

## A NEW RHYMING SCHEME OF CHINESE CLASSIC POETRY

Hong Lin

Department of Computer and Mathematical Sciences,  
University of Houston-Downtown,  
1 Main Street, Houston, Texas 77002, USA  
[linh@uhd.edu](mailto:linh@uhd.edu)

### ABSTRACT

*The forms of Chinese classic poetry have been developed through thousands years of history and are still current in today's poetry society. A re-classification of the rhyming words, however, is necessary to keep the classic poetry up to date in the new settings of modern Chinese language. This new rhyming scheme uses the current standard pronunciations in Chinese Mandarin. Because this new rhyming scheme is presented by using the Pin Yin system, it can be easily understood and followed by common people. This work will help revive Chinese classic poetry in modern society and promote its writability.*

**Keywords:** Chinese classic poetry, rhyming, word processing

### INTRODUCTION

Chinese classic poetry is featured in the way of expressing feelings and thoughts in a scenic surrounding. For this reason, there was a saying that poetry and drawing have the same origin. As one of the essential parts of Chinese literature, Chinese classic poetry is drawing attentions from all around the world<sup>1,2</sup>.

Chinese classic poetry has strict rhyme and structural rules. Two major Chinese classic poetry styles are “Shi (诗)” and “Ci (词)”, each having various forms. A “Shi” has fixed number of verses and the length of verses is the same. In addition, depending on the forms, there are detailed rules on the rhymes among the verses. A “Ci”, on the other hand, has verses of different lengths. However, the length of each verse as well as the number of verses is predetermined and the rhyme rules are normally even stricter than a “Shi”. Therefore, writing a “Ci” is also said “filling a Ci”.

Through thousands of years of history, as part of the Chinese culture and civilization, Chinese classic poetry has evolved in reflecting the linguistic and societal settings of different epochs<sup>3</sup>. Examples of some notable styles include the free style old-fashioned forms prior to Tang Dynasty, the classic forms of Shi in Tang Dynasty, and the classic forms of Ci in Song Dynasty. The evolution refined the forms of the poetry in order to utilize the tones, rhymes, and the brief wording with flexible semantics to achieve the ultimate beauty of the poetry. Even in the modern society when the old classic written forms of the Chinese language has been abandoned to give the way to the modern plain language, classic poems still represent the highest achievements in literature and adorned by Chinese people. Recital of the old famous poems is a common practice among Chinese people, especially in schools. It is clearly seen that the effect and the strength of the classic poems are not surmountable by modern free style Chinese poems in plain language.

An investigation in the history of the Chinese language can reveal that the pronunciation and the usage of the Chinese words have been evolving and this was reflected in the reform of the poetry styles<sup>4, 5</sup>. As a matter of fact, some classic poems do not rhyme in the current pronunciation although they did at the time of their composition. Sometimes we have to refer to the old pronunciation to maintain the rhyme in reading. In the last century, Chinese government has normalized the Chinese mandarin and this causes the poetry society to rethink the classic forms of poetry in the new language. One major issue involves the tones of the words. For example, the classification of the rhyming words according to old pronunciation includes the “Ru” (入) sound that does not correspond straightforwardly to any one of the four tones of modern Chinese. Not only is the recognition of the Ru words not sensible but also it impedes the writing of poems in classic forms. A re-classification of the rhyming words is necessary.

A problem that needs to be solved is that the new grouping of the rhyming words must be accompanied by maintaining the connection between the new grouping and the old one in order to preserve the continuation of the forms as well as help understand the existing poems. A dilemma, therefore, is that we still try to understand the old system while adapting to the new one. To solve this problem, we propose to use computer technology to aid such a transition<sup>6</sup>. This work will contribute to the current discussion in the Chinese poetry forum and benefit the poetry society with the computerized tools. Because of the page limits, this paper, however, focuses on the presentation of the new rhyming scheme.

This paper will detail the scheme of the re-classification of the rhyming words and antithetical phrases. The paper will be organized as the following. In Section 2, we discuss the forms of the Chinese classic poetry and the problems in the current language settings. In Section 3, we present the proposed classifications of the rhyme words and discuss how the new classifications fit in the current language. We discuss about directions of future work and conclude the paper in the end.

## THE PROBLEM OF CHINESE CLASSIC POETRY IN THE MODERN LANGUAGE

### The Metrical Patterns

To understand the metrical patterns of Chinese poetry, we need to know the tones of the Chinese language. Tones determine the rhymes of poems. Tones used in classic poetry are based on ancient Chinese. There are four tones, viz., flat (平 [Píng]) tone, ascending (上 [Shàng]) tone, descending (去 [Qù]) tone, and short (入 [Rù]) tone. Rhyming words must be in the same tone.<sup>6</sup> Ref. 6 gives a detailed classification of words according to their tones. Normally, a word belongs to a specific tone. However, some words have different pronunciations (usually with different meanings) in different contexts. In those cases, the words belong to different tones according to their pronunciations.

In addition to rhymes, Chinese poetry also has tone pattern requirements on verses. Tone patterns are based on flat (Ping (平)) and convex (Ze (仄)) tones, where flat tone itself makes one tone and the other three tones make the convex tone. Two general principles that determine the tone patterns of verses are:

- 1) Flat and convex tones alternate within one verse; and
- 2) Opposite tones are used in corresponding words in pairing verses.

Both Shi and Ci have strict metrical patterns. The following is one of the two metrical forms of Seven Lü.<sup>8</sup>

平平仄仄仄平平，仄仄平平仄仄平。

仄仄平平平仄仄，平平仄仄仄平平。

平平仄仄平平仄，仄仄平平仄仄平。

仄仄平平平仄仄，平平仄仄仄平平。

The underlined positions, viz., 平 and 仄, mean that either a flat or convex word can be used.

Verses in Shi are paired (in the same line) as we can see in the above Seven Lü form. The rhyming schemes of Shi require that rhyming words are used in the end of every verse group, namely, in the end of every even numbered verse, with an additional requirement that the end of the first verse is also rhymed. Similarly, verses in Ci are grouped and rhyming words must be used in the end of each verse group with an additional requirement that the end of the first verse is also rhymed.

In addition to tone patterns and rhyming schemes, Shi and Ci have a further requirement about the use of antithesis phrases in corresponding positions of pairing verses. Simply put, antithesis phrases are phrases of the same type. For example, they are both nouns, verbs, or adjectives of similar meanings or opposite meanings. Since the use of antithesis phrases is on top of the tone patterns, choosing antithesis phrases is a difficult and extremely artistic part of the poetry composition. Ref. 9 listed some common used antithesis phrases. Seven Lü, for example, requires that the third verse and the fourth verse be antithetical to each other, so be the fifth and the sixth.

### Evolution of Tones

Chinese is a language with a lot of dialects and is also dynamic and changing. The evolution of the Chinese language includes changes in the pronunciation, meaning, and writing forms of words as well as the ways of expressions. The changes are drastic in the nation's long history. The modern Chinese language is totally different from the ancient classic language. There are a lot words used in ancient language that are no longer used nowadays.

The change on the tones of words has the greatest impact to poetry. As mentioned in the previous section, the four tones that defined the rhymes and tone patterns are based on the ancient language. When the pronunciations of the words change, some old poems may not sound rhyming in the new language. There are a lot of words in rhyme books that do not fit in their groups and their old pronunciations are no longer known by most of the people or even not retrievable at all.

What became of the four tones in the old Chinese?

- Flat (Ping) tone: It evolved into two categories, viz., high flat (Yin Ping (阴平)) tone and ascending flat (Yang Ping (阳平)) tone.
- Ascending (Shang) tone: Part of it became descending tone.

- Descending (Qu) tone: It remains as the descending tone.
- Short (Ru) tone: It disappeared in the current language and the Ru words assume other tones. More elucidations follow.

As mentioned above, Chinese language has a lot of dialects that share the same written form. The Chinese mandarin nowadays is a normalized version of Pu Tong Hua, a dialect around the vicinity of Beijing, which is China's capital city in the recent centuries. Chinese mandarin doesn't have the short (Ru) tone. However, the short tone still exist in dialects in Jiangsu, Zhejiang, Fujian, Guangdong, Guangxi, Shanxi, and the Inner Mongo provinces/territories. In most of the northern and southwestern provinces, the short tone no longer exists, but it did exist in old times. The short words in the northern areas became high flat words, ascending flat words, ascending words, or descending words. If compared to Pu Tong Hua, most of the short words in northern areas became descending words, some became ascending flat words, only a few became ascending words; while the short words in southwestern dialects all became ascending flat words.

Another case is that the words changed their pronunciations but kept the meanings. Those words had flat tones but they became descending words. For example, 望 (watch, [wàng]) and 叹 (sigh, [tàn]) are both descending words, but they pronounced as flat words, viz., [wāng] and [tān], respectively, in the old language; and they should be pronounced as such when we read old poems.

The most complicated case is that the pronunciation of a word changed non-uniformly, resulting in different pronunciations in different contexts. For example, 看 (look) is pronounced [kàn] in all cases except in phrase 看守 (guard) where it still keeps the flat tone and is pronounced [kān].

In spite of all the changes in the history, Chinese intellectuals adhered to the old classic written forms of the Chinese language (and the use of the old rhyming dictionaries in poetry writing), thanks to the government's persistent adoption of the old education system centered at Confucianism. "The older, the better" was more or less a common motto among Chinese intellectuals. In the last century, with China's revolution of its regime, the use of the old language in written forms was abandoned in the "new culture" campaign. Chinese government standardized the oral language into Chinese mandarin, adopted the simplified words, and used Pin Yin to regulate the pronunciations. Chinese mandarin still has four tones, numbered one, two, three, and four. They correspond to the high flat, ascending flat, ascending, and descending tones in the old language. In Pin Yin, those four tones are marked by a cap on top of the primary vowel of the word. The four caps shape like -, /, v, and \. Therefore, the vowel **a** can be pronounced **ā**, **á**, **ǎ**, or **à**. Sometimes a fifth tone is also listed. The fifth tone is soft tone. When a word's pronunciation doesn't have any of the four caps, it assumes the soft tone. For example, 了 (an auxiliary word that indicates mood) is pronounced [le].

### Problems in Poetry Reading and Composition

The discrepancy in pronunciations between the classic Chinese language and the Chinese mandarin caused problems in classic poetry reading and composition. In reading, there are two problems. Firstly, a perfect written poem may not comply with the tone pattern of the form when

read in Chinese mandarin. For example, “不” (no) is pronounced [bū] in Chinese mandarin. So, it assumes a flat tone and should be used as a 平 word in metrical patterns. However, it had a short tone in old Chinese and was used as 仄 word.

Secondly, and more severely, the discrepancy between the pronunciations in Chinese mandarin and those in the old language makes the composition of classic poems extremely difficult. Due to the elegance of the classic poetry, in recent epoch of new culture campaign, there were still a lot of classic poetry writers, some of them were actually very brilliant. After the founding of the new regime in 1949, China overhauled its education system and regulated the language. Since then, the activity of composing classic poems has been fading and given the way to free style poems.

The contemporary Chinese poets experimented widely with European images, rhythms, and literary trends. The strongest influence initially was that of romanticism; during the 1930s younger poets were more attracted by imagism and symbolism<sup>10</sup>. It is interesting, however, to see that through the last decades of practice, free style poetry never leaves a single master piece with an impact comparable to that of classic poems. Ironically, the new culture leaders, including Lu Xun and Mao Zedong, still clung to classic poetry writing. This historic truth revealed that the forming of the classic poetry metrical patterns has a profound reason that is associated with the features of the language itself. Such metrical patterns lend themselves to the expressivity of Chinese poetry. Therefore, the right direction of the movement is not to cast away the metrical patterns, but to adapt the use of new words/phrases to the metrical patterns.

## THE SOLUTION TO THE PROBLEM

The solution to the problem is simple (to be effective): revising the rhyming scheme and regrouping the rhyming words.

### Revising the Rhyming Scheme

Official rhyming dictionaries were compiled through China's history, such as “Tang Rhyming Dictionary” (唐韵) of Tang Dynasty (618-907 AC) and “Guang Rhyming Dictionary” (广韵), “Ji Rhyming Dictionary” (集韵) of Song Dynasty (960-1279 AC), “Compiled Five Tones Rhyming Dictionary” (五音集韵) of Yuan Dynasty (1206-1368 AC), “Orthodox Rhyming Dictionary of Hongwu” (洪武正韵) of Ming Dynasty (1368-1644 AC), and “Peiwen Rhyming Dictionary” (佩文诗韵) of Qing Dynasty (1636-1911 AC). Among these rhyming dictionaries, “New Rhyming Essentials” (新刊韵略), compiled by Wang Wenyu in Song Dynasty, is the most popular.

“New Rhyming Essentials” classifies rhymes into four groups in accordance with four tones, viz., flat, ascending, descending, and short tones, and each group (tone) has a number of rhymes. The total number of rhymes in four tones is 106, of which 15 are in upper flat tones, 15 in lower flat tones, 29 in ascending tones, 30 in descending tones, and 17 in short tones.

In 1965, a new rhyming scheme, “New Rhyming Scheme”<sup>11</sup>, was made according to the standardized Chinese mandarin. New Rhyming Scheme classified rhymes into 18 groups according to the vowels of the words. Appendix B lists the rhymes and extensions in the New Rhyming Scheme. The New Rhyming Scheme is much more flexible than the old rhyming

schemes and makes classic poetry writing much easier. A problem, however, is that it still keeps the short tones.

The fundamental issue behind this problem is pertaining to whether we need to maintain a “bridge” from the old rhyming scheme to the new one. It is natural that the classic poetry advocates are reluctant to leave out the old rhyming schemes for fear that we lose the essence of the classic poetry. Instead, classic poetry scholars tend to seek a way to “educate” the people in poetry circle to understand the metrical patterns, including the rhyming scheme, of the classic poetry. That is the reason why even the “New Rhyming Scheme” cannot leave out the short tones because without it a lot of famous classic poems will no longer be compliant to the metrical patterns. The cost of maintaining such a “bridge”, however, is that the new poetry generation still cannot fully enjoy the poetry writing in the new language settings.

What we propose is porting the classic poetry metrical patterns into the current language tones, without trying to remember the old tones. In this scheme, the first (high flat), the second (ascending flat) tones, and the fifth (soft) tones are sorted into the flat (平) tones; and the third (ascending) and the fourth (descending) tones are sorted into the convex (仄) tones. The rhyming scheme is based on the vowels, similar to the “New Rhyming Scheme”, except that extensions are merged into the regular rhymes and short tones are no longer included. Revisions are made to the rhymes in the “New Rhyming Scheme” to achieve better rhyming effects. The revised 18 rhymes are:

- (1) 麻, words with vowels [a]、[ua]、and [ia]
- (2) 波, words with vowels [o]、[uo]
- (3) 歌, words with vowel [e]
- (4) 皆, words with vowels [ie]、and [ue]
- (5) 支, words with vowel [i] (with consonants [zh]、[ch]、[sh]、[z]、[c]、and [s])
- (6) 儿, words with vowel [er]
- (7) 齐, words with vowel [i] (with consonants [b]、[p]、[m]、[f]、[d]、[t]、[n]、[l]、[j]、[q]、[x]、[y])
- (8) 微, words with vowels [ei]、and [ui]
- (9) 开, words with vowels [ai]、and [uai]
- (10) 姑, words with vowel [u]
- (11) 鱼, words with vowel [v]
- (12) 侯, words with vowels [ou]、and [iu]
- (13) 豪, words with vowel [ao]、and [iao]
- (14) 寒, words with vowels [an]、[ian]、and [uan]
- (15) 痕, words with vowels [en]、[un]、and [eng] (with consonants [zh]、[ch]、[sh]、[z]、[c]、[s]、[d]、[t]、[n]、and [l])
- (16) 侵, words with vowels [in]、[vn]、and [ing]
- (17) 唐, words with vowels [ang]、[uang]、and [iang]
- (18) 东, words with vowels [ong]、[iong]、and [eng] (with consonants [b]、[p]、[m]、and [f])

The difference between this rhyming scheme and the “New Rhyming Scheme” is:

(15) 痕, words with vowels [en]、[in]、[un]、and [vn]

In the “New Rhyming Scheme” is split into:

(15) 痕, words with vowels [en]、[un], and [eng] (with consonants [zh]、[ch]、[sh]、[z]、[c]、[s]、[d]、[t]、[n]、and [l])

(16) 侵, words with vowels [in]、[vn], and [ing]  
And

(17) 庚, words with vowels [eng]、and [ing]

In the “New Rhyming Scheme” is merged into (15) 痕, (16) 侵, and (18) 东, where [eng] is grouped with either [en] or [ong] depending on the consonants.

### Regrouping the Rhyming Words

Rhyming words are grouped solely based on the vowels in Pin Yin, as described in Section 3.1. Words with similar vowels may be grouped into one rhyme. The grouping is based on similarity in pronunciation, instead of origins. For example, [un] and [vn] have the same origin but drastic difference in pronunciation. In the new scheme, [en], [un], and [eng] are in one group and [in], [vn], and [ing] are in another group. We no longer consider the subtle difference between [in] and [ing]. A special case is [eng]. When combined with consonants [zh]、[ch]、[sh]、[z]、[c]、[s]、[d]、[t]、[n]、and [l], it sounds similar to [en], and these consonants can also be used with [ong] and produce different sounds from [eng]. However, when combined with consonants [b]、[p]、[m]、and [f], it sounds similar to [ong], and those consonants are no longer used with [ong], i.e., for example, [feng] is a possible pronunciation but [fong] is not.

Such a regrouping is radical with respect to the “New Rhyme Essentials”. For example, the seventh rhyme group in the “New Rhyme Essentials”:

(7) 微——微微晖徽挥韦围帙违霏菲妃绯飞非扉肥腓威畿机几讥矶稀希衣依沂巍归诽  
痲欻葳颀圻

Is regrouped into:

[ei] or [ui] (flat): 微微晖徽挥围霏菲妃绯飞非扉肥腓威巍归诽痲葳

[ei] (convex): 韦帙违

[i] (flat): 畿机几讥矶稀希衣依沂欻颀圻

The direct benefit (and the aim) of this new rhyming scheme is that one no longer needs to check a rhyming dictionary to make sure his poem is correctly rhymed, and it corrects the “wrong” rhymes in the traditional rhyming dictionaries caused by the change of pronunciations of the words.

## CONCLUDING REMARKS

Chinese classic poetry has evolved for thousands of years through China's history. Various poetry styles and metrical forms have been developed to enhance the expressivity of the poems. These metrical forms undoubtedly fostered the great poems whose value never diminished through the long history. The change in the pronunciations of Chinese words, however, wreaked difficulty in complying with the metrical patterns in today's pronunciation. A solution presented in this paper is to change the rhyming scheme according to the current pronunciation while keeping the metrical forms intact. The new rhyming scheme is based on the vowels in words' PIN YIN, and is therefore easy to learn. Such a change makes today's classic poetry writing sensible and easier while preserving the expressivity of the metrical patterns.

## REFERENCES

1. S. Owen, Forward to the 1987 Edition, *The Book of Songs: The Ancient Chinese Classic of Poetry*, (Trans. Arthur Waley. NY: Grove Press, 1987).
2. A. Waley (trans.), *The Book of Songs*, (NY: Evergreen, 1937).
3. S.R. Ramsey, *The Languages of China*, (Princeton, NJ: Princeton University Press, 1987).
4. W.H. Baxter, *A Handbook of Old Chinese Phonology*, (Berlin: Mouton de Gruyter, 1992).
5. E.G. Pulleyblank, *Middle Chinese: a study in historical phonology*, (Vancouver: University of British Columbia Press, 1984).
6. H. Lin, the Design of a Chinese Classic Poetry Wizard, Proceedings of IEEE 2<sup>nd</sup> International Conference on Software Engineering and Service Science (ICSESS2011), July 15-17, 2011, Beijing, China, pp. 108-111.
7. *New Edition of Poetry Rhymes*, (Shanghai Publishing House of Antique Books, 1981).
8. L. Wang, *Metrical Patterns of Shi and Ci* (China Bureau of Publications, Beijing, China, 1977).
9. X. Nie (ed.), *A Beginning Book of Tone and Metrical Patterns* (Chengdu Antique Book Store, 1981).
10. W.L. Yip, *Chinese Poetry: An Anthology of Major Modes and Genres*, (Durham and London: Duke University Press, 1997).
11. *New Rhyming Scheme*, (China Publishing House, Shanghai Editing Office, 1965).