

Phonographic Characters in the *Biography of Xuanzang* by Hui Li The Declension of *puruṣa* (*bùlùshā* 布路沙)

Chiara Pette

Università degli Studi di Pavia, Italia

Abstract The article discusses an interesting case of the use of Chinese characters as phonographic devices: the Sanskrit declension of *puruṣa* (*bùlùshā* 布路沙) 'man' as transcribed by the Chinese monk Hui Li in his *Biography of Xuanzang*. In particular, the analysis will focus on two aspects: the way Hui Li renders the different Sanskrit nominal endings; the evaluation of the general accuracy of these transcriptions. For the latter point, I will take as reference the phonetic reconstructions of Chinese characters proposed by Pulleyblank 1991 and Baxter, Sagart 2014.

Keywords Chinese historical phonology. Middle Chinese. Sino-Indian contact. Chinese rime tables. Chinese siddham studies.

Summary 1 Introduction. – 2 The Contact Between China and India. – 3 Chinese Rime Tables. – 4 Hui Li's Declension of *puruṣa*. – 5 Summary.



Edizioni
Ca' Foscari

Peer review

Submitted 2023-02-10
Accepted 2023-03-13
Published 2023-06-26

Open access

© 2023 Pette | 4.0



Citation Pette, C. (2023). "Phonographic Characters in the *Biography of Xuanzang* by Hui Li. The Declension of *puruṣa* (*bùlùshā* 布路沙)". *Bhasha. Journal of South Asian Linguistics, Philology and Grammatical Traditions*, 2(1), 79-94.

DOI 10.30687/bhasha/2785-5953/2023/01/004

1 Introduction

It is necessary to provide some background information about the text considered in this study. First of all, Hui Li's *Biography of Xuanzang* (Chinese title: *Dà Táng dàcí 'ēnsì Sānzàng fǎshī zhuàn* 大唐大慈恩寺三藏法師傳) as we have it actually seems to be attributed to the monk Yancong, who expanded and elaborated an earlier text by Hui Li. While in the preface Yancong himself gives the 688 A.D. as the year of completion of his work, the date of Hui Li's *Biography* has not yet been established (Kotyk 2019, 516). It is therefore necessary to specify that I do not intend the *Biography of Xuanzang* as Hui Li's original work. This means that the specific contents analysed and commented on in this paper are only conventionally attributed to Hui Li, both as a matter of tradition and simplicity. The reference text is certainly different from Hui Li's own elaboration, and has probably gone through a complex history of transmission that cannot be considered here.

The *Biography of Xuanzang* is a remarkable repository of historical information concerning India, and constitutes one of the very few examples of ancient Chinese descriptions of a foreign language. In fact, while a rather small number of Chinese monks seem to have developed a good knowledge of Indian languages, Hui Li's text can be included in a corpus of three famous literary works from the seventh century A.D., all of which contain some annotations regarding Sanskrit and its basic morphology. The other two sources are the *Dà Táng Xīyù Jì* 大唐西域記 (The Great Tang Dynasty Record of the Western Regions), written by monk Bianji (辯機 602-48 A.D.) on the basis of Xuanzang's (玄奘 600/602-64 A.D.) oral account in 646 A.D., and the *Nánhǎi jìguī nēifǎ zhuàn* 南海寄歸內法傳 (A Record of Buddhist Practices Sent Home from the Southern Sea) by monk Yi Jing (義淨 635-713 A.D.), probably completed in 691-92 A.D.

Hui Li's text was first translated into French by Stanislav Julien (1797-1873) in 1853, and then into English by Rev. Samuel Beal (1825-1889) in 1914. While these historical translations are still a valuable reference point for approaching Hui Li's text, some more recent translations are also available: notably those of Li Y.-H. (1959) and Li R. (1995). The text, as the title suggests, represents a later account of the enterprises performed by Xuanzang on his long pilgrimage to India in search of sacred texts and relics, drawn up by his disciple Hui Li. *The Great Tang Dynasty Record of the Western Regions*, written by Xuanzang himself in 646 A.D., also saw as its first translation that into French by Julien in 1857-58. Two English translations followed: by Beal in 1884 and by Thomas Watters (1840-1901), this latter posthumously published in 1904. A more recent version is that of Li R. (1996). The *Record* by monk Yi Jing was translated into English by Japanese Buddhistologist and Sanskritist Junjirō Takakusu (1866-1945) in 1896, and traces Yi Jing's sea journey to India beginning in 671 A.D.

The grammatical descriptions contained in these works are not always easy to interpret, mainly due to their vagueness and unclear use of terminology. In some passages, interpretive uncertainty depends on the fact that the authors cite specific Indian treaties in Chinese transcription or translation, but it has not always been possible to identify the texts referred to. In addition, it is my opinion that some problems also emerge in other cases where the interpretation of the text would seem to have gone unchallenged. Most of the time these ancient texts have been simply translated for what they literally say instead of being analysed for what the authors really meant. It seems that the linguistic information described by these seventh-century Chinese monks was looked at only in the light of Sanskrit and its linguistic tradition, without being contextualised with respect to the Chinese linguistic knowledge of the time.

Among the grammatical contents of the *Biography of Xuanzang* (see Staal 1972), the declension of *purusa* ‘man’ takes on special importance. The monk’s attempt to reproduce Indian sounds by means of Chinese characters deserves to be analysed for several respects: (1) determining which characters were selected for each Sanskrit termination; (2) noting whether alternations of multiple characters are present for the same syllable; (3) evaluating the overall phonetic correspondence between the Middle Chinese reconstructions of the characters used and the Indian sound they transcribe.

Note that the study proposed in this paper is based on the published version of the canon. In the absence of an original text and since it has not been possible to conduct a philological analysis of all available canons, the conclusions are to be considered partly hypothetical.

2 The Contact Between China and India

The focus on linguistic aspects in ancient China was mainly on the exegetical process applied to classical texts, with the intention of re-discovering their authentic meaning. This philological approach obviously could not ignore the analysis of the graphic forms through which the ancient texts had been handed down. The Chinese writing system itself, by virtue of the marked iconicity of some of its graphic elements with respect to the meaning of the word represented, has traditionally been a widely adopted tool for lexical analysis.

If we look at the structural composition of Chinese characters, we see that most of them are *xíngshēngzì* 形聲字 ‘phono-semantic compounds’, i.e. characters made by means of two graphic units: a semantic determinative, which indicates the general thematic area of the word, and a phonetic determinative, which suggests its acoustic re-

alization.¹ For example, the character *xiàng* 像 ‘picture; resemble’ is made up of the semantic component *rén* 亻 ‘person; human being’ and the phonetic component *xiàng* 象, literally meaning ‘elephant’ (which, therefore, sounds exactly the same as the preceding word).² The phonetic content within the Chinese writing system has been recognised as far back as Ancient China: for example the *Shuōwén* 說文 dictionary (second century A.D.) correctly describes the category of ‘phono-semantic compounds’, and for a considerable number of these characters the *Shuōwén* correctly determines which graphic component is phonetic. However, apart from understanding the mechanism of ‘phono-semantic’ characters composition and identifying specific graphic units with phonetic value within characters, Chinese tradition for a long time did not delve into sound analysis. One reason is that the phonetic indication provided by such structural elements is indirect by nature, since there is no one-to-one correspondence between graphic symbol and phoneme as it generally happens in alphabetic writing systems.

The arrival of Buddhism in China from the first century A.D. (cf. Zürcher 1959; 2013) resulted in a large-scale phenomenon of cultural and linguistic exchange. In addition to the influence on the philosophical and artistic fields, the transmission of Buddhist texts and their translation into Chinese brought about important changes in the linguistic sphere as well. The Indian language translated into Chinese was not always Sanskrit. Edgerton (1953) identifies at least four languages underlying Buddhist religious texts: classical Sanskrit, Pali, Dharmapada Prakrit, and a variety called ‘Buddhist hybrid Sanskrit’, which is the result of the interaction of Sanskrit with several Middle Indo-Aryan (MIA) vernaculars. The so-called ‘Sino-Indian contact’ is particularly evident in lexical innovations (Zhu 2003), but it has also played a crucial role in Chinese phonological studies.

In fact, the same labels used by the Chinese to classify different types of initial consonants in the later Rime Tables (see § 3) bear a clear Indian imprint. The names given to these classes of Chinese phonemes are actually an adaptation of the Sanskrit ones, learnt by Chinese monks during the so-called ‘Siddham studies’, i.e. a course

Unless otherwise stated, all translations are by the Author.

1 Theoretically, there are four structural categories to which Chinese characters can belong: in addition to ‘phono-semantic compound’, there are the so-called ‘pictographs’ (actually very few), whose graphic form is directly inspired by the thing represented; the ‘indicative characters’ (also called ‘ideographs’), i.e. characters written in such a way as to symbolically suggest their meaning. The last category, whose status is still quite debated (Boodberg 1937; Boltz 1994; 2006; Handel 2016; Galambos 2011; 2014), is that of ‘semantic compounds’, so called because all the graphic components of the character convey semantic content.

2 For the process of formation and development of the Chinese writing system cf. Boltz 1994; De Francis 1989.

in Sanskrit writing and grammar (Siddham being an early derivative of the Brahmi script). For example, in the following passage³ we can read a description of Sanskrit consonants made by the Chinese Buddhist poet Xiè Língyùn 謝靈運 (385-433 A.D.), where the different sounds are grouped according to their place of articulation, consistently with the Indian phonological tradition (see also Chaudhuri 1998).

其迦佉等二十五字是其毘聲。迦佉等五是咽喉中聲。吒哞等五上腭中聲。多他等五是舌頭聲。遮車等五是齒中聲。波頗等五是脣中聲。隨其流類毘比一處。故曰毘聲。

The 25 characters *jiā* 迦, *qū* 佉 and so on are the consonants. The five characters *jiā* 迦, *qū* 佉 and the following are sounds coming from the throat. The five characters *zhà* 吒, *tuō* 哞 and the others are sounds made on the palate. The five characters *duō* 多, *tā* 他 and the following are sounds produced by the tip of the tongue. The five characters *zhē* 遮, *chē* 車 and so on are sounds made at the center of the teeth. The five characters *bō* 波, *pō* 頗 and the others are sounds realised at the centre of the lips. All these sounds are used in combination, so they are called consonants.⁴

The knowledge of Sanskrit sounds and their classification was not purely theoretical, as this kind of learning was mainly aimed at the correct reading of Indian writing. This is why Xiè Língyùn speaks about twenty-five *zì* 字, properly Chinese characters, emphasising that the first object of his description are the graphic symbols of India; these in turn transcribe different types of sounds (*shēng* 聲). The study of foreign language and grammar is inevitably approached from writing, the plane of graphic representation of words being traditionally invested with special importance in Chinese culture. However, the contact with India allowed the development of a technical terminology that could be applied to Chinese phonemes as well, with a focus on the description of the syllable-initial consonants.

³ SAT, vol. 84, no. 2702, 408.

⁴ I specify that the pinyin transcription given here for these characters refers to their modern Mandarin pronunciation, so it may not be consistent with the places of articulation described by the author.

3 Chinese Rime Tables

The discovery of the Indian model of phonological classification has also made possible a much deeper analysis of the ‘signifier’ conveyed by graphic forms in China. First of all, there is some debate as to whether the so-called *fǎnqiè* 反切 method can be considered Indian-inspired as well. This can be described as the first Chinese tool for breaking down a syllable into discrete components, albeit still quite indirectly. With the *fǎnqiè* method, the pronunciation of a certain character is given by the juxtaposition of two other characters: the former shares the same initial consonant with the glossed one, while the latter has the same set of sounds generically called ‘final’ or ‘rime’, including tone. The entire formula usually closes with the characters *fǎn* 反 or *qiè* 切, meaning ‘convert’ and ‘match’ respectively, explicitly signalling the presence of the phonetic gloss. Note that there are other interpretations of the same terms: for example, Branner (2000a, 38) translates *qiè* 切 as “to run together”. This character is also read in the first tone (*qiē*), with the meaning of ‘to cut’: it is translated in this way by Shen (2020, 18), and by Pulleyblank (1999, 105), who renders *qiē* as “cutting the sound into complementary parts”, while explaining *fǎn* 反 as “turning from the sound of the initial to the sound of the final”.

A classic example of *fǎnqiè* annotation is that of the character *dōng* 東 ‘east’. Its phonetic realisation is traditionally represented by means of the characters *dé* 德 and *hóng* 紅. The formula thus suggests that the correct reading of *dōng* 東 is obtained by combining the initial of the character *dé* 德 (d-) and the final of the character *hóng* 紅 (-óng).

Since the method assumes an awareness that the syllable – the basic unit of the Chinese language – can be internally analysed, many have speculated a direct influence of Indian phonology on the invention of *fǎnqiè* (Baxter 1992, 33). Mair (1991; 1992) supports the idea of an Indian origin of the method, suggesting that the term *fǎnqiè* may derive from the Sanskrit *varṇa-bheda-vidhi*, literally ‘letter cutting rules’. However, some very early examples of the application of *fǎnqiè*, and especially the irregularities of the method – which does not always assign the same character to a certain phonetic value – have caused the *fǎnqiè* to be reconsidered as a completely indigenous annotation system (Branner 2000a, 38; 2006, 1; Pulleyblank 1999, 106).

The *fǎnqiè* is an important source of information in traditional Chinese phonology, but the Rime Tables (*Děngyùntú* 等韻圖) produced starting from the Song dynasty time constitute an undeniable improvement in the annotation of character pronunciation. In the Rime Tables, character classification meets specific phonological criteria: each character is placed within a grid, at the point of intersection between a certain column (representing an initial consonant type) and a certain row (indicating a category of final or rime). In other words, the internal division of syllables remains the same as introduced by the *fǎnqiè*

method, but the Tables provide a more specific phonological description of Chinese syllables. Although there may be little variation among the different Rime Tables, such as in the number of initial consonants, their structure has gradually become uniform over time.

The *Yùnjìng* 韻鏡, which is the oldest extant Table, generally dated between the twelfth and thirteenth centuries, distinguishes thirty-six initials.⁵ These are grouped into six broader categories, representing different places of articulation:⁶

- *chún yīn* 唇音 ‘labial sounds’. It is a group of eight consonants, divided in their turn into ‘heavy’ (*zhòng* 重) and ‘light’ (*qīng* 輕): these two specifications identify bilabial stops and labiodental fricatives, respectively.
- *Shé yīn* 舌音 ‘lingual sounds’. This class also contains eight consonants, which are further categorised into two subgroups: ‘sounds made with the tip of the tongue’ (*shétóu yīn* 舌頭音) and ‘sounds on the tongue’ (*shéshàng yīn* 舌上音). The former designation identifies dental or alveolar stops, while the latter indicates corresponding retroflex dentals.
- *Yá yīn* 牙音 ‘sounds with molar teeth’, i.e. velars.
- *Chǐ yīn* 齒音 ‘sounds with front teeth’, i.e. sibilants. This group consists of ten consonants, with an internal division into four types: the main distinction is that between ‘sounds produced with the tip of the tongue on the teeth’ (*chǐtóu yīn* 齒頭音) and ‘sounds produced on the palate’ (*zhèngchǐ yīn* 正齒音); within these two subcategories, some listed initials are further defined as ‘thin’ (*xì* 細). According to current interpretations, the term *xì* would specify that these are fricative consonants, while the other initials, reconstructed as affricates, are not introduced by special terminology.
- *Yóu yīn* 喉音 ‘throat sounds’. The series includes only four initials, reconstructed as laryngeal (Baxter 1992) or guttural (Norman 1988).
- *Shé yīn chǐ* 舌音齒 ‘lingual and dental sounds’. It is the last class of initials, involving only two palatal elements: a glide and a nasal.

As can be seen, the terms associated with each category of Chinese initials are directly taken from the traditional ones used in Indian phonology. An Indian inspiration has also been hypothesised regarding

⁵ The first list of initials applied to Chinese phonology in the Tables contained only thirty consonants; their number was later supplemented and stabilised at thirty-six consonantal distinctions (Ch’én 1964, 479).

⁶ For more details concerning initial consonants in the Rime Tables see Baxter 1992; Pulleyblank 1984; Branner 2000b; 2006; Norman 1988.

the classification of finals; these, however, are analysed only globally (as in the *fǎnqiè*) and not by individual phonemes. Each Table, called *zhuǎn* 轉, is assigned the label *nèizhuǎn* 內轉 ‘inner’ or *wàizhuǎn* 外轉 ‘outer’. While ‘inner’ and ‘outer’ would indicate the presence of a high or closed vowel in the case of the Inner Tables, and of a low or open vowel in the case of the Outer Tables, the two Chinese designations could represent a translation of the Indian terms *ābhyantara* ‘internal’ and *bāhya* ‘external’ (Branner 2000b). This fact also seems to be confirmed by looking at Allen (1953, 59), where the term *bāhya* is found in this technical application in the *Mahābhāṣya*, referring to the vowel *a*.

4 Hui Li’s Declension of *puruṣa*

After introducing the importance of the Chinese contact with the Indian tradition, particularly from a phonological point of view, my intent is to describe the declensional paradigm of the Sanskrit noun *puruṣa* ‘man’ as represented in Hui Li’s *Biography of Xuanzang*.⁷ It is well known that Chinese transcriptions of foreign terms play a crucial role in reconstructing how Chinese characters were pronounced at different chronological stages of the language. The fortunate circumstance of knowing the Sanskrit forms corresponding to each Hui Li’s transcription renders *puruṣa*’s declension particularly informative, and allows us to compare different systems of reconstruction. In this study I mainly take the systems of Pulleyblank (1991) and of Baxter and Sagart (2014) as a reference, observing whether one or the other provides a better reconstruction for the same characters, i.e. a reconstruction more similar to the intended pronunciation of the Sanskrit syllable.

With regard to Pulleyblank’s system, I have considered the reconstructed pronunciations of characters provided for the historical phase he calls Late Middle Chinese (LMC), rather than the corresponding Early Middle Chinese (EMC) ones. In particular, LMC is the designation Pulleyblank uses to define the new Chinese language developed in the Tang capital Chang’an during the seventh century, and which gradually spread to the rest of the Chinese empire. This idiom would be best represented by the Rime Tables of the Song period. LMC is particularly important to Pulleyblank because he considers this language to be a *koiné* of the period, the common ancestor of all modern Chinese dialects except the Min dialects.⁸

⁷ CBETA, vol. 50, no. 2053. On this topic see also D’Antonio, Keidan 2022. It should be pointed out that other (slightly different) transcriptions of the nominal declension of *puruṣa* have been transmitted in Chinese sources (see Sun 2005, 167-8; Lü 1923, 21-2; Zhang 2020, 250).

⁸ It should be noted, however, that some scholars are sceptical about the actual existence of a *koiné* in the Tang period. Against this theory see, for example, Branner 2006;

In table 1 *puruṣa*'s (*bùlùshā* 布路沙) declension is given in Chinese characters [table 1]. In order, each of Hui Li's transcriptions is followed by a line indicating:

- its pinyin annotation (corresponding to the modern pronunciation of Chinese characters);
- its phonetic reconstruction according to Pulleyblank's LMC system;
- the declined Sanskrit lexeme.

Note that in some cases Hui Li further accompanies his transcription with a *fǎnqiè* formula, whose function is to specify the correct pronunciation of a Sanskrit syllable. Table 1 features in parentheses *fǎnqiè* formulas used by Hui Li for the phonetic gloss, after the syllable they describe. Furthermore, an attempt was made to concretely apply the *fǎnqiè* rule (see § 3) directly in table 1, with the intention of giving a better representation of the pronunciation (presumably) intended by Hui Li for the glossed character. The *fǎnqiè* rule is applied to both the LMC reconstructions and the standard Mandarin transcriptions of the same characters. When the *fǎnqiè* resulted in a non-existing syllable in today's Mandarin, a sporadic usage of a non-canonical pinyin notation, again in parentheses, was required.

The ? symbol used in the Table corresponds to an illegible character in Hui Li's transcription. By 'illegible' I mean orthographic forms that do not correspond to any existing modern Chinese characters. As a result, these graphic variants could not be reported or analysed. Note that the changes or omissions of characters are probably due to the actions of later copyists and transmitters, reflecting the complex history of transmission of Hui Li's text.

Table 1 Phonetic representation of Hui Li's transcriptions.

	Singular	Dual	Plural
NOM	布路殺 Bùlùshā puə̌ luə̌ ʂa:t puruʂaḥ	布路筭 Bùlùshāo puə̌ luə̌ ʂa:w puruʂau	布路沙 Bùlùshā puə̌ luə̌ ʂa: puruʂāḥ
ACC	布路筭 Bùlùshān puə̌ luə̌ ʂa:m puruʂam	布路筭 Bùlùshāo puə̌ luə̌ ʂa:w puruʂau	布路霜 Bùlùshuāng puə̌ luə̌ ʂa:ŋ puruʂān
INSTR	布路鐵擊 Bùlùshānà puə̌ luə̌ ʂa:t nra: puruʂeṅa	布路 [*] ? (音鞞僭反) Bùlù ? (biàn) puə̌ luə̌ ? (pīam`) puruʂābhyām	布路鐵鞞 (or 咽) Bùlùshābǐng (or xi) puə̌ luə̌ ʂa:t pjiājŋ` puruʂaiḥ
DAT	布路慶(沙詐反)耶 Bùlùshà (yé) puə̌ luə̌ ʂa:t (jia) puruʂāya	布路沙? (鞞僭反) Bùlùshā ? (biàn) puə̌ luə̌ ʂa: ? (pīam`) puruʂābhyām	布路鐵韻(鞞約反) Bùlùshāyùn (bue/biao) puə̌ luə̌ ʂa:t (piak) puruʂebhyah
ABL	布路沙哆(他我反) Bùlùshāduō(tuō) puə̌ luə̌ ʂa: (t`a`) puruʂāt	布路鐵? (鞞僭反) Bùlùshā ? (biàn)puə̌ luə̌ ʂa:t ? (pīam`) puruʂābhyām	布路鐵韻(鞞約反) Bùlùshāyùn (b-ue/biao) puə̌ luə̌ ʂa:t (piak) puruʂebhyah
GEN	布路鐵? (子耶反) Bùlùshā? (zé) puə̌ luə̌ ʂa:t ? (tsia) puruʂasya	布路鐵? Bùlùshā ? puə̌ luə̌ ʂa:t ? puruʂayoh	布路鐵誦(安咸反) Bùlùshā `án (ān xiàn) puə̌ luə̌ ʂa:t (?ja:m) puruʂāṅām
LOC	布路? (所齊反) Bùlù ? (sí) puə̌ luə̌ ? (ʂiaj) puruʂe	布路殺論 Bùlùshāyù puə̌ luə̌ ʂa:t jyā` puruʂayoh	布路鐵綴(所芻反) Bùlùshā (sú) puə̌ luə̌ ʂa:t (ʂuə̌ə̌) puruʂeʂu
VOC	布路殺 Bùlùshā puə̌ luə̌ ʂa:t puruʂa	布路稍 Bùlùshāo puə̌ luə̌ ʂaw` puruʂau	布路沙 Bùlùshā puə̌ luə̌ ʂa: puruʂāḥ

* A syllable for ʂā is missing in Hui Li's transcription of the instrumental dual form.

First of all, it can be seen that the declension of *puruṣa* is characterised by a certain degree of inconsistency. For instance, the text renders homonymic elements differently, such as the stem *puruṣa-* (布路沙 LMC puə̌ luə̌ ʂa:; Mandarin *bùlùshā*) and the vocative singular form *puruṣa* (布路殺 LMC puə̌ luə̌ ʂa:t; Mandarin *bùlùshā*). The same happens for the dual vocative termination, which is written 稍 (LMC ʂaw`; Mandarin *shāo*) instead of 筭 (LMC ʂa:w; Mandarin *shāo*), as the identical dual nominative and accusative forms. Here Hui Li's choice could be explained by the intention to represent some intonational aspect of the vocative. Note that the two characters have the same phonetic realisation in Mandarin, while they differ only for vowel length

and tone in Pulleyblank's LMC reconstruction. There are also cases where the accuracy of Hui Li's transcription cannot be verified, because some syllables (typically the termination) are missing. For example, the Sanskrit dual locative *puruṣayoḥ* is fully rendered as 布路殺論 (LMC puǎ̃ luǎ̃ ʃa:t.jyǎ̃; Mandarin *bùlùshāyù*), but the dual genitive, which is formally equal in Sanskrit, is incomplete. It is given as 布路鍛 (LMC puǎ̃ luǎ̃ ʃa:t; Mandarin *bùlùshā*), without the ending syllable.

Another interesting fact in Hui Li's character choice is that the text freely alternates four different graphemes (殺, 沙, 鍛, and 廈) for Sanskrit *ṣa* or *ṣā*. The character 鍛 (LMC ʃa:t; Mandarin *shā*) is further applied to the syllable *ṣe* of the instrumental singular and of the dative, ablative and locative plural forms, and it is used to represent the final syllable *ṣaiḥ* of the instrumental plural *puruṣaiḥ*. The instrumental plural inflection is especially interesting, because for its realisation Hui Li gives two options: 布路鍛鞞 (LMC puǎ̃ luǎ̃ ʃa:t.pjiajŋ; Mandarin *bùlùshābǐng*) or 布路鍛咽 (Mandarin *bùlùshāxì*). No reconstruction is provided by Pulleyblank for the character 咽 (Mandarin *xì*), while 鞞 (LMC pjiajŋ; Mandarin *bǐng*) seems to suggest an alternative termination in *-bhis*. This would imply that Hui Li was aware of the existence of a dual option for the instrumental plural: one ending in *-aiḥ* and one in *-bhiḥ* (cf. Edgerton 1953, 52).

As regards Pulleyblank's phonetic reconstructions (1991), some discrepancies arise regarding final consonants. Sometimes his reconstructions for characters employed by Hui Li display final consonants where the Sanskrit syllables end in a vowel: in particular, this is the case of the above-mentioned characters 殺 and 鍛 (both LMC ʃa:t; Mandarin *shā*). In Pulleyblank's system, both characters are represented as LMC ʃa:t, while the Sanskrit form would not be closed by a dental consonant. In other words, the final *-t* – supposed to be present in the LMC version of the two characters 殺 and 鍛 – was not really necessary for the purposes of Hui Li's phonetic notation.

That being the case, it seems hard to explain why Hui Li adds the character 哆 (LMC tʰa; Mandarin *tō*, according to the *fǎnqiè* indication) after 沙 (LMC ʃa:; Mandarin *shā*) specifically to represent the final dental of the ablative singular *puruṣāt*. The fact that Hui Li already had two options for rendering the syllable *ʃa:t*, and that he used them even when there was no need, makes it strange to think that he had to resort to a different solution for the ablative singular. When we compare Pulleyblank's reconstructed forms with that of Baxter and Sagart (2014), we find two Middle Chinese (MC) realisations for the character 殺 (LMC ʃa:t; Mandarin *shā*), each corresponding to a later development. These are: MC *sreat* > Mandarin *shā*; MC *sreajH* > *shài*. While the first reconstruction is almost the same as that of Pulleyblank, the second reconstruction seems to provide a less problematic phonetic profile for this character. The absence of the final dental consonant would not only make Hui Li's transcription better

in all cases where *shā* 殺 is employed, but (more importantly) would give an explanation for his effort to find a way to signal the presence of a final *-t* at the ablative singular.

By contrast, Pulleyblank's reconstructions of final consonants seem to work well with nasals. Hui Li, for example, uses the characters 芟 (LMC ʃa:m; Mandarin *shān*) and 霜 (LMC ʃa:ŋ; Mandarin *shuāng*) for the accusative singular and accusative plural terminations respectively, where Pulleyblank's forms perfectly fit with the equivalent Sanskrit ones.

Some other comments can be made about the analysis of *fǎnqiè* formulas. In several cases, these indications appear crucial, as they suggest the reading of unknown characters or of a lacuna in the text. For example, the formula *bǐng jiàn fǎn* 鞞僭反 that follows the unreadable character employed for the dual instrumental, dative and ablative termination. 鞞 (LMC pjiəŋ; Mandarin *bǐng*) and 僭 (LMC tsi-am; Mandarin *jiàn*) combination tell us that the character should be read in a way very close to *piam*, which corresponds quite well to the Sanskrit termination *-bhyām*. When a *fǎnqiè* follows a still-existing or perfectly-readable character, sometimes it happens that the phonetic reconstruction of the *fǎnqiè* formula differs from the reconstruction of the glossed character alone. Interestingly, in almost all cases where this occurs, the pronunciation resulting from the *fǎnqiè* is more similar to the reference Sanskrit syllable. For example, the locative plural termination given by Hui Li is 縑 (LMC tʃəw; Mandarin *zhòu*), which is glossed with a *fǎnqiè* as *suǒ chù fǎn* 所芻反. If we combine the initial consonant of 所 (LMC ʃəǎ' or ʃuǎ; Mandarin *suǒ*) and the final of 芻 (LMC tʃ^huǎǎ; Mandarin *chú*) according to Pulleyblank's (1991) reconstruction, we will obtain *-ʃuǎ*. Thanks to *fǎnqiè*, the resulting syllable is closer to Sanskrit *-ʃu*.

The only case in which the formula seems to deviate is that of the genitive plural termination, where the character employed is 誦 (LMC nra:m; Mandarin *nán*). Here Pulleyblank's form fully corresponds to Sanskrit *-ṅām*, while his reconstruction of the graphemes 安 (LMC ʔan; Mandarin *ān*) and 咸 (LMC xɦja:m; Mandarin *xiàn*) appearing in the *fǎnqiè* does not match well to Sanskrit. In fact, the result of the combination would be *ʔja:m*. A corresponding reconstruction for the character 誦 is absent in Baxter and Sagart (2014), where it is only provided the Mandarin homophone character 南 (MC *nom*). The character 安 that opens the *fǎnqiè* formula is instead reconstructed as MC *'an* in Baxter and Sagart (2014), with an initial vowel.

5 Summary

All the characters (and *fǎnqiē* formulas) used by Hui Li to transcribe Sanskrit endings in the declension of *puruṣa* are listed below.

Skr.	Chinese ch.	Pulleyblank's LMC	pinyin (Standard Mandarin)
ṣā	沙	ṣa:	shā
	廈(沙詐)	ṣa: (ṣa: + tṣa: `)	shà (shā + zhà)
	鍛	ṣa:t	shā
ṣa	鍛	ṣa:t	shā
	殺	ṣa:t	shā
ṣaḥ	殺	ṣa:t	shā
ṣāḥ	沙	ṣa:	shā
ṣau	筍	ṣa:w	shāo
	稍	ṣaw`	shāo
ṣam	芰	ṣa:m	shān
ṣān	霜	ṣa:ŋ	shuāng
ṣaiḥ	鍛鞞	ṣa:t pjiājŋ´	shā bǐng
	鍛咽	ṣa:t /	shā yè
ṣāt	沙哆 (他我)	ṣa: t ^h a´ (t ^h a + ŋa´)	tǎ (tā + wǒ)
ṣe	鍛	ṣa:t	shā
	? (所齊)	ṣiaj (ṣəǎ´ + tṣhiaj)	sí (suǒ + qí)
ṣu	綈(所翳)	ṣuəǎ (ṣəǎ´ + tṣ ^h uəǎ)	sú (suǒ + chú)
sya	? (子耶)	tsia (tsz´ + jia)	zé (zǐ + yé)
ṇa	拏	nra:	ná
ṇām	訥 (安咸)	?ja:m (?an + xhja:m)	ān (ān + xiàn)
ya	耶	jia	yé
yoh	論	jyǎ`	yù
bhyām	? (鞞替)	piam` (pjiājŋ´ + tsiam`)	biàn (bǐng + jiàn)
bhyah	韻 (鞞約)	piak (pjiājŋ´ + ?iak)	b-ue/biao (bǐng + yuē/yāo)

In this paper I proposed an analysis of the declension of *puruṣa* (布路沙) in the *Biography of Xuanzang* from a phonological point of view. Although the representation of Indian grammatical cases by Hui Li (or by later copyists) has been previously reported in other studies concerning Chinese descriptions of Sanskrit, specific attention to how Chinese characters were used phonographically has been lacking. Studied from this perspective, the declension of *puruṣa* is extremely interesting. The characters selected for transcription reveal some inconsistencies: in particular, Sanskrit isomorphic elements are treated with graphic alternations in Chinese; similarly, the same character can be associated with different syllables. The Chinese transcriptions from Indian languages generally constitute an important source of information for reconstructing the pronunciation of Middle Chinese, and the declension of *puruṣa* can certainly

ly contribute in this direction. In the present study, the declension of *puruṣa* was used to evaluate the level of correspondence between the transcribed Sanskrit sound and the reconstructed pronunciation of the same characters proposed by Pulleyblank (1991) and by Baxter and Sagart (2014); the analysis showed that the presumed Middle Chinese pronunciation of the vast majority of Chinese forms seems to be valid with respect to the corresponding Sanskrit syllable.

Bibliography

- Allen, W.S. (1953). *Phonetics in Ancient India*. London: University of London. Oxford University Press. London Oriental Series 1.
- Baxter, W.H. (1992). *A Handbook of Old Chinese Phonology*. Berlin; New York: Mouton de Gruyter. <https://doi.org/10.1515/9783110857085>.
- Baxter, W.H.; Sagart, L. (2014). *Old Chinese: A New Reconstruction*. Oxford: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199945375.001.0001>.
- Beal, S. (1884). *Si-Yu-Ki. Buddhist Records of The Western World*. Transl. by H. Tsang. London: Trübner & Co.
- Beal, S. (1914). *The Life of Hiuen-Tsiang, by the Shaman Hwui Li*. London: Trübner & Co.
- Boltz, W.G. (1994). *The Origin and the Early Development of the Chinese Writing System*. New Haven: American Oriental Society. American Oriental Series 78.
- Boltz, W. (2006). "Phonographic Motivation in Compound Chinese Characters: The Case of wǔ 武". Bottéro, Djamouri 2006, 55-73.
- Boodberg, P.A. (1937). "Some Proleptical Remarks on The Evolution of Archaic Chinese". *Harvard Journal of Asiatic Studies*, 2(3-4), 329-72. <https://doi.org/10.2307/2717943>.
- Bottéro, F.; Djamouri, R. (éds) (2006). *Écriture chinoise. Données, usages et représentations*. Paris: École des hautes études en sciences sociales, centre de Recherches Linguistiques sur l'Asie Orientale.
- Branner, D.P. (2000a). "The Sui-Tang Tradition on Fanqie Phonology". Auroux, S.; Koerner, K.; Niederehe, H.J.; Versteegh, K. (eds), *History of the Language Sciences. An International Handbook on the Evolution of the Study of Language from the Beginnings to the Present*, vol. 1. Berlin: De Gruyter, 36-46.
- Branner, D. Prager (2000b). "The Rime-Table System of Formal Chinese Phonology". Auroux, S.; Koerner, K.; Niederehe, H.J.; Versteegh, K. (eds), *History of the Language Sciences. An International Handbook on the Evolution of the Study of Language from the Beginnings to the Present*, vol. 1. Berlin: De Gruyter, 46-55.
- Branner, D. Prager (2006). "Introduction". *Current Issues in Linguistic Theory*, 1-34. <https://doi.org/10.1075/cilt.271.01bra>.
- Chaudhuri, S.K. (1998). "Siddham in China and Japan". *Sino-Platonic Papers*, 88, 1-124. https://sino-platonic.org/complete/spp088_siddham_china_japan.pdf.
- Ch'en, K.K.S. (1964). *Buddhism in China*. Princeton: Princeton University Press. <https://doi.org/10.1515/9780691216058>.
- Coblin, W. South (2003). "The Chiehyunn System and the Current State of Chinese Historical Phonology". *Journal of the American Oriental Society*, 123(2), 377-83. <https://doi.org/10.2307/3217690>.

- Coblin, W. South; Norman, J.L. (1995). "A New Approach to Chinese Historical Linguistics". *Journal of the American Oriental Society*, 115(4), 576-84. <https://doi.org/10.2307/604728>.
- D'Antonio, C.; Keidan, A. (2022). "The Adventures of Pāṇini's Grammar in China and Japan: The Case of the *Kāraka/Vibhakti* System". *Rivista degli Studi Orientali, Nuova Serie*, 95, 149-65.
- DeFrancis, J. (1989). *Visible Speech: The Diverse Oneness of Writing Systems*. Honolulu: University of Hawai'i Press. <https://doi.org/10.1515/9780824841621>.
- Egerton, F. (1953). *Buddhist Hybrid Sanskrit Grammar and Dictionary*, vol. 1. New Haven: Yale University Press.
- Galambos, I. (2011). "Popular Character Forms (*Súzi*) and Semantic Compound (*Huìyì*) Characters in Medieval Chinese Manuscripts". *Journal of the American Oriental Society*, 131(3), 395-409.
- Galambos, I. (2014). "Medieval Ways of Character Formation in Chinese Manuscript Culture". *Scripta*, 6, 49-73.
- Handel, Z. (2016). "Does Xu Shen's *Huìyì* Category Reflect Historical Reality?". Ting Pang-Hsin; Samuel Cheung Hung-Nin; Sze-Wing Tang; Andy Chi-on Chin (eds), *An Argument for the Existence of Compound Graphs Lacking Phonophorics*". *New Horizons in the Study of Chinese: Dialectology, Grammar, and Philology. Studies in Honor of Professor Anne Yue*. Hong Kong: Chinese University of Hong Kong, 581-98.
- Kotyk, J. (2019). "Chinese State and Buddhist Sources on Xuanzang. Historicity and the *Daci'en si sanzang fashi zhuan* 大慈恩寺三藏法師傳". *T'oung Pao*, 105(5/6), 513-44. <https://doi.org/10.1163/15685322-10556P01>.
- Julien, S. (1857-58). *Mémoires sur les contrées occidentales. Traduits du sanscrit en chinois, en l'an 648 par Hiouen-Tsang, et du chinois en français par M. Stanislas Julien*. Paris: s.l.
- Li, Y. (1959). *The Life of Hsuan-Tsang, The Tripitaka – Master of the Great Tzu En Monastery*. Ed. by Monk Hui-Li. Beijing: The Chinese Buddhist Association.
- Li, R. (1995). *A Biography of the Tripitaka Master of the Great Ci'en Monastery of the Great Tang Dynasty*. Berkeley: Numata Center for Buddhist Translation and Research.
- Li, R. (1996). *The Great Tang Dynasty Record of the Western Regions*. Berkeley: Bukkyo Dendo Kyokai America.
- Lǚ, Chéng (1923). *Shēngmíng lüè*. Nánjīng, Zhīnà nèi xuéyuàn.
- Mair, V.H.; Tsu-Lin Mei (1991). "The Sanskrit Origins of Recent Style Proseody". *Harvard Journal of Asiatic Studies*, 51(2), 375-470. <https://doi.org/10.2307/2719286>.
- Mair, V.H. (1992). "Two Papers on Sinolinguistics: 1. A Hypothesis Concerning the Origin of the Term *fanqie* ('Counterterm'); 2. East Asian Round-Trip Words". *Sino-Platonic Papers*, 34 (October).
- Norman, J. (1988). *Chinese*. Cambridge: Cambridge University Press.
- Pulleyblank, E.G. (1984). *Middle Chinese: A Study in Historical Phonology*. Vancouver: University of British Columbia Press.
- Pulleyblank, E.G. (1991). *Lexicon of Reconstructed Pronunciation in Early Middle Chinese, Late Middle Chinese, and Early Mandarin*. Vancouver: University of British Columbia Press.
- Pulleyblank, E.G. (1999). "Chinese Traditional Phonology". *Asia Major*, 12(2), 101-37.
- Sagart, L. (2006). "L'emploi des phonétiques dans l'écriture chinoise". *Bottéro, Djamouri* 2006, 35-54.

- Shen, Zhongwei (2020). *A Phonological History of Chinese*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781316476925>.
- Staal, J.F. (1972). *A Reader on Sanskrit Grammarians*. Cambridge (MA); London: The MIT Press.
- Sūn, L. (2005). *Zhōngguó gǔdài yǔfǎ xué tànjiū* 中國古代語法學探究 (An Inquiry into Ancient Chinese Grammar). Běijīng: Shāngwù Yīnshūguǎn.
- Takakusu, J. (1896). *A Record of the Buddhist Religion as Practiced in India and the Malay Archipelago*. London: Oxford University Press.
- Watters, T. (1904). *On Yuan Chwang's Travels in India (629-645 A.D.)*. Ed. by T.W. Rhys Davids, S.W. Bushell, V.A. Smith. London: Royal Asiatic Society.
- Zhang, X. (2020). "Buddhists' Razor: How Many Vibhaktayaḥ Are There?". *Acta Orientalia*, 80, 244-60.
- Zhu, Q. (2003). "The Impact of Buddhism in the Development of Chinese Vocabulary". *Pǔ mén xuéào*, 15, 1-41.
- Zürcher, E. (1959). *The Buddhist Conquest of China. The Spread and Adaptation of Buddhism in Early Medieval China*. Leiden: Brill.
- Zürcher, E. (2013). "Han Buddhism and the Western Regions". Silk, J.A. (ed.), *Buddhism in China. Collected Papers of Erik Zürcher*. Leiden: Brill, 353-76. Sinica Leidensia 112. https://doi.org/10.1163/9789004263291_013.

Texts

- Dà Táng dàcí ēnsì sānzàng fǎshī zhuàn* 大唐大慈恩寺三藏法師傳 (The Biography of Xuanzang by Hui Li) (CBETA, vol. 50, no. 2053).
- Shí sì yīn xùnù* 十四音訓敘 (Explanation and Interpretation of the Fourteen Sounds) (SAT, vol. 84, no. 2702).