

## The Sound of Initial Shan 禪母 in Middle Chinese<sup>1</sup>

Lee, Jiyoung

### I. Introduction

Initial Chuang 牀母 and initial Shan 禪母<sup>2</sup>, two voiced zheng-chi 正齒 sound, have been placed in affricate and fricative position respectively of the rhyme tables (Yuntu: 韻圖) in Middle Chinese. Proceeding from this, one could logically assume that initial Chuang was affricate sound and initial Shan was fricative sound. But now the characters with these two initials are pronounced both fricative and affricate in Standard Chinese and also in several dialects of China. Also, in Sanskrit-Chinese transliteration, as Buddhist scripts in Middle Chinese, while initial Shan had been used more often as transliteration features of /j/ or /jh/ which is the voiced affricate initial in Sanskrit than initial Chuang. It means that translators of Buddhist scripts in Middle Chinese period have think the voiced affricate in Sanskrit is more similar to initial Shan than Chuang.

This situation which the position of the rhyme tables is different from the language really used have been attraction attention from scholars, much scholarly work has been done on the topics whether initial Shan was fricative or affricate, but there is no overall agreement as to the character of initial Shan. This study is concerned with phonological features of initial Shan which has been a very controversial issue in Middle Chinese phonology. For study, this paper will focus on whether initial Chuang and Shan are affricate or fricative by dwelling upon historical and dialectal data, from this, we can find out how pronounced initial Shan actually in Middle Chinese.

---

<sup>1</sup> Funds for research were provided by Park Wan Suh Endowment Research Fellow Program of Seoul National University.

<sup>2</sup> The more common pronunciation of the character 禪 is probably Chan, but as the name of this initial, Ding and Li(1981) give the other pronunciation Shan. (Baxter et al., 2014:15) This paper follows this approach, because initial Shan is placed in fricative position of the rhyme tables.

## II. Distinction between initial Chuang and Shan in Middle Chinese

Initial Chuang and Shan are a pair of voiced zheng-chi sound: the former is marked as an affricate place, the latter is marked as a fricative place in the rhyme tables, and so are they in the rhyme books. Below is fanqie spellings for initials(反切上字) of initial Shan and Chuang in the *Qieyun* 切韻 as application of the analysis of fanqie spellings(反切系聯法):

### 禪母

Division II: 士 仕 鋤 鉏 牀 查 雛 助 豺 崇 崩

Division III: 時 常 市 是 承 視 署 殊 氏 寔 臣 殖 植 嘗 蜀 成

### 牀母

Division II: 食 神 實 乘

Division III: 俟 禿

Like this, initial Chuang and Shan in Middle Chinese are quite distinct from each other in the *Qieyun*, because si 俟 is only related with chi 禿, not related with fanqie spelling for initial Shan.

But in the *Guangyun*, their division-III were not distinguished. Chi 禿 does not appear as fanqie spelling for any initial, si 俟 is related with fanqie spelling for initial Shan. The same holds true for the letters indicating initials in the *Gui Sanshi Zimu Li* 歸三十字母例. There are only 4 initial consonants in zheng-chi initials in it as Shen 審 Chuan 穿 Shan 禪 Zhao 照. There are several letters below initial name, it means that the letters have the same initial consonant as the letters being spelled. However, the letters below Shan as cheng(or sheng) 乘, chang 常, shen 神, chen 謹 are initial Shan and Chuang mixed: while cheng and shen are with initial Chuang, chang and chen are with initial Shen. It means that there is no distinction between initial Shen and Chuang at that time.

Then, if there is no distinction between these two initials, why the writers of the rhyme tables separate zheng-chi initials?

We can take our cue from dialects. To speak in Yan Zhitui 顏之推 context in his book, *Yan Shi Jia Xun* 顏氏家訓, southerners mispronounce shi 石 as xie 射, shi 是 as shi 舐. While shi 石 and shi 是 are belong to the group with initial Shan, xie 射 and shi 舐 are belong to the group with initial Chuang. From this, it might be deduced that initial Shan have been put together with initial chuang in the southern dialects, but they have been distinguished in the Yan’s phonetic system. It is the reason why we cannot beg the question that initial Chuang and Shan represent same initial.

### III. Phonetic Reconstruction

This chapter attempts to reconstruct initial Chuang and Shan, especially focus on whether these two initials are affricate or fricative.

First of all, let us remind the phrase of *Yan Shi Jia Xun* 顏氏家訓. In Yan’s phrase, southerners mispronounce initial Shan as Chuang, to be correct, it means they read fricative as affricate. Pulleyblank (1962:67) points out which it is not correspond with actual phonetic change, the letters with initial Chuang and Shan have tendency to be read as fricative in Modern Chinese dialects, so we have to reconstruct initial Chuang and Shan as fricative and affricate respectively. As for the fact that these letters whether with initial Chuang or Shan are read as fricative in Sino-Korean, it seems reasonable to conclude that initial Chuang and Shan are fricative and affricate respectively in Middle Chinese.

According to Choi, Young Ae (2000:229), the letters with initial Chuang and Shan in Middle Chinese are read as follows statistically in Modern Chinese dialects:

	Initial Chuang 牀(船)		Initial Shan 禪(禪)	
	平(level tone)	仄(contour tone)	平(level tone)	仄(contour tone)
Beijing	tʂh 50%, ʂ 50%	ʂ 100%	tʂh 79%	ʂ 96%
Xi’an	ʂ 50%	ʂ 60%	tʂh 63%	f 20%, ʂ 56%, s 20%
Suzhou	z 100%	z 100%	z 100%	z 100%
Shuangfeng	ɣ 83%	ɣ 83%	dz 33%, ɣ 37%	ɣ 46%, ɛ 20%
Meixian	s 100%	ɣ 30%, ɛ 30%, ʂ 30%	s 72%	s 90%
Guangzhou	ʃ 83%	ʃ 30%	ʃ 84%	ʃ 90%

Fuzhou	s 100%	s 100%	s 100%	s 93%
--------	--------	--------	--------	-------

Unfortunately, the data based on are not including information of division-II syllables, so this table includes information about division-III syllables only, but we can see the tendency: while initial Chuang is related with fricative, initial Shan is related with affricate. Of course most of letters with both initial Chuang and Shan are read as fricative sound, but a closer look at Beijing, Xi'an, and Shuangfeng, it would not be an overstatement to say that initial Chuang tends to be read as fricative and initial Shan tends to be read as affricate.

In addition, considering pictophonetic characters(形聲字), there is a tendency that the letters with initial Shan is more related with dental stops and affricate as follows.

是: 題 堤 醍 (affricate)

暑: 都 (dental stop)/ 諸 箸 渚 者 (affricate)

殊: 朱 珠 誅 (affricate)

殖: 直 植 (dental stop<sup>3</sup>)

蜀: 觸 燭 (affricate)

崇: 宗 侗 琮 悰 (affricate)

崩: 側 測 廁 (affricate)

From this phonetic relation of these letters, it might be deduced that initial Shan bear throughout the traits of /t-/. Historically, in Chinese, dental stops have been changed to affricate<sup>4</sup>, and fricative gradually, this relation could be the evidence initial Shan have been in the step of affricate in Middle Chinese period. The change from stop to fricative is very natural course in initials. It can be strong evidence that initial Shan have been affricate in Middle Chinese period.

As a result, we can reconstruct initial Shan as affricate while initial Chuang as fricative. It is more reasonable reconstruction considering Shao Rongfen (1982:101-108) said that Before Yi Jing 義淨 of 7 CE, initial Shan had been used as transliteration features of /j/ or /jh/ which

<sup>3</sup> Now these two letters are read as affricate, but in Middle Chinese, have been dental stop.

<sup>4</sup> The recent researches find out that initial groups of Zhi(知系) and Zhao(照系) come from dental stop /t-/.

is the voiced affricate initial in Sanskrit, but initial Chuang.

#### IV. Conclusion

This article has attempted to establish that initial Shan has been affricate in Middle Chinese, while initial Chuang has been fricative at that time. Ostensibly, these a pair of voiced initials, initial Chuang and Shan have been placed in affricate and fricative position respectively of the rhyme tables, much has followed this system. But we could find some interesting evidences that initial Shan was read as affricate in Middle Chinese period and analyzed that.

Up to now we have looked at the historical data as the rhyme books, literature, and references, from these, we can find out initial Shan have been distinguished from initial Chuang. It was just the influence of dialects that initial Shan seems to put together with initial Chuang as some literature shown. Also, from the tendency of dialect, we can find initial Shan tends to have affricate sound, while initial Chuang have fricative sound. Moreover, with the relation of pictophonetic characters, initial Shan is concerned with dental stops and affricate. As a consequence, initial Shan was distinguished from initial Chuang, and reconstruct as affricate. This is the opposite result from what the rhyme tables have shown. But from the above, it is hard to escape the conclusions that initial Shan has been affricate.

#### Bibliography

- Baxter, W. et al., *Old Chinese: A New Reconstruction*, Oxford University Press, 2014  
Choi, Young Ae, *Chinese phonology*(중국어음운학), Tongnamu, 2000  
Pulleyblank, The Consonantal System of Old Chinese, *Asia Major* 9, 1962, 58-144  
Shao Rongfen, *A Study on Qieyun*(切韻研究), Zhongguo Shehui Kexue, 1982  
Yan Zhitui, *Yan Shi Jia Xun*(顏氏家訓), Shanmin Shuguo 三民書局, 2001