A Linguistic Study on the Four Editions of Bāijiā xìng 百家姓 in hP’ags-pa Script

Sicheng Wang
University of Massachusetts Amherst

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A Linguistic Study on the Four Editions of 百家姓 in hP’ags-pa Script

A Thesis Presented

by

SICHENG WANG

Submitted to the Graduate School of the University of Massachusetts Amherst in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

May 2017

Chinese
A Linguistic Study on the Four Editions of Bǎijiā xìng 百家姓

in hP’ags-pa Script

A Thesis Presented

By

SICHENG WANG

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To my grandmother, Xiǎo-lín Lù
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First and foremost, I gratefully acknowledge my advisor, Professor Zhongwei Shen, who I would more like to call “Shen Laoshi”. He helped me come up with the thesis topic and gave me lots of insightful suggestions through the road to finish this thesis. His detailed comments, warm encouragements and thoughtful guidance have greatly influenced the development of this work. Without Shen Laoshi, I would not have the opportunity to do research in this area. I am extremely lucky to have an advisor who cares so much about students and who responded to my questions and queries so promptly. I hope that I could be a researcher as enthusiastic, energetic, smart and highly effective as Shen Laoshi and to someday be able to help students as well as he can.

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Thanks to my teachers at Nanjing University, who led me into the world of Chinese linguistics and encouraged me to go abroad. I owe a great gratitude especially to Professor Yang Shen and Professor Lizhong Chen.

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ABSTRACT

A LINGUISTIC STUDY ON THE FOUR EDITIONS OF BAIJIA XING

百家姓 IN HP’AGS-PA SCRIPT

MAY 2017

SICHENG WANG, B.A., JILIN UNIVERSITY

M.A., NANJING UNIVERSITY

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Directed by: Professor Zhongwei Shen

The hP’ags-pa script was created in the late 13th century (the early Yuan dynasty) which was intended to transliterate all the languages of the Mongol empire such as Tibetan, Uyghur and Chinese into a single writing system. Among all the Chinese hP’ags-pa materials, the primer Bāijiā xìng 百家姓 [Surnames of the Hundred Families] (BJX) offered us extensive hP’ags-pa syllables and their corresponding Chinese characters.

The BJX in hP’ags-pa script has four editions that are currently known to scholars. A careful comparison and examination of the four editions of the BJX text reveals three main types of errors in hP’ags-pa syllables: (1) The misuse of similar-looking letters; (2) Pure clerical errors; and (3) Errors in the transliteration of variant pronunciations. The variant transliterations in the C edition provide some clues to sound changes, including (1) The devoicing of voiced stops and
fricatives and (2) The loss of the bilabial nasal coda [m]. Aside from the variant transliterations, the majority of errors are purely graphic and reflect a lack of knowledge about the writing system.

An examination of the use of the hP’ags-pa script in the BJX text suggests several potential reasons for the failure of the script to come into common use. These include: (1) A misconception of the nature of the hP’ags-pa writing system; (2) An ineffective learning approach; (3) The discrepancy of phonological categories and phonetic values; and (4) The non-adaptability to the Chinese language.
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CHAPTER 1

INTRODUCTION

Among the varieties of typologies of script that exist in the world, Chinese is a logographic writing system (Norman 1988, Daniel 1996). In Chinese, a character represents the basic semantic unit morpheme instead of the basic phonological unit (Shen 2008). Hence, even though many scholars have done elaborate research of historical written documents, such as rhyme words, rhyme dictionaries and rhyme tables, they have only garnered categorical information instead of phonetic information. Scholars have to use the method of reconstruction to infer the phonetic values of Chinese.

Fortunately, there is a written resource that can provide phonetically transparent information for Chinese linguistic research. The hP’ags-pa script offers significant value for the Chinese historical linguistic research, especially the Chinese phonology, because of its alpha-syllabic nature.\footnote{Leonard W.J. van der Kuijp classified the hP’ags-pa script into alpha-syllabic in the book The World’s Writing Systems, edited by Peter T. Daniels and William Bright.}

During the reign of Yuan dynasty, the emperor Qubilai hoped for a new script that could be used to transcribe all the languages of his empire, such as Tibetan, Uyghur, and Sanskrit (Leonard 1996). Thus, the hP’ags-pa script was created. This was the first time Chinese was systematically transcribed into an alphabetic system (Shen 2008).

Among all the Chinese hP’ags-pa materials, the primer Bāijiā xìng 百家姓 [Surnames of
the Hundred Families] (BJX) is the extant earliest systematic printed work\(^2\). Hence, BJX provides us a unique value. On one hand, this work offers us extensive hP’ags-pa script; on the other hand, the hP’ags-pa syllables had its corresponding Chinese characters in the BJX, which is very helpful for us in studying the phonetic values of those characters.

With such an advantage, the value of the primer BJX in hP’ags-pa script should be stressed. Not only can the alpha-syllabic nature of the hP’ags-pa script provide us with a brand-new perspective to understanding the Chinese historical phonetics; this material can also lead to new discovery about script promulgation, language policy, and the cognition of different writing systems.

### 1.1 hP’ags-pa Script

The hP’ags-pa script was created by hP’ags-pa Lama (1235–1280), a Tibetan scholar in the late 13th century who assisted Qubilai Khan (1215–1294) in the early Yuan dynasty. The script was completed and issued in 1269 (Coblin 2007, Shen 2008) and was originally called Ménggû xīn zì 蒙古新字, “new Mongol characters,” or simply guó zì 國字, “national script,” as opposed to the old Uighur script. The Mongols called it dörbeljin üsüg, or “square script” (Leonard 1996). It was intended to transliterate all the languages of the Mongol empire\(^3\) (Coblin 2007). However, its use during the Yuan dynasty was sporadic (Leonard 1996). Documents surviving in it include

\(^2\) Other materials, such as monument inscriptions, seals, currency, coins, badges of rank, and forms from Buddhist Sutras, are rather scant and far less than systematic (Coblin 2007). As for the most important book, The *Mengu Ziyun* 蒙古字韻 [A Mongolia script rhyme dictionary] (MGZY), the printed copy was lost in the early Qing time, and only hand-written copies can be seen today (Shen 2008).

\(^3\) In Chinese: 譯寫一切文字.
epigraphic material, official tablets, official or private seals, and some printed texts. The script was used throughout the Yuan period for about a hundred years and abandoned with the collapse of Yuan. It only remains in use in the Tibetan culture as an ornamental script and on seals of ranking dignitaries and religious hierarchs (Leonard 1996).

As an alpha-syllabic writing system, the hP’ags-pa script combines the orthographic principals of both an alphabet and of syllabary writings (Shen 2008). In syllabary writing, the initial letter represents an entire syllable. Even if there is no initial consonant, a “dummy” letter for zero initial must be shown. Similarly, in hP’ags-pa script, an initial letter represents a CV (consonant + vowel) syllable with a default vowel [a]. The single vowel syllable [a] is spelled with a zero initial. But the other vowels [i] [u] [e] [o] must be presented by vowel letters. Those letters cannot stand for a whole syllable and have to be used with a dummy initial letter. The syllabic features of the hP’ags-pa script were inherited from the Tibetan script (Shen 2008). The hP’ags-pa script is written vertically (top to bottom) in columns from right to left, similar to the Uighur script.

We can find the listing of hP’ags-pa letters in two books, Shūshī huìyào 書史會要 [Essentials of the History of the Written Chinese] (SSHY), first published in 1376 by Tào Zōngyí 陶宗儀; and the Fǎshū kāo 法書考 [Studies of Calligraphic Models] (FSK), first published in 1334 by Shèng Xīmíng 盛煥明 (Shen 2008). The calligraphic examples and the corresponding Chinese characters for the pronunciation are provided in those two books. The following table lists those letters, along with Chinese transcription characters.
Table 1: hP’ags-pa Letters and Chinese Transcription Characters

<table>
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<tr>
<td>hP.</td>
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<td>དྷ</td>
<td>ན</td>
<td>ཕ</td>
<td>བ</td>
<td>དྷ</td>
<td>བ</td>
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<tr>
<td>Ch.</td>
<td>葛</td>
<td>涅</td>
<td>—</td>
<td>誐</td>
<td>者</td>
<td>車</td>
<td>遮</td>
<td>倪</td>
<td>恒</td>
<td>捽</td>
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<tr>
<td>hP.</td>
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<tr>
<td>Ch.</td>
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<td>末</td>
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<td>掂</td>
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<td>བ</td>
<td>དྷ</td>
<td>བ</td>
</tr>
<tr>
<td>Ch.</td>
<td>法</td>
<td>惡</td>
<td>也</td>
<td>高</td>
<td>耶</td>
<td>—</td>
<td>—</td>
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<td>話</td>
<td>啞</td>
<td>伊</td>
<td>郎</td>
<td>頰</td>
<td>污</td>
<td>遐</td>
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From the table above, we can observe that the order of the hP’ags-pa letters is based on the Tibetan letters (Shen 2008). Letters from #42 to #45 are for Chinese only. Each of these four

---

4 “hP.” stands for the hP’ags-pa script.
5 “Ch.” stands for Chinese transcription character.
letters is a graphic modification of its corresponding letters #37, #27, #29, #24 (Shen 2008).

The Chinese hP’ags-pa script materials can be found in various resources, such as official or private seals, coins, bank notes, and edicts in the Yuan dynasty (Coblin 2007). However, the hP’ags-pa scripts in those resources are limited and not systematic. The most complete hP’ags-pa scripts are presented in the book *Ménggū zìyùn 蒙古字韻* [A Mongolian Script Rhyme Dictionary] (MGZY), but we can only see the hand-written copies today because of the loss of the printed copy in Qing dynasty. Extensive hP’ags-pa scripts can be also found in the primer BJX. BJX in hPa’gs-pa script is the earliest systematic printed Chinese hP’ags-pa script material extant. The value of this material is still not fully explored. BJX in hP’ags-pa script not only offers us ample information about Chinese phonology, but also it can provide more insight into the history and movement of Chinese Romanization. I will carefully examine this material in this thesis.

1.2 Surnames of the Hundred Families (*Bǎijiā xìng 百家姓*)

The primer *Bǎijiā xìng 百家姓*, [Surnames of the Hundred Families] (BJX), in hP’ags-pa script is preserved in a popular encyclopedia *Shilin Guangji 事林廣記* [Comprehensive Record of Affairs] (SLGJ). The BJX in hP’ags-pa script has four editions that are currently known to scholars (Luo and Cai 1959, Junast 1981, Junast 2003, Coblin 2007, Chen 2014). I will discuss
the detailed information of those four editions in the second chapter (Materials and Methodologies).

Before we move to study of the BJX in hP’ags-pa script, let us talk a little more about the BJX Chinese version. The BJX Chinese version was composed in the early Song dynasty (during the 10th century) by anonymous authors. Usually, Bai means “hundred.” However, in this book title, Bai means “many.” Thus, Bāijīā xìng 百家姓 does not mean that the exact number of surnames is one hundred, but it refers to all the common Chinese family names at that time. This book was used for teaching children to recognize Chinese characters and was written out in quadri-syllabic rhyming couplets to facilitate memorization. The exact number of embodied surnames in the BJX Chinese version varies from one edition to another, but those BJX Chinese editions are all composed of two parts: single-character surnames and double-character surnames. The following lists the beginning part of the BJX text:

Text: “趙錢孫李，周吳鄭王”

Pinyin: zhào, qián, sūn, lǐ; zhōu, wū, zhèng, wáng.

The first four single-character surnames are “趙、錢、孫、李” in all Chinese editions. The order of the surnames is not in accord with the actual population. The first surname Zhao 趙 zhào is the surname of the Song dynasty emperor. The next several surnames also have relationship with other important families at that time.

The BJX in hP’ags-pa script was issued in Yuan dynasty. The purpose of this document
was to promulgate this new script. As seen in the preface of two BJX editions\(^6\) in hP’ags-pa script, “if you can become proficient in this text at an early stage, you will find it to be a shortcut to a career as an official.”\(^7\)

Like the BJX Chinese version, the BJX in hP’ags-pa script also lists those common single-character and double-character Chinese family names, and the double-character surnames occur after single-character surnames. The difference is that the primer BJX in hP’ags-pa script provides both hP’ags-pa syllables and their Chinese equivalents. I show some examples below.

In terms of single-character surnames, I use the first four surnames “趙、錢、孫、李” as examples. For the double-character surnames, I use “万俟、司馬” as examples.

(1) Single-character surnames

(2) Double-character surnames

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\(^6\) The two editions refer to the Yuan edition published by Chunzhuang Shuyuan 椿莊書院 during the Zhishun 至順 period (1330–1333) and the Yuan edition published by Ji Cheng Tang 積誠堂 in the sixth year of Zhiyuan 至元 (1340).

\(^7\) In Chinese: 初學能復熟此篇，亦可以為入仕之捷徑云.
As we can see from above, (1) lists the first four single-character surnames 趙 zhào、錢 qián、孫 sūn、李 lǐ，and (2) lists two double-character surnames 万俟 mò qì and 司馬 sī mǎ。For either single-character surname or double-character surname, the top part is the hP’ags-pa syllable, and the bottom part is the corresponding Chinese surname.

Although the BJX Chinese version was composed about four centuries earlier than the BJX in hP’ags-pa script, it is a remarkable fact that the BJX in hP’ags-pa script (the edition published by the Chunzhuang Shuyuan 椿莊書院 during 1330-1333) is the oldest BJX edition in existence among all the editions, since the BJX Chinese version published in Song dynasty has been lost (Wang 2015). The BJX in hP’ags-pa script offered more than 400 surnames with their corresponding hP’ags-pa syllables in total.

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8 The pictures of 趙 zhào、錢 qián、孫 sūn、李 lǐ are from the Yuan edition published by Ji Cheng Tang 積誠堂 in the year of 1340.

9 The pictures of 万俟 mò qì and 司馬 sī mǎ are from the Yuan edition published by Ji Cheng Tang 積誠堂 in the year of 1340.

10 The exact figure varies from one edition to another. The comparison of the number of surnames embodied in different editions will be given in Chapter 2.
1.3 Brief Review of the BJX in hP’ags-pa Script Studies

This thesis focuses on the study of the four editions of BJX in hP’ags-pa script, so in this section, I give a brief review of the literature in this field. Detailed information about the four editions is given in Chapter Two. Here, I discuss scholarly studies on the BJX in hP’ags-pa script.

Soviet linguist Alexander Dragunov (1930) mentions the BJX in hP’ags-pa script in his work, *The hP’ags-pa Script and Ancient Mandarin*. In the preface, he explains the materials he used in his research but does not recognize the value of the BJX in hP’ags-pa script because he considers the hP’ags-pa letters in this kind of material to be unclear and inaccurate. Only when using the corresponding Chinese characters and inscriptions in other materials as a reference can scholars explain the hP’ags-pa scripts in this material. It is true that, at the time, there was not a satisfactory version of the text that he could obtain. Junast (1981) points out that Dragunov’s (1930) opinion of the BJX in hP’ags-pa script was based on the version preserved in *Bai Bian* 稗编 (BB) by Tang Shunzhi 唐順之. The hP’ags-pa script in this work indeed is unreliable and illegible. Only approximately thirty hP’ags-pa syllables (less than ten percent of all the hP’ags-pa syllables in BJX) are completely or relatively accurate. Dragunov (1930) does note the existence of the BJX in hP’ags-pa script and suggests that it could offer information for later studies. Although his book does not emphasize the value of this material, he attempts to fit the hP’ags-pa script spelling of Chinese into a credible linguistic context (Denlinger 1963).

Hungarian scholar Louis Ligeti (1956) made a significant contribution to the study of BJX in hP’ags-pa script. His article “Le Pe Kia sing en Écriture ‘phags-pa” includes a facsimile of the BJX text entitled *Bai Jia Xing Menggu Wen* 百家姓蒙古文, which has provided other scholars
with access to a relatively good version of the BJX text. It is worth noting that the phrase *Menggu Wen* 蒙古文 in the title refers to the hP’ags-pa script rather than Mongolian script.

Ligeti (1956) undertakes a critical examination of the text and provides a transcription and editorial notes comparing it to earlier works by Dragunov (1930). Ligeti (1956) thought the facsimile he received from Mikinosuke Ishida 石田幹之助 was the Japanese edition published in the twelfth year of Genroku (元祿),\(^{11}\) although it clearly is not the Genroku edition (Junast 1981, Cai 1959). Cai Meibiao (1959) believed that the edition provided by Ligeti (1956) was from the Cabinet Library of Japan 日本内阁文库, while Junast (1981, 2003) thought that it was from the Seikado Bunko Art Museum 日本静嘉堂文库, which preserved the edition published by Cuiyan Jingshe 翠岩精舍 in the year of 1418. Ligeti’s (1956) article made it possible for scholars to work with the BJX corpus.

Following Ligeti’s (1956) study, Luo Changpei 羅常培 and Cai Meibiao 蔡美彪 (1959), working in mainland China, published their book *Basiba zi yu Yuan dai Han yu: (zi liao hui bian)* 八思巴字與元代漢語（資料彙編）[*The hP’ags-pa Script and Chinese in the Yuan Dynasty: Compilation of Materials*]. In the second chapter of this book, they discuss various

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\(^{11}\) Genroku (元祿) is the name a Japanese era from the ninth month of 1688 through the third month of 1704. The twelfth year of Genroku is 1699 CE.
versions of *Shi Lin Guang Ji* 事林廣記 [*Comprehensive Record of Affairs*] (SLGJ)\(^{12}\), in which different editions of the BJX in hP’ags-pa script text are recorded. Luo and Cai (1959) give a detailed comparison to the Ji Cheng Tang 積誠堂 edition\(^{13}\) preserved in the Peking University Library and the Japanese edition of 1699 based on a now-lost Yuan edition. The comparison of those two editions focuses on their volume numbers, titles, prefaces, format, and errors. Based on their analysis of the errors in those two editions, Luo and Cai (1959) consider the Ji Cheng Tang 積誠堂 edition to be much more reliable than the Japanese edition of 1699, which was compiled much later than when the hP’ags-pa script was created. Although its editors lacked knowledge of this writing system and made numerous errors, the Japanese edition of 1699 can still offer some useful information for scholars. Photographic reproductions of two editions are provided in the book *Basiba zi yu Yuan dai Han yu: (zi liao hui bian) 八思巴字與元代漢語（資料彙編）* [*The hP’ags-pa Script and Chinese in the Yuan Dynasty: Compilation of Materials*], and Luo and Cai’s (1959) work offers a useful collection of materials. They meticulously compare and collocate two editions of the BJX in hP’ags-pa script, forming a foundation for later work.

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\(^{12}\) *Shi Lin Guang Ji* 事林廣記 [*Comprehensive Record of Affairs*] is a popular encyclopedia compiled in the late Song-early Yuan era by scholar Chen Yuanjing 陳元靚. The book includes a map of the territory of the Yuan dynasty, the county of the Yuan dynasty, the official Yuan system and currency, and family names in hP’ags-pa script. This book also has illustrations showing daily life, which is a historical first.

\(^{13}\) The Ji Cheng Tang 積誠堂 edition is a Yuan edition published by Ji Cheng Tang 積誠堂 in the year 1340. We give detailed information about this edition in the second chapter.
Junast (1981, 2003) is another important scholar who has made recent significant contributions to the study of the BJX in hP’ags-pa script. In his article Basiba zi baijiaxing jiaokan 八思巴百家姓校勘 [“The Collation of the BJX Text in hP’ags-pa Script”], Junast (1981) compares and comments on the quality of the four available editions of the BJX in hP’ags-pa script. He considers the two Yuan editions\(^ {14} \) published by Chunzhuang Shuyuan 椿莊書院 (1330–1333) and Ji Cheng Tang 積誠堂 (1340) to be the two best editions because they have fewer errors and almost the same errors. The Ming edition published by Cuiyan Jingshe 翠巖精舍 in 1418 has better quality than the Japanese edition of 1699, which has relatively poor quality and more than 110 errors. Junast (1981) points out all writing errors and makes critical corrections to the Ji Cheng Tang 積誠堂 and Cuiyan Jingshe 翠巖精舍 editions. He provides an index of all the surnames by initials, which facilitates retrieval. Photocopies of those two editions are attached as appendices. This work is a milestone in the study of the BJX in hP’ags-pa script because it compares all four known editions and identifies and corrects graphic errors in two editions, consulting the hP’ags-pa writings in Menggu ziyun 蒙古字韻 [A Mongolian Script Rhyme Dictionary] (MGZY)\(^ {15} \). Junast (1981) also gives the Latin transliterations of all the family names which appear in the four editions. Junast (2003) published a updated work Xin bian Yuan

\(^ {14} \) Detailed information about these two editions is given in Chapter Two.

\(^ {15} \) Menggu ziyun 蒙古字韻 [A Mongolian Script Rhyme Dictionary] (MGZY) is a rhyme book. The Yuan court attempted to develop an orthography for Chinese in the newly invented v hP’ags-pa script. This book can be used to learn the hP’ags-pa spellings of Chinese characters and possibly conversely to understand the Chinese characters represented in hP’ags-pa spellings.
A New Critical Edition of hP’ags-pa Script BJX], which could supplant his older critical version of Basiba zi baijiaxing jiaokan 八思巴字百家姓校勘 [The Collation of BJX Text in hP’ags-pa script]. This newest book includes the research results of his earlier work in 1981 and supplements it the standard hP’ags-pa scripts for each surname. In short, Junast’s (1981, 2003) work is the most thorough research on the BJX in hP’ags-pa script. His work (1981, 2003) is an index for further studies.

In addition to those studies which treat the BJX in hP’ags-pa script as a whole, Chen Xinhai 陳鑫海 (2014) focuses on a single character and a small question in his article. In the Japanese edition of 1699, the surname Miu 繆 is spelled as muw, which is usually regarded as a variant pronunciation. However, after applying the voice corresponding rules and conducting a comparative literature study, he (2014) categorizes the spelling of the surname Miu 繆 in hP’ags-pa script in the Japanese edition as a clerical error instead of a variant pronunciation.

As we can see, scholars have gradually recognized the value of the BJX in hP’ags-pa script. They have done excellent work, providing facsimiles for four editions, comparing the quality of these editions, correcting their graphic errors, and standardizing the writing of those hP’ags-pa syllables. These research results can facilitate further studies. However, except for Chen’s (2014) analysis of the error type of a single surname, these scholars have not categorized the error types in this material, let alone explained the reason for those errors. They have treated the BJX in hP’ags-pa script as a good document for philological research but have overlooked the value of this material in linguistic research.
1.4 Organization of the Thesis

The aim of this study is to scrutinize and compare the four known editions of the BJX text in hP’ags-pa script. Comparing their differences and analyzing their error types permit examining the relationship between hP’ags-pa script in the BJX text and the actual phonetics at Yuan dynasty. More importantly, this attempt to turn Chinese logographic writing system (Norman 1988, Daniel 1996) into a hP’ags-pa alpha-syllabic writing system (Leonard 1996) proved to be a failure, so it can offer a new perspective to learn about the history of the Chinese Romanization movement. In this thesis, we need to answer four questions:

1. How many kinds of error types are in those hP’ags-pa syllables in the BJX text?
2. Do these errors have a relation to sound changes? Or are these purely graphic errors reflecting a lack of knowledge of the nature of the writing system?
3. Why did this attempt fail? What does the cognition of different writing systems have to do with the script promulgation?
4. What linguistic factors should be addressed to formulate a sound language policy?

This thesis contains five parts. After the introductory chapter, detailed information about the four known BJX editions in hP’ags-pa script is given, and the methodologies used in this study are explained. Chapters three and four present the main body of this study. The transliteration of Chinese initials and finals is carefully compared and studied, and these error types are classified. In chapter five, these error types are discussed, and the reasons for the failure of promulgation suggested. Finally, the main contents of this work are briefly summarized.
CHAPTER 2

MATERIALS AND METHODOLOGY

2.1 Materials

The BJX in hP’ags-pa script were preserved in the 事林廣記 [Comprehensive Record of Affairs] (SLGJ), a popular encyclopedia that was compiled by Chen Yuanjing 陳元靚 in late Song-early Yuan. There are four extant editions of the SLGJ, in which we can find bilingual BJX text - hP’ags-pa script and Chinese (Luo and Cai 1959, Junast 1981, Junast 2003, Chen 2014). Those four editions are as follows:


(C). A Japanese edition, published in the twelfth year of Genroku 元祿 (1699)\(^\text{16}\), which is a

\(^{16}\) Genroku (元祿) is the name a Japanese era from the ninth month of 1688 through the third month of 1704. The twelfth year of Genroku is 1699 CE.
reprint of a Yuan Taiding 泰定 (1325) edition.

(D). An edition that was provided by the Hungarian scholar Louis Ligeti.

As a variety of scholars cannot be sure of the publishing house of the edition provided by Ligeti, these four editions are usually labeled A, B, C, and D. I will refer to them as the A, B, C, and D editions hereafter, according to the convention of the scholars in this field (Junast 1981, Junast 2003, Chen 2014).

2.1.1 The A Edition

The A edition is a Yuan edition that was published by Chunzhuang Shuyuan 椿莊書院 during the Zhishun 至順 period (1330–1333), and was preserved in the National Palace Museum in Taiwan (Luo and Cai 1959, Chen 2014, Wang 2015). A facsimile of the A edition can be found in the appendices of the book Xinbian Yuandai Basiba Zi Bai-Jia-Xing 新編元代八思巴字百家姓 “A new critical edition of BJX”. There is a short preface at the beginning of the text:

蒙古之書，前乎李者之所未覩，近風化，自北而南，新考尚之。蓋自科斗之書廢而篆隸之制作，其後真草之書，雜行于世。今王化近古，風俗還淳。蒙古之李設為專門，初李能復熟此篇，亦可以為入仕之捷徑云。

17 Taiding (泰定) is the name of a Yuan emperor, his reign started from the year of 1324 and ended in the year of 1328. Yuan Taiding edition was produced in the third year 1325.
Mongolian writing is something that had never been seen by scholars before [this dynasty]. Recently the customs and ways of the North have come to the South, and new scholarship thinks highly of it [the new Mongolian writing]. It is the case that after the [archaic] Tadpole style of [Chinese writing] was abandoned, the Seal Script and Official Script forms of writing were devised, which both preserved the ancient forms of ideographs. Only later did the Regular Script and Cursive Script gradually come into use. Now the teachings of the king have an affinity towards the customs and habits of ancient times, and tend away from the pure and uncomplicated. The study of Mongolian [writing] has been established as a special subject, and if you can become proficient in this text at an early stage you will find it to be a shortcut to a career as an official.18

From the last sentence, we can apparently ascertain the original purpose of the BJX text in the hP’ags-pa script: The government wanted to popularize the hP’ags-pa script. It was a helpful tool if one planned to become an official.

The title of the text is Bai-Jia-Xing Menggu Wen百家姓蒙古文 “A Hundred Surnames in the Mongolian script”. However, “Menggu Wen” 蒙古文 stands for the hP’ags-pa script instead of the Mongolian script.

The A edition has eleven pages, which contain seven columns per page, and six characters per column. A total of four hundred and eleven surnames are encompassed, including three hundred and ninety-one single-character and twenty double-character surnames. The text is in a top-to-bottom, right-to-left direction. A photocopy of the A edition can be found in Appendix A.

18 The translation of the preface is from the BableStone website (http://www.babelstone.co.uk/), which is run by the English Sinologist Andrew Christopher West.
2.1.2 The B Edition

The B edition is a Yuan edition that was published by Ji Cheng Tang 積誠堂 in the sixth year of the reign of Zhiyuan 至元 (1340), and preserved in Peking University Library (Luo and Cai 1959, Chen 2014, Wang 2015). A facsimile of the B edition can be found in the book Ba si ba zi yu yuan dai han yu [Zi liao hui bian] 八思巴字與元代漢語（資料彙編） “The hP’ags-pa Script and Chinese in the Yuan Dynasty (Materials Compilation)”. The preface of the B edition is the same as the A edition, emphasizing that the purpose of the BJX text in hP’ags-pa script was to encourage people to learn this new writing system so as to benefit their official career. The title of the B edition is also Bai-Jia-Xing Menggu Wen 百家姓蒙古文 “A Hundred Surnames in the Mongolian script”.

The B edition has nine pages, which contain eight columns per page, and seven characters per column. The number of surnames included in the B edition is the same as that included in the A edition; four hundred and eleven surnames in total, including three hundred and ninety-one single-character and twenty double-character surnames.

We can see that the B edition is fairly similar to the A edition in several aspects. They share the same preface and title, and the single-character and double-character surnames included in those two editions are also the same. The text is also in a top-to-bottom, right-to-left direction. A photocopy of the B edition can be found in Appendix B.
2.1.3 The C Edition

The C edition is a Japanese edition that was published in the twelfth year of Genroku 元禄 (1699), and is a reprint of a Yuan Taiding 泰定 (1325) edition (Luo and Cai 1959, Junast 2003, Chen 2014, Wang 2015). A facsimile can be found in the book He Ke Ben Lei Shu Ji Cheng 和刻本類書集成 Vol.1, published by Shanghai Guji Chubanshe 上海古籍出版社 in 1990. We can also find a photocopy in the book Ba si ba zi yu yuan dai han yu [Zi liao hui bian] 八思巴字與元代漢語（資料彙編） “The hP’ags-pa Script and Chinese in the Yuan Dynasty (Materials Compilation)”.

The preface of the C edition is unique from the other editions, and its content of the preface can be seen below.

古篆之外，世有所見。今得蒙古所篆《百家姓》字，每見一格，皆世所未見者。謹刻次于古篆。揮毫學此，向乎筆走龍蛇矣。

In addition to the ancient Seal Script, there are other [scripts] in the past. Now I have obtained this version of the "Hundred Surnames" written in the Mongolian script – each form is unique and previously unknown. I have carefully engraved [this text] after the section of the ancient Seal Script. Holding the writing bush to learn this script, its brushstrokes are like dragons and snakes (describing the dynamic movement of the brushstrokes).

From the preface, we can ascertain that the text was written by the compiler or editor of Shilin Guangji 事林廣記, rather than being inherited from the original text of the Hundred
Surnames in hP’ags-pa script. The compiler believed that the script was special, and considered this text to be a good example of calligraphy. Since the C edition was compiled far later than the creation of the hP’ags-pa script, people no longer considered it to be a tool or requirement for an official career at that time; the popularization of the hP’ags-pa script had been proved a failure.

The title of the text is *Bai-Jia-Xing* 百家姓 “A Hundred Surnames”, which is also different from that of the other editions.

The C edition has twelve pages, which contain ten columns per page, and four characters per column. A total of four hundred and twenty-seven surnames are encompassed, including four hundred and twelve single-character surnames and fifteen double-character surnames. It has single-character surnames “和, 穆, 蕭, 尹, 姚, 邵, 湧, 汪, 祁, 毛, 禹, 狄, 米, 貝, 明, 藏, 勿, 商, 歸, 避” that are not included in the other three editions. However, the C edition only included 15 double-character surnames, which is five fewer than the other three editions. The double-character surnames “東方, 閭丘, 長孙, 鮮于, and 淳于” were not included in the C edition.

Numerous graphic errors have been found in the C edition (Luo and Cai 1959, Junast 1981, Junast 2003); for example, Junast (2003) alone recognized more than 110 errors. Moreover, of the four extant editions, Junast (2003) believed that the text quality of the C edition was the worst. However, the C edition can still provide us with some useful information (Luo and Cai 1959).

The text is in a top-to-bottom, right-to-left direction. A photocopy of the C edition can be found in Appendix C.
2.1.4 The D Edition

The D edition was provided by Louis Ligeti (1956) in his article “Le Pe Kia sing en Écriture 'phags-pa". Ligeti (1956) stated that the facsimile was from Mikinosuke Ishida 石田幹之助, and he considered it to be the Japanese edition published in the twelfth year of Genroku 元禄 (1699). However, it is apparently not the C edition (Junast 1981). Luo and Cai (1959) believed that it was from the Cabinet Library of Japan 日本内阁文库, while Junast (1981, 2003) and Wang (2015) considered it to be from the Seikado Bunko Art Museum 日本静嘉堂文库, in which the edition published by Cuiyan Jingshe 翠岩精舍 in the year of 1418 was preserved.

The D edition did not contain a preface at the beginning of the text. Its title is Bai-Jia-Xing Menggu Wen 百家姓蒙古文, “A Hundred Surnames in the Mongolian script”, which is identical to the A and B editions.

The D edition has four pages, which contain fourteen columns per page, and nine characters per column. A total of four hundred and twelve surnames are encompassed, including three hundred and ninety-two single-character surnames and twenty double-character surnames. The surnames in the D edition are fairly similar to those in the A and B editions. Compared with the A and B editions, the D edition included one more single-character surname “越”. Below is a photocopy of the D edition.

The text is in a top-to-bottom, right-to-left direction. A photocopy of the D edition can be found in Appendix D.
In summary, the main differences and similarities between the four editions can be observed in the following chart.

Table 2: Main Differences and Similarities between the Four Editions of BJX

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Format</td>
<td>7 columns/p 6 characters/c</td>
<td>8 columns/p 7 characters/c</td>
<td>10 columns/p 4 characters/c</td>
<td>14 columns/p 9 characters/c</td>
</tr>
<tr>
<td>Pages</td>
<td>11</td>
<td>9</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Preface</td>
<td>Same preface as the B edition</td>
<td>Same preface as the A edition</td>
<td>Unique preface</td>
<td>No preface</td>
</tr>
<tr>
<td>Title</td>
<td>百家姓蒙古文</td>
<td>百家姓蒙古文</td>
<td>百家姓</td>
<td>百家姓蒙古文</td>
</tr>
<tr>
<td>Number of single-character surnames</td>
<td>391</td>
<td>391</td>
<td>412</td>
<td>392</td>
</tr>
<tr>
<td>Number of double-character surnames</td>
<td>20</td>
<td>20</td>
<td>15</td>
<td>20</td>
</tr>
</tbody>
</table>

2.2 Methodology

Several scholars (Luo and Cai 1959, Junast 1981, Junast 2003) carried out the amendment work, and found many errors in those four editions. However, the error types and the reasons for

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19 “p” stands for “page”.

20 “c” for “column”.
those errors have not been examined, and we should classify these error types into different categories. Is the error a pure clerical error, or it can be regarded as a variant pronunciation as time changes? If the error, or the difference of transliteration, has a relationship with the sound change, it cannot be overlooked. The transliterations are crucial for us to improve our understanding of the origin of Mandarin phonology. If the error has no relationship to the change of pronunciation, then what is the potential reason for those clerical mistakes?

This thesis will compare the differences among the four editions. The transliteration in the MGZY and MGZYJJ\(^{21}\) will be a frame of reference. Our judging criteria are based on the corrected ḡP’ags-pa spellings in the MGZYJJ. If the spelling of one character in BJX text is the same with the spelling in the MGZYJJ, we regard it as correct, and vice versa.

By comparing the differences and analyzing their error types, we can promote our understanding of several aspects, such as the history of sound change, as well as potential reasons for the failure of the script to come into common use.

CHAPTER 3

THE TRANSLITERATION OF CHINESE INITIAL CONSONANTS

There are three main types of errors in the transliteration of Chinese initial consonants in hP’ags-pa spellings. This includes the misuse of similar-looking letters; although some hP’ags-pa letters look very similar, they represent different phonological units: in the BJX text, many graphic errors were made due to the ignorance of subtle differences. In addition, there are errors that can be classified as pure clerical errors; these errors involve the unintentional addition or omission of a hP’ags-pa letter. Finally, there are errors in the transliteration of variant pronunciations.

Among the three main types of errors, errors in the transliteration of variant pronunciations are the rarest. The majority of errors involve either the misuse of similar-looking letters or pure clerical errors, which together can be categorized as “graphic errors.” Although many hP’ags-pa letters look very similar, they can represent totally different phonological units. Han Chinese people tend to only regard hP’ags-pa scripts in BJX text as a special or representative example of calligraphy, such as is the case with Chinese characters. As a result, many graphic errors have been made to the BJX text.

In this chapter, hP’ags-pa initials will be discussed in the following order: bilabials, labiodentals, alveolar stops, alveolar affricates and fricatives, lateral initials, retroflexes, velars, guttural fricatives, and zero initials.
3.1 The Bilabials

The hP’ags-pa letters 甘, 甘, 甘 and 甘 are used to represent the Chinese bilabial stops. Their corresponding Chinese initials are listed as follows:

Table 3: The Bilabials

<table>
<thead>
<tr>
<th>Initial</th>
<th>bang-mu</th>
<th>pang-mu</th>
<th>bing-mu</th>
<th>ming-mu</th>
</tr>
</thead>
<tbody>
<tr>
<td>hP’ags-pa letter</td>
<td>甘</td>
<td>甘</td>
<td>甘</td>
<td>甘</td>
</tr>
</tbody>
</table>

Errors regarding bilabial initial letters can be categorized into the three main types of errors, which are discussed in the beginning of this chapter. These three types can be further divided into sub-types. These error types are discussed in greater detail below.

(1) The misuse of similar-looking letters:

a. Confusions between 甘 and 甘:

The unaspirated letter 甘 and aspirated letter 甘 are very similar in graphic appearance. Because of the graphic similarity, there are confusions between these two letters in the BJX text.

b. 甘 written as 甘:

The letter 甘 represents the voiceless unaspirated bilabial initial, while the letter 甘 represents the voiced bilabial initial. In Chinese, the voiced stops basically change to their voiceless counterpart diachronically instead of the opposite direction. As a result, replacing 甘
with [symbol] is incorrect. In the C edition, such errors can be observed in the writing of surnames 卜 and 鲍\(^{22}\). In the D edition, such errors can be observed in the writing of surnames 包 and 邦.

Correct: A92  B92  D92  Wrong: C92

Correct: A62  B62  D62  Wrong: C62

Correct: A169  B169  Wrong: D169

Correct: A198  B198  Wrong: D198

c. [symbol] written as [symbol]:

The letter [symbol] represents the voiceless unaspirated bilabial initial, while the letter [symbol] represents the retroflex initial. Although there are some similarities between the two letters’ graphic appearances, they have totally different place of articulation. Such errors can be observed in the writing of the surname 邦 in the C edition.

\(^{22}\) In the MGZYJJ, 鲍: 鲍. The writing in the C edition is the same with the writing in the MGZYJJ.
d. 写 written as 写:

The letter 写 represents the voiced bilabial initial, while the letter 写 represents the retroflex initial. They have totally different place of articulation, although their graphic appearances have some similarities. Such errors can be observed in the writing of surnames 平 and 蒲 in the C edition.

Correct: A198 B198 Wrong: C214

Correct: A95 B95 D95 Wrong: C95

Correct: A253 B253 D253 Wrong: C269

e. 写 written as 写:

The letter 写 represents the voiced bilabial initial, while the letter 写 represents the velar nasal. They have totally different place of articulation, although their graphic appearances have some similarities. Such errors can be observed in the writing of surname 暴 in the A, B and D editions.

23 In the MGZYJJ, 暴: 延 or 延.
(2) Pure clerical errors: Pure clerical errors involve the unintentional addition or omission of a hP’ags-pa letter. Clerical errors can be observed in the writing of the surnames 貝, 豐, 卉, 馬, 孟, 茅, 穆 and 万 (俟) in the C edition and surname 班 in the D edition.

24 The surname 貝 can be only found in the C edition. There is no 貝 in A, B and D editions. In the MGZYJJ, 貝: 邕.

25 In the MGZYJJ, 卉: 娴.

26 The surname 穆 can be only found in the C edition. There is no 穆 in A, B and D editions.
Correct: A103  B103  D103  Wrong: C103

Wrong: C122

万: Correct: A1  B1  D1  Wrong: C1

Correct: A219  B219  C235  Wrong: D219


Variant pronunciation: C172

---

27 In the MGZYJJ, 繆:  or  
28 In the MGZYJJ, 母:  
29 In the MGZYJJ, 乜: ; 乜: 
3.2 The Labiodentals

The hP’ags-pa letters ཁ, ས and སོ are used to represent the Chinese labiodental stops. Their corresponding Chinese initials are listed as follows:

<table>
<thead>
<tr>
<th>Initial</th>
<th>fei-mu 非</th>
<th>fu-mu 敷</th>
<th>feng-mu 奉</th>
<th>wei-mu 微</th>
</tr>
</thead>
<tbody>
<tr>
<td>hP’ags-pa letter</td>
<td>ཁ</td>
<td>ས</td>
<td>སོ</td>
<td>ས</td>
</tr>
</tbody>
</table>

Labiodental initial letter errors can be categorized into the three, aforementioned types of errors as well. These error types are discussed in greater detail below.

(1) The misuse of similar-looking letters:

a. སོ written as ས: A, B and D editions: ༌ སོ.  

---

30 In the MGZYJJ, 傅: སོ. 

---
b. 写 written as 作:

The letter 写 represents a labiodental initial, while the letter 作 represents a guttural fricative. Their places of articulation are totally different. Such errors can be observed in the writing of the surname (東方) in the D edition. We can make sure it is an error instead of a variant pronunciation because the spelling of the surname 方 in the D is 写.

(2) Pure clerical errors: Clerical errors can be observed in the writing of the surnames

---

31 The double-character surname 東方 can be only found in the A, B and D editions. There is no 東方 in the C edition. In the MGZYJJ, 方: 写.
馮 in the A and B editions and the surnames 封, 富, 馮, 鳳, 費, 伏, 樊, 房, 符, 扶, 巫, 聞, 文, 勿, (字)文, 閶(人) in the C edition and surnames 馮, (字)文, (皇)甫 in the D edition.

32 In the MGZYJJ, 封: みつ。
33 In the MGZYJJ, 富: みつ。
34 In the MGZYJJ, 馮: みつ。
35 In the MGZYJJ, 鳳: みつ。
36 In the MGZYJJ, 費: みつ。
37 In the MGZYJJ, 伏: みつ or みつ。
38 In the MGZYJJ, 樊: みつ。
39 In the MGZYJJ, 房: みつ。
40 In the MGZYJJ, 符: みつ。
41 In the MGZYJJ, 扶: みつ。
42 In the MGZYJJ, 甫: みつ。
3.3 The Alveolar Stops

The hP’ags-pa letters ང, ཅ, ང and མ are used to represent the Chinese alveolar stops.

Their corresponding Chinese initials are listed as follows:

---

43 In the MGZYJJ, ང: ག, ཅ: ཆ.
44 In the MGZYJJ, ང: ག. 
Table 5: The Alveolar Stops

<table>
<thead>
<tr>
<th>Initial</th>
<th>duan-mu 端</th>
<th>tou-mu 透</th>
<th>ding-mu 定</th>
<th>ni-mu 泥</th>
</tr>
</thead>
<tbody>
<tr>
<td>hP’ags-pa letter</td>
<td>𠕑</td>
<td>𠕒</td>
<td>𠕖</td>
<td>𠕚</td>
</tr>
</tbody>
</table>

Alveolar stop letter errors can be categorized into the three, aforementioned types of errors as well. These error types are discussed in greater detail below.

(1) The misuse of similar-looking letters:

𠕑 written as 𠕒:

The letter 𠕑 represents a voiceless unaspirated alveolar stop, while the letter 𠕒 represents a guttural fricative initial. Their places of articulation are totally different, although their graphic appearances have some similarities. Such errors can be observed in the writing of the surname 刁 in all the four editions.

Wrong: A132 B132 C148 D132
(2) Pure clerical errors: Clerical errors can be observed in the writing of the surnames 翟 in the B edition, 戴, 董(重), 党, 陶, 段, 谭, 宁, 能, 农, 那 in the C edition and 董, 董(薰), (申)屠 in the D edition.

Correct: A276 C292 D276 Wrong: B276

Correct: A100 B100 D100 Wrong: C100

Correct: A111 B111 Wrong: C111 D111

Correct: A275 B275 D275 Wrong: C291

45 In the MGZYJJ, 翟: 翟.
46 In the MGZYJJ, 宁: 宁. The alveolar nasal letter has two variants: n and n (Shen, 2008). The surname 宁 in the C edition used the variant n.
47 In the MGZYJJ, 能: 能. The alveolar nasal letter has two variants: n and n (Shen, 2008). The surname 能 in the C edition used the variant n.
48 In the MGZYJJ, 农: 农. The alveolar nasal letter has two variants: n and n (Shen, 2008). The surname 农 in the C edition used the variant n.
Correct: A304  B304  D304  Wrong: C320

Correct: A364  B364  D365  Wrong: C381

턴 Correct: A14  B14  C10  Wrong: D12

(3) Errors in the transliteration of variant pronunciations: C edition: 邵⁴⁹, 鄧⁵⁰.

Variant pronunciation: C270

Variant pronunciation: C180

⁴⁹ In the MGZYJJ, 邵: 超.

⁵⁰ In the MGZYJJ, 鄧: 迎. 鄭: 景. 
### 3.4 The Alveolar Affricates and Fricatives

The hP’ags-pa letters ་, .isnan, ་, ་ and ཀ། are used to represent the Chinese alveolar affricates and fricatives. Their corresponding Chinese initials are listed as follows:

<table>
<thead>
<tr>
<th>Initial</th>
<th>jing-mu</th>
<th>qing-mu</th>
<th>cong-mu</th>
<th>xin-mu</th>
<th>xie-mu</th>
</tr>
</thead>
<tbody>
<tr>
<td>hP’ags-pa letter</td>
<td>བ</td>
<td>བ</td>
<td>བ</td>
<td>བ</td>
<td>བ</td>
</tr>
</tbody>
</table>

Table 6: The Alveolar Affricates and Fricatives

Alveolar affricate and fricative letter errors can be categorized into the three, aforementioned types of errors as well. These error types are discussed in greater detail below.

(1) The misuse of similar-looking letters:

་_written as བ:

The letter ་ represents a voiceless unaspirated alveolar affricate, while the letter བ represents a voiceless unaspirated velar stop. Their places of articulation are totally different, although their graphic appearances have some similarities. Such errors can be observed in the writing of surnames 錢 in the C edition and surnames 賣, 宗, 左 in the D edition.

Correct: A2 B2 D2  
Wrong: C2

Correct: A149 B149 C165  
Wrong: D149

40
(2) Pure clerical errors: Clerical errors can be observed in the writing of the surnames 左, 井, 焦, 祖, 訾, 曾, 秦, 曹, 齊, 從, 薛, 索, 桑, 辛, 須, 相, (公)孫, 謝 in the C edition and surnames 訾, 曾, 全, 司, 宿, 胥, 桑, 辛, 須, 相, 司(馬), 鮮(于)51 in the D edition.

51 The double-character surname 鮮于 can be only found in the A, B and D editions. There is no 鮮于 in the C edition.
Correct: A291  B291
Wrong: C307  D291

Correct: A362  B362
Wrong: C379  D363

Correct: A374  B374
Wrong: C391  D375

Correct: A379  B379
Wrong: C396  D380

Correct: A13  B13  D14
Wrong: C11

Correct: A34  B34  D34
Wrong: C34

Correct: A217  B217  C233
Wrong: D217
Correct: A243  B243  C259
Wrong: D243

Correct: A250  B250  C266
Wrong: D250

Correct: A269  B269  C285
Wrong: D269

司 Correct: A2  B2  C2
Wrong: D2

鲜 Correct: A12  B12
Wrong: D10

(3) Errors in the transliteration of variant pronunciations: C edition: 宰52, 蔡53, 藉54, 松55.

52 In the MGZYJJ, 宰: ㄗㄢ. 蔡: ㄔㄢ.
53 In the MGZYJJ, 蔡: ㄔㄢ.
54 In the MGZYJJ, �藉: ㄈㄢ.
55 In the MGZYJJ, 松: ㄕㄥ.
3.5 The Lateral Initial

The hP’ags-pa letter is used to represent the Chinese lateral initial. Its corresponding Chinese initial is *lai-mu*:

Table 7: The Lateral Initial

<table>
<thead>
<tr>
<th>Initial</th>
<th>lai-mu 来</th>
</tr>
</thead>
<tbody>
<tr>
<td>hP’ags-pa letter</td>
<td>[\text{拉丁字母}]</td>
</tr>
</tbody>
</table>

Lateral initial errors can be categorized into the two: pure clerical errors and errors in the transliteration of variant pronunciations. These error types are discussed in greater detail below.
(1) Pure clerical errors: Clerical errors can be observed in the writing of the surnames 柳, 廉, 梁, 驥, 厲, 劉, 龍, 龜, 禄, 隆, 冷, 令(狐) in the C edition and surnames 運, (鍾)離 in the D edition.

Correct: A60  B60  D60  Wrong: C60

Correct: A66  B66  D66  Wrong: C66

Correct: A112  B112  D112  Wrong: C112

Correct: A136  B136  D136  Wrong: C152

Correct: A231  B231  D231  Wrong: C247

Correct: A236  B236  D236  Wrong: C252
Correct: A240  B240  D240  Wrong: C256

Correct: A287  B287  D287  Wrong: C303

Correct: A342  B342  D342  Wrong: C358

Correct: A351  B351  D352  Wrong: C368

Correct: A360  B360  D361  Wrong: C377

Correct: A360  B360  D361  Wrong: C377

Comment: Correct: A8  B8  D20  Wrong: C15

(2) Errors in the transliteration of variant pronunciations: C edition: 藍56.

56 In the MGZYJJ, 藍: 藍, 監: 監.
3.6 The Retroflexes

The hP’ags-pa letters .dispose, .dispose, .dispose, .dispose, .dispose and dispose are used to represent the Chinese retroflexes. Their corresponding Chinese initials are listed as follows:

Table 8: The Retroflexes

<table>
<thead>
<tr>
<th>Initial</th>
<th>zhi-mu 知</th>
<th>che-mu 徹</th>
<th>cheng-mu 澄</th>
<th>niang-mu 娘</th>
</tr>
</thead>
<tbody>
<tr>
<td>hP’ags-pa letter</td>
<td>इ</td>
<td>आ</td>
<td>ढ</td>
<td>अ</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Initial</th>
<th>shen-mu 審</th>
<th>shan-mu 謫</th>
<th>ri-mu 日</th>
</tr>
</thead>
<tbody>
<tr>
<td>hP’ags-pa letter</td>
<td>स्त्र</td>
<td>स्त्र</td>
<td>र</td>
</tr>
</tbody>
</table>

Retroflex letter errors can be categorized into the three, aforementioned types of errors as well. These error types are discussed in greater detail below.

1. The misuse of similar-looking letters:

   a. ड ि written as ठ़:

   The letter ड represents a voiced retroflex stop, while the letter ठ़ represents a velar nasal. Their places of articulation are totally different, although their graphic appearances have
some similarities. Such errors can be observed in the writing of surname 晁 in the A and B editions, surname 仲 in the C edition, and surnames of 晁, 巢 in the D edition.

b. 亙 written as 亙:

The letter 亙 represents a voiced retroflex stop, while the letter 亙 represents a voiced alveolar fricative. Their places of articulation are totally different, although their graphic appearances have some similarities. Such errors can be observed in the writing of surname 査 in the B edition and 陳 in the C edition.
(2) Pure clerical errors: Clerical errors can be observed in the writing of the surnames 沈
57, 聶58 in the A and B editions, surnames 朱, 楚(葛), 褚, 昌, 充, 沈, 辛59, 巢, (万)俟60, 聶, 商61, 申(屠)62, 史63, 舒64, 山65, 雙66, 荊67, 師68, 沙69, 成, 韶, 尚, 慎, 上(官), 戎, 冉, 茹, (聞)人70 in the C edition, and surnames (長)孫71, 沈, 聶, 舒 in the D edition.

57 In the MGZYJJ, 沈: xim.
58 In the MGZYJJ, 聶: n}.
59 The surname 辛 can be only found in the C edition. There is no 辛 in the A, B and D editions.
60 There is no 俟 in the MGZYJJ.
61 The surname 商 can be only found in the C edition. There is no 商 in the A, B and D editions.
In the MGZYJJ, 商: xM.
62 In the MGZYJJ, 申: xM.
63 In the MGZYJJ, 史: xM.
64 In the MGZYJJ, 舒: xM.
65 In the MGZYJJ, 山: xM.
66 In the MGZYJJ, 雙: xM.
67 In the MGZYJJ, 荊: xM.
68 In the MGZYJJ, 師: xM.
69 In the MGZYJJ, 沙: x.
70 In the MGZYJJ, 人: xM. 任: xM.
71 The double-character surname 長孫 can be only found in the A, B and D editions. There is no 長孫 in the C edition.
Correct: C14
Wrong: A14  B14  D14

Correct: A17  B17  D17
Wrong: C17

Correct: A18  B18  D6
Wrong: C6

Correct: A11  B11  D11
Wrong: C11

Correct: A51  B51  D51
Wrong: C51

Correct: A320  B320  D320
Wrong: C328

Wrong: C412

Correct: A376  B376
Wrong: C393  D377
俟 Correct: A1 B1 D1 Wrong: C1

Wrong: A355 B355 D356 C372

申 Correct: A14 B14 D12 Wrong: C10

Wrong: C63

Correct: A63 B63 D63

Wrong: C107 D107

Correct: A211 B211 D211 Wrong: C227

52
Errors in the transliteration of variant pronunciations: C edition: 郗, 岑, 束, 常,

水, 饒.

In the MGZYJJ, 郗: .

In the MGZYJJ, 岑: . 岑: .

In the MGZYJJ, 束: . 速: .

In the MGZYJJ, 常: .

In the MGZYJJ, 水: . 冰: .

In the MGZYJJ, 饒: . 堯: .
3.7 The Velars

The hP’ags-pa letters वळ, ढूळ, ढे and म्ब are used to represent the Chinese velars. Their corresponding Chinese initials are listed as follows:

<table>
<thead>
<tr>
<th>Initial</th>
<th>jian-mu</th>
<th>xi-mu</th>
<th>qun-mu</th>
<th>yi-mu</th>
</tr>
</thead>
<tbody>
<tr>
<td>hP’ags-pa letter</td>
<td>वळ</td>
<td>ढूळ</td>
<td>ढे</td>
<td>म्ब</td>
</tr>
</tbody>
</table>

Velar initial errors can be categorized into the two: pure clerical errors and errors in the transliteration of variant pronunciations. These error types are discussed in greater detail below.

(1) Pure clerical errors: Clerical errors can be observed in the writing of the surname 鞠 in the A edition, the surnames 纪, 干, 景, 古, 公, 孔, 屈, 匡, 蒯, 祁78, 裘, 仇, 簌79, 暨 in the C edition and surnames 仇, 匡, (上)官, (闋)丘80 in the D edition.

78 The surname 祁 can be only found in the C edition. There is no 祁 in the A, B and D editions. In the MGZYJJ, 祁: 鞠。
79 In the MGZYJJ, 簌: 鞌. 簌: 鞌.
80 The double-character surname 開丘 can be only found in the A, B and D editions. There is no 開丘 in the C edition. There is no 丘 in the MGZYJJ.
(2) Errors in the transliteration of variant pronunciations: C edition: 谷⁸¹, 瞿⁸², 蓋⁸³, 麴⁸⁴.

---

⁸¹ In the MGZYJJ, 谷: 谷.
⁸² In the MGZYJJ, 瞿: 瞿 or 瞿.
⁸³ In the MGZYJJ, 蓋: 蓋.
⁸⁴ In the MGZYJJ, 麴: 麴.
3.8 The Guttural Fricatives and Zero Initials

The hP’ags-pa letters ḥ, ḩ, ḡ, ḥ, ḻ, ṽ and Ṽ are used to represent the Chinese guttural fricatives and zero initials. Their corresponding Chinese initials are listed as follows:

<table>
<thead>
<tr>
<th>Initial</th>
<th>xiao-mu 曉</th>
<th>xia-mu 衞</th>
<th>ying-mu 影</th>
<th>yu-mu 喻</th>
</tr>
</thead>
<tbody>
<tr>
<td>hP’ags-pa letter</td>
<td>ḥ</td>
<td>ḩ</td>
<td>ḡ</td>
<td>ḥ</td>
</tr>
</tbody>
</table>

Guttural fricative and zero initial errors can be categorized into the two: pure clerical errors and errors in the transliteration of variant pronunciations. These error types are discussed in greater detail below.
(1) Pure clerical errors: Clerical errors can be observed in the writing of surnames 袁, 宇

(文) in the B edition, surnames 黄, 惠85, 扈, 後, 紅, 恒, 皇(甫), 郁, 印, 隱, 鬱, 雍, 歐, 王, 宇(文),

越86, 余 in the C edition, and 蔚87, 尉(遜)88, 宇(文), (鮮)于89, (淳)于90 in the D edition.

Correct: A59  C59  D59  Wrong: B59

Correct: A6  Wrong: B6  C12  D18

Correct: A96  B96  D96  Wrong: C96

85 In the MGZYJJ, 惠:岡iard.
86 In the MGZYJJ, 越:廼m.
87 In the MGZYJJ, 蔚:廼i.
88 In the MGZYJJ, 尉:廼t or 囗u.
89 The double-character surname 鮮于 can be only found in the A, B and D editions. There is no 鮮于 in the C edition.
90 The double-character surname 淳于 can be only found in the A, B and D editions. There is no 淳于 in the C edition.
Correct: A267  B267  D267  Wrong: C283
Correct: A268  B268  D268  Wrong: C284
Correct: A288  B288  D288  Wrong: C304
Correct: A345  B345  D345  Wrong: C361
Correct: A8  B8  D8  Wrong: C8
Correct: A90  B90  D90  Wrong: C90
Correct: A349  B349  C365  Wrong: D349
Correct: A19  B19  C7
Wrong: D15

Correct: A12  B12
Wrong: D10

Correct: A16  B16
Wrong: D16
(2) Errors in the transliteration of variant pronunciations: C edition: 華\(^91\), 于\(^92\), 霍\(^93\), 解\(^94\),
邢\(^95\), 向\(^96\), 越\(^97\), 韋\(^98\), 葉\(^99\).

91 In the MGZYJJ, 華: 囡 or 囨.
92 In the MGZYJJ, 于: 豫. The letter 団 is used together with the letter 囹 to transcribe the yu-mu.
93 In the MGZYJJ, 霍: 限.
94 In the MGZYJJ, 解: 限.
95 In the MGZYJJ, 邢: 限.
96 In the MGZYJJ, 向: 限.
97 The surname 越 can be only found in the C and D editions. There is no 越 in the A and B editions. In the MGZYJJ, 越: 限.
98 In the MGZYJJ, 韋: 限.
99 In the MGZYJJ, 葉: 限.
A179  B179  D179  Variant pronunciation: C195

C337  Variant pronunciation: A321  B321  D321

Variant pronunciation: D350

A50  B50  D50  Variant pronunciation: C50

A241  B241  D241  Variant pronunciation: C257
CHAPTER 4

THE TRANSLITERATION OF CHINESE FINALS

In this chapter, the transliteration of hP’ags-pa finals will be discussed in the order of rhyme groups: Dong, Geng, Yang, Zhi, Yu, Jia, Zhen, Han, Xian, Xiao, You, Tan, Qin, Ge, and Ma.

4.1 The DongRhyme Group

In the book MGZY, the Dong rhyme group has two major spelling groups (Shen 2008). It is the same in the BJX text. The two spelling groups are listed as follows:

Table 11: The Dong Rhyme Group

<table>
<thead>
<tr>
<th>公</th>
<th>弓</th>
</tr>
</thead>
<tbody>
<tr>
<td>公</td>
<td>弓</td>
</tr>
</tbody>
</table>

The spelling of 公 is repeated in both the Dong (東: 弓) and the Geng (庚: 尾) rhyme groups. 公 occurs after 16 initials in the Dong rhyme group and occurs after only 5 guttural initials in the Geng rhyme group (Shen 2008).
Dong: 弓 穹 窮 蠍 縱 樸 堆 松 胸 -- 雍 順 繁 融 隆 戎

Geng: 局 傾 琼

In the BJX text, the finals of those surnames 馮, 熊, 龔, 松, 弓, 仲, 宮, 戎, 龍, 從, 雍, 容, 榮, 隆, 鞏, 融, (慕)容 and 馮 are spelled as \[\text{\textit{uuM}}\]. According to MGZYJJ\textsuperscript{100}, 龔, 松\textsuperscript{101}, 弓, 仲, 宮, 戎, 龍, 從, 雍, 容, 榮, 隆, 融 and (慕)容 belong to the Dong rhyme group, and 馮 and 熊 belong to the Geng rhyme group.

The errors regarding the Dong rhyme group can be categorized into two types: misuse of similar-looking letters and pure clerical errors. These error types are discussed in greater detail below.

(1) The misuse of similar-looking letters.

寫\[\text{\textit{iJ}}\] written as \[\text{\textit{J}}\]: This kind of errors can be observed in the writing of surnames 鳳 and 孟 in the C edition.

Correct: A54 B54 D54
Wrong: C54

\textsuperscript{100} MGZYJJ stands for the book 《蒙古字韻集校》.
\textsuperscript{101} In MGZY, 松: \[i\text{\textit{J}}\]; In the MGZYJJ, 松: \[\text{\textit{iJ}}\].
(2) Pure clerical errors: Pure clerical errors are the unintentional addition or omission of a p’ags-pa letter; Clerical errors can be observed in the writing of the surnames 雍 and 隆 in the A and B editions, surnames 戎, 雍, 榮, 隆, 鞏, 融 and (慕) 容 in the C edition and surnames 雍 in the D edition.
It is worth noting that there is not an absolute standard or criterion to judge mistakes.

Whether some writings are correct or incorrect is debatable, for example, the surnames 隆 in the A and B editions and the surnames 宮 and 従 in the C edition.

102 The mark “?” means whether the writings are correct or incorrect is debatable.
If we use a very strict criterion to judge the writing errors, the surname 隆 in the A and B editions and the surnames 宮 and 從 in the C edition can be regarded as errors.

4.2 The Geng Rhyme Group

In the book MGZY, the Geng rhyme group has seven spelling groups (Shen 2008). Among them, the spellings of 庚, 兄 and 行 are the same. The spelling of 闢 is repeated in both the Dong (東: 弓) and Geng (庚: 閣) rhyme group. Surnames 馮, 熊 belong to Geng rhyme group. The spelling groups are listed as follows:

Table 12: The Geng Rhyme Group

<table>
<thead>
<tr>
<th>驚</th>
<th>繵</th>
<th>弓 (弓)</th>
<th>庚</th>
<th>兄</th>
<th>行</th>
<th>泓</th>
</tr>
</thead>
<tbody>
<tr>
<td>䧐</td>
<td>䲗</td>
<td>䲗</td>
<td>䲗</td>
<td>䲗</td>
<td>䲗</td>
<td></td>
</tr>
</tbody>
</table>

The errors regarding the Geng rhyme group can be categorized into the three main types of errors, aforementioned types of errors as well. These three types can be further divided into sub-types. These error types are discussed in greater detail below.

(1) The misuse of similar-looking letters:
a. 令 written as 申

This kind of errors can be observed in the writing of surnames 程, 井, 令（狐）103 and 衡104 in the C edition.

Correct: A177 B177 D177 Wrong: C193

Correct: A201 B201 D201 Wrong: C217

令: Correct: A8 B8 D20 Wrong: C15

Correct: A331 B331 D331 Wrong: C347

b. 令 written as 亖

103 The final of 令（狐） is spelled as 魚. In the C edition, 令 is written as 申; the writing of the nasal ending 魚 belongs to clerical error.

104 The final of 衡 is spelled as 亖. In the C edition, 令 is written as 亖; the writing of the nasal ending 亖 belongs to clerical error.
This kind of errors can be observed in the writing of surname 應 in the C edition.

Correct: A159  B159  D159  Wrong: C175

(2) Pure clerical errors: Clerical errors can be observed in the writing of the surname 馮 in the the A and B editions, the surnames 明, 盛, 丁, 井, 荊, 令（狐）, 滕, 能, 經 and 衡 in the C edition, surnames 馮, 彭 and 耿in the D edition.

Correct: C9  Wrong: A9  B9  D9
Wrong: C135

Correct: A130  B130  D130  Wrong: C146

Correct: A161  B161  D161  Wrong: C177

Correct: A382  B382  D383  Wrong: C399
It is worth noting that there is not an absolute standard or criterion to judge mistakes.

Whether some writings are correct or incorrect is debatable, for example, the surnames 邢, 幸 and 耿 in the C edition.

If we use a very strict criterion to judge the writing errors, the surnames 邢, 幸 and 耿 in the C edition can be regarded as errors.
(3) Errors in the transliteration of variant pronunciations: C edition: 冷^{105}, 鄧^{106}.

4.3 The Yang Rhyme Group

In the book MGZY, the Yang rhyme group has six spelling groups (Shen 2008). The six spelling groups are listed as follows:

<table>
<thead>
<tr>
<th>閆</th>
<th>姜</th>
<th>光</th>
<th>莊</th>
<th>湟</th>
<th>悅</th>
</tr>
</thead>
<tbody>
<tr>
<td>々</td>
<td>々</td>
<td>々</td>
<td>々</td>
<td>々</td>
<td>々</td>
</tr>
</tbody>
</table>

The errors regarding the Yang rhyme group can be categorized into the three main types of errors, aforementioned types of errors as well. These three types can be further divided into subtypes. These error types are discussed in greater detail below.

(1) The misuse of similar-looking letters:

---

^{105} In the MGZYJJ, 冷: 咖 or 喔.

^{106} In the MGZYJJ, 鄧: 欣 or 欣.
a. 写 as 写: This kind of errors can be observed in the writing of the surname 房 in the C edition and the surname 姜\textsuperscript{107} in the D edition.

Correct: A154 B154 D154 Wrong: C170

Correct: A32 B32 C32 Wrong: D32

b. 写 as 写: This kind of errors can be observed in the writing of surnames 向\textsuperscript{108} and 姜\textsuperscript{109} in the A and B editions, surnames 項, 江, 姜 and 梁\textsuperscript{110} in the C edition, and surname 向 in the D edition.

Wrong: A321 B321 D321

\textsuperscript{107} In the MGZYJJ, 姜: 写. The letter [ in the A, B and C editions are incorrect. The letter 写 in the D edition is incorrect.

\textsuperscript{108} The writing of 向 in A, B, D editions is due to the misuse of similar-looking letters. The writing of 向 in the C edition is due to the pure clerical errors. In the MGZYJJ, 向: 写.

\textsuperscript{109} In the MGZYJJ, 姜: 写. The letter [ in the A, B and C editions are incorrect. The letter 写 in the D edition is incorrect.

\textsuperscript{110} The writing of 梁 in the C editions is due to the misuse of similar-looking letters. The writing of 梁 in the D edition is due to the pure clerical errors. In the MGZYJJ, 梁: 写.
(2) Pure clerical errors: Clerical errors can be observed in the writing of surnames 湯 and 蔣 in the A edition, surnames 蔣 in the B edition, surnames 郎, 蒼, 強, 蔚, 向, 王, 蔣, 汪, 廣 and 皇（甫）in the C edition and surnames 梁 and 蔣 in the D edition.

111 In the MGZYJJ, 蔣: 饒 meticulous.
112 In the MGZYJJ, 蔚: 饒 meticulous.
113 In the MGZYJJ, 汪: 暢 meticulous.
Wrong: A13 B13 C13 D13

Wrong: C337

Correct: A48 B48 D48

Wrong: C48

Correct: A271 B271 D271

Wrong: C287

Correct: A120 B120 D120

Wrong: C120

Wrong: C136

Correct: A8 B8 D8

Wrong: C8

Wrong: C128
It is worth noting that there is not an absolute standard or criterion to judge mistakes.

Whether some writings are correct or incorrect is debatable, for example, the surnames 昌, 康, 昭 and 罕 in the C edition.
If we use a very strict criterion to judge the writing errors, the surnames 昌, 康, 杭 and 匡 in the C edition can be regarded as errors.

(3) Errors in the transliteration of variant pronunciations: C edition: 常

4.4 The Zhi Rhyme Group

In the book MGZY, the Zhi rhyme group has seven spelling groups (Shen 2008). 常 is repeated (規 and 麓) in the Zhi rhyme group. The seven spelling groups are listed as follows:

---

114 In the MGZYJJ, 常: 因. 
Table 14: The Zhi Rhyme Group

<table>
<thead>
<tr>
<th>綋</th>
<th>蘖</th>
<th>鶏</th>
<th>嫀</th>
<th>規</th>
<th>麾</th>
<th>恽</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>21</td>
<td>21</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>21</td>
</tr>
</tbody>
</table>

The errors regarding the Zhi rhyme group can be categorized into the three main types of errors, aforementioned types of errors as well. These three types can be further divided into sub-types. These error types are discussed in greater detail below.

(1) The misuse of similar-looking letters:

a. し written as し: This kind of errors can be observed in the writing of the surname 奚 in the C edition, and the surname 惠 in the A, B, C and D editions.

Correct: A45 B45 D45
Wrong: C45

Wrong: A188 B188 D188 C204

b. どこ written as で: This kind of errors can be observed in the writing of the surname 齊 in the C edition.

---

115 In the MGZYJJ, 奚: 奚.
116 In the MGZYJJ, 惠: 惠.
(2) Pure clerical errors: Clerical errors can be observed in the writing of the surname 危 in the A edition, the surname 師 in the B edition, and surnames (万)俟，習，師，司（馬），危，崔，隗 and 季 in the C edition.

---

There is no 俟 in the MGZYJJ.

In the MGZYJJ, 崔: 張 or 張. 
It is worth noting that there is not an absolute standard or criterion to judge mistakes.

Whether some writings are correct or incorrect is debatable, for example, the surnames 戚, 李, 支, 米, 畢 and 稱 in the C edition. The writings of 哥 are not unified in the C edition.
If we use a very strict criterion to judge the writing errors, the surnames 威, 李, 支, 米, 畢 and 稹 in the C edition can be regarded as errors.
(3) Errors in the transliteration of variant pronunciations: C edition: 藺¹¹⁹, 郜¹²⁰, 水¹²¹ and 贇¹²² in the C edition.

4.5 The Yu Rhyme Group

In the book MGZY, the Yu rhyme group has three spelling groups (Shen 2008). The three spelling groups are listed as follows:

---
¹¹⁹ In the MGZYJJ, 藺: 肆.
¹²⁰ In the MGZYJJ, 郜: 鄧.
¹²¹ In the MGZYJJ, 水: 河. 冰: 河.
¹²² In the MGZYJJ, 贇: 河 or 河.
Table 15: The Yu Rhyme Group

<table>
<thead>
<tr>
<th>孤</th>
<th>居</th>
<th>吾</th>
</tr>
</thead>
<tbody>
<tr>
<td>固</td>
<td>囗</td>
<td>囗</td>
</tr>
</tbody>
</table>

The errors regarding the Yu rhyme group can be categorized into two types: pure clerical errors and errors in the transliteration of variant pronunciations. These error types are discussed in greater detail below.

(1) Pure clerical errors: Clerical errors can be observed in the writing of surnames 万(俟)\textsuperscript{123}, 符, 古, 郁, 朱, 胥 and 款 in the C edition, surnames 鞠 and 余 in the D edition.

万: Correct: A1 B1 D1 Wrong: C1

Correct: A235 B235 D235 Wrong: C251

Correct: A322 B322 D322 Wrong: C338

\textsuperscript{123} In the MGZYJJ, 万: 候.
It is worth noting that there is not an absolute standard or criterion to judge mistakes.

Whether some writings are correct or incorrect is debatable, for example, surnames 路, 鳥 and 宿 in the C edition, and the surname （申）屠 in the D edition.
If we use a very strict criterion to judge the writing errors, surnames 傳, 路, 鳥 and 宿 in the C edition can be regarded as errors.
(2) Errors in the transliteration of variant pronunciations: C edition: 宓\textsuperscript{124}, 蔚\textsuperscript{125}, 尉(遲)\textsuperscript{126},

伏\textsuperscript{127}, 繆\textsuperscript{128}, 谷\textsuperscript{129}, 於\textsuperscript{130} and 瑚\textsuperscript{131} in the C edition.

\begin{itemize}
\item A215, B215, D215, Variant pronunciation: C231
\item C365, Variant pronunciation: A349, B349, D349
\item 尉: C7, Variant pronunciation: A19, B19, D15
\end{itemize}

\textsuperscript{124} In the MGZYJJ, 宓: 芳. 蕊: 芳.

\textsuperscript{125} In the MGZYJJ, 蔚: 电网.

\textsuperscript{126} In the MGZYJJ, 尉: 电网 or 电网.

\textsuperscript{127} In the MGZYJJ, 伏: 裳 or 裳.

\textsuperscript{128} In the MGZYJJ, 繆: 电网 or 电网. Chen (2014) regarded the writing 电网 in the C edition as a graphic error. It mixed the letter 丁 and 丁.

\textsuperscript{129} In the MGZYJJ, 谷: 谷.

\textsuperscript{130} In the MGZYJJ, 於: 於.

\textsuperscript{131} In the MGZYJJ, 瑚: 瑚. 瑚: 瑚.
4.6 The Jia Rhyme Group

In the book MGZY, the Jia rhyme group has five spelling groups (Shen 2008). The five spelling groups are listed as follows:

Table 16: The Jia Rhyme Group

<table>
<thead>
<tr>
<th>該</th>
<th>乖</th>
<th>佳</th>
<th>刻</th>
<th>黒</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>
The errors regarding the Jia rhyme group can be categorized into two types: pure clerical errors and errors in the transliteration of variant pronunciations. These error types are discussed in greater detail below.

(1) Pure clerical errors: Clerical errors can be observed in the writing of the surname 蒯 and 戴 in the C edition and the surname 柏 in the D edition.

Correct: A378 B378 D379
Wrong: C395

Correct: A100 B100 D100
Wrong: C100

Correct: A37 B37 C37
Wrong: D37
(2) Errors in the transliteration of variant pronunciations: C edition: 艾\textsuperscript{132}, 宰\textsuperscript{133}, 翟\textsuperscript{134}, 蔡\textsuperscript{135} and 郑\textsuperscript{136}.

\textsuperscript{132} In the MGZYJJ, 艾: 艾 or 艾.

\textsuperscript{133} In the MGZYJJ, 宰: 賄 or 賄.

\textsuperscript{134} In the MGZYJJ, 翟: 薛 or 薛.

\textsuperscript{135} In the MGZYJJ, 蔡: 阿 or 阿.

\textsuperscript{136} In the MGZYJJ, 郑: 郑 or 郑.
4.7 The Zhen Rhyme Group

In the book MGZY, the Zhen rhyme group has six spelling groups (Shen 2008). The six spelling groups are listed as follows:

<table>
<thead>
<tr>
<th>申</th>
<th>昆</th>
<th>君</th>
<th>根</th>
<th>緊</th>
<th>資</th>
</tr>
</thead>
<tbody>
<tr>
<td>⼱</td>
<td>⼱</td>
<td>⼱</td>
<td>⼱</td>
<td>⼱</td>
<td>⼱</td>
</tr>
</tbody>
</table>

The errors regarding the Zhen rhyme group can be categorized into two types: pure clerical errors and errors in the transliteration of variant pronunciations. These error types are discussed in greater detail below.

(1) Pure clerical errors: Clerical errors can be observed in the writing of surnames 貝，閔，印，申，慎，申（屠），聞，文，（公）孫，尹 and 莘 in the C edition, surnames 申 and 文 in the D edition.

Wrong: C116
Correct: A116 B116 D116

Wrong: C116

---

137 In the MGZYJJ, 貝：
138 In the MGZYJJ, 尹：
It is worth noting that there is not an absolute standard or criterion to judge mistakes.

Whether the writing of 聞(人) in the C edition is correct or incorrect is debatable.
If we use a very strict criterion to judge the writing errors, the surname 閔(人) in the C edition can be regarded as clerical errors.

(2) Errors in the transliteration of variant pronunciations: C edition: (聞)人\textsuperscript{139}.

4.8 The Han Rhyme Group

In the book MGZY, the Han rhyme group has five spelling groups (Shen 2008). The five spelling groups are listed as follows:

Table 18: The Han Rhyme Group

<table>
<thead>
<tr>
<th>干</th>
<th>山</th>
<th>官</th>
<th>闢</th>
<th>閭</th>
</tr>
</thead>
<tbody>
<tr>
<td>多</td>
<td>多</td>
<td>多</td>
<td>多</td>
<td>多</td>
</tr>
</tbody>
</table>

\textsuperscript{139} In the MGZYJJ, 人: 宀. 任: 宀.
The errors regarding the Han rhyme group can be categorized into two types: misuse of similar-looking letters and pure clerical errors. These error types are discussed in greater detail below.

(1) The misuse of similar-looking letters:

a. ¥ written as 丷: This kind of errors can be observed in the writing of the surname 簡 ¹⁴⁰ in the A, B and D editions.

Correct: C382  Wrong: A365 B365 D366

(2) Pure clerical errors: Clerical errors can be observed in the writing of surnames 山 and 班 in the C edition.

Correct: A211 B211 D211  Wrong: C227

Correct: A219 B219 D219  Wrong: C235

¹⁴⁰ In the MGZYJJ, 簡: 简.
It is worth noting that there is not an absolute standard or criterion to judge mistakes. Whether some writings are correct or incorrect is debatable, for example, surnames 萬, 顏, 樊, 干, 宦 and 關 in the C edition.

Correct: A146  B146  D146  ?: C162

Correct: A127  B127  D127  ?: C143

Correct: A141  B141  D141  ?: C157

Correct: A157  B157  D157  ?: C173

Correct: A309  B309  D309  ?: C333

Correct: A377  B377  D378  ?: C394
If we use a very strict criterion to judge the writing errors, surnames 萬, 颜, 樊, 干, 宦 and 关 in the C edition can be regarded as clerical errors.

The transliteration of several Han syllables should be discussed here. The alveolar nasal letter has two variants: ʰ and ɦ (Shen, 2008). Several writings of 爾 in the C edition are different from the A, B and D editions and their writings in the MGZY.

C edition: 段141, 楚142, 滿143, 桓144, 潘145, 管146 and (上)官147.

C218
Variant writing: A202 B202 D202

C243
Variant writing: A227 B227 D227

C351
Variant writing: A335 B335 D335

---

141 In the MGZYJJ, 段: 䃅 كانوا.
142 In the MGZYJJ, 楚: ��可根据.
143 In the MGZYJJ, 滿: ��可根据.
144 In the MGZYJJ, 桓: ��可根据.
145 In the MGZYJJ, 潘: ��可根据.
146 In the MGZYJJ, 管: ��可根据.
147 In the MGZYJJ, 官: ��可根据.
4.9 The Xian Rhyme Group

In the book MGZY, the Xian rhyme group has five spelling groups (Shen 2008). The five spelling groups are listed as follows:

Table 19: The Xian Rhyme Group

<table>
<thead>
<tr>
<th>韬</th>
<th>坚</th>
<th>涓</th>
<th>巻</th>
<th>賢</th>
</tr>
</thead>
<tbody>
<tr>
<td>丁</td>
<td>丁</td>
<td>丁</td>
<td>丁</td>
<td>丁</td>
</tr>
</tbody>
</table>
The errors regarding the Han rhyme group belong to pure clerical errors. Clerical errors can be observed in the writing of surnames 田 in the A edition, surnames 錢, 田, 單, 連, 邊, 燕\(^{148}\), 元 and 全 in the C edition, and the surname 錢 in the D edition.

Correct: A140    B140    D140    Wrong: C156
Correct: A2      B2      D2      Wrong: C2
Correct: A166    B166    D166    Wrong: C182
Correct: A306    B306    D306    Wrong: C330
Correct: A297    B297    D297    Wrong: C313
Correct: A299    B299    D299    Wrong: C315

\(^{148}\) In the MGZYJJ, 燕: 燕. 
It is worth noting that there is not an absolute standard or criterion to judge mistakes. Whether some writings are correct or incorrect is debatable, for example, surnames 袁, 阮 and 宣 in the C edition, and surnames 燕 and 元 in the D edition.
If we use a very strict criterion to judge the writing errors, surnames 袁, 阮 and 宣 in the C edition, and surnames 燕 and 元 in the D edition can be regarded as clerical errors.

4.10 The Xiao Rhyme Group

In the book MGZY, the Xiao rhyme group has six spelling groups (Shen 2008). The six spelling groups are listed as follows:

Table 20: The Xiao Rhyme Group

<table>
<thead>
<tr>
<th>高</th>
<th>驒</th>
<th>驒</th>
<th>郭</th>
<th>交</th>
<th>獠</th>
</tr>
</thead>
<tbody>
<tr>
<td>高</td>
<td>驒</td>
<td>驒</td>
<td>郭</td>
<td>交</td>
<td>獠</td>
</tr>
</tbody>
</table>

The errors regarding the Xiao rhyme group can be categorized into the three main types of errors, aforementioned types of errors as well. These three types can be further divided into sub-types. These error types are discussed in greater detail below.

(1) The misuse of similar-looking letters:

"written as \(\l\): This kind of errors can be observed in the writing of the surname 郭 in the C edition.
(2) Pure clerical errors: Clerical errors can be observed in the writing of surnames 索, 陶, 包, 巢, 韶, 廖, 姚\textsuperscript{149}, 焦 and 蕭\textsuperscript{150} in the C edition, and the surname 晃 and 巢 in the D edition.

\textsuperscript{149} In the MGZYJJ, 蕭: 竹題.
\textsuperscript{150} In the MGZYJJ, 姚: 竹題.
It is worth noting that there is not an absolute standard or criterion to judge mistakes. Whether some writings are correct or incorrect is debatable, for example, surnames 邵 and 蒋 in the C edition, and the surname 巢 in the D edition.

151 In the MGZYJJ, 邵: 回敬.
If we use a very strict criterion to judge the writing errors, surnames 邵 and 晁 in the C edition, and the surname 巢 in the D edition can be regarded as clerical errors.

(3) Errors in the transliteration of variant pronunciations: C edition: 暴\(^{152}\), 喬\(^{153}\).

\[^{152}\] In the MGZYJJ, 暴: 耶 or 𢄂.

\[^{153}\] In the MGZYJJ, 喬: 麻.
4.11 The You Rhyme Group

In the book MGZY, the You rhyme group has five spelling groups (Shen 2008). The five spelling groups are listed as follows:

Table 21: The You Rhyme Group

<table>
<thead>
<tr>
<th>鳩</th>
<th>搵</th>
<th>鈎</th>
<th>櫛</th>
<th>浮</th>
</tr>
</thead>
<tbody>
<tr>
<td>鴬</td>
<td>鴬</td>
<td>鴬</td>
<td>鴬</td>
<td>鴬</td>
</tr>
</tbody>
</table>

The errors regarding the You rhyme group can be categorized into the three main types of errors, aforementioned types of errors as well. These three types can be further divided into sub-types. These error types are discussed in greater detail below.

(1) The misuse of similar-looking letters:

a. 糘 written as 鴬: This kind of errors can be observed in the writing of the surname 鄒 in the A, B and D editions.
b. 写 as 写: This kind of errors can be observed in the writing of surnames 竇 and 欧(陽) in the A edition, the surname 竇 in the B edition, the surname 寇 in the C edition, and surnames 竇 and 勾 in the D edition.

The writing of 寶 in the A, B and D editions is due to the misuse of similar-looking letters; the writing of 寶 in the C edition belong to pure clerical errors.

The writing of 勾 in the D edition is due to the misuse of similar-looking letters; the writing of 勾 in the C edition is due to the pure clerical errors.
(2) Pure clerical errors: Clerical errors can be observed in the writing of surnames 裘, 鈕, 劉, 富, 賈, 歐 and 勾 in the C edition.

Correct: A155  B155  D155  Wrong: C171

Correct: A175  B175  D175  Wrong: C191

Correct: A236  B236  D236  Wrong: C252

Correct: A203  B203  D203  Wrong: C219

Correct: A345  B345  D345  Wrong: C361
It is worth noting that there is not an absolute standard or criterion to judge mistakes. Whether some writings are correct or incorrect is debatable, for example, surnames 柳, 秋 and 游 in the C edition, and the surname 仇 in the D edition.
If we use a very strict criterion to judge the writing errors, surnames 柳, 秋 and 游 in the C edition, and the surname 仇 in the D edition can be regarded as clerical errors.

(3) Errors in the transliteration of variant pronunciations: C edition: 母\textsuperscript{156}, 婦\textsuperscript{157}.

![Variant pronunciation: C386](image1)

A369 B369 D370

![Variant pronunciation: C139](image2)

A123 B123 D123

4.12 The Tan Rhyme Group

In the book MGZY, the Tan rhyme group has five spelling groups (Shen 2008). The five spelling groups are listed as follows:

Table 22: The Tan Rhyme Group

<table>
<thead>
<tr>
<th>甘</th>
<th>檢</th>
<th>兼</th>
<th>韹</th>
<th>秤</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{156} In the MGZYJJ, 母: 母

\textsuperscript{157} In the MGZYJJ, 婦: 婦
The errors regarding the Tan rhyme group can be categorized into two types: pure clerical errors and errors in the transliteration of variant pronunciations. These error types are discussed in greater detail below.

(1) Pure clerical errors: Clerical errors can be observed in the writing of the surname 詹 in the A, B and D editions, and surnames 譚 and 冉 in the C edition.

Correct: C254  Wrong: A238  B238  D238

Correct: A277  B277  D277  Wrong: C293

Correct: A285  B285  D285  Wrong: C301

It is worth noting that there is not an absolute standard or criterion to judge mistakes. Whether some writings are correct or incorrect is debatable, for example, the surname 閔 in the C edition.

Correct: A363  B363  D364  ?: C380
If we use a very strict criterion to judge the writing errors, the surname 阮 in the C edition can be regarded as clerical errors.

(2) Errors in the transliteration of variant pronunciations: C edition: 談₁⁵⁸ and 藍₁⁵⁹.

4.13 The Qin Rhyme Group

In the book MGZY, the Qin rhyme group has three spelling groups (Shen 2008). The three spelling groups are listed as follows:

Table 23: The Qin Rhyme Group

<table>
<thead>
<tr>
<th>金</th>
<th>笓</th>
<th>続</th>
</tr>
</thead>
<tbody>
<tr>
<td>𨞁</td>
<td>𨞁</td>
<td>𨞁</td>
</tr>
</tbody>
</table>

¹⁵⁸ In the MGZYJJ, 諏: 阮.
¹⁵⁹ In the MGZYJJ, 藍: 阮. 監: 阮.
The errors regarding the Qin rhyme group belong to pure clerical errors. Clerical errors can be observed in the writing of surnames 陰 and 岑\(^{160}\) in the C edition.

Correct: A267 B267 D267
Wrong: C283

Correct: A67 B67 D67
Wrong: C67

It is worth noting that there is not an absolute standard or criterion to judge mistakes. Whether some writings are correct or incorrect is debatable, for example, surnames 任, 林 and 針 in the C edition.

Correct: A58 B58 D58
?: C58

Correct: A131 B131 D131
?: C147

Correct: A230 B230 D230
?: C246

\(^{160}\) In the MGZYJJ, 岑: 岑, 岑: 岑.
If we use a very strict criterion to judge the writing errors, surnames 任, 林 and 針 in the C edition can be regarded as clerical errors.

4.14 The Ge Rhyme Group

In the book MGZY, the Ge rhyme group has three spelling groups (Shen 2008). The three spelling groups are listed as follows:

Table 24: The Ge Rhyme Group

<table>
<thead>
<tr>
<th>歌</th>
<th>戈</th>
<th>訛</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

The errors regarding the Ge rhyme group can be categorized into two types: pure clerical errors and errors in the transliteration of variant pronunciations. These error types are discussed in greater detail below.

(1) Pure clerical errors: Clerical errors can be observed in the writing of the surname 戈 in the C edition.

Correct: A325 B325 D325
Wrong: C341
(2) Errors in the transliteration of variant pronunciations: C edition: 盖

A388 B388 D389 Variant pronunciation: C405

4.15 The Ma Rhyme Group

In the book MGZY, the Ma rhyme group has seven spelling groups (Shen 2008). The seven spelling groups are listed as follows:

Table 25: The Ma Rhyme Group

<table>
<thead>
<tr>
<th>結</th>
<th>瓜</th>
<th>嘉</th>
<th>块</th>
<th>厥</th>
<th>迴</th>
<th>打</th>
</tr>
</thead>
<tbody>
<tr>
<td>U</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>M</td>
<td>M</td>
</tr>
</tbody>
</table>

The errors of the Ma rhyme group are misuse of similar-looking letter. The detailed subtypes can be observed in the following:

a. V written as U: This kind of errors can be observed in the writing of the surname 賈 in the A, B and D editions, and the surname 郭 in the C edition.

---

161 In the MGZYJJ, 盖: 盖.
162 The writing of 郭 in the C edition is due to the misuse of similar-looking letters; the writing of 郭 in the D edition is due to the pure clerical errors.
b. ¥ written as ¥: This kind of errors can be observed in the writing of the surname 越 in the C edition.

(2) Pure clerical errors: Clerical errors can be observed in the writing of surnames 薛, 滑, 夏, 闕, 葉 and 謝 in the C edition, and the surname 郑 in the D edition.

---

163 In the MGZYJJ, 越: 趙.
Correct: A138  B138  D138  
Wrong: C154

Correct: A343  B343  D343  
Wrong: C359

Correct: A241  B241  D241  
Wrong: C257

Correct: A34  B34  D34  
Wrong: C34

Correct: A301  B301  
Wrong: D301
CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 Types of Errors

As examined in the last two chapters, there are many errors in the four editions of the BJX text, especially in the C edition. These errors can be categorized into three main types: (1) Misuse of similar-looking letters; (2) Pure clerical errors; (3) Errors in the transliteration of variant pronunciations. The first two are graphic mistakes, and the third is a non-graphic mistake.

5.1.1 Graphic Errors

Within the category “misuse of similar-looking letters,” there are eleven error subtypes involving initials: (1) Confusion of Ꙙ and Ꙙ; (2) Ꙙ written as Ꙙ; (3) Ꙉ written as Ꙉ; (4) Ꙙ written as Ꙉ; (5) Ꙙ written as Ꙉ; (6) Ꙉ written as Ꙉ; (7) Ꙉ written as Ꙉ; (8) Ꙉ written as Ꙉ; (9) Ꙉ written as Ꙉ; (10) Ꙉ written as Ꙉ; and (11) Ꙉ written as Ꙉ. There are eight error subtypes involving finals: (1) ꙉ written as ꙉ; (2) ꙉ written as ꙉ; (3) ꙉ written as ꙉ; (4) ꙉ written as ꙉ; (5) ꙉ written as ꙉ; (6) ꙉ written as ꙉ; (7) ꙉ written as ꙉ; and (8) ꙉ written as ꙉ.

In the category “clerical errors,” there are many mistakes in initial Ꙉ, Ꙉ, Ꙉ, Ꙉ, Ꙉ, Ꙉ, Ꙉ, Ꙉ, Ꙉ, and Ꙉ, and in final Ꙉ, Ꙉ, Ꙉ, Ꙉ, Ꙉ, and Ꙉ. It is worth noting that the criteria for judging mistakes are not absolute. In many finals, whether or not an error exists may be debatable. This is discussed in more detail in chapter four.
Most of the errors in the four editions of the BJX text fall into the categories “misuse of similar-looking letters” or “clerical errors.” Those two types of errors reflect a misconception of different writing systems, which will be addressed in more depth in 5.2.1. The C edition has the most graphic errors of the four editions.

5.1.2 Errors in the Transliteration of Variant Pronunciations

The third type of error, errors in the transliteration of variant pronunciations, needs further examination. A total of 46 surnames with variant pronunciations appear in all four editions, but the distribution of these surnames across editions is not balanced. Forty-one surnames with variant pronunciations appear in the C edition, and only five surnames (于, 霍, 向, 蔚, 於) with different transliteration appears in the A, B and D edition.

Table 26: The Distribution of Errors in the Transliteration of Variant Pronunciations

<table>
<thead>
<tr>
<th>Number (Percentage)</th>
<th>Errors in the C edition</th>
<th>Errors in the A, B and D edition</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>41 (89%)</td>
<td>5 (11%)</td>
<td>46 (100%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number (Percentage)</th>
<th>Different Initial</th>
<th>Different Final</th>
<th>Different Initial &amp; Final</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>15</td>
<td>18</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>28%</td>
<td>33%</td>
<td>39%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>
In 5.1.2, I will discuss the different transliterations which could offer us some useful phonetic information in the following order: different transliteration of initials, different transliteration of final letters, and variant transliterations of an entire syllable.

5.1.2.1 Different Transliteration of Initials

First, let us look at the surnames with different transliterations of initials. These different transliterations provide some phonetic information:

(1) Voiceless and voiced: transliterations in the C edition usually indicate voiced initials. Examples include 松, 瞿, 華, 霍, 解, 邢, 向 and 韋.

<table>
<thead>
<tr>
<th>Feature</th>
<th>松</th>
<th>瞿</th>
<th>華</th>
<th>霍</th>
<th>解</th>
<th>邢</th>
<th>向</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voiced</td>
<td>邁</td>
<td>群</td>
<td>箱</td>
<td>箱</td>
<td>箱</td>
<td>箱</td>
<td>箱</td>
</tr>
<tr>
<td>Unvoiced</td>
<td>心</td>
<td>見</td>
<td>曉</td>
<td>曉</td>
<td>曉</td>
<td>曉</td>
<td>曉</td>
</tr>
</tbody>
</table>

(2) Aspirated and unaspirated: in the C edition, the surname 麹 has an unaspirated initial 見 (jian-mu 见), while 麹 has an aspirated initial 溪 (xi-mu 溪) in the A, B, and D editions.
Table 28: Different Transliterations of Initials (Aspirated and Unaspirated)

<table>
<thead>
<tr>
<th>Feature</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspirated</td>
<td></td>
</tr>
<tr>
<td>Unaspirated</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ABD</th>
<th>池</th>
<th>Aspirated</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>見</td>
<td>Unaspirated</td>
</tr>
</tbody>
</table>

(3) Bilabial and labiodental: in the C edition, the surname (皇)甫 has an bilabial initial 池 (pang-mu ㄢ) , while (皇)甫 has an labio-dental initial 耳 in the A, B, and D editions.

Table 29: Different Transliterations of Initials (Bilabial and Labiodental)

<table>
<thead>
<tr>
<th>Feature</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Labio-dental</td>
<td></td>
</tr>
<tr>
<td>Bilabial</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ABD</th>
<th>非/奉</th>
<th>Labio-dental</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>池</td>
<td>Bilabial</td>
</tr>
</tbody>
</table>

(4) Bilabial nasal and palatal approximant: In the C edition, the surnames 乜 and 饒 have palatal approximant initial 喻 (yu-mu ㄩ), while 乜 and 饒 have bilabial nasal initial 明 (ming-mu ㄇ) in the A, B and D editions.
Table 30: Different Transliterations of Initials (Bilabial Nasal and Palatal Approximant)

<table>
<thead>
<tr>
<th></th>
<th>乜</th>
<th>鳜</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABD</td>
<td>明 丂</td>
<td>明 囉</td>
</tr>
<tr>
<td>C</td>
<td>喻 丂</td>
<td>喻 囉</td>
</tr>
</tbody>
</table>

The differences might result from the transliteration of similar Chinese characters. In

MGZYJJ, 讃 is the transliteration of the Chinese character 也 instead of 乜；prene 是 the

transliteration of the Chinese character 堯 instead of 鳜.

5.1.2.2 Different transliteration of final letters

For the surnames with different transliterations of final letters, the variant transliterations
appear primarily in different main medials, vowels, and endings.

(1) Different vowels: some transliterations in the C edition use different vowels from

those in the A, B, and D editions\(^{164}\). These include the surnames 冷, 蔚, 尉 (遲), 於, 確, 艾, 翟, 被, 喬, 娄, and 鄙.

\(^{164}\) The IPA reconstructions in this chapter are taken from the *Menggu Ziyun Jijiao* (Shen, 2015).
Table 31: Different Transliterations of Vowels

<table>
<thead>
<tr>
<th>Surname</th>
<th>冷</th>
<th>蔚</th>
<th>尉</th>
<th>於</th>
<th>璧</th>
<th>艾</th>
<th>翟</th>
<th>暴</th>
<th>姚</th>
<th>婦</th>
<th>色</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABD</td>
<td>iŋ</td>
<td>y</td>
<td>y</td>
<td>u</td>
<td>y</td>
<td>aj</td>
<td>aj</td>
<td>aw</td>
<td>ew</td>
<td>œw</td>
<td>ja</td>
</tr>
<tr>
<td>C</td>
<td>œŋ</td>
<td>uj</td>
<td>uj</td>
<td>y</td>
<td>jew</td>
<td>i</td>
<td>i</td>
<td>u</td>
<td>œw</td>
<td>y</td>
<td>je</td>
</tr>
</tbody>
</table>

(2) Different endings: some transliterations have different endings in the C edition than in the A, B, and D editions. These include the surnames 賁 and 談.

Table 32: Different Transliterations of Endings

<table>
<thead>
<tr>
<th>Surname</th>
<th>賁</th>
<th>談</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABD</td>
<td>uj</td>
<td>am</td>
</tr>
<tr>
<td>C</td>
<td>un</td>
<td>an</td>
</tr>
</tbody>
</table>

(3) Different vowels and endings: these appear in the transliteration of the surname (聞)人在 the C edition.

Table 33: Different Transliterations of Vowels and Endings

<table>
<thead>
<tr>
<th>Surname</th>
<th>（聞）人</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABD</td>
<td>in</td>
</tr>
</tbody>
</table>
(4) Different medials and vowels: these appear in the transliteration of the surname 郭 in the C edition.

Table 34: Different Transliterations of Medials and Vowels

<table>
<thead>
<tr>
<th>Surname</th>
<th>語</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABD</td>
<td>waw</td>
</tr>
<tr>
<td>C</td>
<td>jew</td>
</tr>
</tbody>
</table>

One main reason for variations in the transliteration of finals is that some surname characters have more than one phonetic value. Polyphone characters may be transliterated in a variety of ways. These include the surname characters 冷, 艾, 責, 暴, 喬, and 婦. Differences in the transliteration of finals also reflect the sound change rule, the loss of the bilabial nasal coda [m]. An example is the surname 談, in which the nasal coda changes from [m] to [n] in the C edition.

5.1.2.3 Variant transliterations of an entire syllable

Some variant transliterations do not only involve an initial or a final; the entire syllable varies in the C edition from the other editions. This kind of transliteration variation occurs in the
surnames 繆, 母, 伏, 宓, 邵, 鄧, 宰, 蔡, 鄴, 藉, 藍, 常, 水, 束, 岑, 葉, 蓋, and 谷. These

surnames are transliterated differently in the C edition than in the A, B and D editions, as shown

in the following table.

**Table 35: Different Transliterations of an Entire Syllable**

<table>
<thead>
<tr>
<th>Surname</th>
<th>繆</th>
<th>母</th>
<th>伏</th>
<th>宓</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABD</td>
<td>wu</td>
<td>muw</td>
<td>vu</td>
<td>vu</td>
</tr>
<tr>
<td>C</td>
<td>muw</td>
<td>kʰu</td>
<td>vow</td>
<td>bi</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Surname</th>
<th>邵</th>
<th>鄧</th>
<th>宰</th>
<th>蔡</th>
<th>鄴</th>
<th>藉</th>
<th>藍</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABD</td>
<td>tʰaj</td>
<td>dəŋ</td>
<td>tsaj</td>
<td>tsʰaj</td>
<td>tʃʰi</td>
<td>dze</td>
<td>lam</td>
</tr>
<tr>
<td>C</td>
<td>ʒew</td>
<td>ʒin</td>
<td>tʃi</td>
<td>tʃʰa</td>
<td>ɡi</td>
<td>hji</td>
<td>kjam</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Surname</th>
<th>常</th>
<th>水</th>
<th>束</th>
<th>岑</th>
<th>葉</th>
<th>蓋</th>
<th>谷</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABD</td>
<td>ʒaŋ</td>
<td>ʒuŋ</td>
<td>ʒy</td>
<td>dʒəm</td>
<td>je</td>
<td>ko</td>
<td>ku</td>
</tr>
<tr>
<td>C</td>
<td>vu</td>
<td>pʊŋ</td>
<td>su</td>
<td>gim</td>
<td>ʃe</td>
<td>hy</td>
<td>jy</td>
</tr>
</tbody>
</table>
One reason for variations in the transliteration of finals is that some surname characters have more than one phonetic value. Polyphone characters may be transliterated in a variety of ways. In this group, the surname character 伏 has two different pronunciations.

Some differences might result from the transliteration of similar Chinese characters. In MGZYJJ, [bi] is the phonetic value of the Chinese character 芈 instead of 宓; [dʒi] is the phonetic value of the Chinese character 鄭 instead of 鄧; [tʃi] is the phonetic value of the Chinese character 沼 instead of 宰; [kjam] is the phonetic value of the Chinese character 椒 instead of 藥; [puŋ] is the phonetic value of the Chinese character 冰 instead of 水; [su] is the phonetic value of the Chinese character 速 instead of 束. Since the C edition is kept in Japan, it is possible that those different transliterations are due to the mispronunciation by Japanese.

5.2 The failure of the script to promulgate

The hP’ags-pa script was intended to be used to transliterate all the languages of the Mongol empire. However, this attempt to replace the Chinese logographic writing system with a hP’ags-pa alpha-syllabic writing system proved to be a failure. Its use during the Yuan dynasty was sporadic, and the hP’ags-pa script was abandoned with the collapse of the Yuan dynasty, becoming a dead writing system. The types of errors in the four editions provide some clues that may help explain the failure of this script to achieve widespread use.
5.2.1 The cognition and learning approach to different writing systems

The BJX is a primer to teach young students the Chinese characters. Together, the BJX and two other primers, the Sānzi Jīng 三字經 [Three Character Classic] and the Qiānzi Wén 千字文 [Thousand Character Classic], are known as San Bai Qian (Three, Hundred, Thousand). They are the most common primers for learning Chinese characters. A student who has memorized all three knows roughly 2,000 Chinese characters. Since Chinese is logographic, students normally learn to identify the characters before learning to read a text or to write characters, although this method is time-consuming. However, such an approach is not effective for learning the hP’ags-pa script, since hP’ags-pa is not logographic but alpha-syllabic. To learn it, students must memorize each individual letter and learn the spelling rules.

As shown in the photocopies of the four editions of the BJX material, the corresponding Chinese character is written below the hP’ags-pa spelling. The hP’ags-pa syllables are included in the BJX material to provide an index for learners of the hP’ags-pa script. But there are some crucial barriers to understanding the hP’ags-pa spellings.

In the MGZY, the hP’ags-pa spellings correspond to the syllables of the Chinese characters (Shen, 2008). This is a shortcut that allows learners to search and copy the hP’ags-pa script syllable by syllable. However, the syllable block is not transparent to learners and prevents them from learning the phonetic value of the script’s individual letters (Shen, 2008).

The BJX text also includes hP’ags-pa spellings that correspond to the syllables of the Chinese characters. In fact, the BJX material carries this tendency even further. In the MGZY, a syllable spelled with one letter appears much shorter than one that uses four letters (Shen, 2008).
But in the BJX text, the syllable size is fixed. All the hP’ags-pa syllable blocks are adjusted to be basically the same size, no matter whether they include one or four letters. For example,

In the A edition

In the B edition

In the C edition

In the D edition

In this example from the A edition, the surnames 晁, 辛, 曹, 須, 查, and 權 are in the same horizontal line. In hP’ags-pa, 查 is written with only one letter and 曹 is written with four letters. However, these syllables appear to be basically the same size. In the B edition, the surnames 元, 伏, 熊, 梁, 麻, 童, 鍾, and 田 are in the same horizontal line. Whether their hP’ags-pa spellings are composed of one letter (麻), two letters (伏), three letters (鍾), or four letters (元), the lengths of the individual letters are adjusted so the syllable blocks are all the same length. It is the same in the C and D editions: the sizes of the syllable blocks are fixed regardless of the number of letters.
The fixed size of syllable blocks reflects people’s complete misunderstanding of the nature of the writing system. Readers of the Chinese logographic writing system treated the hP’ags-pa script as logographic as well. The phonetic information in each individual letter was ignored, and the hP’ags-pa syllable was treated as an unanalyzable block of information. This approach makes recognition and memorization quite a burden.

This problem resulted from an ineffective approach to learning the script. The MGZY is a list of homophones, while the BJX is an index of syllables. Both of these materials lack alphabetic tables and syllable charts. However, in order to master an alpha-syllabic writing system, the learner must understand the phonetic value of each individual letter and learn the spelling rules.

In FSK and SSHY, Chinese equivalents, as pronunciation cues, are provided. The chart can be found in 1.1. Those Chinese equivalent characters basically represent the same phonetic value for the initials and the inherent vowel [a]. For example, 葛[kə], 潴[kʰa]. This approach can remind learner of the phonetic value of each letter. However, in the MGZY, 36 initials\(^\text{165}\) are given under each hP’ags-pa letter. Those characters do not represent the pronunciations of hP’ags-pa letters. Starting from MGZY, the pronunciation of each hP’ags-pa letter became non-transparent to its users, which makes it impossible for its users to remember the phonetic values.

\(^{165}\) Traditionally, 36 initials are used to represent the initials of Middle Chinese phonology.
The Korean alphabetic syllabary Hangul is a successful case. When this system was introduced, great efforts were made to teach beginners the phonetic values of each consonant and
vowel. Also, syllable charts were provided to help learners master the spelling rules for constructing syllable blocks (Shen, 2008). Because Hangul was introduced in this way, the system was successfully adopted as the official script of Korea.

Therefore, one underlying reason for the failure of the hP’ags-pa script to spread is a misunderstanding of the nature of an alpha-syllabic writing system. This misunderstanding is also reflected in the preface to the BJX text. The preface to the A and B editions states,

蒙古之書，前乎李者之所未覩，近風化，自北而南，新李尚之。盖自科斗之書廢而篆隸之制作，其詔皆古也。其後真草之書，雜行於世。

Mongolian writing is something that had never been seen by scholars before [this dynasty]. Recently the customs and ways of the North have come to the South, and new scholarship thinks highly of it [the new Mongolian writing]. It is the case that after the [archaic] Tadpole style of [Chinese writing] was abandoned, the Seal Script and Official Script forms of writing were devised, which both preserved the ancient forms of ideographs. Only later did the Regular Script and Cursive Script gradually come into use.

The preface to the C edition says,

古篆之外，世有所見。今得蒙古所篆《百家姓》字，每見一格，皆世所未見者。謹刻次于古篆。揮毫李此，向乎筆走龍蛇矣。

In addition to the ancient Seal Script, there are other [scripts] in the past. Now I have obtained this version of the "Hundred Surnames" written in the Mongolian script – each form is unique and previously unknown. I have carefully engraved [this text] after the section of the ancient Seal Script. Holding the writing bush to learn this
script, its brushstrokes are like dragons and snakes (describing the dynamic movement of the brushstrokes).

The prefaces to the A, B, and C editions, all preface emphasize the script’s uniqueness. The compilers of the BJX considered the hP’ags-pa script to be special material, a good example of calligraphy (like Chinese characters). However, the nature of hP’ags-pa script and Chinese are totally different. They did not consider the BJX a textbook for script promulgation. This misunderstanding was a fatal error that prevented the spread of the script.

5.2.2 The discrepancy between phonological categories and phonetic values

Another barrier to the script’s widespread use is the discrepancy between phonological categories and phonetic values. The standard hP’ags-pa syllabic transcriptions for the Chinese characters are provided in the MGZY, which was produced during the early Yuan dynasty, shortly after the hP’ags-pa script was invented (Shen, 2011). The BJX text was written after the MGZY, and those hP’ags-pa transliterations were made after spelling had been standardized. The MGZY provides systematic phonological and phonetic information, which is very useful for understanding the hP’ags-pa spellings in the BJX text.

Ironically, the phonological categories and phonetic values in the MGZY do not form one coherent system (Shen, 2008). However, the method of the book’s compilation explains the discrepancy.

Step 1: the phonological system of Qiyin Yun 七音韻 (QYY)\(^\text{166}\) was adopted.

\(^{166}\) Qiyin Yun 七音韻 (QYY) is a rhyme table. Each phonologically distinguishable syllable is represented by one character. The number of characters in this chart equals the number of distinctive syllables (Shen, 2008).
Step 2: hP’ags-pa spellings for each distinctive syllable in the QYY were added.

Step 3: many homophonous characters copied from Xinkan Yunlue 新刊韻略 (XKYL) were added.

<table>
<thead>
<tr>
<th>MGZY Phonological system</th>
<th>QYY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characters</td>
<td>XKYL</td>
</tr>
<tr>
<td>hP’ags-pa spellings</td>
<td>New</td>
</tr>
</tbody>
</table>

Figure 4: The Method of the MGZY’s Compilation

As the figure above shows, the QYY provides the phonological framework for the MGZY, and the characters were copied from the XKYL; only the hP’ags-pa spelling of the Chinese syllables were new in the MGZY. Thus, the phonological categories are late Jin, and the phonetic values of the categories are early Yuan (Shen, 2011). Therefore, the phonological system of MGZY and what is reflected in the hP’ags-pa spellings represent two different phonological systems (Shen, 2008).

<table>
<thead>
<tr>
<th>Phonological information</th>
<th>QYY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phonetic information</td>
<td>non-QYY (based on a living language at the time)</td>
</tr>
</tbody>
</table>

Figure 5: The Discrepancy between Phonological Categories and Phonetic Values

---

167 Xinkan Yunlue 新刊韻略 (XKYL) is a rhyme dictionary compiled by Wang Wenyu in the early 13th century. Yunlue is a kind of abbreviated rhyme dictionary; it was mainly used for civic examinations (Shen, 2008).
Hence, the MGZY takes its phonological categories from one language and its phonetic values from another. The main purpose of the MGZY is orthographic. Its artificial characteristics can be seen in the phenomenon: the flip-flop of the voiceless and voiced stops and affricates, as shown in the table below.

Table 36: The Flip-Flop of the Voiceless and Voiced Stops and Affricates

| hP’ags-pa letter | བ | བ བ | ད | ད ད | བ | བ བ | ད | ད ད | བ | བ བ | ད | ད ད | བ | བ བ | ད | ད ད |
|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chinese value    | p | pʰ | b | t | tʰ | d | tʃ | tʃʰ | dʒ | k | kʰ | g | b | pʰ | b | t | tʰ | d | tʃ | tʃʰ | dʒ | k | kʰ | g |
| Tibetan value    | b | pʰ | p | d | tʰ | t | dʒ | tʃʰ | tʃ | g | k | kʰ | k | b | pʰ | b | t | tʰ | d | tʃ | tʃʰ | dʒ | tʃ | g | k | kʰ | k |
| Tibetan letter   | བ | བ | བ | བ | བ | བ | བ | བ | བ | བ | བ | བ | བ | བ | བ | བ | བ | བ | བ | བ | བ | བ | བ | བ | བ | བ |

In the hP’ags-pa materials, voiced stops and affricates were used for voiceless ones, and vice versa. This phenomenon demonstrates that devoicing had already appeared and was artificially distinguished in the hP’ags-pa material (Shen, 2008, 2011).

Besides, the spellings of voiceless and voiced fricatives are not well distinguished in BJX. This phenomenon also reflects the voicing contrast did not exist in the language but was artificially made (Shen, 2011).

Table 37: The Spellings of Voiceless and Voiced Fricatives in MGZYJJ and BJX

<table>
<thead>
<tr>
<th>MGZYJJ</th>
<th>BJX</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>傳</td>
<td>𓅍</td>
<td>𓅍</td>
</tr>
<tr>
<td>(東)方</td>
<td>𓅍</td>
<td>𓅍</td>
</tr>
<tr>
<td>ABD</td>
<td>f</td>
<td></td>
</tr>
<tr>
<td>f</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In short, the phonological categories and the phonetic values of the hPa’gs-pa syllables in the BJX text do not form one coherent system. Rather, the BJX text mixes the phonological categories from one language with the phonetic values from another (Shen, 2008). The script did not completely reveal real phonetic information, since its phonological system is artificial. This discrepancy of phonological categories and phonetic values made it impossible for its users to accurately record the living language.

5.2.3 Non-adaptability to the Chinese language

In addition to the two reasons described above, the hP’ags-pa script failed to spread because of its inability to adapt to the Chinese language. The syllable structure in Chinese can be illustrated with the following graph:
The Chinese language is a three-dimensional system: a syllable includes a tone, an initial, and a final. However, the hP’ags-pa script is a two-dimensional system; the initial and final are taken into account, but it does not indicate tones. Identical syllables with different tones are spelled the same way.

In the four editions of the BJX, there are twenty-one pairs and thirteen groups of surnames that are spelled identically in the hP’ags-pa script. Two thirds are pairs with one third
groups of three or four surnames. Thirteen pairs and twelve groups include surnames with
different tones. These surnames are tonally distinct in Chinese, but the hP’ags-pa script cannot
indicate the tonal difference, making it difficult to distinguish these surnames in hP’ags-pa. For
example, in pair 1, 馬 uses a shang-tone, and 麻 has a ping-tone in Chinese. However, these two
surnames are spelled identically in the hP’ags-pa script.

In the other eight pairs and one group (Pair 3: 閻文; Pair 6: 胎須; Pair 7: 張章; Pair 8: 鍾
終; Pair 12: 弓宮; Pair 15: 屈麴; Pair 16: 襲仇; Pair 17: 蕞瞿; and Group 8: 洪弘紅), the
surnames in each group use the same tones and are spelled identically in the hP’ags-pa script.
However, these surnames are different family names and are represented by different Chinese
characters. The limited number of hP’ags-pa syllables make it impossible to distinguish these
surnames.

Table 38: The Pairs and Groups of Surnames with Identical Spellings

<table>
<thead>
<tr>
<th>Pair 1: 馬麻</th>
</tr>
</thead>
<tbody>
<tr>
<td>shang-tone</td>
</tr>
<tr>
<td>ping-tone</td>
</tr>
</tbody>
</table>
Pair 2: 巫武

<table>
<thead>
<tr>
<th>ping-tone</th>
<th>A204</th>
<th>B204</th>
<th>C220</th>
<th>D204</th>
</tr>
</thead>
<tbody>
<tr>
<td>shang-tone</td>
<td>A234</td>
<td>B234</td>
<td>C250</td>
<td>D234</td>
</tr>
</tbody>
</table>

Pair 3: 聞文

<table>
<thead>
<tr>
<th>ping-tone</th>
<th>A273</th>
<th>B273</th>
<th>C289</th>
<th>D273</th>
</tr>
</thead>
<tbody>
<tr>
<td>ping-tone</td>
<td>A339</td>
<td>B339</td>
<td>C355</td>
<td>D339</td>
</tr>
</tbody>
</table>

Pair 4: 堵都

<table>
<thead>
<tr>
<th>shang-tone</th>
<th>A284</th>
<th>B284</th>
<th>C300</th>
<th>D284</th>
</tr>
</thead>
<tbody>
<tr>
<td>ping-tone</td>
<td>A333</td>
<td>B333</td>
<td>C349</td>
<td>D333</td>
</tr>
</tbody>
</table>

Pair 5: 杜屠
shang-tone
A113  B113  C113  D113

ping-tone
A263  B263  C279  D263

Pair 6: 胥須

ping-tone or shang-tone
A269  B269  C285  D269

ping-tone
A374  B374  C391  D375

Pair 7: 張章

ping-tone
A24  B24  C24  D24

ping-tone
A40  B40  C40  D40

Pair 8: 鍾終
<table>
<thead>
<tr>
<th>Pair 9: 舒束</th>
</tr>
</thead>
<tbody>
<tr>
<td>ping-tone</td>
</tr>
<tr>
<td>A133 B133 C149 D133</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pair 10: 成盛</th>
</tr>
</thead>
<tbody>
<tr>
<td>ping-tone</td>
</tr>
<tr>
<td>A107 B107 C107 D107</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ru-tone</th>
</tr>
</thead>
<tbody>
<tr>
<td>A239 B239 C255 D239</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pair 11: 葛柯</th>
</tr>
</thead>
<tbody>
<tr>
<td>ping-tone</td>
</tr>
<tr>
<td>A99 B99 C99 D99</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>qu-tone</th>
</tr>
</thead>
<tbody>
<tr>
<td>A130 B130 C146 D130</td>
</tr>
</tbody>
</table>
ru-tone

A44 B44 C44 D44

ping-tone

A148 B148 C164 D148

Pair 12: 弓宫

ping-tone

A208 B208 C224 D208

ping-tone

A224 B224 C240 D224

Pair 13: 家郟

ping-tone

A191 B191 C207 D191

ru-tone

A301 B301 C317 D301

Pair 14: 庚耿
<table>
<thead>
<tr>
<th>Pair 15: 屈麴</th>
</tr>
</thead>
<tbody>
<tr>
<td>ping-tone</td>
</tr>
<tr>
<td>shang-tone</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pair 16: 裘仇</th>
</tr>
</thead>
<tbody>
<tr>
<td>ru-tone</td>
</tr>
<tr>
<td>ru-tone</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pair 17: 璽瞿</th>
</tr>
</thead>
<tbody>
<tr>
<td>ping-tone</td>
</tr>
<tr>
<td>ping-tone</td>
</tr>
<tr>
<td>Pair 18: 吳伍</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td><strong>ping-tone</strong></td>
</tr>
<tr>
<td>A290 B290 C306 D290</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pair 19: 元阮</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ping-tone</strong></td>
</tr>
<tr>
<td>A6 B6 C6 D6</td>
</tr>
</tbody>
</table>

| **shang-tone** |
| A89 B89 C89 D89 |

<table>
<thead>
<tr>
<th>Pair 20: 華滑</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ping-tone</strong></td>
</tr>
<tr>
<td>A91 B91 C91 D91</td>
</tr>
</tbody>
</table>

| **shang-tone** |
| A114 B114 C114 D114 |
Pair 21: 于禹

Group 1: 伏符扶
Group 2: 黎酈利

<table>
<thead>
<tr>
<th>ping-tone</th>
<th>A246</th>
<th>B246</th>
<th>C262</th>
<th>D246</th>
</tr>
</thead>
<tbody>
<tr>
<td>ru-tone</td>
<td>A287</td>
<td>B287</td>
<td>C303</td>
<td>D287</td>
</tr>
<tr>
<td>qu-tone</td>
<td>A348</td>
<td>B348</td>
<td>C364</td>
<td>D348</td>
</tr>
</tbody>
</table>

Group 3: 路盧祿遠

<table>
<thead>
<tr>
<th>qu-tone</th>
<th>A122</th>
<th>B122</th>
<th>C138</th>
<th>D122</th>
</tr>
</thead>
<tbody>
<tr>
<td>ping-tone</td>
<td>A151</td>
<td>B151</td>
<td>C167</td>
<td>D151</td>
</tr>
<tr>
<td>ru-tone</td>
<td>A342</td>
<td>B342</td>
<td>C358</td>
<td>D342</td>
</tr>
<tr>
<td>ru-tone</td>
<td>A387</td>
<td>B387</td>
<td>C404</td>
<td>D388</td>
</tr>
</tbody>
</table>

Group 4: 朱祝諸
<table>
<thead>
<tr>
<th>Group 5: 紀汲姬冀</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ping-tone</strong></td>
</tr>
<tr>
<td><strong>ru-tone</strong></td>
</tr>
<tr>
<td><strong>ping-tone</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 6: 魏危隗</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>shang-tone</strong></td>
</tr>
<tr>
<td><strong>ru-tone</strong></td>
</tr>
<tr>
<td><strong>ping-tone</strong></td>
</tr>
<tr>
<td><strong>qu-tone</strong></td>
</tr>
</tbody>
</table>
qu-tone

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>A30</td>
<td>B30</td>
<td>C30</td>
<td>B30</td>
</tr>
</tbody>
</table>

ping-tone

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>A124</td>
<td>B124</td>
<td>C140</td>
<td>D124</td>
</tr>
</tbody>
</table>

shang-tone

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>A210</td>
<td>B210</td>
<td>C226</td>
<td>D210</td>
</tr>
</tbody>
</table>

Group 7: 何賀和

ping-tone

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>A21</td>
<td>B21</td>
<td>C21</td>
<td>D21</td>
</tr>
</tbody>
</table>

qu-tone

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>A70</td>
<td>B70</td>
<td>C70</td>
<td>D70</td>
</tr>
</tbody>
</table>

ping-tone

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>C121</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Group 8: 洪弘紅

ping-tone

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>A168</td>
<td>B168</td>
<td>C184</td>
<td>D168</td>
</tr>
<tr>
<td>Group 9: 鄒於鳥</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ping-tone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A336  B336  C352  D336</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ping-tone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A383  B383  C400  D384</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 10: 鵝鵝蔚</th>
</tr>
</thead>
<tbody>
<tr>
<td>ru-tone</td>
</tr>
<tr>
<td>A165  B165  C181  D165</td>
</tr>
<tr>
<td>ru-tone</td>
</tr>
<tr>
<td>A268  B268  C284  D268</td>
</tr>
<tr>
<td>Tone</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>qu-tone</td>
</tr>
<tr>
<td>ping-tone</td>
</tr>
<tr>
<td>ru-tone</td>
</tr>
<tr>
<td>ru-tone</td>
</tr>
<tr>
<td>qu-tone</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tone</th>
<th>Group 12: 喻俞余</th>
</tr>
</thead>
<tbody>
<tr>
<td>qu-tone</td>
<td>A36  B36  C36  D36</td>
</tr>
<tr>
<td>ping-tone</td>
<td>A57  B57  C57  D57</td>
</tr>
</tbody>
</table>
ping-tone

Group 13: 魏危隗

qu-tone

ping-tone

shang-tone

In Chinese culture, one’s family name is part of one’s identity. Surnames are of enormous importance both to the people who receive them and to the society that gives them. The inability to distinguish these different surnames in the hP’ags-pa script is another barrier to its promulgation.

5.3 Conclusion

A careful comparison and examination of the four editions of the BJX text reveals three main types of errors in hP’ags-pa syllables: (1) Misuse of similar-looking letters; (2) Pure clerical errors; and (3) Errors in the transliteration of variant pronunciations. Most errors fall into
the first two categories, which together can be called “graphic errors.” The third type involves non-graphic errors.

Since the C edition was produced much later than the A, B, and D editions, the variant transliterations in the C edition provide some clues to changes in pronunciation, including (1) the devoicing of voiced stops and fricatives and (2) the loss of the bilabial nasal coda [m].

Aside from the variant transliterations, the majority of errors are purely graphic and reflect a lack of knowledge about the writing system. An examination of the use of the hP’ags-pa script in the BJX text suggests several potential reasons for the failure of the script to come into common use. These include:

(1) A misconception of the nature of the hP’ags-pa writing system: the hP’ags-pa script is alpha-syllabic, but it is treated in the BJX text as if it were logographic (like Chinese characters). This means that the sizes of syllable blocks are fixed regardless of the number of letters, and the prefaces reflect the compliers’ misunderstanding.

(2) An ineffective learning approach: the direct correspondence between the hP’ags-pa spellings and Chinese characters at the syllabic level hindered a phonetic approach, and the lack of alphabetic tables and syllable charts made it difficult for users to learn the spelling rules.

(3) The discrepancy of phonological categories and phonetic values: in the BJX text, the phonological categories and the phonetic values of the hPa’gs-pa syllables do not form one coherent system. This writing system cannot accurately record a living Chinese language.

(4) The non-adaptability to the Chinese language: Chinese language is a three-dimensional system, while the hP’ags-pa script, which does not indicate tones, is a two-dimension system. Its atonality and the limited number of hP’ags-pa spelling syllables make it hard to distinguish different semantic units in Chinese.
The case of hP’ags-pa script promulgation demonstrates some of the important linguistic factors of a sound language policy. First, the purpose of a writing system is to accurately record a living language. Thus, the system cannot be artificial. The phonological categories and phonetic values should be coherent. Second, the nature of the writing system must be properly understood by its users. Third, language policymakers should design effective learning approaches.
APPENDIX A

THE A EDITION
APPENDIX C

THE C EDITION
APPENDIX D

THE D EDITION
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