchi and Poppe proposed two central vowels $\delta$ and $\eta$ which are compound shapes of No. 41 and Nos. 32, 34a. The central vowels are unknown before the advent of modern Chinese, so they should rather be diphthongs in the MKTY or other Chinese ’Phags-pa documents. There were, however, central vowels in Mongolian, as Poppe has noted. Chinese transcription of Sanskrit, as far as the vowels are concerned, is much different from that in the FSK. For instance, the character 奚 for No. 33 has been used to transcribe the Sanskrit $l$, but in the ’Phags-pa alphabet it is $\delta$.

K: Miscellanea

No. 25 was invented solely to transcribe the Mongolian $r$, and was omitted from Chinese material. The Mongolian $r$ is a 'strong rolled alveolar

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37 Oshibuchi, 'Chūgenon'in chū no......' p. 606; Poppe, op. cit, p. 25.
sound\textsuperscript{38} and in the Tsung-k'uo Pien-hua chih t'ü 總括變化之圖 in the MKTY,\textsuperscript{39} it is annotated as chuan-she-erh 轉舌兒. This seems that the Mongolian $r$ was similar to Chinese retroflex vibrant $r$. The reason why No. 25 was not transcribed by jih initial character but was transcribed by the lai initial (來母) character ($l$) is also a result of the traditional transcription of the Chinese Buddhist texts.

As regards No. 38, this seems to have been invented to transcribe the Sanskrit $aḥ$ as seen in the CTT. Later, however, this letter became completely useless to transcribe Chinese and Mongolian.

\textsuperscript{38} Poppe, Grammar of Written Mongolian, p. 13.
\textsuperscript{39} MKJI (Kansai Daigaku ed.) p. 7; PSPT ed., p. 97a.
III
'PHAGS-PA ORTHOGRAPHY IN CHINESE DOCUMENTS

§ 1 Alternation between Voiced and Voiceless Initials

It has been frequently said that in the 'Phags-pa transcription of Chinese, voiced and voiceless initial consonants usually alternate. In fact, this phenomenon can be seen in both the PCH and MKTY as follows:

<table>
<thead>
<tr>
<th>group</th>
<th>No.</th>
<th>'Pgs.</th>
<th>Chin.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>3</td>
<td>$g$</td>
<td>$k$</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>$k$</td>
<td>$g$</td>
</tr>
<tr>
<td>B.</td>
<td>15</td>
<td>$b$</td>
<td>$p$</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>$p$</td>
<td>$b$</td>
</tr>
<tr>
<td>D.</td>
<td>11</td>
<td>$d$</td>
<td>$t$</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>$t$</td>
<td>$d$</td>
</tr>
<tr>
<td>E.F.</td>
<td>7</td>
<td>$dz$</td>
<td>$ts$</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>$t$ $s$</td>
<td>$d$ $z$</td>
</tr>
<tr>
<td>G.</td>
<td>19</td>
<td>$dz$</td>
<td>$ts$</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>$ts$</td>
<td>$dz$</td>
</tr>
</tbody>
</table>

However, in the following cases this phenomenon does not appear:

| G.    | 37  | $f$   | $f$   |
|       | 42  | $v$   | $v$   |
| F.    | 27  | $s$   | $s$   |
|       | 43  | $z$   | $z$   |
| G.    | 28  | $s$   | $s$   |
|       | 22  | $z$   | $s$   |
| H.    | 29  | $h$   | $h$   |
|       | 44  | $h$   | $h$   |

That is to say, the alternation of voiced and voiceless initials always occurs in the plosive group (including affricated sounds) and not in the fricative group.

On this problem, Karlgren states:

La supposition $b'$, $d'$, $g'$ etc. nous donne aussi la clé d'un autre problème.
Les transcriptions mongoles ont régulièrement des sourdes pour les sonores.
chinoises et des sonores pour les sourdes chinoises. Or, si l'on interprète les
sonores de l'ancien chinois par \( b, d, g \) etc., il sera tout à fait incompréhensible
que les mongols aient entendu \( p \) pour \( b \) et \( b \) pour \( p \). Mais en supposant que
les phonèmes de l'ancien chinois ont été \( b', d', g' \) etc. et qu'en mongol les
sourdes \( p, t, k \) ont été plus aspirées que les sonores \( b, d, g \) — ce qui est la
règle par ex. dans les langues germaniques — on ne trouvera rien d'étonnant à
cela que le \( b' \) chinois, à cause de son aspiration, ait été perçu par les mongols
comme un \( p' \), et qui la sourde faible chinoise \( p \), vu son manque d'aspiration, ait
été perçue comme un \( b \).

According to Karlgren, this phenomenon can be indicated as the fol-
lowing scheme:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Chin.</th>
<th>Mong.</th>
<th>'Pgs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>( b' )</td>
<td>( p (= [p']) )</td>
<td>( p )</td>
</tr>
<tr>
<td>2</td>
<td>( p )</td>
<td>( b )</td>
<td>( b )</td>
</tr>
<tr>
<td>3</td>
<td>( p' )</td>
<td>( b' )</td>
<td></td>
</tr>
</tbody>
</table>

On the evidence of alternation between voiced and voiceless initials
in the Chinese and Mongolian languages, Karlgren concludes that An-
cient Chinese voiced initials were aspirated. Chiang Yung 江永 and Ch'en Li 陈澧 assigned the voiced initials to the aspirated group,² which would
accord with Karlgren's hypothesis, and Lo Ch'ang-p'ei produces evidences
from Chinese Buddhist texts to support this conclusion.³ However, Lu
Chih-wei and A. Tődő hold the opposite view,⁴ and Chao Yuan-ren, al-
though he in general follows Karlgren's hypothesis, still leaves the
question open.⁵ Thus it is difficult to associate the phenomenon of alter-
nation between voiced and voiceless initial in 'Phags-pa with the presence
of aspiration in Ancient Chinese voiced initials, until the presence of
aspiration in Ancient Chinese has itself been proved more conclusively.

As there is no phonological opposition concerning aspiration in
Ancient Chinese voiced initials, it is possible to deal phonologically with
Ancient Chinese voiced initials without further reference to Karlgren's
theory.

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1 Karlgren, Études sur la phonologie chinoise, p. 360.
2 Chiang Yung, Yin-hsüeh Pien-wei 音學辨微: Ch'en Li, Ch'ieh-yün k'ao wai-pien
切韻考外篇.
3 Lo Ch'ang-p'ei, T'ang Wu-tai Hsi-pei Fang-yin, pp. 27-30.
4 Lu Chih-wei, ‘Shih CYYY’, YCHP, XXXI (1946), p. 38, n. 2; A. Tődő,
Chagokugo On'inron, pp. 158-61.
In Ancient Chinese there is a phonological opposition between voiced, voiceless aspirated and voiceless non-aspirated initials (e.g. \( b : p' : p \)) in each group. On the other hand, in Mongolian there is a phonological opposition only between voiced and voiceless initials (e.g. \( b : p / b : p' \)).

Voiceless initials are all strong aspirated,\(^6\) so we can also denote them \( p' \) because there is no phonological opposition between them.

It can be supposed that the alternation between voiced and voiceless initials in 'Phags-pa transcription of Chinese is caused by the differences of phonological opposition in Chinese and Mongolian. The Mongols, who did not possess a phonological opposition between aspirated and non-aspirated initials, might have noticed the phonological opposition between them of Chinese. In this case, the transcription should be as follows:

\[
\begin{array}{ccc}
\text{Chin.} & \text{Mong.} & \text{'Pgs.} \\
\text{stage 1.} & p' & p \left(= [p'] \right) & p' \\
\text{Scheme II} & \text{stage 2.} & p & b & b \\
\text{stage 3.} & b & b & p
\end{array}
\]

In this scheme, Chinese and Mongolian naturally correspond to each other; however the voiced initial \( b \) excluded from Chinese in stages 1 and 2 should be replaced by \( p \) which is also excluded from 'Phags-pa transcription in the stages 1 and 2. Therefore it can be said that stages 1 and 2 are a natural alternation from the Mongolian point of view, but stage 3 is an artificial alternation introduced from a comparison with Chinese usage.

Another explanation is also possible. In the T'ang period, the Uighur script tended to transcribe Chinese voiced initials (except nasals) by voiceless initials.\(^7\) This was influenced by the denasalisation of the Northwestern dialects as discussed in Chapter II. This can be shown as follows:

---


(comparative list of the Middle Chinese glosses in Uighur script) in which one may find the following examples (AC sounds are in parentheses): 伽 ka (gia); 翁 ki (gji); 咬 pi (bji); 大 tai (dai); 弟 tai (diei); 已 ki (kji); 传 pan (pwan); 传 tang (tang); 史 go (kaw); 都 tu (too); 開 qai (k'ai); 裝 tso (dzang); 孔 qung (k'ung); 聚 tung (t'ung); 魔 ba (mua); 危 gu (ngjwe); 位 gen (ngjian); etc.
In the Yuan period, however, the Uighur transcription of Chinese was influenced by phonetic changes in Old Mandarin, by which voiced initials were distributed to either aspirated or non-aspirated voiceless initials depending upon their tones. Therefore, in Old Mandarin there is simply an opposition between aspirated and non-aspirated voiced initials. The Mongols regarded this phonological opposition in Old Mandarin as that between voiced and voiceless initials⁸. So in the case of Mongol, alternation might have occurred as follows:

<table>
<thead>
<tr>
<th>Chin.</th>
<th>Ugr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>stage 1.</td>
<td>( m \rightarrow b )</td>
</tr>
<tr>
<td>Scheme III</td>
<td>stage 2.</td>
</tr>
<tr>
<td>stage 3.</td>
<td>( p, p' \rightarrow p )</td>
</tr>
</tbody>
</table>

This principle had apparently already been established when the 'Phags-pa script came into existence.⁹ In the 'Phags-pa transcription of Chinese, the alternation suggested above also took place. In order to transcribe the voiced initials which were still retained in the non-Mandarin area, 'Phags-pa script had to use the only group of letters available, as follows:

<table>
<thead>
<tr>
<th>Chin.</th>
<th>Ugr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheme IV</td>
<td>stage 1.</td>
</tr>
<tr>
<td>stage 2.</td>
<td>( p' \rightarrow p(=p') )</td>
</tr>
</tbody>
</table>

---

⁸ Cf. F.W. Cleaves, 'The Sino-Mongolian inscription of 1362 in memory of Prince Hindu', *HJAS*, XII (1949), pp. 1-133 + 27 plates, esp. see pp. 69-82, 'Index verborum Mongolicorum'. In this index, the following examples may be seen (Pekinese sounds in parentheses): 伯 bai (pai/po); 部 bu (pu); 剌 bun (p'an); 埋 bii (pei); 兵 bing (ping); 轉 da (ie); 峰 ding (teng); 都 du (tu); 東 dung (tung); 鎮 gim (chin); 官 gion (kuan); 光 gong (kuang); 國 gui (kwo); 塔 tai (t'ai); 騰 ting (t'eng); 門 tung (t'ung); etc. The Uighur transcription of Chinese has definitely been influenced by old Mandarin. Furthermore, in the tentative romanisation of Chinese put forward in 1957 in mainland China, the phonological opposition between aspirated and non-aspirated initials is replaced by that between voiced and voiceless initials. The Japanese also tend to regard Chinese \( p : p' \) as \( b : p \) respectively.

⁹ Hope also gives an explanation of alternation in the 'Phags-pa transcription of
In this scheme, stages 1 and 2 are identical with those in Scheme IV, and stage 3 was necessarily added to transcribe the non-Mandarin voiced initials as seen in the MKTY and PCH. E.R. Hope's scheme is identical with the above Scheme V, but his intention is apparently to illustrate the alternation between 'clear null' and 'muddy null' pitches. He states, 'The Tibetan muddy null that, which has the same tone as KH/Gh [g], TH/Dh [d] etc., becomes the clear-pitch null of Chinese, while the Tibetan clear-pitch null ע, which is of the same tonal series as the initials G [k], D [t], etc. becomes the muddy null in Chinese.'

In the 'Phags-pa Mongolian documents, as Poppe points out, the confusion of fortes and lenes, especially initially, occurs. Although no explanation about this phenomenon is given by Poppe, it should be noted that in the 'Phags-pa Mongolian documents alternation between fortes and lenes does not occur but simply the confusion between them occurs. In Mongolian consonantalism, there is a phonological opposition between voiceless and voiced initials (e.g. p/k : b/g). Normally, however, according to Poppe, the Mongolian voiceless stops are strong aspirated fortes. Also in Uighur orthography, the letters denoting p/k and b/g are not distinguished from each other; in other words, only one Uighur letter is provided to denote either p/k or b/g. Since p/k and b/g are phonetically [p']/[k'] and [b]/[g] respectively, these two

---

Chinese: 'Evidently the identification of Mongol G [g] with Chinese G [k] was already established at the time, and too strongly established to allow any change to be made.' (Karlgren's Glottal Stop Initials..., p. 35), but he gives no reference or reason for this phenomenon.

10 Hope, ibid., p. 36.
11 Poppe, Mongolian Monuments..., p. 33.
12 Poppe, Grammar of Written Mongolian, pp. 12-5.
phonemes are to be distinguished from each other, but they have no orthographical distinction at all. After the 'Phags-pa script was introduced, the letters denoting the voiceless aspirated consonants \( p' \) and \( k' \) were added to Mongolian documents. Thus, in 'Phags-pa Mongolian documents, the phonemes \( p \) and \( k \), which were phonetically \([p']\) and \([k']\), were represented by using the 'Phags-pa letters \( p' \) and \( k' \), while the 'Phags-pa letters \( p \) and \( k \) were used for representing \( p \) and \( k \) in the words of foreign origin.\(^\text{13}\) The confusion of \( p'\k' \) and \( b/g \) in the 'Phags-pa Mongolian documents took place of that of \( p/k \) and \( b/g \) in the Uighur orthography. This phenomenon is, thus, to be regarded as a consequent development from the Uighur orthography and not to be regarded as a phonological confusion between fortes and lenes.

Hattori also explains the confusion between fortes and lenes in the 'Phags-pa Mongolian documents and ascribes it to the result of the Tibetan transcription of Mongolian which tended to transcribe the Mongolian voiceless aspirated by the 'Phags-pa voiced letters, as in the Lhasa dialect of Tibetan of the time the voiced was actually pronounced like voiceless.\(^\text{14}\) This explanation is, however, hardly acceptable unless the fact that the Tibetans in Lhasa transcribed Mongolian in the 'Phags-pa script is proved. The 'Phags-pa script is supposed to have not been used in Tibet at the time but only been used in Mongolian and China.

On the one hand, Hattori also explains the peculiar phenomenon of alternation between voiceless and voiced initials in 'Phags-pa Chinese documents. Hattori states: 'At the time, the principle that the Chinese voiceless non-aspirated was represented by the 'Phags-pa voiced letters and the Chinese voiceless aspirated was represented by the 'Phags-pa aspirated letters was established, because the Chinese and Mongolians of the time, in comparing their languages, regarded the Mongolian voiced/voiceless aspirated as the Chinese voiceless non-aspirated/voiceless aspirated. Thus, the Chinese voiced aspirated which did not exist in Mongolian was necessarily represented by the letters derived from the Tibetan voiceless letters.'\(^\text{15}\) This can be deduced as Scheme VI shows:

\(^{13}\) See Poppe, Mongolian Monuments..., pp. 19-21, esp. Nos. 5, 11, 12 and 21.
\(^{14}\) Hattori, Genchôhishi no Kôkôgo..., p. 68.
\(^{15}\) Hattori, ibid., p. 67.
Although Hattori's premise of this explanation that the Chinese voiced initials were aspirated as Karlgren's cannot be accepted, his interpretation mentioned above illustrates that the alternation of Chinese voiced and voiceless initials in the 'Phags-pa orthography was a result of difference of phonological opposition between the Chinese and Tibetan languages and Mongolian language. That is to say, the Mongolian language has only distinction between sonants and surds, while the Chinese and Tibetan ('Phags-pa) languages have the phonological opposition between aspiration and non-aspiration as well as sonants and surds.

§ 2. The Peculiar acidad

The phoneme $n$ is usually denoted as No. 12 (ㄆ) in the 'Phags-pa script. However, only in the MKTY a variant of No. 12 ( navigationController) appears regularly, and this letter is always accompanied by the vowel (IsActive) which is also a variant of No. 34 (IsActive) and which occasionally appears in Mongolian documents.16 Concerning the distribution of IsActive and IsActive, Ligeti has proposed a comprehensive theory,17 but he gives no mention of IsActive accompanied by IsActive.

The distribution of IsActive and IsActive in the PCH and MKTY is as follows:

<table>
<thead>
<tr>
<th>AC</th>
<th>CYYY</th>
<th>PCH</th>
<th>MKTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>黃 huang</td>
<td>huang</td>
<td>ɣōn</td>
<td>ɣōn</td>
</tr>
<tr>
<td>尻 yuan</td>
<td>won</td>
<td>-</td>
<td>ɣn</td>
</tr>
<tr>
<td>官 kuan</td>
<td>kwon</td>
<td>ɣn</td>
<td>ɣn</td>
</tr>
<tr>
<td>寬 k'uan</td>
<td>k'won</td>
<td>-</td>
<td>k'ɔn</td>
</tr>
<tr>
<td>端 tuan</td>
<td>twon</td>
<td>-</td>
<td>ɗn</td>
</tr>
</tbody>
</table>

16 In Mongolian documents, Ligeti's $d$ occurs in many cases, but the most peculiar case should be found in the word mongk'a ('eternal') in the initial formula of edicts. See W. Kotwicz, 'Formules initiales des documents mongois aux XIII-e et XIV-e ss.,' RO, 10 (1934) pp. 131-57; Poppe, Mongolian Monuments..., pp. 68-72; Pelliot, 'Un rescrit mongol en écriture 'phags-pa', TPS, II, pp. 621-4; Ligeti, ibid.

17 Ligeti, 'Trois notes ..., ' pp. 212-25.
Ligeti's \( \delta \) or Hattori's \( \rho \) in Chinese documents are considered to be denoted as \([ɔ]\) phonetically, because the nucleus is evenly the back-vowel \([a]\) and the medial preceding it is also a back-vowel \([u]\) in the 1st-degree of the both shan-she 山攝 and tang-she 塔攝. On the other hand, 2nd-degree of these groups had a nucleus \([a]\) and medial \([w]\). From these facts, it is supposed that the medial \([u]\) in these groups was much stronger than ordinary medial \([w]\), so it is possible to assume that this medial \([u]\) has a tendency to assimilate \([a]\) into \([u]\) itself. Even in the CYYY phenomenon occurs; the nucleus \([a]\) in Ancient Chinese changes to \([o]\) being attracted by the medial \([u]\); as a result of this medial \([u]\) changes to \([w]\) and the nucleus \([a]\) changes to \([o]\). Similarly, in the MKTY as a result of mutual attraction, either \([o]\) or \([ɔ]\) can appear. In this case, \( \delta \) (or \( \rho \)) should be \([ɔ]\), because \([o]\) had already appeared in the MKTY as follows.

\[
\begin{align*}
\text{CYYY} & \quad \text{MKTY} \\
\text{shan, tang (she), 1st h.k.} & \\
-\text{uan} & \rightarrow \text{[-won]} & \text{[-oŋ]} \\
-\text{uang} & \rightarrow \text{[-wan]} & \text{[-oŋ]} \\
\text{2nd h.k.} & \\
-\text{wan} & \rightarrow \text{[-wan]} & \text{[-wan]} \\
-\text{wang} & \rightarrow \text{[-wan]} & \text{[-wan]}
\end{align*}
\]
On the other hand, Hattori denotes as $\approx$ as $n$ to distinguish it from other ordinary $n$, though he does not give any explanation of $n$. As seen in the *MKTY*, this letter has obviously the different function from ordinary $n$. In the Genroku edition of the *PCH*, this letter appears often, but they are apparently misprints which Ts'ai Mei-p'iao corrected in the *PSPT*. Another evidence of the existence of the letter $\approx$ is the table of seal-script forms of the 'Phags-pa script. According to this table, each letter of the 'Phags-pa script has at least one seal-script form; e.g. No. 12 (ţ) has three seal-script forms; $\approx$, $\approx$ and $\approx$, and the variant of No. 12 (ţ) has one; $\approx$. From this it would seem to follow that two letters $\approx$ and $\approx$ had different functions. This may be confirmed by some considerations of modern dialects as follows:

*Table 5*

<table>
<thead>
<tr>
<th>final</th>
<th>shan-she 山摄</th>
<th>chen-she 錦摄</th>
</tr>
</thead>
<tbody>
<tr>
<td>$k'ai-ho$</td>
<td>$k$, $k'$</td>
<td>$h$, $h'$</td>
</tr>
<tr>
<td>degree</td>
<td>1, 2</td>
<td>3</td>
</tr>
<tr>
<td>initial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soochow</td>
<td>$E$, $E$, $\emptyset$</td>
<td>$\emptyset$</td>
</tr>
<tr>
<td>Wenchow</td>
<td>$a$, $a$, $i$</td>
<td>$i$</td>
</tr>
<tr>
<td>Yangchow</td>
<td>$\check{e}$, $\check{e}$, $\check{e}$</td>
<td>$\check{e}$</td>
</tr>
</tbody>
</table>

18 Hattori, op. cit., p. 44.
19 *PSPT*, pp. 45-52.
20 The table of the seal-script forms of the 'Phags-pa script in the *MKTY* is defectively compiled, e.g. $k'$ and $d_2$ appear in duplicate, the seal-script forms of $f$ and $t$ are too artificial, the seal-script form of $d$ is obviously a mistake, etc. But some of seal-script forms of the 'Phags-pa script in this table resemble those in the Tibetan seal-script, e.g. $i$, $i$, $l$, $e$, $u$, $i$, etc. These seal-script forms were also sometimes used in epigraph inscriptions, and the Tibetans might have used these Chinese inscriptions in the 'Phags-pa script as models in inventing their own seal-script. Although the 'Phags-pa script is also called 'square script', some letters include round strokes such as in $\check{e}$, $\check{e}$, $\check{e}$, $\check{e}$, and $\check{e}$. These letters are not suitable for seal-script, so the Chinese made them square as in the seal-script forms of Chinese characters.
This table shows different variants of the final consonant *n* in modern dialects. From this table the following facts can be deduced: (1) in Peking and some other Mandarin-speaking areas the final *n* has not changed; (2) in Foochow *n* has evenly changed to *y*; (3) in Amoy it has not changed except for occasional nasalisation; (4) in both the Sian and Taiyuan dialects it has also been nasalised apart from *y* of *chen-she* in Taiyuan; (5) in Yangchow (in the Mandarin-speaking area) it has been nasalised except *chen-she*; (6) in the Wu dialects (Soochow and Wenchow) it has been dropped in the *shan-she* group, but in the *chen-she* group it has been kept except in Wenchow, where it has changed to *η*.

Comparing this table with the distribution of *η* in the *MKTY*, we see that *η* which is a variant of *n* cannot correspond to the Mandarin *n* because in Peking and some other Mandarin-speaking areas *n* has been a very stable dental plosive.

Most of Mandarin speaking areas, therefore, should be excluded from the possibility of accordance because the *chen-she* group in the *MKTY* has an ordinary *n*, although in Sian and Taiyuan it usually changed to either *y* or nasalised sounds. Similarly Foochow can be excluded because *n* has evenly changed to *y*. The Amoy dialect can also be excluded, because this dialect has retained an ordinary *n* in *ho-k'ou* while in the *MKTY* *n* had changed to the peculiar *η* under the similar conditions to the Amoy dialect. Therefore, the possibility of similarity between the *MKTY* and modern dialects concerning the peculiar *η* may be connected

|        | | | | |
|--------| | | | |
| Sian   | | | | |
| a      | | | | |
| Taiyuan | | | | |
| | ə | | | |
| Amoy | n | | | |
| Foochow | | | | |
| | | | | |
| Mandarin | | | | |

(This table is based on the *Han-yü Fang-yen Tzu-hui.*)
with one of the dialects of Soochow, Wenchow, or Yangchow. The
Soochow and Wenchow dialects belong to the Wu dialects and the Yang­
chow dialect belongs to the Mandarin-speaking area (though Yangchow
situates nearer to the Wu dialects area). The Yangchow dialect is more
strongly influenced by the Wu dialects, although it still keeps some
peculiarities of Mandarin; for example it has no retroflex initials, keeps
the entering-tone as a glottal stop, and its proportion of the nasal final
consonants reserved is similar to that of the Wu dialects etc., although
it has dropped the voiced initials as in most of the Mandarin dialects.

In the Wu dialects (in this case, the Yangchow dialects is for con­
venience included in this group), the yang-lei 陽類 final group\(^{21}\) has a
tendency to change depending on nature of their preceding nuclei re­
gardless their original nature in Ancient Chinese.

According to Tôdô, in the Soochow dialect there is a phonological op­
pposition between \(n\) and \(ŋ\) similar to Pekinese, and this opposition can be
denoted as [n], [ŋ] and [ä] (nasalised) phonetically.\(^{22}\) However, these
sounds supplement each other as follows:

\[
\begin{array}{llll}
\text{根 } & \text{更 } & \text{新 } & \text{星 } \\
\text{Pek. } /\text{kən}/ & /\text{kəŋ}/ & /\text{sjan}/ & /\text{sjaŋ}/ & /\text{tsəŋ}/ & /\text{kəŋ}/ & /\text{kweŋ}/ \\
\text{Soochow } [\text{kəŋ}] & [\text{sjaŋ}] & [\text{tsəŋ}] & [\text{kəŋ}] & [\text{kweŋ}] \\
\end{array}
\]

In other words, \([ŋ]\) appears after the back-vowel \([ŋ]\) and \([o]\), \([n]\)
appears after the front-vowel \([ə]\) and nasatisation occurs after \([a]\).

\(^{21}\) In the traditional Chinese phonology, the final consonants can be divided into
the following threes groups:

<table>
<thead>
<tr>
<th>(yin-lei)</th>
<th>(yang-lei)</th>
<th>(ju-lei)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-a</td>
<td>-ang</td>
<td>-ak</td>
</tr>
<tr>
<td>-aj</td>
<td>-an</td>
<td>-at</td>
</tr>
<tr>
<td>-aw</td>
<td>-am</td>
<td>-ap</td>
</tr>
<tr>
<td>ends with</td>
<td>ends with</td>
<td>ends with</td>
</tr>
<tr>
<td>null</td>
<td>nasals</td>
<td>plosives</td>
</tr>
</tbody>
</table>

\(^{22}\) A. Tôdô, op. cit., pp. 59–62.
Therefore, from the viewpoint of phonology we can state that there is only one phoneme \( n \) denoting the nasal final consonant in the Soochow dialect.

The latest observation of the Wu dialects also supports Tōdō's explanation, though there are some differences between them on some minor points. The following table shows distribution of the *yang-lei* group.

Table 6

<table>
<thead>
<tr>
<th>AC dialects</th>
<th>山, 咸</th>
<th>江</th>
<th>臧, 深</th>
<th>寂</th>
<th>通</th>
<th>会</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yangchow</td>
<td>nasalised</td>
<td>n</td>
<td>nasalised</td>
<td>η</td>
<td>η</td>
<td>η</td>
</tr>
<tr>
<td>Soochow</td>
<td>E, ø, y</td>
<td>n</td>
<td>η</td>
<td>η</td>
<td>η</td>
<td>n</td>
</tr>
<tr>
<td>Wenchow</td>
<td>a, ø, y</td>
<td>η</td>
<td>η</td>
<td>η</td>
<td>η</td>
<td>n</td>
</tr>
<tr>
<td>Mandarin</td>
<td>n</td>
<td>η</td>
<td>η</td>
<td>η</td>
<td>η</td>
<td>η</td>
</tr>
</tbody>
</table>

As shown before, in the *MKTY* the group which has a peculiar \( n \) appears only in the 1st-degree and a part of the 3rd-degree of *ho-k'ou* in the *shan-she* group. It therefore follows that this peculiar \( n \) would denote a transitional feature of either nasalisation in the Yangchow dialect or the disappearance of the final -\( n \) in the Soochow and Wenchow dialects from the phonetical viewpoint.

Phonetically speaking there are four variants of the dental nasal stop as follows:

1. \( [\eta] \) : stop articulated with either blade, a front of the tongue or both.
2. \( [\eta] \) : stop articulated with front of tongue and front of palate.
3. \( [\eta] \) : nasalised ; e. g. ə, ø.
4. \( [N] \) : loose stop articulated with back of tongue and rearmost part of back palate (including the uvula).

Among them, 1 and 2 can be phonologically denoted as /\( η \)/ or /\( ñ \)/, which appear as palatalized \( [\tilde{η}] \) in the *MKTY*. Therefore these two pho-

---

23 *Han-ya Fang-yin Tzu-hui*. Also investigation in Chao Yuen-ren's *Hsien-tai Wu-yü te Yen-chiu* is the same as above.
nemes cannot be identified with the peculiar ŋ. If the stop articulated with blade and alveole ([n]) loosens and the point of articulation retreats to the back, then it changes to either nasalised [ŋ] or post-velar [N]. The peculiar ŋ in the MKTY is supposed to be one of these, and [ŋ] or [N] have been loosened even more to complete the disappearance of ŋ as in modern Wu dialects. In this paper, especially in Chap. IV, § 6, I shall use the sign N in denoting this peculiar ŋ, since at the time of the MKTY, nasalisation is considered to have not yet sufficiently undergone even in the Wu dialects.

§ 3 The Vocalism of Peculiar Ń

In both the PCH and MKTY especially in the MKTY, a peculiar Ń which vocalises as a medial appears frequently. Dragunov and Ligeti have discussed this but not in any detail, and Clauson and Denlinger have followed their conclusions.24 The distribution of vocalic Ń in the MKTY is as follows:

<table>
<thead>
<tr>
<th></th>
<th>AC</th>
<th>CYYY</th>
<th>PCH</th>
<th>MKTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>爳 t̤ang (曾摄, 1, 閣)</td>
<td>t̤ang</td>
<td>tin</td>
<td>d̤hing</td>
<td></td>
</tr>
<tr>
<td>禁 t̤̂an (深摄, 2, 閣, E,F)</td>
<td>t̤̂an</td>
<td>-</td>
<td>d̤̂shing</td>
<td></td>
</tr>
<tr>
<td>生 ʃî̤en (” , 3, 閣, F )</td>
<td>ʃ̤̂en</td>
<td>-</td>
<td>z̤hing</td>
<td></td>
</tr>
<tr>
<td>史 ʃi̤ (止摄, 2, 閣, F )</td>
<td>ʃ̤</td>
<td>ʃ̤i</td>
<td>z̤i</td>
<td></td>
</tr>
<tr>
<td>司 ʃi (” , 4, 閣, G )</td>
<td>ʃ̤</td>
<td>ʃ̤i</td>
<td>z̤i</td>
<td></td>
</tr>
<tr>
<td>瑟 ʃ̤et (臻摄, 2, 閣,F入)</td>
<td>ʃ̤</td>
<td>-</td>
<td>z̤i</td>
<td></td>
</tr>
<tr>
<td>城 ʃ̤̂op (深摄, 2, 閣,F入)</td>
<td>-</td>
<td>-</td>
<td>d̤̂shi</td>
<td></td>
</tr>
<tr>
<td>德 ʃ̤̂ak (曾摄, 1, 閣, 入)</td>
<td>ʃ̤̂aj</td>
<td>-</td>
<td>d̤̂hij</td>
<td></td>
</tr>
<tr>
<td>色 ʃ̤̂ak (” , 2, 閣,F入)</td>
<td>ʃ̤̂oi</td>
<td>-</td>
<td>z̤hij</td>
<td></td>
</tr>
<tr>
<td>根 ʃ̤en (臻摄, 1, 閣 )</td>
<td>ʃ̤en</td>
<td>-</td>
<td>g̤in</td>
<td></td>
</tr>
<tr>
<td>臧 ʃ̤̂on (” , 2, 閣, F)</td>
<td>ʃ̤̂on</td>
<td>-</td>
<td>d̤̂shin</td>
<td></td>
</tr>
<tr>
<td>锋 ʃ̤ou (流摄, 1, 閣 )</td>
<td>ʃ̤ou</td>
<td>giw</td>
<td>giw</td>
<td></td>
</tr>
<tr>
<td>項 ʃ̤̂ou (” , 2, 閣, F)</td>
<td>ʃ̤̂ou</td>
<td>jiw</td>
<td>d̤̂shw</td>
<td></td>
</tr>
<tr>
<td>岑 ʃ̤̂om (深摄, 2, 閣 F)</td>
<td>ʃ̤̂om</td>
<td>cim</td>
<td>ʃ̤̂him</td>
<td></td>
</tr>
<tr>
<td>莊 ʃ̤̂ang (宕摄, 2, 閣 F)</td>
<td>ʃ̤̂ang</td>
<td>jian</td>
<td>d̤̂shang</td>
<td></td>
</tr>
</tbody>
</table>

From this table of distribution, the following formula can be deduced:

\[
\begin{align*}
&\text{AC} \quad \text{CYYY} \quad \text{MKTY} \\
(1) & \quad -\alpha- \quad (\text{曾, 踱, 流}, \ 1) \\
(2) & \quad -\alpha- \quad (\text{曾, 踱, 流, 深}, \ 2, \ E, \ F) \\
(3) & \quad -\tau- \quad (\text{止}, \ 2, \ F) \\
(4) & \quad -\tau- \quad (\text{止}, \ 4, \ G) \\
(5) & \quad -\text{ang} \rightarrow -\text{wang} \quad -\text{hang}
\end{align*}
\]

As far as (1) is concerned, there are very few dialects whose nucleus of the 1st-degree final has changed to the deflected sounds,\(^{25}\) except the Shuangfeng and Amoy dialects.\(^{26}\) Therefore, it may be easily supposed that \(-\text{hi}-\) in the MKTY is not a deflected sound but one of the straight sounds. As far as (2), (3) and (4) are concerned, the supradental had already lost the deflected element \(-\text{i}-\) by this time, both in the Mandarin-speaking area and amongst the Wu dialects. In other words, \(-\text{hi}-\) in the MKTY should have something like the quality of a semi-vowel which is not a deflected sound. From this point of view, Ligeti's denotation \(i\), which represents a central vowel, is reasonably correct but still not sufficiently inclusive to embrace all conditions mentioned above. Also, as Clauson explains: '... -\text{hi} is obviously a back \(i\),

\[^{25}\text{As to the details of this term and straight sounds, see the following table:}\]

<table>
<thead>
<tr>
<th>\</th>
<th>\</th>
<th>\</th>
<th>\</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(A) \text{kan}</td>
<td>(B) \text{kwan}</td>
<td>low and back</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>high and front</td>
</tr>
<tr>
<td>3</td>
<td>(C) \text{kien}</td>
<td>(D) \text{kien}</td>
<td>central [\text{i}]</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>front [\text{i}]</td>
</tr>
</tbody>
</table>

The sounds which belong to the columns (A), (B), (C) and (D) are called \(k'\text{ai-k'ou-hu}\) 開口呼, \(k\text{o-k'ou-hu}\) 合口呼, \(ch'i-ch'ih-hu\) 齊齒呼 and \(sh'e-k'ou-hu\) 撕口呼 respectively.

\(^{26}\text{According to the Han-yü Fang-yen Tzu-hui, ts\text{\text{a}}y\text{\text{a}} and its group have changed to ts\text{\text{a}} in the Shuangfeng dialect and to ts\text{\text{a}} in the Amoy dialect. The Foochow dialect also occasionally has this tendency.}\)
the sounds represented in the Wade transcription system by -ih (in such words as chih) and -ü (in such words as tsu); but it is hard to grasp its function in -hang. 27 This explanation is misleading, because in the MKTY -hi- does not appear in any sound represented in the Wade transcription system by -ih' but only appears in the supradental group under the condition mentioned above. As shown in p. 52 (Chapter II, § 2, E, F), the phonetic changes of retroflex sounds since the Northern Sung period have been very complicated, but nevertheless the distinction between the supradental and affricated alveolo-palatal groups had been preserved until the early seventeenth century, although the initial consonants had already assimilated each other at that time. Even in the CYYY the supradentals in stage 3 (see p. 52) derived from the affricated alveolo-palatal still retained a deflected element as follows:

Table 7

<table>
<thead>
<tr>
<th>CYYY</th>
<th>精微 韻</th>
<th>支思 韻</th>
<th>Modern Mandarin</th>
<th>Modern Wu</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>-jei</td>
<td>-i</td>
<td>-l</td>
<td>[·-l]</td>
</tr>
<tr>
<td>F (2nd)</td>
<td>蟹 (entering-tone)</td>
<td>止</td>
<td>-l</td>
<td>[·-l] or [-y] (except entering-tone)</td>
</tr>
<tr>
<td>F (3rd)</td>
<td>蟹 (entering-tone)</td>
<td>止</td>
<td>-l</td>
<td>[·-l] or [-y] (except entering-tone)</td>
</tr>
<tr>
<td>E</td>
<td>止 (entering-tone)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

On the other hand, in the MKTY the distinction between the supradental, affricated alveolo-palatal, and cerebral groups is as follows:

Table 8

<table>
<thead>
<tr>
<th>MKTY</th>
<th>支</th>
<th>麗</th>
<th>MKTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>-i</td>
<td>-hi</td>
<td>AC</td>
</tr>
<tr>
<td>F (2nd)</td>
<td>支, 蟹 (entering-tone)</td>
<td>止, 至, 畢 (entering-tone)</td>
<td></td>
</tr>
<tr>
<td>F (3rd)</td>
<td>支, 蟹 (entering-tone)</td>
<td>止, 蟹 (entering-tone)</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>支 (entering-tone)</td>
<td>止 (entering-tone)</td>
<td></td>
</tr>
</tbody>
</table>

27 Clauson, op. cit., p. 320.
All the characters in these tables have changed to retroflex vibrant in modern Mandarin, however in both the CYY and MKTY distinctions were still made between them on the basis of their origins in Ancient Chinese. Therefore, Clauson's explanation, ' -hi is obviously a back -i, the sound represented in the Wade transcription system by -ih' is completely erroneous.

Phonetically speaking, -hi should be placed somewhere near the vowels [i], [ə], [ɨ] depending on its original vowel in Ancient Chinese. In the MKTY, the characters 士, 事, 四, 此, etc. (chih-she, 2nd- and 4th-degrees) should have a central closed vowel [ɨ], and the characters 崩, 彭, 登, etc. (tseng-she, 1st-degree) should have a front half-closed vowel [ə].

As regards -hang, it is still difficult to infer its function as Clauson states. However, the characters 莊, 創, 牀, 霜, etc. (supradental with a front vowel [a]) have changed to ho-k'ou in the Mandarin-speaking area despite their original nature as members of the k'ai-k'ou group. In the Wu dialects they have changed to a back vowel [u] or [ʊ]. Thus it is supposed that in the MKTY ha- is used to indicate the change of [a] to the back vowels of either [u], [ʊ] or [ʊ], therefore ha- may be located between them as the following diagram:

![Diagram showing vowel distribution and retroflex changes](image-url)
In the MKTY, as shown later, there is no [ø], [i] or [e] as nuclei, and those vowels are very infrequent. Thus -h is supposed to be put forwards as a common medial to indicate these delicate phonetic distinctions.

From these observations, the following scheme can be deduced:

\[
\begin{align*}
\text{AC} \\
\cdot \cdot \cdot \ (1\text{st}) \\
\text{(E, F)} \\
\cdot i \cdot \ (E, F) \\
\cdot i \cdot \ (G) \\
\cdot a \cdot \ (E, F)
\end{align*}
\]

\[
\begin{align*}
\cdot i \cdot &= [ø] \\
\cdot i \cdot &= [i] \\
\cdot i \cdot &= [i] \\
\cdot a \cdot &= [ø] \\
\cdot i \cdot + \cdot h &= [i]
\end{align*}
\]

Of course, it is difficult to determine the phonetic values of -h under the conditions mentioned above. So these three values are simply tentative, and indicate approximate quantity which might be able to satisfy some conditions.

§ 4 Differentiations in the Laryngeal Group

In Ancient Chinese the laryngeal group is divided into the following four initials; ying-mu 影母 (= -), hsiao-mu 晓母 (=h), hsia-mu 歙母 (=k) and yü-mu 嘅母 (=j). On the other hand, in the Ku-chin Yün-yui Chü-yao 古今韻會舉要 (abbr. KYC) the following three initials were also added; ho-mu 合母, yü-mu 嘅母 (to distinguish 嘅母 and 魚母, the former will be called yü-mu I and the latter will be called yü-mu 2) and ao-mu 見母; the MKTY follows this. The 'Phags-pa script signs denoting these sounds are: No. 23 for ying-mu, No. 29 for hsiao-mu, No. 44 for hsia-mu, No. 24 for yü-mu I, No. 36 for ho-mu, No. 30 for yü-mu 2 and No. 45 for ao-mu. The conditions under which the various members of the laryngeal group are differentiated in the MKTY are as follows:

---

28 In this paper, the term 'laryngeal' is a translation of hou-yin 喉音 in the traditional Chinese phonology. In fact, hou-yin includes palatals ([j], [y]), velars ([x], [z]), uvulars ([q], [ʁ]) and laryngeals ([ʔ], [h], [ɦ]) phonetically. Therefore the term 'laryngeal' in this paper follows the traditional Chinese terminology.
In this table, the column of *i-mu* is insufficient because this initial still retains its original nature in Ancient Chinese under the condition of *k.k.* of 1, 3 and 4 degrees.
Hattori puts forwards as the actual phonetic values of these seven initials the following:  

\[
\begin{align*}
&\varepsilon : \text{ying-mu} \quad [?] \\
&y : \text{ao-mu} \quad [?;] \\
&\gamma : \text{yu-mu} \text{ 2 (gradual beginning of voice)} \\
&j : \text{yu-mu} \text{ 1 [j]} \\
&h : \text{hsiao-mu} \quad [h] \\
&\gamma : \text{ho-mu} \quad [?] \\
&\varepsilon : \text{hsia-mu} \quad [?;]
\end{align*}
\]

adding by way of justifications:

According to the established theory of Chinese phonology, this is the only way to infer the sounds. On the other hand, comparison with a Tibetan sound represented by the Tibetan letter 'a (=e) and a Mongolian sound represented by a 'Phags-pa sign equivalent to this Tibetan character, suggests that it is better to take [?] for \( \varepsilon \) and \( \gamma \) as the gradual beginning of voice'. Dragunov, in his article 'The 'Phags-pa script and Ancient Mandarin', also takes the Chinese sounds represented by these 'Phags-pa signs as follows:

\[
\begin{align*}
&\varepsilon : [?] \\
&\varepsilon : [h] \\
&j : [j]
\end{align*}
\]

Dragunov does not explain his reasons, although he notices that the Tibetan sounds representing the first two are [h] and [?] being exactly opposite to each other. I shall attempt to explain this difficulty by pointing out that in Mongolian documents in 'Phags-pa script, the initial vowels are represented either with an initial consonant \( \varepsilon \) (and vowel) or a special vowel as follows:

\[
\begin{align*}
\text{Mong.} & : \text{'Phgs.} \\
& a : 'a \\
& e : E \\
& i : I \\
& o : O \\
& u : U \\
& \ddot{o} : 'eo, 'e_o \\
& \ddot{u} : 'eu
\end{align*}
\]

In exceptional cases, the letter \( \varepsilon \) is rarely used like 'i-he, 'en and 'eu-gu-le. The reason why the initial \( \varepsilon \) is more frequently used than \( \varepsilon \) is not due to the fact that the Mongolian initial vowel begins with clear [?], but is caused by the fact that in Tibetan \( \varepsilon \) is more frequently used than \( \varepsilon \) as an initial vowel. If it may be supposed that in Mongolian the initial vowels are always preceded by [?] as a phoneme, the letter \( \varepsilon \) is probably used to represent the phoneme [?]. The Chinese might have regarded \( \varepsilon \) which is the gradual beginning of voice in Mongolian initial

\[30\] Hattori, op. cit., pp. 50-2, 71-2(n.18).
vowels as the same as yü-mu 2, and also identify the initial [j] with yü-mu 1. Thus they may have adopted an initial ɻ to represent ying-mu and invented an initial ɻ which is derived from the 'Phags-pa j to represent ao-mu. 31

As far as the 'Phags-pa Mongolian documents are concerned, Hattori's theory corresponds exactly to the result of Poppe's investigations 32; however, we still need to consider the ascription in the KYC to clarify the phonetic value in Chinese documents. The KYC denotes these sounds as follows:

<table>
<thead>
<tr>
<th>Chinese</th>
<th>Pinyin</th>
</tr>
</thead>
<tbody>
<tr>
<td>hsiao-mu</td>
<td>羽次清音</td>
</tr>
<tr>
<td>ho-mu</td>
<td>羽濁次音</td>
</tr>
<tr>
<td>hsia-mu</td>
<td>羽濁音</td>
</tr>
<tr>
<td>ying-mu</td>
<td>羽清音</td>
</tr>
<tr>
<td>ao-mu</td>
<td>羽次清音</td>
</tr>
<tr>
<td>yü-mu 2</td>
<td>角次濁音</td>
</tr>
<tr>
<td>yü-mu 1</td>
<td>角次濁音</td>
</tr>
</tbody>
</table>

Namely, the terms yü 羽 and chiao 角 correspond to hou-yin 喉音 (= laryngeals) and ya-yin 牙音 (= velars) in the Yün-ching 韻鏡 system. 33 Tz'u-ch'ing-yin 次清音, cho-yin 濁音, ch'ing-yin 清音 and tz'u-cho-yin 次濁音 mean voiceless aspirated initials, voiced initials, voiceless non-aspirated initials and voiced nasal initials respectively. The function of tz'u-yin 次音, however has not yet been clearly worked out.

According to Chang Fu's 章馥 Ch'i-yin san-shih-liu-mu fan-ch'ieh ting-chü 七音三十六母反切定局 34 based on the Ku-chin Yün-hui 古今韻會 (abbr. KY), tz'u-yin occurs only in the hsin-mu 心母, shen-mu 舌母 and ch'an-mu 禪母; i.e. as far as Chang Fu's table is concerned, tz'u-yin means a fricative element.

On the other hand, phonetically speaking, [ʃ, v, s, z, ʃ, x, y, h, fi] belong to the fricative sound group. The KY mentions that fei-mu 非母, fu-mu 敷母 and feng-mu 奉母 which were derived from the bilabial plosives belong to tz'u-kung ch'ing-yin 次宮清音, t'zu-kung

31 Ibid., pp. 71–2.
33 As regards the terms yü 羽, chiao 角, kung 宮, chih 微 and shang 商, see the following books: Wang Li, Han-yü Yin-yün-hsueh, pp. 56–77; Chao Yin-t'ang, Teng-yün Yuan-liu, pp. 10–15, 53–4, 77, 110, 141–2; etc.
34 For detail on this table, see Chao Yin-t'ang, ibid., pp. 139–142.
tz'u-ch'ing-yin 次宮次清音 and tz'u-kung cho-yin 次宮濁音 which mean labio-dental voiceless non-aspirated, labio-dental voiceless aspirated and labio-dental voiced respectively. In this classification, these labio-dentals which came into existence in the eleventh century in China were classified as tz'u-kung 次宮 or semi-labials (=labio-dentals), therefore they were not put into the tz'u-yin group. Also in Chang Fu's classification, hsieh-mu 興母 should be included in the tz'u-yin although he also included it amongst tz'u-cho-yin (=voiced nasals) by mistake. The sounds [h, ō], according to Pike, should be classified into the 'vocoid'; i.e. fricatives like [h, ō] or semi-vowels [j, w] which are the sounds 'which air leaves the mouth over the centre of the tongue (non-lateral) and without friction in the mouth (but friction elsewhere does not affect the classification).'

It is not surprising that Huang Kung-shao 黃公紹, the compiler of the KY, noticed the peculiar nature of the fricative [h, ō] as vocoid and put them into the ordinary group. Thus we can explain the three initials in the KYC by using the concept of tz'u-yin (=fricative element) as follows:

ying-mu : [ʔ] = glottal voiceless (羽清)
hsiao-mu : [h] = glottal voiceless aspirated (羽次清)
ao-mu : [x] = velar voiceless aspirated fricative (羽次清次音)
hsia-mu : [f] = glottal voiced (羽濁)
ho-mu : [ɣ] = velar voiced fricative (羽濁次音)
yū-mu 1 : [j] = palatal voiced semi-vowel k'ai-k'ou (羽次濁)
yū-mu 2 : [ɥ] = palatal voiced semi-vowel ho-k'ou (羽次濁次音)

According to this hypothesis, [x] for ao-mu could be passively denoted [ʔ], as Hattori infers; however, the combination of the glottal stop [ʔ] and palated semi-vowel [j] may be expected to produce the aspirated fricative sound [x] which appears slightly front of the glottal voiceless aspirated [h]. Also unless otherwise indicated the glottal stop [ʔ] occurs before [j], this sound being very similar to yū-mu 1 (= [j]), and this is probably the reason why this letter No. 45, whose shape is slightly

35 K. L. Pike, Phonetics, A Critical Analysis of Phonetic Theory and a Technic for the Practical Description of Sounds (=Language and Literature, XXI) (Ann
different but still easily mixed up with yü-mu 1 (No. 24), was later invented. From these facts, we may conclude firstly that Huang Kung-shao distinguishes ao-mu from its original initial ying-mu, and secondly that he mentions this actual sound as similar to hsiao-mu by its aspiration, thirdly that Chu Tsung-wen, compiler of the MKTY, probably noticed the similarity between ao-mu and yü-mu 1 by virtue of their both including a semi-vowel [j], and therefore invented a new letter to represent this sound by changing the shape of yü-mu 1. The ao-mu gives us many difficulties, i.e. its origin, denotation in the KYC, and the shape of the letter used to denote it in the ‘Phags-pa script. I can thus only offer a hypothetical equivalent for this sound. According to the description in the KYC the phonetic value of this initial should be [x] although Hattori’s assumption is more realistic. As regards transcription of this letter, it is adequate to adopt y as Hattori, Clauson, and Denlinger do.36 However the transcription ·j may be better to distinguish it from the gradual beginning of voice j (yü-mu 1) because y is easily mixed up with the phoneme [y]. As far as yü-mu 2 is concerned, my assumption of the phonetic value of this letter [y] may be reasonably correct because this initial is derived from the ho-k’ou of yü-mu 1 and i-mu 疑母 in Ancient Chinese. For the transcription of this letter, y will certainly be better than Hattori’s , or Oshibuchi and Poppe’s a.

Thus we can conclude that the transcription and phonetic value of these letters should be as follows: 37

<table>
<thead>
<tr>
<th>initial</th>
<th>transcription</th>
<th>phonetic value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ying-mu</td>
<td>·</td>
<td>[ʔ]</td>
</tr>
<tr>
<td>hsiao-mu</td>
<td>h</td>
<td>[h]</td>
</tr>
<tr>
<td>ao-mu</td>
<td>· j</td>
<td>[x]</td>
</tr>
<tr>
<td>hsia-mu</td>
<td>ŋ</td>
<td>[ŋ]</td>
</tr>
<tr>
<td>ho-mu</td>
<td>γ</td>
<td>[γ]</td>
</tr>
<tr>
<td>yü-mu 1</td>
<td>j</td>
<td>[j]</td>
</tr>
<tr>
<td>yü-mu 2</td>
<td>y</td>
<td>[y]</td>
</tr>
</tbody>
</table>


36 Clauson, op. cit., pp. 322, No. 24A; Denlinger, op. cit., pp. 415 (No. 33a), 424. Besides the Chinese characters 呼 呼 呼 呼 and 以 in Denlinger’s Chart 1a should be corrected to 合, 又, 魚 and 嘩 respectively.

37 Cheng Tsai-fa also gives a full account of the laryngeal group in the MKTY in comparison with the KYC. He deals in great detail with fan-ch’ieh of this group, but it is regrettable that he gives no actual phonetic value of each letter. See MKTY ken ken Pa-su-pa-tzu yu-kuan-le yün-shu, (Taipei, 1965), pp. 27-35.
IV

THE SOUND SYSTEM IN THE
MENG-KU TZU-YÜN

§ 1. On the Meng-ku Tzu-yün

The MKTY (2 vols.) is said to have been compiled by Chu Tsung-wen in the first year of the Chih-ta 至大 reign (1308). According to the Ssu-k'u Ch'üan-shu Tsung-mu T'ı-yao 四庫全書總目提要, Chu Tsung-wen was one of the students in the Meng-ku Tzu-hsiieh (= 'School for the Mongolian Script') established by Imperial edict in each province after the invention of the 'Phags-pa script.' Liu Keng 劉更 states in his preface to the MKTY that Chu Tsung-wen's Mongolian name is Po-yen 伯顏 or Pa-yen 巴顏 (Mong. Bayan) which means 'rich' or 'wealthy.'

As the Ssu-k'u Ch'üan-shu Tsung-mu T'ı-yao mentions, the printed text of the MKTY has long been lost, and today the manuscript held in the British Museum is believed to be the only reliable text. Based upon this manuscript, the following editions are now available:

1. Eiin Daiei Hakubutsukan zō Kyūshōhon Möko Jiin, 2 vols. 影印大英博物館藏舊銅本蒙古字韻二卷. This is based on the photos taken by J. Ishihama 石濱純太郎 in 1921.

1 According to Liu Keng's preface to the MKTY, Chu Tsung-wen (tzu, Yen-chang 彦章) simply revised and enlarged the original text of the MKTY, which has been lost. The original text of the MKTY is supposed to have had at least two editions; the Hupeh edition and the Chekiang edition. See Chu Tsung-wen's preface to the MKTY (Kansai Daigaku edition, pp. 5-6; PSPT edition, p. 96); Cheng Tsai-fa, op.cit., pp. 3-7.

2 The T'ı-yao also states that Chu Tsung-wen was born during the Chih-cheng 至正 reign (1341-1368), but this should be corrected to the Chih-yüan 至元 reign (1264-1294), because the year in which Chu Tsung-wen compiled the MKTY was the year of wu-shen in the Chih-ta 至大 reign (1308). See Ts'ai Mei-piao, PSPT, p. 89; Cheng Tsai-fa, op. cit. p. 5. Liu Keng is said to have been a teacher of Chu Tsung-wen in the Meng-ku Tzu-hsiieh, but there are no reference to this man.

3 The manuscript of the MKTY held in the British Museum is supposed to have been copied in the Ch'ien-Lung 乾隆 reign (1736-1795) of the Ch'ing dynasty (see Y. Ozaki, 'Daiei Hakubutsukan-bon Mökojiin sakki', p. 164). This manuscript was bought by Mrs Russell in 1909 (6 April) (see Lo Ch'ang-p'ei, 'MKTY pa', PSPT,
2. Hsieh-pen Meng-ku Tzu-yün 習本蒙古字頌 in the PSPT. This is based on the photos taken by Yü Tao-ch’üan 于道泉 in 1938.

The MKTY consists of a title page, a preface by Liu Keng, the compiler’s preface, a list of errata in each edition, a diagram of Tsung-k’uo Pien-hua chih t’u 總括變化之圖, a table of the ‘Phags-pa alphabet, a table of the ‘Phags-pa alphabet in seal-script form, a table of contents, the text (vol. 1, pp. 8a-33b; vol. 2, pp. 1a-30a, the PSPT edition lacks pp. 5a-b, both lack pp. 31a-b) and colophon.

The MKTY was, as Chu Tsung-wen states in his preface, based upon the KY whose text has been lost. The sound system employed in the KY is, therefore, still a matter of conjecture. However, according to the Ssu-k’u Ch’üan-shu Tsung-mu T’i-yao, Huang Kung-shao 黃公紹, who composed the KY, was born in Chaowu 昭武 in Foochow and became a chin-shih 進士 (a top-class successful applicant for bureaucracy examination) in the first year of the Hsien-ch’üan 咸淳 reign (1265) in the Sung dynasty, and never held a post under the Yuan government. He is therefore believed to have been hostile to the Yuan government, and it is also supposed that he did not recognise the dialect of Ta-tu 大都 (the capital of the Yuan dynasty, Peking) as standard Chinese but took a dialect of either Pien-ching 濮京 (the capital of the Northern Sung dynasty, Kaifeng) or Lin-an 臨安 (the capital of the Southern Sung dynasty, Hangchow) as standard Chinese. Moreover, Hsiung Chung 熊忠, the compiler of the KYC which is a reduced edition of the KY, was also born in Chaowu, while Chu Tsung-wen, the compiler of the MKTY was born in Hsin-an 信安 (Kiuchow) in Chekiang province. It is noteworthy that none of these three compilers was born in Peking or anywhere else in Northern China, and it therefore seems extremely unlikely that these books would have employed sound system of the Northern or Mandarin-speaking area. Only Chu Tsung-wen is
generally said to have been appointed to the Yüan government.

Nevertheless, a satisfactory conclusion on the sound system employed in these books cannot be deduced unless we study them phonologically.

In this chapter, I intend to analyse the MKTY phonologically regardless of whether the sound system employed in the MKTY is identical with that in the KY (or KYC) or not.

§ 2. Initial Consonantal System

(1) Voiced Initials

The most distinctive peculiarity in the initial consonantal system of the MKTY is the existence of voiced initials. In the CYYY compiled almost at the same time as the MKTY, voiced initials in Ancient Chinese were assimilated into either voiceless aspirated or voiceless non-aspirated depending on their tones.

Amongst modern dialects, only the Wu and Amoy dialects\(^\text{7}\) have still retained voiced initials. In the Mandarin-speaking area, the disappearance of voiced initials begins in the eleventh century. The earliest indication of their disappearance may be seen in the HCCS compiled by Shao Yung. Thus, the existence of voiced initials in the MKTY suggests a possibility that the sound system there employed is related to either the Wu or the Amoy dialects. Further difficulties involved by the assumption or the reconstruction of the old sound system will be discussed in § 5 of this chapter.

(2) Changes of i-m 疑母 (y)

In the CYYY, very few characters retain their original initial y; all the others have devocalised or have been assimilated either to yu-mu or to hsiao-mu.\(^\text{8}\)

On the other hand, in the MKTY, the distribution of the initial y is very complicated, as shown below:

\(^\text{7}\) See Lo Ch'ang-p'ei, Hsia-men Yin-hsi, (2nd ed.), pp. 5-9.

\(^\text{8}\) Lo Ch'ang-p'ei states that there is no distinction between i-mu, yu-mu and hsiao-mu in the CYYY ('CYYY sheng-lei k'ao' AS, II, 4 (1932), pp. 423-40), but as Chao Yin-t'ang infers only the characters which belong to kuo-she 窩塞 retained their ori-
According to Chao's investigation, in most of the Wu dialects the initial \( y \) has been kept when preceded by a straight final, and has changed to either \( n \) or \( k \) when preceded by a deflected final.\(^9\) On the other hand, in the MKTY \( y \) disappeared when preceded by the ho-k'o finals. Thus the distribution of \( y \) in the Wu dialects and the MKTY is very dissimilar. However, in Hangchow (previously Lin-an), \( y \) has been kept only when it follows the straight final of \( k'ai-k'ou \) and changed to \( h(u') \) when preceded by the straight final of ho-k'ou. Also following the deflected sounds, \( y \) has changed to either \( n \) or \( j \). This distribution again is different from that in the MKTY, because the MKTY retains \( y \) when preceded by \( k'ai-k'ou \) of 3rd-degree final. However, it is possible that \( y \) in this may have disappeared at some time since the MKTY was compiled. The following scheme shows the distribution of \( y \) in Hangchow in contrast to Scheme 1.

**Scheme 2**

\[
\begin{align*}
\text{AC} & \quad \text{Hangchow} \\
\{1\} & \quad \rightarrow y \\
\{2\} & \quad \rightarrow n \text{ or } j \\
\{3\} & \quad \rightarrow h(u) \\
\{4\} & \quad \rightarrow n \text{ or } j
\end{align*}
\]

Comparing Scheme 1 and 2, the change from 1 to 2 is phonologically
natural, because \( y \) belonging to the 3rd-degree of \( k' ai-k' ou \) in Scheme 1 has an ability to change to \( n \) or \( j \), and the devocalised sounds in Scheme 2 can easily be accompanied by \( ʰ \) if pronounced with strong aspiration. Thus the distribution of the initial \( y \) in both the MKTY and Hangchow dialect is quite similar. However, it cannot be concluded that the sound system employed in the MKTY is the Hangchow dialect without having investigated certain other elements. So far we are only entitled to assume that as far as the initial \( y \) is concerned the sound system employed in the MKTY may be the Hangchow dialect.

(3) Changes of niang-mu 娘母（泥）

In the CYYY, niang-mu (palatal nasal \( ʰ \)) was assimilated to ni-mu 汴母 (\( n \)). In the MKTY, this initial has almost retained its original nature although there were some confusions between this initial and ni-mu and jih-mu as Table 10 shows:

This phenomenon can be also seen in Archaic Chinese, as Chang P’ing-lin proposes.\(^ {10} \) In the Mandarin-speaking area, as seen in the CYYY, ni-mu and jih-mu are obviously distinguished as a dental plosive nasal and a retroflex vibrant respectively. In most Wu dialects, on the other hand, these three initials are confused. As already discussed, the initial jih-mu presents some difficulties, but on the assumption that the phonetic value of this ancient sound was \( ʰ z \) as Karlgren proposes, in the Wu dialects ‘the written form has adopted its fricative element to produce the same sound as ch’uang-mu 彍母 and ch’an-mu 禪母 and the spoken sound has adopted its nasal element to produce something similar to ni-mu and niang-mu.’\(^ {11} \) However, in the MKTY the jih-mu initial exists as an independent initial, therefore ‘the sound system employed in the MKTY does not accord with the spoken sound in the Wu dialects, because \( z \) was supposed to represent the voiced alveolar fricative and not a nasal as is evident by the Tibetan prototype of this letter.’\(^ {12} \) Nevertheless, on the assumption that the MKTY

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\(^{10}\) 'Ku-yin niang, jih erh-niu kuei ni shuo', Chang-shih Ts'ung-shu, vol. I, pp. 30b–33a.

\(^{11}\) Chao Yuen-ren, op. cit., p. 29.

\(^{12}\) Hattori, op. cit., p. 52.
confuses the spoken and literary forms of the Wu dialects, the confusion between niang-mu, ni-mu, and jih-mu and the existence of a voiced alveolar fricative can be understood without difficulty.

(4) On the treatment of labio-dentals

The treatment of the labio-dental group in the KYC and MKTY can be said to be conservative or showing a tendency to archaise. The KYC distinguishes even fei-mu 非母 and fu-mu 敷母, although the MKTY correctly unified them as only one phoneme f. The existence of
feng-mu 奉母(v) in the MKTY can be said to be a consequence of the MKTY's retention of voiced initials. Only one problem concerning the treatment of wei-mu 微母(w) in the MKTY requires comment. Initial wei-mu was derived from ming-mu 明母 of the 3rd-degree under the following conditions:

Table 11

<table>
<thead>
<tr>
<th></th>
<th>k'ei or ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>通, 古, 根, 粻, 效</td>
<td>m</td>
</tr>
<tr>
<td>止*, 山, 麓</td>
<td>k.k.</td>
</tr>
<tr>
<td>宓, 遇, 成</td>
<td>h.k. *with a few exceptions) w</td>
</tr>
</tbody>
</table>

However, in the MKTY this initial is confused with ming-mu as follows:

Table 12

<table>
<thead>
<tr>
<th>MKTY AC</th>
<th>m</th>
<th>w</th>
</tr>
</thead>
<tbody>
<tr>
<td>m</td>
<td>(A) 睦, 謂, etc.</td>
<td>(B) 夢, 目, 織, 牧, 目, 謀, 聊, etc.</td>
</tr>
<tr>
<td>w</td>
<td>(C) 曼</td>
<td>(D) 無, 母, 武, 舞, etc.</td>
</tr>
</tbody>
</table>

In Table 12, the columns (B) and (C) show confusions between ming-mu and wei-mu. In the Hangchow dialect, the spoken sound of wei-mu has two initials m and v. In the Shanghai dialect also the literary sound of wei-mu has two initials β and v (or k(u)),13 but the differentiating features of these initials in the Wu dialects are not the same as those in the MKTY. According to Chou Tsu-mo, in the HCCS the initial wei-mu is divided into two sounds m and v depending on its tones; in the case of falling-rising-tone wei-mu changes to either zero or v, in the case of the other tones (=level-tone, falling-tone and entering-tone) it changes to η.14 The sound system employed in the HCCS is supposed to be the Pien-ching (Kaifeng) dialect of that

13 See Chao Yuen-ren, op. cit., p. 22.
day. If Hattori’s hypothesis is correct, the sound system employed in the MKTY is the Pien-ching dialect transplanted to Lin-an by the transfer of the capital, and thus the confusions in the HCCS and MKTY should be similar to each other. Thus as far as the confusion between wei-mu and ming-mu in the MKTY is concerned, there is little possibility that this sound system is related to one of the Wu dialects or even to the Pien-ching dialect. This problem clearly requires further investigation.

(5) On the distribution of the retroflex initials

It is still difficult to establish the sound system in the MKTY on the evidence mentioned above, but in part at least it presents similarities to one of the Wu dialects. Nevertheless, another difficulty arises here which requires clarification; this is the problem of the existence of retroflex initials.

As is well-known, the retroflex initials in the modern Mandarin-speaking area have come from the supradental, affricated alveolo-palatal and cerebral, and the development of these initials from Old Mandarin has been very complicated, as shown in p. 52 above.

In the MKTY, it is obvious that the retroflex initials in the modern Mandarin are clearly distinguished from other dental initials. On the other hand, in the Wu dialects, as already discussed (Chapter II, § 2, E, F), they have been assimilated to the simple sibilant group with the exceptions of the Kiuchow 譟州 and Kinhwa 金華 dialects. Kiuchow was previously called Hsin-an 信安, and was Chu Tsung-wen's birthplace. Although it is not certain whether Chu Tsung-wen referred to his own dialect or not, or whether the other Wu dialects had already assimilated the groups E and F to the sibilant group or not, the existence of the tŝ series may be regarded as the result of Mandarin element.
§ 3. Final System

(1) 15 final groups in the MKTY

In the MKTY, all the finals are classified into 15 groups as follows:

1. tung-yün 東韻: -ung, -eung.
2. keng-yün 庚韻: -ing, -hing, -tung, -eing, -üung, -iing.
4. chih-yün 支韻: -i, -hi, -ei, -ue, -iue, -eue, -üi.
5. yü-yün 魁韻: -u, -eu.
6. chia-yün 佳韻: -aj, -üaj, -iaj, -hij, -ij.
7. chen-yün 真韻: -in, -un, -eun, -hin, -ein, -üin.
8. han-yün 官韻: -an, -oan, -üan, -lan.
12. t' an-yün 談韻: -am, -em, -em, -iam, -iæm.
13. ch' in-yün 沉韻: -im, -hlm, -ilm.
15. ma-yün 麻韻: -e, -üa, -ia, -ue, -üe, (-a, -e).

Some peculiarities of the final system in the MKTY will be discussed below.

(2) -eu- and -yu- ¹⁵

In the 'Phags-pa Mongolian documents, eu represents the sound [y]. In the 'Phags-pa Chinese documents, this compound of e + u also appears very frequently. Dragunov denotes this compound as eu and infers its Chinese phonetic value as [y]. Dragunov denotes this compound as eu and infers its Chinese phonetic value as [y].¹⁶ Ligeti gives the Chinese phonetic value of this compound as å ([y]), as in Mongolian.

¹⁵ In my previous article, I corrected all the -eu- group to -iu-, but in the present paper I keep the 'Phags-pa spelling.
¹⁶ 'The Phags-pa script and Ancient Mandarin' (Chin. tr.), pp. 26-9.
¹⁷ 'Le Po kia sing...', e.g. Index Nos. 287-309.
In Ancient Chinese, -iw- and -iu- did not have a central vowel [y], although the Uighur script tended to transcribe Ancient Chinese -iw- and -iu- as -ü-.\(^{18}\)

Yet it is very difficult to decide whether in Old Mandarin -iw- and -iu- had changed to [y] or not. Chao Yin-t'ang infers that in the CYYY there was a sound [y], such as in 容 yng, 徹 tsyng, 局 lcy, etc.\(^{19}\) Chao's denotation has been adopted by E. Nagashima,\(^{20}\) but the characters which include Chao's yng are -ung in modern Pekinese, with the exception of 兄, 衛, 熊, etc, which are now denoted as hsiung (or hsing) in the Wade transcription. It would have been very unnatural for Ancient Chinese -iung to have changed to yng and for yng to have changed to -ung. In the CYYY, therefore, Chao’s y should be corrected to io or iu.\(^{21}\)

But the question remains, when did -iu change to y? In the Hsi-ju Erh-mu-tzu 西儒耳目資 (1626) by Nicolas Trigault, characters such as 中, 弓, 松, 龍, which were considered as -io in the CYYY are romanised as chum, kum, sum, lum\(^{22}\) respectively. So it can be seen that the sound -iong of the CYYY had already lost its deflected element -i- (or -j-) as a medial at the latest by the seventeenth century. On the other hand, the Hsi-ju Erh-mu-tzu distinguishes characters such as 居, 須, 處, 魚, which were derived from the yin-lei group from 曲, 槊, 欲, 局, which were derived from the Ancient Chinese entering-tone denoting the former group as -iu and the latter group as -io. The phonetic value of Trigault’s -iu must be [y].\(^{23}\) The Shansi dialect, the sound system employed in his book, replaced the final consonants -k,

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18 Cf. Csengor, ‘Chinese in the Uighur script ...’, e.g. Index Nos. 29 窯 kũ, 51 惡 kũi, 96 軍 gun, 96 如 tũ, 162 龍 lu, 187, 蔡 sũ, etc.
19 CYYY Yen-chiu, p. 104 ff.
21 Cf. Lu Chih-wei, ‘Shih CYYY’, \(YCHP\), XXXI (1946), p. 56. He says: ‘It is very strange that u and y were rhymed together, because in the Yüan dramas mo-yün (u) and yū-yün (iu) can be rhymed together’.
22 The final consonant -m in the Hsi-ju Erh-mu-tzu and Matteo Ricci’s romanisation is equivalent to -ng.
23 In Matteo Ricci’s romanisation, [y] is denoted as iu (e.g. 居 kiu, 虜 kiu, 決 kiue, etc.) and y (e.g. 用 yum, 遠 yuen, etc.), João Soeiro’s romanisation is very
-t, -p with a glottal stop after they had disappeared. Also, as Wang Li mentions, the Lei-yin 類音 (1712) by P’an Lei 潘耒 classifies finals into 翻, 衣, 革 and 萬, which represent the nuclei i, u, and y respectively. Therefore, the phonetic change of iu to y in Old Mandarin might have occurred after the compilation of the CYYY and before the late seventeenth century.

Another problem is the existence of y in the Wu dialects. Lu Yu 魯迅 (1125–1210), a poet of the Northern Sung dynasty, states in the Lao-hsiieh-an Pi-chi 老學庵筆記: ‘Wu people have corrupted the sound of the word 魚 and its rhyme group to k' ai-k' ou.’ This accords with some of the Wu dialects such as the modern Soochow, Wuhe 吳興, Taiping 太平 dialects, whose sounds of the 魚 group are either i or i. On the other hand, according to Arisaka, both the 鬼 group, which has -uei or -ui finals in modern Mandarin, and the 魚 group already included the sound [y] in the Yuan period on the evidence of the Tō-on version of Sino-Japanese. This assumption accords with Ch’ien T’hein’s 錢大昕 (1728–1804) observation that in the Wu dialects the word 鬼 (Pek. kuei) is pronounced as 興 (Pek. chu), the word 鬼 (Pek. kuei) is pronounced as 喜 (Pek. chu), ... the word 稀 (Pek. i) is read as 喜 (Pek. yi).


25 Lao-hsiieh-an Pi-chi (Ch’in-tai Pi-shu ed. vol. VI, p. 10b).
characters as $y$ in the colloquial form and $-ue$ in the literary form. The sounds $-iu$ and $-eu$ in the MKTY perhaps indicate the sound $y$ or its approximation. However, it is difficult to distinguish between $-iu$ and $-eu$. Similarly, in the MKTY, the characters 頂, 瓊, 詩, 奚, 熊, etc. are transcribed as $-iung$, and the characters 弓, 松, 龍, 兇, 永 etc. are transcribed as $-eung$. In the Wu dialects, the former group and 兆, 永 of the latter group have the sound $-ong$, and the latter group (except 兆, 永) have the sound $-eong$. Therefore, the medial $-i$- and $-e$- seem in this case to have the function of indicating whether the sounds are deflected or not.

Generally speaking, in 'Phags-pa documents the letters $e$ and $i$ are easily confused with each other, because their shapes $\equiv (e)$ and $\equiv (i)$ are very similar. Also it is doubtful whether the person who copied the manuscript of the MKTY was careful to make the distinction between these two letters. However, the existence of a distinction between them probably indicates that either $-eu$- or $-iu$- in the MKTY can be equivalent to $y$, although the distribution of $-eu$- and $-iu$- in the MKTY is not sufficiently consistent because of the similarity of their letter shapes. Therefore, in this paper, I shall simply follow the 'Phags-pa spelling, and adjust the sound in each case in comparison with modern dialects.

(3) $-ueng$

The sound $hueng$ which includes four characters 恤, 况, 賴 and 惡 appears in the yang-yin group of the MKTY. These four characters are now pronounced as $kuang$ in Mandarin, and are given as $huang$ in the CYY. In the Wu dialects they are either $huang$ (Soochow), $huang$ (Hangchow) or $hu5$ (Ningpo). The sound $hueng$ in the MKTY is closer to the $huang$ of Hangchow than to $kuang$ in Mandarin because of its front vowel.

(4) $-ue$

With the exception of the entering-tone, the characters belonging

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28 See Chao Yuen-ren, op. cit., Table II, 7.
29 See ibid., Table II, 5, 12.
30 The characters 恤, 况, 賴, and 惡 have undergone a phonetic change $h>k$. 

92
to the -ue group in the MKTY are pronounced -ei or -uei in Mandarin, while they are -e, -e, -ue, -ue in the literary form and -y in the colloquial form of the Wu dialects. But the characters of the Ancient Chinese entering-tone group are not always similar to the Wu dialects; for example 國 (ku6) is ko, kɔ, kuɔ and 城 (·uɛ) is i, yo, yɔ, etc. In general, the distribution of the entering-tone in the MKTY is very difficult to grasp, and this problem will be discussed in the next section.

(5) -üin

The characters 蘭, 晏, 雲, 項, etc. are pronounced as [yn] in Mandarin. In the MKTY they are denoted as -üin (i.e. 蘭, 晏 -üin; 雲, 項 yiüin), and are distinguished from the 君, 春, 允, 薰 group, which has the final -eun. The -üin group also shows a tendency towards the Wu dialects, such as yin (Hangchow) and yi(ng) (Kiu-chow).

(6) nuclei and medials

Basing upon all the finals in the MKTY, the nuclei and medials and their connections with endings can be shown as the following table:

Other examples are given in Karlgren, Études sur la phonologie chinoise, p. 372.
31 See Chao Yuen-ren, op. cit., Table II. 2, 7. But some of the characters of this group are pronounced as y in the colloquial form, except in the Hangchow and Kiu-chow dialects.
32 See ibid., Table III, 4.
33 See idid., Table II. 13.
Table 13

<table>
<thead>
<tr>
<th>medials</th>
<th>endings</th>
<th>yin-lei</th>
<th>yang-lei</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a</td>
<td>aj</td>
<td>ang</td>
</tr>
<tr>
<td></td>
<td></td>
<td>aw</td>
<td>an</td>
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<td></td>
<td></td>
<td>-</td>
<td>-</td>
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<tr>
<td>-i</td>
<td>i</td>
<td>iaj</td>
<td>iang</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iaw</td>
<td>tan</td>
</tr>
<tr>
<td>-ü</td>
<td>üa</td>
<td>üaj</td>
<td>üang</td>
</tr>
<tr>
<td></td>
<td></td>
<td>üaw</td>
<td>üan</td>
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<tr>
<td>-e</td>
<td>o</td>
<td>ow</td>
<td>-</td>
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<td>-ø</td>
<td>üø</td>
<td>-</td>
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<td>-ü</td>
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<td>üew</td>
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<td>üew</td>
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<td>i</td>
<td>ij</td>
<td>ing</td>
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<td>-ø</td>
<td>üi</td>
<td>üi</td>
<td>üing</td>
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<td>-e</td>
<td>ei</td>
<td>eiw</td>
<td>e'ing</td>
</tr>
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<td>-ø</td>
<td>üi</td>
<td>üi</td>
<td>üin</td>
</tr>
<tr>
<td>-e</td>
<td>hi</td>
<td>hi</td>
<td>hing</td>
</tr>
<tr>
<td>-ø</td>
<td>üi</td>
<td>üi</td>
<td>üin</td>
</tr>
</tbody>
</table>

From this table, the following seven nuclei can be abstracted; a, o, ø, u, e, e, and i. However, phonetically speaking, another three nuclei may also be supposed to exist in the MKTY; [ø, i, o]. These three nuclei can be phonologically interpreted as equivalent to 'ha-', 'hi-', 'hi-' respectively.

As regards the medials, the MKTY has four medials; -i-, -e-, -ü-
and -h, while the CYYY has only two; -i-(or -j-) and -w-. Also the MKTY has four endings in the yin-lei group; null (ends with nucleus), -j, -w and -e, while the CYYY has three; null, -j and -w. Therefore, in the MKTY, the phonemes e and e are used as nucleus and medial/ending. As to the final consonants in the yang-lei group, both the MKTY and CYYY have -ng, -n and -m as in Ancient Chinese.

Seven nuclei in the MKTY can be diagrammed in comparison with Ancient Chinese and the CYYY as follows:

\[\text{CYYY} \quad \text{MKTY} \quad \text{AC}\]

§ 4 Distribution of the Entering-tone

As well known, the entering-tone in Ancient Chinese disappeared in the Mandarin-speaking area since about the eleventh century. In the HCCS, we see the first indications of the disappearance of the final consonants of the entering-tone, while by the time the CYYY was composed, there was no trace of this tone. Also in the MKTY, it may be noted that the entering-tone had already disappeared as a phonetic value but still existed as a tone. For example, the sound bi does not signify one of the finals -k, -t, -p, but is distributed to four groups depending upon its tone; p'ing-sheng (level-tone), shang-sheng (falling-rising-tone), ch'u-sheng (falling-tone), and ju-sheng(entering-tone). This shows that the entering-tone still existed as one of the four tones in Ancient Chinese, but the final consonants -k, -t, -p had already disappeared. In this section, I intend to clarify the distribution of the entering-tone in the MKTY, with particular reference to the exhaustive studies of this subject by Keiya.34

34 See 'Nisshō inbi shōshitsu no katei ni tsuite no ichi kasetsu—MKTY karano apu-
The earliest source material which shows an indication of the disappearance of the final consonants of the entering-tone is the HCCS. In this simple rhyme table, the characters 菰, 露, 六, 玉, 日, 骨, 德 and 北 are not allocated to the yang-lei group but to the yin-lei group which ends with either a nucleus or one of the medials. On the other hand, the characters 且 and 玲 are allocated to the -m series in the yang-lei group, just as in Ancient Chinese. This means that the final consonants -k, -t and -p no longer have the same nature as in Ancient Chinese. Chou Tsu-mo interprets this phenomenon as indicating that the entering-tone had changed to a comparatively short and quick sound, but he does not establish the actual sounds of these characters which had formerly ended with either -k or -t. On the other hand, Ogawa proposes that in the HCCS the dental final consonant -t and velar final consonant -k are confused with each other, having already been assimilated to the glottal stop 「(?)」, and only the bilabial consonant -p has still retained its original nature. Ogawa points out that the most of the ku-l'i-shih 古體詩 ('old style poems') by Su Tung-p'o 蘇東坡 (1036-1101) rhyme between -t and -k although the other poets of his day still archaised to the traditional rhyming. This would reflect the spoken language in North China at that time, supposing Su Tung-p'o to have made free use of colloquial sounds.

However, in the tz'u poetry (lyric poems) of the Sung period, confused rhyming between -k, -t and -p final consonants can be seen very frequently. According to Sakai's study of rhyme in the tz'u poetry, the rōchi,' NDBKR, XXXVII (1965), pp. 1-37. Keiya also contributes to this problem in the following articles: 'Pei-yin ju-sheng yen-pien k'ao fusetsu', ibid, XL (1966), pp. 45-110; 'Nissē inbi no shōshitsu ni kansuruichi mondai', Kotoba, XXXIV (1966), pp. 15-37; 'Onsetsu kōsei to on'in henka — Kohoku hōgen ni okeru nisshō inbi shōshitsu no katei', NDBKR, XLIII (1967), pp. 17-49.


confusions between three final consonants are as follows: 37

**Table 14**

<table>
<thead>
<tr>
<th>-k</th>
<th>-t</th>
<th>-p</th>
<th>-k,-t,-p</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>25</td>
<td>8</td>
<td>20</td>
<td>123</td>
</tr>
<tr>
<td>(57)</td>
<td>(20)</td>
<td>(7)</td>
<td>(16)</td>
<td>(100)</td>
</tr>
<tr>
<td>25</td>
<td>20</td>
<td>48</td>
<td>20</td>
<td>113</td>
</tr>
<tr>
<td>(22)</td>
<td>(18)</td>
<td>(42)</td>
<td>(18)</td>
<td>(100)</td>
</tr>
<tr>
<td>8</td>
<td>48</td>
<td>5</td>
<td>20</td>
<td>81</td>
</tr>
<tr>
<td>(10)</td>
<td>(59)</td>
<td>(6)</td>
<td>(25)</td>
<td>(100)</td>
</tr>
</tbody>
</table>

From the proportion of confusions between these three final consonants, Sakai proposes that the final consonants of the entering-tone in the Sung period can be divided into two groups; the -k group, and the -t group which assimilated the -p group. This contrasts with the hypothesis derived from the HCCS, which suggests that confusion between -k and -t came first and resulted in . The two hypotheses are illustrated in the following scheme.

**Scheme I**

\[ \text{HCCS} \]

\[ -k \rightarrow -t \rightarrow -p \]

**Scheme II**

\[ \text{tz'u} \]

\[ -k \rightarrow -t \rightarrow -p \]

It is still difficult to conclude which of these is more adequate to explain the disappearance of the final consonants of the entering-tone during the transitional period of Old Mandarin. However, it may be suggested that differences between the two hypotheses reflect differences in the Sung period dialects. 38 To clarify this problem, it will be useful to examine the distribution of the entering-tone in the MKTY as shown by Keiya: 39


38 P. Serruys, 'Chinese dialectology based on written documents', *MS*, XXI(1962), p. 335 describes the manner of merging between -k,-t and -p only as in Scheme II without considering the case of the HCCS, but, as Table 14 shows, the confusion between -k and -t is not consequent but shows only a statistical majority.

39 'Nisshō inbi shōshitsu no katei ni tsuite no ichi kōsatsu', pp. 166-8. The ori-
<table>
<thead>
<tr>
<th></th>
<th>-p</th>
<th>-t</th>
<th>k-</th>
<th>MKTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>auk</td>
<td>-aw</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ak</td>
<td>-aw</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ûak</td>
<td>-ûaw</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>auk</td>
<td>-law</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ûak</td>
<td>-ew</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ûak</td>
<td>-ew</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ûak</td>
<td>-ûew</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii)</td>
<td>ak</td>
<td>-aj</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ûek</td>
<td>-ûaj</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ûak</td>
<td>-ûaj</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ak</td>
<td>-raj</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ëk</td>
<td>-hij</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ëk</td>
<td>-ij</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(iii)</td>
<td>ap</td>
<td>at</td>
<td></td>
<td>-o</td>
</tr>
<tr>
<td></td>
<td>ap</td>
<td>at</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>uat</td>
<td>-ûo</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ap</td>
<td>at</td>
<td></td>
<td>-ià</td>
</tr>
<tr>
<td></td>
<td>uat</td>
<td>-ûa</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ap</td>
<td>at</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>uat</td>
<td>-ûa</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ëap</td>
<td>ëat</td>
<td></td>
<td>-iê</td>
</tr>
<tr>
<td></td>
<td>ëap</td>
<td>ëat</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>uat</td>
<td>-ûe</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ëap</td>
<td>ëat</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>uat</td>
<td>-ûe</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

98
Keiya also summarises the above tables in the following table:

**Table 16**

<table>
<thead>
<tr>
<th>group</th>
<th>conditions</th>
<th>MKTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>k I</td>
<td>high vowel + k</td>
<td>I’m’</td>
</tr>
<tr>
<td>(ImNk)</td>
<td>i(med) + mid. vowel + k</td>
<td>(or I’m’?)</td>
</tr>
<tr>
<td>k II</td>
<td>mid. vowel + k</td>
<td>j</td>
</tr>
<tr>
<td>(ImNk)</td>
<td>(no med. i)</td>
<td></td>
</tr>
<tr>
<td>k III</td>
<td>low vowel + k</td>
<td>w</td>
</tr>
<tr>
<td></td>
<td>(regardless med. i)</td>
<td></td>
</tr>
</tbody>
</table>
Keiya states:

In the above table, it seems to be a lack of consistency in that the final -k is divided into three groups, and the finals -t and -p into two groups. However, phonetically speaking, the region of change of -k is wider than that of -t and -p because the point of articulation of -k is further back than -t and -p in the mouth. For example, in the following cases, the initial consonant and nucleus in the same, but the final consonant is slightly different pak, pat and pap, it is even possible that these final consonants might disappear, to result in pa. But in actual fact, the a nucleus, in pak leads to a wider opening of the mouth than with other instances.  

To interpret this peculiar function of the final -k, Keiya proposes the existence of the glides -w and -j as follows:

\[\text{-ak} \xrightarrow{w} \text{-ag} \xrightarrow{w} \text{-aw} \quad \text{(-awg)} \xrightarrow{w} \text{-aj}\]

In fact, this formula follows Rai's hypothesis, which assumes a phonological opposition between -k and -q (= [kw]) in Archaic Chinese.  

Also Arisaka proposes a glide as follows:  

\[\text{-ak} \xrightarrow{w} \text{-a} \xrightarrow{w} \text{-auk} \xrightarrow{w} \text{-auk} \xrightarrow{w} \text{-au7} \xrightarrow{w} \text{-o7} \xrightarrow{w} \text{-o} \quad \text{(-aug)} \xrightarrow{w} \text{-aj}\]

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In general, the consonant \( k \) has a peculiar nature. The syllables which had the final -\( k \) and the initial \( k- \) series accompanied by middle or low nuclei had easily combined with the medial -\( i- \) intending the further palatalisation (e.g. \( kauk/pauk \rightarrow klaw/paw \)).

In the CYYY the characters which formerly had final consonants of the entering-tone in Ancient Chinese are shared amongst the \( yang-p'ing\)-sheng (rising-tone), \( shang\)-sheng (falling-rising-tone), or \( ch'\-sheng \) (falling-tone) groups, depending on the nature of their initials. Lu Chih-wei proposes that even in the CYYY the entering-tone has been partly re-

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44 Ozaki points out that in the MKTY the velar initials of deflective syllables had already been palatalised, as is shown by the following passage of Chu Tsung-wen's preface to the MKTY: '古今韻會於每字之首必以四聲釋之，由是始知見經堅為 \( g \) '，which Ozaki interprets to mean 'In the Ku-chin Yuan-hui, all the sound groups are arranged under one of the \( tu\-mu \) (initials). From this arrangement, I realized for the first time that the initial consonant of the characters \( g \) and \( k \) is \( g \). [In fact, these characters are not pronounced as \( g \) although they are denoted as \( g \) in the 'Phags-pa script. But now I realized that the original sound of these characters was \( g \) by use of the Ku-chin Yuan-hui.] (Ozaki, 'Daiiei Hakubutsukan-bon MKTY sakkii', pp. 167–174). Thus Ozaki proposes that the velar initials of deflective syllables had already been palatalised by this time. This hypothesis is similar to Chao Yin-t'ang's assumption (CYYY Yen-chiu, pp. 88–93). Ozaki also criticizes Tödö's theory that palatalisation occurred between the seventeenth and nineteenth centuries, in his 'Ki-to tsi-no kondö wa 18 seiki ni hajimaru', CG, 94 (1960), pp. 1–3, 12; 'Development of Mandarin from 14c. to 19c.' AA, VI (1964), pp. 38–9. However, Tödö's hypothesis is more acceptable, since in many rhyme dictionaries such as the Yuan-lueh I-t'ung, Wu-fang Yuan-yan and Hsi-ju Erh-mu-tzu, written during the fourteenth and seventeenth centuries, velar initials have still not undergone palatalisation. Also Chu Tsung-wen's words quoted above might be interpreted as follows: '...From this arrangement I realized for the first time that the initial consonant of the characters \( g \) and \( k \) is \( g \). [In fact, these characters are pronounced as \( k \) although they are denoted as \( g \) in the 'Phags-pa script. But I now realized that in the 'Phags-pa transcription of Chinese there is an alternation between voiced and voiceless initials like \( k \) and \( g \).]' According to my interpretation of Chu Tsung-wen's preface, it is impossible to infer the existence of palatals in the MKTY.

45 According to H. Hirayama, 'Chûko nisshö to Peking seichö no taiö tsûsoku', NCGH, XII (1960), pp. 139–156, it must be noted that the some of modern Pekinese sounds have colloquial and literary versions. The colloquial element may be taken as basic Pekinese, but the literary element is supposed to consist of many other dialects in the form of loan-sounds (cf. Table 3 in his article).
tained, as [ʔ], [ʔ] or [ŋ], and he explains: ‘...the disappearance of [ɦ]
which is a fricative final consonant possibly originated from the changing
of tz’u-cho (nasals and semi-vowels) to the falling-tone, thereafter grad­
ually leading to complete extinction.’

Thus the difficulty in dealing with the disappearance of the entering-
tone in the CYYY lies in its relationship with other tones. Although
Lu Chih-wei proposes the existence of a glottal stop replacing the former
- k, - t and - p, the fact that the entering-tone syllables had already been
distributed amongst other three tones means that the trace of glottal stop
at the end of syllables must have been very weak and already tending to
disappear.

On the other hand, in the MKTY the four tones of Ancient Chinese
have all been preserved, although the final consonants of the entering-
tone have already been dropped. It is therefore considered that in the
MKTY those characters which formerly had the final consonants of the
entering-tone (except - k accompanied by middle/low vowel) have a clear
glottal stop [ʔ] at the end of each syllable.

Comparing this feature in the MKTY with that in the CYYY, we can
phonologically interpret as follows:

<table>
<thead>
<tr>
<th>AC</th>
<th>CYYY</th>
<th>MKTY</th>
<th>Wu dialects</th>
</tr>
</thead>
<tbody>
<tr>
<td>high vowel + k</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>middle vowel + k</td>
<td>-j</td>
<td>-j</td>
<td></td>
</tr>
<tr>
<td>low vowel + k</td>
<td>-w</td>
<td>-w</td>
<td></td>
</tr>
</tbody>
</table>

Table 17

46 ‘Shih CYYY’, pp. 63-6. However, according to his ‘Kuo-yü ju-sheng yen-pien
hsiao-chu’, YCHP, XXXIV (1948), pp. 21-8. [q] is corrected to [j]. This theory
was criticized by Chao Hsia-ch’iu and Tseng Ch’ing-jui in their ‘CYYY yin-hsi te

47 See Keiya, ‘Pei-yin-ju-sheng yen-pien k’ao fusetsu’, which critically treats
Po Ti-chou’s proposal and adds many supplementary materials based on exhaustive
investigation of the CYYY, Chung-chou Yin-yün, Tz’u-lin yün-shih and Yin-yün
ch’ih-cho chien.

102
The MKTY reveals that the distribution of the ending -• is similar to that of the Wu dialects, while the existence of the endings -j and -w is more similar to the CYYY. It is very unlikely that the MKTY’s -j and -w have changed to -• because phonetic change such as -j>-• is incongruous. Thus we may conclude that in the respect of the disappearance of the final consonants of the entering-tone the MKTY has two aspects of both the Wu dialects and Mandarin, although the Wu element seems to be more dominant in it.

§ 5. Conclusion

The sound system employed in the MKTY has many elements of the Wu dialects, although it has a partly Mandarin element. As far as the initial consonant system is concerned, it seems very strange that the MKTY preserves voiced initials and retroflex initials which are the peculiarities of the Wu and Mandarin dialects respectively. However, it must be noted that the MKTY was compiled in the Yuan dynasty, just after voiced initials had disappeared in the Mandarin-speaking area. It might have been easy for the Pien-ching people to preserve the voiced initials which were retained in the Wu dialects when they moved to Lin-an, because this transfer of the capital in the Northern Sung dynasty (1138) took place when Mandarin was still in the transitional period. As Hattori explains, when the Pien-ching dialect was transplanted to Lin-an, voiced initials might still have been preserved even in Mandarin. On the other hand, the retroflex initials in the MKTY are also rendered as affricated alveolo-palatals, which were vestiges of Ancient Chinese in the Wu dialects.

In the final system, the number and nature of nuclei are obviously much more complicated and archaised than in the CYYY. Also as to the other peculiarities of the final system, in particular the peculiar n, the MKTY shows more similar elements to the Wu dialects than to

48 According to the Hsien-tai Wu-yü te Yen-chiu, the phonetic change of the entering-tone in the Wu dialects is very simple. The nuclei have scarcely been influenced by the change of the final consonant to the glottal stop.

49 Hattori, op. cit., p. 55.
Mandarin. On the Hangchow dialect, Chao Yuen-ren explains:

Harngjou (Hangchow), being the capital of the Southern Song (Sung) Dynasty, retain a good deal of Mandarin influence. Whereas all the other Wu-dialects have a literary and a colloquial pronunciation for a large number of words, Harngjou uses only the literary form whether in speech or in writing. There is therefore no striking difference in pronunciation between reading a literary passage in the Harngjou dialect and reading in the Shawhing (Shaohing) dialect, while the colloquial speech of Harngjou sounds very different from the surrounding dialects.

Hattori’s assumption and Chao’s observation thus accord with each other. Although in general I agree with Hattori’s hypothesis that the sound system employed in the MKTY may perhaps be the Pien-ching dialect as transplanted to Lin-an, I also think that Chu Tsung-wen might have referred to the sound system of the Kiuchow dialect in minor points. Therefore, as a general conclusion, it can be said that the sound system employed in the MKTY is one of the prototypes of literary form of the Wu dialects.

§ 6. The Text of the Meng-ku Tzu-yüin

This section is intended to show all the syllables represented in the MKTY. The table below consists of (1) 'Phags-pa spellings, (2) Chinese sounds, (3) distribution of tones and representative characters in each tone group, and (4) page number in the texts of the Kansai University edition (abbr. MKJI) and the new Chinese manuscript in the PSPT (abbr. PSPT (in) parentheses).

\[ p = p' \text{-} \text{ing-sheng} \text{ (level-tone)}; s = \text{shang-sheng} \text{ (falling-rising-tone)}; c = \text{chu-sheng} \text{ (falling-tone)}; j = \text{ju-sheng} \text{ (entering-tone)}; \text{ k, t, p after the ju-sheng column denote the final consonants -k, -t, -p of the Ancient entering-tone respectively.} \]

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50 Chao Yuen-ren, op. cit., 'Introduction in English', p. xiv.
MENG-KU TZU-YÜN

Volume I

1. tung-yün 東韻

1. gung kung P公 s礫 c賤 (15, 99a)
2. k'ung k'ung P空 s 孔 c 控
3. dung tung P東 s 學 c 淤
4. t'ung t'ung P通 s 捕 c 應
5. tung dung P同 s 動
6. nung nung P脕
7. dzung t'sung P中 s 留 c 中 (16, 99a)
8. t's'ung t's'ung P 仲 s 禮
9. t'sung dzung P 異
10. ŋung ŋung P壘
11. bung pung P 俑 s 錐 c 嚀
12. pung bung P 蓬 s 璜 c 嚀
13. mung mung P 蒙 s 蒙 c 蟄
14. ŋung fung P 風 s 朘 c 風 (16-17, 99a-b)
15. ŋüng vung P 鴻 s 奉 c 鳳
16. wung wung P 甌 c 帝
17. dzung tsung P 醒 s 總 c 捌
18. ts'ung ts'ung P 忽 (s) 俗念 c 誠
19. tsung dzung P 異
20. sung sung P 鮮 c 宋 (17, 99b)
21. ſung ſung P 春 (17, 99b)
22. źung źung P 瘴 s 尖
23. hung hung P 蠟 (18, 99b)
24. ſung ſung P 洪 s 瀾 c 呼
25. ſung ſung P 翁 s 翁 c 鳢
26. lung lung P 節 s 節 c 弄

27. geung kiung P 弓 s 拱 c 供
28. k'eung k'iung P 竄 s 恐 c 頩

Both the MKJI and PSPT editions lack the character 上 (shang-sheng).
<table>
<thead>
<tr>
<th>29. keung</th>
<th>30. dzeung</th>
<th>31. dzeung</th>
<th>32. ts'eung</th>
<th>33. tseung</th>
<th>34. seung</th>
<th>35. zeung</th>
<th>36. heung</th>
<th>37. •eung</th>
<th>38. yeung</th>
<th>39. •jeung</th>
<th>40. jeung</th>
<th>41. leung</th>
<th>42. feung</th>
</tr>
</thead>
<tbody>
<tr>
<td>keung</td>
<td>t\textsuperscript{š}iung</td>
<td>tsiung</td>
<td>ts\textsuperscript{’}iung</td>
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2. 

| 43. ging | 44. k'ing | 45. king | 46. ting | 47. ding | 48. t'ing | 49. ting | 50. ning | 51. džing | 52. tš'ing | 53. tšing | 54. bing | 55. p'ing | 56. ping | 57. ming | 58. dzing | 59. ts'ing | 60. tsing |
|----------|-----------|---------|---------|--------|--------|---------|---------|--------|---------|---------|--------|--------|---------|--------|---------|--------|---------|---------|
| king     | king      | g'ing   | ping   | ding   | t'ing   | ding   | ning   | džing  | tš'ing  | tšing  | ping   | p'ing  | ping   | ming   | dzing  | ts'ing  | dzing  |
| P驚      | P驚      | P驚     | P驚     | P丁    | P丁    | P庭    | P亭    | P亭    | P亭    | P亭    | P兵    | P侍    | P平    | P詳    | P鶉    | P鶉    | P鶉    |
| S警      | S警      | c敬     | c敬     | S丁    | S丁    | S庭    | S庭    | S庭    | S庭    | S庭    | S兵    | S侍    | S病    | S命    | S鶉    | S鶉    | S鶉    |

\* For 三 read 三.
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87. 吳 | kìung | P 畢 | s 頜 | (26, 101b) |
| 88. k'lung | k'lung | P 倚 | s 頜 | |

53 For 去 (after 前) read 上.
54 See Chapter III, 3.
55 For 𦛨读 𦛨.
56 The PCH gives the Nos. 27–42 group as -eung. See Dragunov, op. cit., 熊.

107
| 89.  | kiung   | gïung  | P 瓊  |
| 90.  | hiung   | hïung  | s 詞  |
| 91.  | fiïung  | fiïung | P 娣 s 厶  |

92. geïng   | keïng  | P 絹 s 梁  | c 更  |
93. k'eïng  | k'eïng | P 陁 s 豐  |
94. heïng   | heïng  | P 膊  | c 興  |
95. fieïng  | fieïng(Æïung?) | P 兄  |

96. Êïung  | Êïung  | P 泓  |

97. hiïng  | hiïng  | P 行 s 𢦚  c 行  |

3. yang-yïn 陽韻

98. g(a)ng  | kïang  | P 閼  | c 𢦚  |
99. k'(a)ng | k'ïang | P 康 s 條  | c 抗  |
100. Ë(a)ng  | Ëïang  | P 昇  | c 脫  |
101. d(a)ng  | tïang  | P 當 s 暗  | c 澄  |
102. t'(a)ng | t'ïang | P 湯 s 覓  | c 偽  |
103. t(a)ng  | dïang  | P 唐 s 蕃  | c 宥 (27-28, 102a)  |
104. n(a)ng  | nïang  | P 納 s 羌  | c 儀 (28, 102a)  |
105. Ëz(a)ng | tïang  | P 張 s 長  | c 撘  |
106. tš(a)ng | tš'ïang | P 獵 s 稀  | c 慘  |
107. tš(a)ng | Ëzïang | P 長 s 丈  | c 仗  |
108. Ën(a)ng | Ëïang  | P 烏  |
109. h(a)ng  | pïang  | P 帮 s 榜  |
110. p'(a)ng | Ë'ïang | P 漂  |
111. p(a)ng  | bang  | P 傍 s 𢦔  c 傍 (29, 102b)  |
112. m(a)ng  | mang  | P 茫 s 莞  |

*heutig*; Ligeti, op. cit., 熊 hui. Cheng Tsai-fa makes no distinction between Nos. 27–42 and Nos. 87–91.

57 Hattori gives this as Æïing (op. cit., p. 43).

58 The PCH and some other inscriptions give 𢦚. Cf. Cheng Tsai-fa, op. cit., p. 950.

59 For 𢦚 read 𢦚.  
50 For 𢦚 read 𢦚.
113. hū(a)ng  fang  P 力  s 力  c 放
114. hū(a)ng  vang  P 房  c 防
115. w(a)ng  wang  P 亡  s 網  c 妨
116. dz(a)ng  tsang  P 成  s 驗  c 墳
117. ts'(a)ng  ts'ang  P 倉  s 蒼
118. ts(a)ng  dzang  P 藏  s 喫  c 藏
119. s(a)ng  sang  P 桑  s 喁  c 喪  (30, 102b)
120. s(a)ng  shang  P 商  s 買  c 買
121. z(a)ng  zang  P 常  s 上  c 儀
122. r(a)ng  rang  P 航  s 沈  c 吹
123. -a(n)g  -ang  s 块  c 堆
124. j(a)ng  jang  P 營  s 養  c 演
125. l(a)ng  lang  P 箇  s 朗  c 間
126. f(a)ng  fang  P 環  s 壮  c 讓

127. gū(a)ng  kiang  P 縱  s 極  c 張  (31, 103a)
128. k'i(a)ng  k'iang  P 蒙  s 柔
129. kū(a)ng  gūang  P 強  s 強
130. pī(a)ng  pīang  P 引  s 引
131. dī(a)ng  tīang  P 將  s 搔  c 鞠
132. ts'(a)ng  ts'ang  P 誘
133. tī(a)ng  dzīang  P 總  c 匠
134. sī(a)ng  sīang  P 總  s 單  c 相
135. zī(a)ng  zīang  P 詳  s 楊
136. hū(a)ng  hūang  P 供  s 響  c 向
137. fū(a)ng  fūang  P 降  s 張  c 權
138. ·i(a)ng  ·iāng  P 尖  s 眼  c 閏
139. lū(a)ng  lūang  P 廉  s 閔  c 刑

140. gū(a)ng  kūang  P 光  s 廣  c 訑
141. k'ū(a)ng  k'ūang  P 匪  c 罪
142. kū(a)ng  gūang  P 狂

61 For çü read çǔ.
62 For (PSPT ed.) read .
| 143. | ㄉㄗㄩ(ㄋ)ŋ | ㄉㄗㄩㄤ | P 瞳 |
| 144. | ㄉㄗˊㄩ(ㄋ)ŋ | ㄉㄗˊㄩㄤ | P 瞳 |
| 145. | ㄉㄗㄩ(ㄋ)ŋ | ㄉㄗㄩㄤ | P 瞳 |
| 146. | ㄕㄨ(ㄋ)ŋ | ㄕㄨㄤ | P 瞳 |
| 147. | ㄏㄨ(ㄋ)ŋ | ㄏㄨㄤ | P 荒 |
| 148. | ㄔㄩ(ㄋ)ŋ | ㄔㄩㄤ | P 央 |
| 149. | ㄭㄩ(ㄋ)ŋ | ㄭㄩㄤ | P 荒 |
| 150. | ㄌㄩ(ㄋ)ŋ | ㄌㄩㄤ | P 潤 |

（33, 103b）

| 151. | ㄉษㄕ(ㄋ)ŋ | ㄉㄗㄕong | P 荒 |
| 152. | ㄉㄗㄕ(ㄋ)ŋ | ㄉㄗˋong | P 削 |
| 153. | ㄉˇㄕ(ㄋ)ŋ | ˋㄉˇong | P 牀 |
| 154. | ㄕㄕ(ㄋ)ŋ | ㄕong | P 萬 |

（34, 103b）

| 155. | ㄖㄤ | ㄖню | P 潤 |

| 156. | ㄈㄤ | ㄈню | s 怡 |

4. *chi-h-yün* 支韻

| 157. | ㄉ | ㄋ | P 瞳 |
| 158. | ㄎ | ㄔ | P 瞳 |
| 159. | ㄐ | ㄍ | P 瞳 |
| 160. | ㄑ | ㄑ | P 瞳 |
| 161. | ㄒ | ㄒ | P 瞳 |
| 162. | ㄊ | ㄊ | P 瞳 |
| 163. | ㄋ | ㄌ | P 瞳 |
| 164. | ㄉ | ㄉ | P 瞳 |
| 165. | ㄉ | ㄉ | P 瞳 |
| 166. | ㄉ | ㄉ | P 瞳 |
| 167. | ㄉ | ㄉ | P 瞳 |
| 168. | ㄉ | ㄉ | P 瞳 |
| 169. | ㄉ | ㄉ | P 瞳 |

63 For ㄉ read ㄉ
64 See Chapter III, § 3.
170. p'i p'i p'i P穀 s穀 c穀 j(k)穀
171. pi bi Pi穀 s穀 c穀 j(kt)穀 (39, 105a)
172. mi mi Pi穀 s穀 c穀 j(kt)穀
173. hi hi fi P穀 s穀 c穀 (39, 105a)
174. fi fi vi P穀 s穀 c穀
175. wi wi P穀 s穀 c穀
176. dzi ts'i ts'i P穀 s穀 c穀 j(kp)穀 (39-40, 105a)
177. ts'i ts'i ts'i P穀 s穀 c穀 j(kt)穀 (40, 105a)
178. tsi tsi tsi P穀 s穀 c穀 j(ktp)穀
179. si si si P穀 s穀 c穀 j(kt)穀
180. zi zi zi P穀 s穀 c穀 j(kt)穀 (39-40, 105a)
181. si si P穀 s穀 c穀 j(ktp)穀 (40-41, 105a-b)
182. zi zi P穀 s穀 c穀 j(ktp)穀 (41, 105b)
183. hi hi hi P穀 s穀 c穀 j(kt)穀 (41, 105b)
184. i i i P穀 s穀 c穀 j(kt)穀 (41-42, 105b)
185. j i j i P穀 s穀 c穀 j(kt)穀 (41-42, 105b)
186. ji ji ji P穀 s穀 c穀 j(kt)穀 (42-43, 105b-106a)
187. li li li P穀 s穀 c穀 j(kt)穀 (43, 106a)
188. ri ri ri P穀 s穀 c穀 j(kt)穀 (43-44, 106a-b)
189. dzh'i tš'i tš'i P穀 s穀 c穀 j(kp)穀 (44, 106a)
190. ts'hi tš'ī tš'ī P穀 s穀 c穀 j(kp)穀 (44, 106a)
191. dzh'i dzh'i dzh'i P穀 s穀 c穀 j(kp)穀 (44, 106a-b)
192. dzh'i dzh'i dzh'i P穀 s穀 c穀 j(kp)穀 (44, 106a-b)
193. ts'hi ts'ī ts'ī P穀 s穀 c穀 j(kp)穀 (44-45, 106a-b)
194. tshi tsi tsi P穀 s穀 c穀 j(kp)穀 (44-45, 106a-b)
195. shi ʃ i ʃ i P穀 s穀 c穀 j(kp)穀 (44-45, 106a-b)
196. zhi z z z P穀 s穀 c穀 j(kp)穀 (45, 106b)

65 For  in sheng read ．
66 For  read ．
67 The character in the ju-sheng group of the PSPT edition must be corrected to 因, because in the Ch'ien-lung manuscript of the MKTY, the last stroke of this character should be lacked to avoid the identity with 弘, the first name of the Emperor Ch'ien-lung. Cf. Ozaki, op. cit., p. 164.
68 For  read ．

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<table>
<thead>
<tr>
<th>226.</th>
<th>227.</th>
<th>228.</th>
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<tbody>
<tr>
<td>yue</td>
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</tr>
</tbody>
</table>

(46, 106b)
(46, 107a)
(48, 107a)
(49, 107b)
(49-, 50 107b)
The s. and c. groups are to be reversed.

For 輝 read 輝.
<table>
<thead>
<tr>
<th>No.</th>
<th>Character</th>
<th>Meaning</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>256.</td>
<td>ts'u ts'u</td>
<td>P 鼠</td>
<td>居 j(kt) 繁</td>
</tr>
<tr>
<td>257.</td>
<td>tsu dzu</td>
<td>P 狮 s 粮</td>
<td>族 j(kt) 族</td>
</tr>
<tr>
<td>258.</td>
<td>su su</td>
<td>P 蘇 s 切</td>
<td>言 j(kt) 言</td>
</tr>
<tr>
<td>259.</td>
<td>şu şu</td>
<td>P 爲 s 所</td>
<td>粗 j(kt) 縮 (56, 109a)</td>
</tr>
<tr>
<td>260.</td>
<td>hu hu</td>
<td>P 呼 s 虜</td>
<td>該 j(kt) 賴</td>
</tr>
<tr>
<td>261.</td>
<td>ṛu ṛu</td>
<td>P 胡 s 戶</td>
<td>親 j(kt) 穀</td>
</tr>
<tr>
<td>262.</td>
<td>ṛ u ṛ u</td>
<td>P 鳥 s 陌</td>
<td>惡 j(kt) 里</td>
</tr>
<tr>
<td>263.</td>
<td>lu lu</td>
<td>P 盧 s 魯</td>
<td>路 j(kt) 爐 (56-57, 109a-b)</td>
</tr>
<tr>
<td>264.</td>
<td>geu kiu</td>
<td>P 居 s 學</td>
<td>據 j(kt) 跟 (57, 109b)</td>
</tr>
<tr>
<td>265.</td>
<td>k'eu k'iu</td>
<td>P 虎 s 去</td>
<td>躍 j(kt) 荒</td>
</tr>
<tr>
<td>266.</td>
<td>keu giu</td>
<td>P 勝 s 巨</td>
<td>勝 j(kt) 勝</td>
</tr>
<tr>
<td>267.</td>
<td>čzeu čšiu</td>
<td>P 頑 s 賽</td>
<td>著 j(kt) 竹 (57-58, 109b)</td>
</tr>
<tr>
<td>268.</td>
<td>tš'eu tš'iu</td>
<td>P 竄 s 機</td>
<td>機 j(kt) 機</td>
</tr>
<tr>
<td>269.</td>
<td>tšenu čžiu</td>
<td>P 斋 s 餘</td>
<td>畫 j(kt) 舵 (58, 109b)</td>
</tr>
<tr>
<td>270.</td>
<td>ņeu ņiu</td>
<td>P 鬱 s 女</td>
<td>女 j(kt) 女</td>
</tr>
<tr>
<td>271.</td>
<td>dzeu ts'iu</td>
<td>且</td>
<td>且 j(kt) 楓 (58-59, 109b-110a)</td>
</tr>
<tr>
<td>272.</td>
<td>ts'enu ts'iu</td>
<td>P 廚 s 取</td>
<td>篤 j(kt) 篤 (59, 110a)</td>
</tr>
<tr>
<td>273.</td>
<td>tšeu dzšu</td>
<td>且</td>
<td>且 j(kt) 且</td>
</tr>
<tr>
<td>274.</td>
<td>seu ššu</td>
<td>P 肖 s 謂</td>
<td>篾 j(kt) 肅</td>
</tr>
<tr>
<td>275.</td>
<td>zeu šiu</td>
<td>P 徐 s 銜</td>
<td>j(kt) 續</td>
</tr>
<tr>
<td>276.</td>
<td>ſeu ššu</td>
<td>P 書 s 夏</td>
<td>恕 j(kt) 友</td>
</tr>
<tr>
<td>277.</td>
<td>zėu žšu</td>
<td>P 孰 s 偶</td>
<td>護 j(kt) 日 (59-60, 110a)</td>
</tr>
<tr>
<td>278.</td>
<td>heu hiu</td>
<td>P 虛 s 許</td>
<td>許 j(kt) 許 (60, 110a)</td>
</tr>
<tr>
<td>279.</td>
<td>·eu ·šu</td>
<td>且 s 會</td>
<td>會 j(kt) 會</td>
</tr>
<tr>
<td>280.</td>
<td>yeu yšu</td>
<td>P 魚 s 話</td>
<td>御 j(kt) 玉</td>
</tr>
<tr>
<td>281.</td>
<td>jeu jšu</td>
<td>P 餘 s 養</td>
<td>豫 j(kt) 豫 (60-61, 110a-b)</td>
</tr>
<tr>
<td>282.</td>
<td>leu</td>
<td>lšu</td>
<td>P 魔 s 呂</td>
</tr>
<tr>
<td>283.</td>
<td>ſeu ſšu</td>
<td>P 如 s 女</td>
<td>女 j(kt) 肉</td>
</tr>
</tbody>
</table>

71 For 回 read 回.
72 For 路 read 路.
This group ought to belong to the Nos. 239–263 group.
<table>
<thead>
<tr>
<th>Page</th>
<th>Characters</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>314.</td>
<td>hā(a)j hüaj</td>
<td>j(k)著</td>
</tr>
<tr>
<td>315.</td>
<td>ṣū(a)j ṣūaj</td>
<td>P嘍 c懣 j(k)獲</td>
</tr>
<tr>
<td>316.</td>
<td>ə(a)j əaj</td>
<td>P蛙 j(k)捿</td>
</tr>
<tr>
<td>317.</td>
<td>yū(a)j yūaj</td>
<td>c謇</td>
</tr>
<tr>
<td>318.</td>
<td>gi(a)j kīaj</td>
<td>P佳 s解 c解 j(k)格</td>
</tr>
<tr>
<td>319.</td>
<td>k'ī(a)j k'īaj</td>
<td>P揩 s楷 c劦 j(k)客</td>
</tr>
<tr>
<td>320.</td>
<td>hi(a)j hiaj</td>
<td>c譍 j(k)赦</td>
</tr>
<tr>
<td>321.</td>
<td>fil(a)j filaj</td>
<td>P賡 s購 c賰 j(k)騰</td>
</tr>
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</table>

Volume II.

<table>
<thead>
<tr>
<th>Page</th>
<th>Characters</th>
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<tbody>
<tr>
<td>322.</td>
<td>k'hij k' Languages</td>
<td>j(k)刻</td>
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<tr>
<td>323.</td>
<td>dhij tṣj</td>
<td>j(k)德</td>
</tr>
<tr>
<td>324.</td>
<td>ʦhij t'sj</td>
<td>j(k)替</td>
</tr>
<tr>
<td>325.</td>
<td>thijs dṣj</td>
<td>j(k)特</td>
</tr>
<tr>
<td>326.</td>
<td>ḏḥij tṣj</td>
<td>j(k)茶</td>
</tr>
<tr>
<td>327.</td>
<td>ḍṣ'ḥij t'sj</td>
<td>j(k)測</td>
</tr>
<tr>
<td>328.</td>
<td>ḍṣhij ḍṣj</td>
<td>j(k)剔</td>
</tr>
<tr>
<td>329.</td>
<td>dzḥij tṣj</td>
<td>j(k)則</td>
</tr>
<tr>
<td>330.</td>
<td>tshij dzṣj</td>
<td>j(k)賊</td>
</tr>
<tr>
<td>331.</td>
<td>shīj sọj</td>
<td>j(k)塞</td>
</tr>
<tr>
<td>332.</td>
<td>ʂhij şọj</td>
<td>j(k)色</td>
</tr>
<tr>
<td>333.</td>
<td>lḥij lọj</td>
<td>j(k)勒</td>
</tr>
</tbody>
</table>

7. chen-yün 真韻

<table>
<thead>
<tr>
<th>Page</th>
<th>Characters</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>334.</td>
<td>hij høj</td>
<td>j(k)黑</td>
</tr>
<tr>
<td>335.</td>
<td>ḡij ḡj</td>
<td>j(k)刻</td>
</tr>
</tbody>
</table>

74 For .coord of Nos. 318-321 read .coord.
75 For .coord (MKJI) and .coord (PSPT) read .coord.
76 No. 334 may have the same value as Nos. 322-333. The difference of 'Phags-pa spelling between them was perhaps to avoid the duplicating form in ḍhiṣj.
| 333. | pin | tin | P 銀 | s 听 | c 憋 |
| 339. | nin | nin | P 錫 |
| 340. | dzin | tšin | P 珍 | s 輪 | c 靈 | (70-71, 112b-113a) |
| 341. | tš' in | tš' in ²² | P 麗 | s 輪 | c 靈 | (71, 113a) |
| 342. | bin | dzin | P 神 | s 綠 | c 陳 |
| 343. | p'in | pin | P 賓 | c 儲 |
| 345. | pin | bin | P 頻 | s 攌 |
| 346. | min | min | P 昼 | s 愍 |
| 347. | dzin | tsin | P 津 | s 盡 | c 書 |
| 348. | ts'in | ts'in ²² | P 親 | c 親 |
| 349. | tsin | dzin | P 統 | s 盡 |
| 350. | sin | sin | P 辛 | c 信 | (72, 113a) |
| 351. | zin | zin | P 齋 |
| 352. | šin | šin | P 申 | s 犧 |
| 353. | zin | zin | P 辰 | s 腎 | c 慄 |
| 354. | řin | řin | P 疎 | s 狠 | c 恨 |
| 355. | řin | řin | P 殷 | s 隱 | c 德 |
| 356. | řin | xin | P 因 | c 印 |
| 357. | jin | jin | P 宦 | s 引 | c 懿 |
| 358. | lin | lin | P 鄰 | s 隆 | c 邂 |
| 359. | řin | řin | P 人 | s 忍 | c 反 | (73, 113b) |
| 360. | gun | kun | P 屍 | s 髭 |
| 361. | k'un | k'un | P 坤 | s 闆 | c 困 |
| 362. | dun | tun | P 敦 | c 頓 |
| 363. | t'un | t'un | P 嚴 | s 塩 |
| 364. | tun | dun | P 冴 | s 圓 | c 鈹 |
| 365. | nun | nun | c 嫩 |
| 366. | bun | pun | P 奔 | s 本 |
| 367. | p'un | p'un | P 惕 | c 憐 |
| 368. | pun | bun | P 盤 | c 盤 |
| 369. | mun | mun | P 門 | s 悅 | c 悶 | (74, 113b) |
| 370. | fun ²² | vun | P 分 | s 粉 | c 盤 |

²² For 田 read 田.
²² For 亡 read 亡.

117
| 371. hun | fun | P 汲  | s 汲  | c 分 |
| 372. wun | wun | P 文  | s 吻  | c 問 |
| 373. dzun | tsun | P 鎮  | s 枢  | c 接 |
| 374. ts'un | ts'un | P 村  | s 村  | c 寸 |
| 375. tsun | dzun | P 存  | s 鐵  |   |
| 376. sun | sun | P 孫  | s 損  | c 機 |
| 377. hun | hun | P 呼  |   |   |
| 378. γun | γun | P 魂  | s 混  | c 意 |
| 379. • un | • un | P 溫  | s 穩  |   |
| 380. lun | lun | P 論  | c 論  |   |

| 381. geun | k'jun | P 君  | c 擇 |
| 382. k'eun | k'jun | P 織  |   |
| 383. keun | g'tun | P 群  | s 窮  | c 郡 |
| 384. d'zeun | t's'tun | P 电  | s 準  | c 程 |
| 385. t's'eun | t's'tun | P 春  | s 輪  |   |
| 386. t'seun | d'ziun | P 屋  | s 屋  | c 順 |
| 387. dzeun | ts'jun | P 逐  | c 偈 |
| 388. ts'eun | ts'tun | P 逐  |   |
| 389. seun | s'jun | P 筍  | s 筊  | c 素 |
| 390. zeun | z'sun | P 隘  | c 祜 |
| 391. šeun | š'jun | P 笛  | c 舞 |
| 392. řeun | ř'jun | P 醉  |   |
| 393. heun | h'iuun | P 黙  | c 訓 |
| 394. jeun | j'jun | P 勻  | s 勻 |
| 395. leun | liun | P 溜  |   |
| 396. řeun | ř'jun | P 笛  | s 笛  | c 味 |

| 397. gh'ın | k'ün | P 根  | c 根 |
| 398. k'hin | k'ın | P 骨  | s 畿 |
| 399. t'hin | t'ın | P 吞  | c 唾 |
| 400. d'z'hin | t's'ın | P 殁  |   |
| 401. t's'hin | t's'ın | P 殁  | c 殁 |

*79 For 坤 read 輢.

*80 For 坤 (MKJ) read 輢.

The PSPT lacks Nos. 386-405.
402. ʂhin ʂoŋ ʐ音
403. ʂhin ʂoŋ ʐ音

404. gein kein ʂ緊
405. hein hein ʐ欣 c 醺
406. hein hein ʐ胸

407. ʂˈin ʂˈin ʐ藏 s 慄 c 腐
408. yuˈin yuˈin ʐ雲 s 燸 c 燹

8.  hän-yün 漢陰

409. g(a)n kan ʐ千 s 猫 c 翥
410. kˈ(a)n kˈan ʐ看 s 倪 c 侃
411. ʂ(a)n ʂan ʐ軒 c 岸
412. ʂ(a)n tan ʐ單 s 置 c 旦 (78, 114b)
413. tˈ(a)n tˈan ʐ灘 s 湛 c 燊
414. t(a)n dan ʐ壇 s 但 c 彈
415. nˈ(a)n nan ʐ難 s 暱 c 難
416. ʂˈ(a)n ʂˈan ʂ 緣
417. ʂˈ(a)n ʂˈan ʂ 紉 c 紉
418. tˈ(a)n ʂˈan ʂ 灏 s 棋 c 棋
419. bˈ(a)n pan ʐ班 s 版
420. pˈ(a)n pˈan ʐ攀 c 爀
421. pˈ(a)n ban ʐ辦 c 辦 (80, 115a)
422. mˈ(a)n man ʐ雙 c 慣
423. hˈ(a)n ʂ f an ʐ 貢 s 転 c 賢
424. fˈ(a)n ʂ f van ʐ 聽 s 飯 c 飯
425. kˈ(a)n ʂ f wan ʐ 晚 c 燒
426. dzˈ(a)n tsˈan ʐ 爲 c 爲
427. tsˈ(a)n tsˈan ʐ 餐 c 餐
428. tsˈ(a)n dzˈan ʐ 殘 s 漲
429. sˈ(a)n san ʐ 隣 s 飽 c 散 (81, 115b)
430. sˈ(a)n san ʐ 頃 s 潛 c 潛

82 For ʐ read ʂ. 83 For ʐ read ʂ. 84 For ʐ read ʂ.
| 431. | h(a)n | han | 早 | 漢 |
| 432. | r(a)n | ran | 早 | 翰 |
| 433. | -(a)n | an | 安 | 按 |
| 434. | -(a)n | xan | 殷 | 愈 |
| 435. | j(a)n | jan | 眼 | 漣 |
| 436. | l(a)n | lan | 燒 | 燜 |

| 437. | ㄑn | ㄑn | 玩 | 玩 |
| 438. | ㄑn | kɔn | 官 | 官 |
| 439. | k’qn | k’ɔn | 宽 | 款 |
| 440. | dqn | tɔn | 端 | 短 |
| 441. | t’qn | t’ɔn | 湛 | 象 |
| 442. | tqn | dɔn | 圍 | 断 |
| 443. | nqn | nɔn | 暖 | 悄 |
| 444. | bqn | bɔn | 鍵 | 哨 |
| 445. | p’qn | p’ɔn | 潘 | 判 |
| 446. | pqn | bon | 漪 | 伴 |
| 447. | mqn | mɔn | 漬 | 溃 |
| 448. | dzqn | tsɔn | 鑿 | 鑿 |
| 449. | ts’qn | ts’ɔn | 湳 | 湳 |
| 450. | tsqn | dzɔn | 攘 | 攘 |
| 451. | sqn | sɔn | 酸 | 算 |
| 452. | hqn | hɔn | 歡 | 喚 |
| 453. | γqn | γɔn | 槅 | 緂 |
| 454. | •qn | •ɔn | 蜻 | 换 |
| 455. | lqn | lɔn | 鳴 | 卯 |

| 456. | ĝu(a)n | k̂uan | 間 | 慣 |
| 457. | dẑu(a)n | tʂûan | 足 | 篱 |
| 458. | tʂ’u(a)n | tʂ’ûan | | 篱 |
| 459. | tʂ̂u(a)n | dẑûan | 篇 | 篇 |
| 460. | r̄u(a)n | r̄ûn | 還 | 蝮 |
| 461. | •u(a)n | •ûn | 隆 | 節 |
9. *hsien-yün* 先韻

| 466. | gen | kən | p操 | s謇 | c建 |
| 467. | k'ən | k'ən | p怨 | s頹 | c謨 |
| 468. | kən | gen | p乾 | s件 | c健 |
| 469. | ən | ən | p言 | s喩 | c彥 |
| 470. | den | ən | p願 | s典 | c殿 |
| 471. | t'en | t'en | p天 | s騰 | c顕 |
| 472. | ten | den | p田 | s臻 | c電 |
| 473. | nen | nen | p季 | s燃 | c現 |
| 474. | dzen | tshen | p遜 | s騫 |
| 475. | tshen | dzen | p織 |
| 476. | pen | ben | p縑 | s繃 | c卞 |
| 477. | men | men | p瞼 | s繇 | c麊 |
| 478. | tsen | dzen | p前 | s踐 | c苒 |
| 479. | zen | zen | p次 | s義 |
| 480. | shen | shen | p錠 | s鍔 | c籍 |
| 481. | jen | jen | p延 | s演 | c衍 |
| 482. | len | len | p蓮 | s葺 | c繽 |
| 483. | fen | fen | p然 | s繡 |

| 484. | gen | ken | p堅 | s覊 | c見 |
| 485. | k'en | k'en | p牽 | s進 | c倪 |
| 486. | dzen | tshen | p鍾 | s鈈 | c戰 |
| 487. | t's'en | t's'en | p礦 | s闇 | c砲 |
| 488. | ben | pen | p邊 | s綾 | c變 |
| 489. | p'en | p'en | p編 | s鴞 | c片 |
| 490. | dzen | tsen | p繚 | s織 | c繃 |

For 亻 read 亼.
491. ts’en  ts’en  p千  s浅  c.ibm
492. sen  sen  p先  s銑  c.pi
493. şen  şen  p驪  c肩
494. hen  hen  p軒  s德  c獻
495. • en  • en  p焉  s僊  c壑
496. • jen  xen  p煙  c宴

497. gůen  kūen  p涓  s叭  c眼
498. k’āen  k’ūen  p犬
499. kūen  gůen  p權  s囲  c倦
500. dzüen  tsüen  p專  s轉  c聾
501. ts’üen  ts’üen  p穿  s卒  c釱
502. tsüen  dzüen  p舩  s絮  c傳
503. dzüen  tsüen  p錦
504. ts’üen  ts’üen  p詁
505. tsüen  dzüen  p McCl  s僑
506. süen  sōen  p宜  s選  c選
507. züen  züen  p旋  c渇
508. shüen  šüen  p邂
509. hüen  hüen  p鴻  s環  c約
510. füen  füen  p玄  s泫  c縣
511. • ūen  ūen  p鷃  s婉  c怨
512. yüen  yüen  p元  s阮  c願
513. • jüen  xüen  p涓  s龜  c鎧
514. jüen  jüen  p沿  s兗  c緣
515. füen  füen  p壕  s模

516. gōen  kōen  p捱  s箝  cᐉ
517. k’eōn  k’ōen  p鵁  s縝  c効
518. leōn  lōen  p犠  s犃  c簌

519. šēn  šīen  p賢  s瞑  c見

(90-91, 117b-118a)
10. *hsiao-yün* 蕭韻

<table>
<thead>
<tr>
<th>No.</th>
<th>Pinyin</th>
<th>Character</th>
<th>Meanings</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>520</td>
<td>g(a)w</td>
<td>kaw</td>
<td>P高 s 翱 c 𥁨 j(k)各</td>
<td>(92, 118a)</td>
</tr>
<tr>
<td>521</td>
<td>k'(a)w</td>
<td>k'aw</td>
<td>s 考 c 𥁨 j(k)愕</td>
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<tr>
<td>522</td>
<td>b(a)w</td>
<td>𤀋aw</td>
<td>P 敗 c 𥁨 j(k)啀</td>
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<tr>
<td>523</td>
<td>d(a)w</td>
<td>taw</td>
<td>P 刀 s 倒 c 到</td>
<td>j(k)許</td>
</tr>
<tr>
<td>524</td>
<td>t'(a)w</td>
<td>t'aw</td>
<td>P 鶯 s 討 c 𥁨 j(k)託</td>
<td></td>
</tr>
<tr>
<td>525</td>
<td>t(a)w</td>
<td>daw</td>
<td>P 陶 s 道 c 𥁨 j(k)釋</td>
<td>(92-93, 118a-b)</td>
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<tr>
<td>526</td>
<td>n(a)w</td>
<td>naw</td>
<td>P 𪬀 s 脳 c 𥁨 j(k)諾</td>
<td>(93, 118b)</td>
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<tr>
<td>527</td>
<td>𤂉(a)w</td>
<td>𤂉aw</td>
<td>P 啄 s 爪 c 翱</td>
<td></td>
</tr>
<tr>
<td>528</td>
<td>𤂉'(a)w</td>
<td>𤂉'aw</td>
<td>P 抄 s 炒</td>
<td></td>
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<tr>
<td>529</td>
<td>𤂉(a)w</td>
<td>𤂉aw</td>
<td>P 莪 c 𥁨</td>
<td></td>
</tr>
<tr>
<td>530</td>
<td>b(a)w</td>
<td>paw</td>
<td>P 類 s 禰 c 報 j(k)愳</td>
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</tr>
<tr>
<td>531</td>
<td>p'(a)w</td>
<td>p'aw</td>
<td>P 戂 c 𥁨 j(k)繳</td>
<td></td>
</tr>
<tr>
<td>532</td>
<td>p(a)w</td>
<td>baw</td>
<td>P 𠊺 s 鮑 c 𥁨 j(k)_opacity</td>
<td>(94, 118b)</td>
</tr>
<tr>
<td>533</td>
<td>m(a)w</td>
<td>maw</td>
<td>P 毛 s 𥁨 c 幕 j(k)寜</td>
<td></td>
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<tr>
<td>534</td>
<td>𤂉(a)w</td>
<td>𤂉aw</td>
<td>P 紮</td>
<td>j(k)繩</td>
</tr>
<tr>
<td>535</td>
<td>𤂉(a)w</td>
<td>𤂉aw</td>
<td>P 糟 s 騔</td>
<td>c 𥁨 j(k)作</td>
</tr>
<tr>
<td>536</td>
<td>ts'(a)w</td>
<td>ts'aw</td>
<td>P 稽 s 草 c 操 j(k)錯</td>
<td></td>
</tr>
<tr>
<td>537</td>
<td>ts(a)w</td>
<td>dzaw</td>
<td>P 曹 s 𨸞 c 清 j(k)偽 (94-95, 118b-119a)</td>
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<tr>
<td>538</td>
<td>s(a)w</td>
<td>saw</td>
<td>P 𨸞 s 嫂 c 𥁨 j(k)索</td>
<td>(95, 119a)</td>
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<tr>
<td>539</td>
<td>샨(a)w</td>
<td>垃aw</td>
<td>P 粉</td>
<td>c 粉</td>
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<tr>
<td>540</td>
<td>h(a)w</td>
<td>haw</td>
<td>P 高 s 好 c 耗</td>
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</tr>
<tr>
<td>541</td>
<td>𤒐(a)w</td>
<td>𤒐aw</td>
<td>P 豪 s 𨸞 c 𥁨 j(k)湄</td>
<td></td>
</tr>
<tr>
<td>542</td>
<td>ㆍ(a)w</td>
<td>ㆍaw</td>
<td>P 𨸞 s 漢 c 賓 j(k)惡</td>
<td></td>
</tr>
<tr>
<td>543</td>
<td>ㆍj(a)w</td>
<td>ㆍjxaw</td>
<td>P 務 s 務 c 𨸞 j(k)湄</td>
<td>(96, 119a)</td>
</tr>
<tr>
<td>544</td>
<td>j(a)w</td>
<td>jaw</td>
<td>P 竀 s 鼜 c 𨸞 j(k)嶽</td>
<td></td>
</tr>
<tr>
<td>545</td>
<td>l(a)w</td>
<td>law</td>
<td>P 勞 s 老 c 𨸞 j(k)落</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Pinyin</th>
<th>Character</th>
<th>Meanings</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>546</td>
<td>gw</td>
<td>kew</td>
<td>P 驕 s 矯</td>
<td>j(k)靉</td>
</tr>
<tr>
<td>547</td>
<td>k'ew</td>
<td>k'e'w</td>
<td>P 穏 j(k)靉</td>
<td></td>
</tr>
<tr>
<td>548</td>
<td>ke'w</td>
<td>gehw</td>
<td>P 窉 c 𥁨 j(k)靉</td>
<td></td>
</tr>
</tbody>
</table>

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66 For 𤂉 read 𤂉.
67 The character 上 (shang-sheng) in the PSPT edition must be corrected to 去 (ch'ü-sheng).

123
<table>
<thead>
<tr>
<th>Page</th>
<th>Contents</th>
</tr>
</thead>
</table>

**脚注** (97, 119b)  
**脚注** (98, 119b)  
**脚注** (99, 120a)  
**脚注** (100, 120a)  

**備考** 124
The character 寶 normally belongs to No. 530 (shang-sheng), but this spelling was used for this character only when written on Imperial treasure. In Chinese 'Phags-pa documents, • in the intervocalic position occurs only in this character. In the Mongolian documents, ' • in intervocalic position served to indicate a hiatus between two adjacent vowels belonging to two separated syllables' (Poppe, *The Mongolian Monuments* ..., p. 23). The only interpretation of this spelling of *ba-o* is that people in the Yuan court pronounced *paw* very clearly to distinguish it from ordinary *paw*, thus resulting in *pao*. The Mongolians then denoted this as *pa-o* in the Mongolian way.
| 第600. k’iw  | k’iw | P邱 | s 糯 | (103, 121a) |
| 第601. kiw  | giw | P表 | s 舅 | c 舊 |
| 第602. giw  | giw | P牛 | s 有 | c 有 |
| 第603. ḭʒiw | ḭʒiw | P射 | s 射 | c 畫 |
| 第604. ḭʂ’iw | ḭʂ’iw | P抽 | s 丑 | c 畜 |
| 第605. ḭʂiw | ḭʂiw | P射 | s 射 |
| 第606. ŋiw  | ŋiw  | P網 | s 網 | c 綾 |
| 第607. biw  | piw  | P彫 |
| 第608. miw  | miw  | P繆 | c 謀 |
| 第609. ḭʒiw | ḭʒiw | P啾 | s 酒 | c 做 |
| 第610. ḭʂ’iw | ḭʂ’iw | s 秋 |
| 第611. tsiw | tsiw | P豔 | c 輪 |
| 第612. siw  | siw  | P糀 | c 秀 |
| 第613. ziw  | ziw  | P囚 | c 袖 |
| 第614. ʂiw | ʂiw | P看 | s 首 | c 狩 |
| 第615. ʂiw | ʂiw | P綿 | s 受 | c 授 |
| 第616. hiw | hiw | s 吼 | c 蘇 |
| 第617. ɬiw | ɬiw | P僕 | s 厚 | c 僕 | (104-105, 121a-b) |
| 第618. ɬiw | ɬiw | P僕 |
| 第619. ɬiw | ɬiw | P幽 | s 黝 | c 幼 |
| 第620. jiw  | jiw  | P獻 | s 西 | c 習 |
| 第621. liw  | liw  | P劯 | s 柳 | c 洛 |
| 第622. ɬiw | ɬiw | P柔 | s 蹂 | c 蹂 |

| 第623. buw | puw | s 捖 |
| 第624. p’uw | p’uw | s 劾 | c 仆 | (106, 121b) |
| 第625. puw | buw | P衰 | s 部 |
| 第626. muw | muw | s 母 | c 茂 |
| 第627. Ṽuwp | Ṽuwp | P不 | s 斧 | c 副 |
| 第628. kuw  | kuw  | P謀 |

| 第629. ghiw | kσw | P鉤 | s 菓 | c 資 |

89 For 阝 read  阝90 For  阝 read  阝91 For the character 去 (ch’u-sheng) read  上 (shang-sheng).
630. k'hiw   k'ow  P 弘  s 口  c 宸  
631. dhiw   dšw  s 頜  
632. t'hiw   t'sw  P 偷  s 鳥  c 透  
633. thiw   dšw  P 頭  c 豆  
634. džhiw   tššw  P 箭  s 覆  c 翳  
635. tššhiw   tšš'ow  P 箭  s 驅  c 翳  
636. tššhiw   tšš'ow  P 箭  s 驅  c 翳  
637. tššhiw   tšš'ow  P 箭  c 翳  
638. zhiw   zšw  P 愈  c 驅  
639. džhiw   tššw  P 箭  s 走  c 走  
640. ts'hiw   ts'ow  s 遊  c 檔  
641. ts'hiw   ts'ow  s 遊  c 檔  
642. ts'hiw   ts'ow  s 遊  c 檔  
643. ts'hiw   ts'ow  s 遊  c 檔  
644. ts'hiw   ts'ow  s 遊  c 磚  
645. ts'hiw   ts'ow  s 遊  c 磚  
646. geiw   keiw  P 蠓  s 糧  
647. keiw   geiw  P 蠓  s 糧  
648. heiw   heiw  P 休  s 朽  c 熱  
649. heiw   heiw  P 休  s 朽  c 熱  

12. t'an-yün 單韻

650. g(a)m   kam  P 甘  s 感  c 頓  
651. k'(a)m   k'am  P 亜  s 甘  c 勸  
652. d(a)m   tam  P 矛  s 尋  c 擔  
653. t'(a)m   t'am  P 釁  s 釁  c �🐻  
654. t(a)m   dam  P 盪  s 稔  c 聳  
655. n(a)m   nam  P 南  
656. dšz(a)m₂ tš'am  s 斬  c 熊  
657. tš'(a)m   tš'am  P 擎  s 擎  c 擎  
658. tš'(a)m   tš'am  P 擎  s 擎  c 擎  

For ≡ (MKH) read ≡.
<table>
<thead>
<tr>
<th>No.</th>
<th>Character</th>
<th>Meaning</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>659.</td>
<td>hu(a)m</td>
<td>fam</td>
<td>c 汐</td>
</tr>
<tr>
<td>660.</td>
<td>fju(a)m</td>
<td>vam</td>
<td>p 凡 s 范 c 森</td>
</tr>
<tr>
<td>661.</td>
<td>w(a)m</td>
<td>wam</td>
<td>s 鋸</td>
</tr>
<tr>
<td>662.</td>
<td>dz(a)m</td>
<td>tsam</td>
<td>p 春 s 畿</td>
</tr>
<tr>
<td>663.</td>
<td>ta'a(m)</td>
<td>ts'am</td>
<td>p 参 s 慈</td>
</tr>
<tr>
<td>664.</td>
<td>ts(a)m</td>
<td>dzam</td>
<td>p 鷺 s 剃 c 嵯</td>
</tr>
<tr>
<td>665.</td>
<td>s(a)m</td>
<td>sam</td>
<td>p 鮫 s 縱 c 三</td>
</tr>
<tr>
<td>666.</td>
<td>š(a)m</td>
<td>šam</td>
<td>p 鐾 s 蘇 c 錵</td>
</tr>
<tr>
<td>667.</td>
<td>h(a)m</td>
<td>ham</td>
<td>p 應 s 喊</td>
</tr>
<tr>
<td>668.</td>
<td>r(a)m</td>
<td>ram</td>
<td>p 盤 s 頦 c 感</td>
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<tr>
<td>669.</td>
<td>•(a)m</td>
<td>•am</td>
<td>p 謹 s 喪 c 暗</td>
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<tr>
<td>670.</td>
<td>•j(a)m</td>
<td>xam</td>
<td>s 點</td>
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<td>671.</td>
<td>j(a)m</td>
<td>jam</td>
<td>p 花 s 點</td>
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<tr>
<td>672.</td>
<td>l(a)m</td>
<td>lam</td>
<td>p 畏 s 壇 c 濤</td>
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</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Character</th>
<th>Meaning</th>
<th>Example</th>
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</thead>
<tbody>
<tr>
<td>673.</td>
<td>gem</td>
<td>kem</td>
<td>s 檢 c 劍</td>
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<tr>
<td>674.</td>
<td>k'ėm</td>
<td>k'ėm</td>
<td>c 欠</td>
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<td>675.</td>
<td>kem</td>
<td>gėm</td>
<td>p 笠 s 儉</td>
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<td>ńem</td>
<td>ńem</td>
<td>p 嚴 s 嚴 c 庫</td>
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<tr>
<td>677.</td>
<td>dem</td>
<td>tem</td>
<td>s 點 c 店</td>
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<tr>
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<td>t'em</td>
<td>t'em</td>
<td>p 添 s 添 c 植</td>
</tr>
<tr>
<td>679.</td>
<td>tem</td>
<td>dem</td>
<td>p 甜 s 萬 c 萬</td>
</tr>
<tr>
<td>680.</td>
<td>nem</td>
<td>nem</td>
<td>p 餑 c 念</td>
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<tr>
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<td>ńšėm</td>
<td>p 愧 s 懷 c 愛</td>
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<tr>
<td>682.</td>
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<td>ńš'ėm</td>
<td>p 晌 s 謹 c 蹟</td>
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<tr>
<td>683.</td>
<td>įėm</td>
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<td>p 點</td>
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<td>684.</td>
<td>bėm</td>
<td>pėm</td>
<td>p 贊 s 贊 c 窄</td>
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<tr>
<td>685.</td>
<td>dzėm</td>
<td>tėm</td>
<td>p 尖 c 僧</td>
</tr>
<tr>
<td>686.</td>
<td>ts'ėm</td>
<td>ts'ėm</td>
<td>p 棄 s 慎 c 慣</td>
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<tr>
<td>687.</td>
<td>šėm</td>
<td>šėm</td>
<td>p 葫 s 峽 c 閃</td>
</tr>
<tr>
<td>688.</td>
<td>žėm</td>
<td>žėm</td>
<td>p 拔 s 剃 c 勝</td>
</tr>
<tr>
<td>689.</td>
<td>zėm</td>
<td>zėm</td>
<td>p 拔 s 剃 c 勝</td>
</tr>
</tbody>
</table>

93 For 未 (PSPT) read 未.
94 For 未 read 未.
95 For 未 read 未.
96 For 未 (MKJ) and 未 (PSPT) read 未.
690. •em •em    p淹  s淹  c淹
691. ñem ñem    p熅  s熅  c熅
692. ñem ñem    p熊  s熊  c熊
693. •em 97 ñem    p額  s再  c染

694. gem    kem    p兼
695. k‘em    k‘em    p譸  s譸  c譸 (114, 123b)
696. tsem    dzem    p濁  s濁
697. jem    xem    p懸  s懸  c懸

698. gî(a)m    kîam    p緖  s緖  c緖
699. k‘î(a)m    k‘îam    s緖
700. hî(a)m    hîam    s喊
701. ñî(a)m    ñîam    p戚  s譆  c譆

702. htem    htem    p秝  s險
703. ñtem 98 ñtem    p嫌

13. ch’in-yün  侵韻
704. gim    kim    p金  s錦  c禁 (115, 124a)
705. k‘im    ki‘m    p欽
706. kim    gim    p琴  s聽  c聆
707. ñim    ñim    p聆
708. ñçim    ñṣim    p긩  s聴  c聞
709. ñṣ‘im    ñṣ‘im    p聴  s聴  c聞
710. ñṣim    ñçim    p頴  s聴  c聞
711. ñîm    ñîm    c嘆
712. bim    pim    s禮
713. p’im 99 p’im    s品
714. ñçim    tsim    p棌  s浸  c浸 (116, 124a)
715. ts’im    ts’im    p侵  s浸  c浸
716. sim    sim    p心  c沁
717. zim    zim    p尋

97 For ㎜ read ㎜.
98 Hattori makes this as ㎜, but this must be identical with ñem.
99 For ㄹ read ㄹ.
718. 造 造 造 深 s 沈 造
719. 造 造 造 養 s 甚 c 菊
720. • 造 • 造 養 s 飲 c 隘
721. • 造 造 造 s 慎
722. 造 造 造 深 造
723. 造 造 造 林 s 廳
724. 造 造 造 任 s 在 c 宅（117, 124b）

25. 造 造 造 深 c 閏
26. 造 造 造 林 c 閏
27. 造 造 造 岑 c 閏
28. 造 造 造 深 c 閏

29. 造 造 造 深 造

14. 造 造 造 深 造

19. 造 造 造 深 造

30. 造 造 造 深 造

725. 造 造 造 深 c 閏
726. 造 造 造 林 c 閏
727. 造 造 造 林 c 閏
728. 造 造 造 深 c 閏

29. 造 造 造 深 造

30. 造 造 造 深 造

19. 造 造 造 深 造

101 For 象 read 象

101 For 象 read 象

130
747. düo  tāo  s  j(t) 捕
748. t'ūo  t'ūo  p  c  j(t) 佩
749. tōo  dǎo  s  c  j(t) 貋
750. nūo  nūo  p  c  j(t) 貍
751. būo  pōo  p  j(t) 透
752. p'ūo  p'ūo  p  c  j(t) 透
753. pāo  bāo  p  j(t) 蹿
754. mūo  mūo  p  j(t) 末
755. dzūo  tsāo  p  j(t) 坐
756. ts'ūo  ts'ūo  s  j(t) 坐
757. tsāo  dzūo  p  j(t) 坐
758. sūo  sūo  p  j(t) 坐
759. hūo  s  j(t) 話
760. rūo  rūo  p  j(t) 盪
761. rūo  rūo  j(t) 盪
762. lūo  lūo  j(t) 將
763. o  o  j(t) 洞
764. ge  ke  j(tp) 伽
765. k'e  k'e  j(tp) 竦
766. de  te  j(tp) 鐵
767. t'e  t'e  j(tp) 鐵
768. ne  ne  j(t) 涅
769. dze  tše  s  c  j(tp) 哲
770. ts'e  tš'e  s  j(t) 撄
771. be  pe  j(t) 彈
772. p'e  p'e  j(t) 旅
773. me  me  j(t) 萃
774. dze  tse  s  j(tp) 姬
775. ts'e  ts'e  s  j(tp) 旅
776. se  s  j(tp) 居

102 For 門 read 門.
103 For 作 read 作.
104 For 佳 read 佳.
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<td>777.</td>
<td>ʂe&lt;sup&gt;105&lt;/sup&gt;</td>
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<sup>105</sup> For ʂ read ʂ.  
<sup>106</sup> For ʃ read ʃ.  
<sup>107</sup> The *PSPT* edition lacks the 'Phags-pa spelling of this sound.  
<sup>108</sup> For ʁ read ʁ.  
<sup>109</sup> For ʁ read ʁ.
805. zuē zuē j(t) 蜥
806. shē shē j(t) 説
807. zūe zūe j(t) 吻
808. hūe hūe j(t) 血
809. hūe hūe j(t) 穴 (127, 127a)
810. .üe .üe j(t) 扶
811. .jüe .jüe j(t) 月
812. jüe jüe j(t) 悦
813. lüe lüe j(t) 劣
814. füe füe j(t) 飞

SUPPLEMENT 111

S1. d(a) ta a打 j(tp) 但答
S2. t'(a) t'a j(tp) 閥豆鋸楣
S3. t(a) da j(tp) 達杏鞠
S4. n(a) na P犭 j(tp) 猊納廘
S5. dš(a) ĉša P棳חלק s卜 c咲咲 j(tp) 咳ねぇ
S6. tš'a P又 s扮 c訖泬 j(tp) 察剎重
S7. ts(a) dša P棳柈 s柈 c乍 j(tp) 萬燭
S8. b(a) pa P巴 s把 c霜 j(t) 八
S9. p'(a) p'a P葩 c葩 j(t) 柘
S10. p(a) ba P柏 c柏罫 j(t) 拔
S11. m(a) ma P廕 s廕 c戸 j(t) 閏栢
S12. hǐ(a) fa j(t) 髪
S13. fǐ(a) va j(t) 伐

111 For 未 read 末.

111 The manuscript of the MKTY held in the British Museum lacks the last two final groups -a and -e. A supplement was written by Cheng Tsai-fa with reference to the KYC (MKTY ken ken Pa-ssu-pa-tzu yu-kuan te yün-shu, pp. 102-3). I will append his supplement in full for the convenience of readers.
S14. w(a) wa j(t) 隻
S15. dz(a) tsa j(tp) 拉市挟壓
S16. ts'(a) ts'a j(t) 擊
S17. ts(a) dza j(tp) 境
S18. s(a) sa j(tp) 隆
S19. s(a) sa j(tp) 隊
S20. h(a) ha s 間
S21. j(a) xa j(tp) 車******/
S22. j(a) ja p 太 s 雅 c 雅
S23. l(a) la j(tp) 羅拉▧
S24. ge k£ p 參 j(tp) 許胡掲子
S25. k'e k'£ s 咫 j(tp) 稀笑
S26. ke ge P繁 j(tp) 竄賀傑
S27. he ge P繁 j(tp) 黙輝業繁鐵
S28. te de j(tp) 銜
S29. tse dz£ c 蛇 j(tp) 腦嚕舌
S30. tse dz£ c 藤 j(t) 廬別
S31. tse dz£ c 藤 j(p) 捷
S32. ze ze s 邪 s 鬧 c 謝 j(p) 捷
S33. xe xe s 鬧 c 社 j(tp) 逝折
S34. he he j(t) 竊
S35. je je s 野 c 夜 j(tp) 著掲

112 For issue (ibid., p. 103) read 甘.
APPENDIX

'PHAGS-PA MATERIALS

Many 'Phags-pa materials are now available for research in the Chinese, Mongolian, and Tibetan languages. The following list of 'Phags-pa materials is classified into these three languages and is further divided according to provenance, e.g. inscriptions, seals, coins.

Each item is described as follows: title, (1) date, (2) size, (3) place of discovery, (4) present location and (5) reproductions (* decipherments).

Much 'Phags-pa material must be either unknown or inaccessible, and the author welcomes any further information on this subject.

(A) 'PHAGS-PA MATERIALS IN CHINESE

I. Inscriptions

1. *Edict of the Shen-yii-miao Shrine at Lung-men* 龍門神焉廟聖旨碑
   (1) 1275, (2) 1.24m. x 0.73m., (3) Shensi, Han-ch'eng, (4) Peking University, (5) E. Chavannes, 'Inscriptions et pièces de chancellerie chinoises de l'époque mongole', *TP*, IX (1908), pp. 373-6, plate 18; *PSPT*, p. 32, plate 4.

2. *Edict of the Ch'ung-yang Wan-shou-kung Shrine at Ching-chao-lu* 京兆路重陽萬壽宮聖旨碑
   (1) 1269, (2) 2.07m. x 1.67m., (3) Shensi, Chou-chih, (4) Peking University, (5) *PSPT*, pp. 32-3, plate 5.

3. *Edict of Grant to Pei-yiieh* 加封北嶽聖旨碑
   (1) 1291, (2) 1.29m. x 0.58m., (3) Hopei, Ch'ü-yang, (4) Peking University, (5) *PSPT*, p. 33, plate 6.

4. *Edict of the School of the Confucian Shrine* 孔子廟學聖旨碑
   (1) 1294, (2) 1.34m. x 0.86m., (4) Peking University, (5) *PSPT*, p. 33, plate 7.

5. *Ditto*
   (1) 1294, (2) 2.89m. x 1.14m., (4) Peking University, (5) *PSPT*, p. 33, plate 8.

6. *Proclamation of Posthumous Grant to Confucius* 加封孔子制
7. *Ditto*  
(1) 1307, (2) 2.10 m. × 0.81 m., (3) Shantung, Ch'ü-fu, (4) Peking University, (5) *PSPT*, p. 34, plate 10; Kadokawa Shoten (ed.), *Sekai Bunkashi Taikei*, vol. XVII (Tokyo, 1959), p. 148.

8. *Ditto*  
(1) 1307, (2) 1.21 m. × 0.61 m., (3) Hopei, Ting-hsien, (4) Peking University, (5) *PSPT*, p. 34, plate 11.

9. *Proclamation of Special Posthumous Award to Cheng*  
(1) 1308, (2) 1.27 m. × 0.66 m., (3) Shansi, Yang-ch'eng, (4) Peking University, (5) *PSPT*, p. 34, plate 12.

10. *Ditto*  
(1) 1312, (2) 1.42 m. × 0.76 m., (3) Shansi, Yang-ch'eng, (4) Peking University, (5) *PSPT*, p. 34, plate 13.

11. *Edict of the Ta-ch'ung-yang Wan-shou-kung Shrine at Feng-t'ien-lu*  
(1) 1313, (2) 2.36 m. × 1.14 m., (3) Shensi, Chou-chih, (4) Peking University, (5) *PSPT*, pp. 34–5, plate 14.

12. *Proclamation of Posthumous Grant to Mencius' Parents*  
(1) 1316, (2) 2.64 m. × 0.86 m., (3) Shantung, Tsou-hsien, (4) Peking University, (5) R. Bonaparte, *Documents de l'époque des XIIIe et XIVe siècles...*, plate XIII, 1; Chavannes, op.cit., pp. 342–5, plate 10; *PSPT*, p. 35, plate 15.

13. *Proclamation of Posthumous Grant to Mencius*  
(1) 1331, (2) 2.48 m. × 0.91 m., (3) Shantung, Tsou-hsien, (4) Peking University, (5) Bonaparte, *ibid.*, plate XIII, 2; Chavannes, *ibid.*, pp. 345–7, plate 11; *PSPT*, p. 35, plate 16.

14. *Proclamation of Posthumous Grant to Yen-kuo Fu-sheng-kung and his Wife*  
(1) 1331, (2) 2.31 m. × 0.96 m., (3) Shantung, Ch'ü-fu, (4) Peking University, (5) Chavannes, *ibid.*, pp. 329–30, 340–2, plate 5; *PSPT*, p. 35, plate 17.
15. *Proclamation of Posthumous Grant to Yen-tzu's Parents* 加封顏子父母制
(1) 1334, (2) 1.82m. x 0.73m., (3) Shantung, Ch'ü-fu, (4) Peking University, (5) Chavannes, ibid., pp. 338-40, plate 9; *PSPT*, p. 35, plate 18.

16. *Edict of the Ta-ch'ung-yang Wan-shou-kung Shrine at Feng-t'ien-lu* 奉天路大重陽萬壽宮聖旨碑
(1) 1358, (2) 2.13m. x 0.99m., (3) Shensi, Chou-chih, (4) Peking University, (5) *PSPT*, p. 35, plate 19.

17. *Ditto*
(1) 1333, (2) 1.70m. x 0.85m., (3) Shensi, Chou-chih, (4) Peking University, (5) *PSPT*, pp. 35-6, plate 20.

18. *Record of the Reconstruction of the Ch'ung-ch'ing-yüan* 重修崇慶院記
(1) 1289, (2) 2.74m. x 0.94m., (3) Shantung, Tzu-yang, (4) Peking University, (5) *PSPT*, p. 36, plate 21.

19. *Record of the Confucian School at Chung-shan-fu* 中山府儒學記
(1) 1234, (2) 1.44m. x 0.68m., (3) Hopei, Ting-hsien, (4) Peking University, (5) *PSPT*, p. 36, plate 22 [two words are illegible].

20. *Dedication Stele to General Liu I* 武略將軍遼州知州劉義神道碑
(1) 1300, (2) 1.34m. x 0.71m., (3) Shansi, Liao-chou, (4) Peking University, (5) *PSPT*, p. 36, plate 23.

21. *Proclamation of Posthumous Grant to Confucius* 加封孔子制
(1) 1307, (2) 1.37m. x 0.63m., (3) Kiangsu, Wu-hsi, (4) Peking University, (5) *PSPT*, p. 36, plate 24.

22. *Stele of Ling-chi Chao-yu Hsien-sheng-wang* 靈濟昭佑顯聖王碑
(1) 1350, (2) 1.65m. x 0.71m., (3) Honan, Meng-hsien, (4) Peking University, (5) *PSPT*, p. 36, plate 25.

23. *Stele of Ancestors of the Chang family* 張氏先靈碑
(1) 1335, (2) 3.83m. x 1.39m., (3) Inner Mongolia, Ch'iih-feng, (4) Peking University, (5) F.W. Cleaves, 'The Sino-Mongolian inscription of 1335 in memory of Chang Ying-ju', *HJAS*, XIII (1950), plates XVII, XVIII, XXIV, XXX; *PSPT*, pp. 36-7, plate 26.

24. *Edict of the Tung-p'ing-hsiieh School* 東平學聖旨碑
(1) 1294, (2) 2.23m. x 0.87m., (3) Shantung, Tung-p'ing, (4) Peking University, (5) *PSPT*, p. 37, plate 27.
25. *Edict of the School of the Confucian Shrine* 孔子廟學聖旨碑
(1) 1294, (2) 1.90 m. × 1.05 m., (3) Kiangsu, Sung-chiang, (4) Peking University, (5) G. Pauthier, ‘De l’alphabet de Pa’sse-pa, ...’, *JA*, V, 19 (1862), plate facing p. 5; *PSPT*, p. 37, plate 28.

26. *Edict of Grant to Tung-an-wang* 增封東安王詔書碑
(1) 1298, (2) 2.76 m. × 0.97 m., (3) Shantung, Lin-ch’ü, (4) Peking University, (5) *PSPT*, p. 37, plate 29.

27. *Edict of Exemption from Labour Service of “hsiu-ts’ai” in Chiang-huai* 江淮免秀才雜差役詔書碑
(1) 1288, (5) Bonaparte, op. cit., plate XII, 2; *PSPT*, plate 30.

28. *Stele of a Christian* (1)
(1) 1311, (2) 0.45 m. × 0.30 m., (3) Fukien, Chuan-chow, (5) Wu Wen-liang, *Ch’üan-chou Tsung-chiao Shih-k’o*, p. 33, plate 85; Kadokawa Shoten, op. cit., p. 159.

29. *Ditto* (2)
(1) 1324, (2) 0.34 m. × 0.31 m., (3) Fukien, Chuan-chow, (5) Wu Wen-liang, ibid., pp. 33-4, plate 86 (rubbing reproduction on p. 83).

30. *Ditto* (3)
(2) 0.42 m. × 0.28 m., (3) Fukien, Chuan-chow, (5) Wu Wen-liang, ibid., p. 34, plate 87.

II. Seals

31. *T’ai-wei chih yin* 太尉之印
(1) 1377, (5) *Hsi-ch’ing hsü-chien* 西清續鑑（甲編）; *PSPT*, p. 19, fig. 1.

32. *Lung-chen-wei pai-hu chih yin* 隆鎮衡百戶之印
(5) *Tung-pei ku-yin kou-ch’en* 東北古印鈐流; *PSPT*, p. 20, fig. 20.

33. *Meng-ku-chüan pai-hu yin* 蒙古軍百戶印
(1) 1295, (2) 6.5 cm², (5) *W. Simon, ‘A Phags-pa seal of 1295’, AM*, n. s. VI (1958), pp. 203-5, plates I, II.

34. *Huai-ning-wang yin* 懷寧王印

35. *Ta-Yüan ti-shih t’ung-ling chu-kuo seng-ni chung-hsing Shih-chiao chih*
36. **Chung-shu-li-pi** [read -pu] chih yin 中書禮部之印

(1) 1306, (5) Seal stamped on the *Proclamation of 1306*. See Chavannes, op. cit., plate 2; Poppe, *The Mongolian Monuments in the ḤP'ags-pa Script*, plate VI; *Haarh, ibid., p. 60, fig. 3. [Haarh mistakenly deciphered this as *Chung-shu-ling pi-chih-yin* 中書令印.]

37. **Chung-shu-sheng yin** 中書省印


38. **Tsung-pa chih yin** 總把之印


39. **Tsung-pa chih yin** 總把之印


40. **Hsiao-chung-i Ch'ien-hu so-t'i ya-yin 頭忠義千戶所提押印

(2) 5.8cm², (3) Inner Mongolia, O-t'o-k'e ch'i, (5)*WW, 182(1965;), p. 62.

41. Seal (illegible) stamped on the *Edict of Annanda* (1) 1283, (5) Bonaparte, op. cit., plate XII, 1; Poppe, op.cit., plate V.

III. **P'ai-tzu**

42. **Kai-kuan ching-lü** 賢官旌閭 (?)


139
IV. Bank-notes

43. Chih-yüan pao-ch’ao 至元寶鈔
(1) 1294, (4) Academia Sinica (Peking) and Asiatic Museum (Leningrad), (5) *PSPT, pp. 24–5, plates 1, 2; Kadokawa Shoten, op. cit., pp. 175–6.

44. Chung-wen Yüan-pao, chiao-ch’ao 中紋元寶, 交鈔

V. Coins

45. Ta-Yüan t’ung-pao 大元通寶

46. Chih-yüan t’ung-pao 至元通寶 (1)
(5) Bonaparte, op. cit., p. 5, plate XV, 2; *PSPT, pp. 25–7, fig. 5 (right).

47. Chih-yüan t’ung-pao 至元通寶 (2) (with four inscriptions in Chinese, ‘Phags-pa, Hsi-hsia and Persian)

48. Chih-cheng t’ung-pao 至正通寶

VI. Balances

49. (?)-chin-p’ing □斤秤
(1) 1300 and 1321, (4) Lu Ho-chiu, (5) *PSPT, p. 28, plate 3.

VII. Texts of the Po-chia-hsing 百家姓

50. Po-chia-hsing
(1) 1340 (ed.), (4) Peking University, (5) PSPT, pp. 57–67.

51. Po-chia-hsing
of the Royal Asiatic Society, V (1855), pp. 110-8, 4 plates.

52. Po-chia-hsing
   (1) 1699 (ed.), (4) Library of the Academia Sinica (Peking), (5) PSPT, pp. 69-82.

53. Po-chia-hsing.

VIII. Texts of the Meng-ku Tzu-yün 蒙古字韻

54. Meng-ku Tzu-yün

(B) 'PHAGS-PA MATERIALS IN MONGOLIAN

I. Inscriptions

55. The Edict of Mangala
   (1) 1276, (5) Chavannes, op. cit., pp. 376-81, plate 19; * Poppe, op. cit., pp. 46-7, plate I [Chinese text is in Ts'ai Mei-piao, Yüan-tai Pai-hua-pei Chi-lu, No. 23].

56. The Edict of Buyantu Qan
   (1) 1314, (5) Chao Han, Shih-mo Chüan-hua (Chih-pu-tsu-chai Ts'ung-shu ed.) vol. 6, pp. 11b-14b.; * von der Gabelentz, 'Versuch über eine alte mogolische Inschrift', ZKM, II, 1 (1839), pp. 4-13, Tables I, III; * Wylie, 'Sur une inscription mongole...'; JA, V, 19 (1862), reproduction facing p. 465; Bonaparte, op. cit., plate XII, 3; * Devéria, 'Notes d'épigraphie mongole-chinoise', JA, IX, 7-8 (1896), pp. 94-128; Chavannes, ibid. TP, II, 5 (1904), pp. 422-6; * Lewicki, Les inscriptions mongoles inédites en écriture carrée, pp. 20-3; * Poppe, ibid., pp. 48-50, plate II.

57. The Edict of Buyantu Qan
   (1) 1314, (2) Honan, An-yang, (5) Chavannes, ibid., TP, IX (1908), pp.
407-3, plate 24; *Poppe, ibid., pp. 51-3, plate III; Ts'ai Mei-piao, op. cit., p. 67, plate 4.

58. *The Edict of Dharmapāla's Widow
(1) 1321, (4) Oriental Library of the Leningrad University, (5) A.A. Bobrovnikov, 'Gramoty vdovy Darmabalovoj i Bujantu-Xana, pisannyja kvadratnym' pis'mon', TVOIRAO, XVI (1872) [not seen]; *Poppe, ibid., pp. 54-5, plate IV; Simon, op. cit., p. 205, plate III (b) [only the top of this epigraph]; *Haarh, op. cit., p. 60, fig. 4 [only the top of this epigraph].

59. *The Edict of Ananda
(1) 1283, (5) Bonaparte, op.cit., plate XII, 1; *Poppe, ibid., pp. 56-7, plate V.

60. *The Proclamation
(1) 1306, (5) Chavannes, op.cit., pp. 320-3, plate 2; *Poppe, ibid., p. 57, plate VI.

61. *The Proclamation
(1) 1307, (5) Chavannes, ibid., pp. 323-4, plate 3; Cheng Tsai-fa, op. cit., plate 6 [The 'Phags-pa inscription of this epigraph is exactly the same as item 57.]

62. *The Proclamation
(1) 1294, (5) Chavannes, ibid., pp. 325-9, plate 4 [The inscription is also exactly the same as item 57.]

63. *The Proclamation
(1) 1365 (or 1377), (2) 0.82m. x 0.64m., (3) Shansi Province, Shan-pi-shan, Hsüan-chung-ssu Temple, (4) ditto, (5) *Ozawa, 'Sansei-shō Kōjō-ken Sekiheki-zen Genchū-ji no Pasupamoji Mokogo hibun no kaidoku,' Tōkyō Gaikokugo Daigaku Ronshū, 9 (1962), pp. 9-33+1 plate.

64. *The Chū-yung-kuan Inscription 居庸關碑文

142
65. The Edict of Kuang-kuo-ssu Temple
(1) 1318, (3) Shensi, Ko-yang-hsien, (5) Chavannes, op. cit., plate XXV; * Yamasaki, '1318 nen no Pasupaji Mōkogo hibun kaidoku', *GK, 26/27 (1954), pp. 111-9 (reproduction is on p. 113); Cheng Tsai-fa, op. cit., plates 4, 5 (illegible).

66. The Edict of the Ch'ung-yang-kung at Chou-chih

67. Ditto

68. Ditto
(1) 1352, (3) Shensi, Chou-chih, (4) Ethnological Museum of Berlin, (5) * Haenisch, ibid., pp. 60-1, 65-6, plate III.

II. Seals

69. Seal of NomÖi mergen mkhan-po
(2) $1\frac{5}{16}$ in. square, (3) Darjeeling, (4) Forbes-Tweedie (?), (5) * Clauson, 'A Mongolo-Tibetan seal', *JRAS*, 1929, pp. 117-9, [The last line is written in Tibetan.].

70. Seal of Galdan Boshogutu

III. P'ai-tzu

71. The Minusinsk p'ai-tzu
(3) Minusinsk, (4) The Hermitage Museum (Leningrad), (5) Yule, *The Book of Ser Marco Polo*, I, plate facing p. 352; Yanai, op.cit., plate facing p. 894; Haneda, op. cit., fig. 1; *Poppe, op. cit., p. 57, plate VII.

72. The Nyuki p'ai-tzu
(3) Nyuki, (4) The Hermitage Museum, (5) * Poppe, ibid., p. 58, plate VIII.

73. The Bogotol p'ai-tzu
(3) Bogotol, (5) A. M. Pozdnejev, 'Ob'jasnenie drevnej mongol'skoj
nadpisi na čugunnoj doščecky, dostavlennoj v Imp. Akad. Nauk' G. Vinokurovym', ZIAN, 39 (1881) [not seen]; Haneda, ibid., fig. 6, pp. 113–4; *Poppe, ibid., p. 53, plate IX.; Kadokawa Shoten, op. cit., p. 172.

74. The Mongolian-Persian-Chinese p'ai-tzu

(3) near Peking, (4) Institute of Oriental Studies of the Academy of Sciences of the USSR, (5) Haneda, ibid., fig 5; *Poppe, ibid., p. 58, plate X.; Kadokawa Shoten, ibid., p. 172.

IV. Documents

75. The Edict of Hai-ning-wang 海寧王詔


76. Fragment of the Subhāṣṭaratdanidhi (= The Mannerheim Fragment)


77. Ditto (2)

(5) Carter, The Invention of Printing in China and its Spread Westward, plate facing p. 120; *Aalto, 'A second fragment of the Subhāṣṭaratdanidhi', JSFOu, LVII, 5 (1954), pp. 1–6;

78. The Turfan fragment


(C) 'PHAGS-PA MATERIALS IN TIBETAN

I. Seals

79. Seal of Dalai Lama (1)


80. Seal of Dalai Lama (2)

81. *Seal of Rnam-rgyal*
(5)*Francke, ‘Note on the Dalai Lama’s seal...’, p. 1206, fig. 4.

82. *Seal of Prime Minister (1)*

83. *Seal of Prime Minister (2)*
(5)*Walsh, ibid., pp. 7–8.

84. *Seal of The Tibetan Council of Ministers*
(5)*Walsh, ibid., p. 9, fig. 6.

85. *Seal of Bka'-blon Bla-ma*
(5)*Walsh, ibid., pp. 9–10, fig. 8.

86. *Seal of Tsogs-'du dud-pa*
(5)*Walsh, ibid., pp. 9–10, fig. 7.

87. *Seal of Rjon-dpon (1), (2)*
(5)*Walsh, ibid., pp. 10–11, fig. 9.

88. *Seal of the Abbot of the Gyantse Monastery*
(5)*Walsh, ibid., p. 11.

89. *Seal of the Tibet Joint Trade Agent at Gyantse*
(5)*Walsh, ibid., pp. 11–12.

90. *Seal of the Kyab-dpin*
(5) Walsh, ibid., p. 12, fig. 10 (indecipherable).

91. *Private Seal of Dalai Lama*
(5) Walsh, ibid., pp. 4–5, fig. 3 (indecipherable)

92. *Seal of the 'Bras-spuñ Monastery*
(5)*Walsh, ibid., p. 15.

93. *Seal of Sera Monastery*
(5)*Walsh, ibid., p. 15 (partly illegible).

94. *Seal of Dga'-ldan Monastery*
(5)*Walsh, ibid., p. 15.

95. *Seal of Dalai Lama (3)*
96. Smaller Seal of the Regent of Lhasa
   (1) 1741, (5) Walsh, ibid., p. 469 (illegible).

97. Larger Seal of the Regent Lhasa
   (1) 1741, (5) Walsh, ibid., p. 470 (indecipherable).

98. Seal of Bhutan

99. Seal of Nomći mergen mkhan-po
   [see item 69.]

100. Seal of Qan Olan-a erγugdegsen

II. Block-prints

101. Rgya-dkar-nag rgya-ser ka-smi-ra bal bod hor-gyi yi-ge dan dpe-ris rnam-grais man-ba, fols. 14a, 14b, 15a
   (1) early nineteenth century (?), (3) printed in Peking, (4) National Library of Germany (Berlin); Library of the Hungary Academy of Sciences (Budapest); The Australian National University Library (Canberra); Sakai Collection (Kōyasan); Nagao Collection (Kyōto); Asiatic Museum (Leningrad); Lokesh Chandra Collection (New Delhi); Library of the Oriental Institute, Czechoslovakian Academy of Sciences (Prague), (5) Das, ‘The sacred and ornamental characters of Tibet’, JASB, LVII (1888), plates V (b), (e), VII, No. 1; *Francke, ‘Note of the Dalai Lama’s seal...’, p. 1205; *Nakano, ‘Rgya-dkar-nag...ni tsuite ...’, THG, 36 (1958) pp. 149-134, plate. ; Nakano, ‘On the Rgya-dkar-nag... and some remarks on the ’Phags-pa script’, Indo-Asian Studies, part 3 (1971) pp. 1-16, plâte.

102. A ’Phags-pa specimen
   (4) E. Teramoto, (5) Teramoto, Chibetlogo Bunpō, the 3rd plate after the title page; W. Simon, op. cit., plate III (c).

   (D) ’PHAGS-PA MATERIALS IN OTHER LANGUAGES

I. Sanskrit

103. Epigraph of Mo-kao-k’u 莫高窟碑 (The Thousand Buddhas in Tun-huang)
(3) Kansu, Tun-huang, (4) Academia Sinica (Taipei), (5) Hsieh Chih-liu, Tung-huang I-shu Hsü-lu (Shanghai, 1955), plate 1; P'an Hsieh-tzu, Tun-huang Mo-kao-k'u I-shu (Shanghai, 1957), p. 24; Kadokawa Shoten, op. cit., p. 181; Cheng Tsai-fa, op. cit., plate I. [This epigraph is written in the six scripts: Laṅkāsa, Tibetan, Uighur, 'Phags-pa, Hsi-hsia and Chinese. The dhāraṇī of this epigraph can be read as Om maṇi padme hūṃ].
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I. **A Biography of Bla-ma 'Phags-pa.**


[Chinese tr. of the *Erdeni-yin Tobat*]


'GOS-LO-TSA-BA GŽON-NU-DPAL, Bod-kyi yul-du chos dan chos-smra-ba ji-ltar byuin-ba'i rim-pa Deb-ther sñon-po, or in short Deb-ther sñon-po. See Roerich, below.

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b) SHIH-YÜAN Tsung-chu 釋源宗主, 'Ti-shih Tien-pei 帝師殿碑', ibid., fasc. 22 (Taishö, XLIX, 732-3).


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POSTSCRIPT

After this monograph had been completed, a number of articles became available. Particularly important ones are as follows:


Farquhar provides a number of materials of Phags-pa seals. His figure 20 is, as he says, especially of interest 'for being the only known text in a Turkic language written with the Phags-pa script' (p. 388). In 'Appendix: Phags-pa Materials' above, I have listed only one item written in a language other than Chinese, Mongolian, and Tibetan. Thus the Phags-pa Turkic seal is now to be added to my list as new material with some other Phags-pa Chinese seals introduced by Farquhar.

I was also unable to consult Hashimoto's article, although it is listed in my bibliography. It deals in great details with alternation between voiced and voiceless initial consonants in Phags-pa Chinese documents, which I have also treated in Chapter III. I have tried to clarify the puzzle of the alternation from a viewpoint of phonological opposition; on the other hand Hashimoto bases his argument on a much more exhaustive phonetical viewpoint.

Pulleyblank deals with the value of the letters e and o, the representation of the 'muddy' initials, and the initials ying, yü and i, some of which are also mentioned in my paper.

As to Krueger, I wrote a commentary on his reading of The Great Seal of Galdan Boshogtu Khan, stamped on the letter to the Russian
Czar from the Oirat Khan, Galdan in 1691. It is expected to be published in CAJ, XIII, 1 (1971). As regards 'Phags-pa Chinese seals, I have also re-examined E. Haarh’s reading of three 'Phags-pa Chinese seals. My article entitled ‘Three 'Phags-pa Seal Inscriptions — Re-examination of Dr. E. Haarh’s Readings’, will be published in AM, XVI, 1 (1971), pp. 96-101.

I regret I was unable to revise this monograph after referring to these articles.

After finishing this monograph, I wrote a small book on the same subject for general readers, Sabaku ni uzumoreta Moji — Pasupamoji no Hanashi — 砂漠に埋れた文字— バスパ文字のはなし— (Script buried in Desert : A Story of the 'Phags-pa Script) soon to be published in Japan. In this book, I have advanced or abandoned some of the ideas in this monograph; in particular I have dealt historically with the social roles of the 'Phags-pa script amongst Mongolian and Chinese bureaucrats in the Yuan court and the meaning of the ‘returning’ of the 'Phags-pa script to Tibet.

Sapporo, April, 1971

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