

A Philology Study of Character Formation Based on 馬

Radical Characters

1. Introduction:

The character 馬 (mǎ) is one of the earliest pictographic forms in Chinese writing, first attested in oracle bone inscriptions, with the meaning ‘horse’. As an ancient pictograph, 馬 has undergone a continuous graphic evolution—from oracle bone script to bronze inscriptions, from large and small seal scripts to regular script, and finally to the modern simplified form 马.

The first and comprehensive Chinese dictionary *Shuowen Jiezi*, which was completed by an outstanding philologist Xu Shen 許慎 (c. 58–147) during the Eastern Han period, contains 120 characters in the 馬 radical section¹, encompassing various colors, ages, and features of horses, as well as verbs describing their movements and humans’ actions with them. This lexical richness reflects the significant social, political, economic, and military functions of the horse in early Chinese society.

In Chinese philology, a clear distinction is drawn between *wén* 文 and *zì* 字.

According to the *Shuowenjiezi xu* by Xushen ‘When Cang Jie first created writing, he depicted the various forms in accordance with their categories. Therefore, he referred to these graphs as *wen* 文 (designs). Thereafter, when shape and sound were used to complement one another, he referred to these graphs as *zi* 字 (compound graphs).’

¹ ‘《说文解字》马部字的历时演变情况_许心怡’, n.d.; ‘《说文解字·马部》研究_李倡龙’, n.d.

²In conclusion, the former are original graphs, the latter derivative constructions, and the key question is whether a character can be broken down into separate functional components.

These original single-element characters in the Chinese script is limited, and 馬 is one of them. It is also the only pictographic character classified under the “Horse” radical in the *Shuowen Jiezi*. The present study takes 馬 and selected characters under this radical to investigate the major structural types of Chinese characters.

2.1

In the *Shuowen Jiezi*, Xu Shen 許慎 (c. 58–147) was the first scholar to present a systematic and explicit formulation of the theory of the Six Principles of Character Formation (*liùshū* 六書):

- (1) xiàngxíng 象形 (pictograph),
- (2) zhǐshì 指事 (ideograph),
- (3) huìyì 會意 (associative compound),
- (4) xíngshēng 形聲 (semantic-phonetic compound),
- (5) zhuǎnzhù 轉注 (mutually explanatory characters),
- (6) jiǎjiè 假借 (loan characters).

The Six Principles of Character Formation (*liùshū* 六書) represent a traditional

² Xu Shens Postface to the *Shuowen Jiezi* (許慎說文敘英譯) trans by Goran Mabaqvist.

classification of the structural principles and functional uses of Chinese characters.³

During the Qing dynasty (1644-1912), the philologist Dai Zhen 戴震 (1724–1777) proposed a theory of four-principle and two-use for Six Scripts, by distinguishing the first four categories as genuine methods of character formation, while treating the last two as principles of character usage.

2.2 Pictograph of 馬 Radical Characters

In the *Shuowen Jiezi*, within the *ma* 馬 radical section (馬部), the graph *mǎ* (馬) functions as a radical (部首) and is the only character classified as a pictograph (象形). The more than one hundred characters listed under this section are related to horses and are structurally derived from this original pictorial form.

According to the *Shuowen*, an examination of graphic structure of the character 馬, the seal script  reveals that it depicts the horse's head, mane, tail, and four limbs. This script emphasises the distinction between the horse and other animals. In the oracle bone inscription  and early bronze inscription , the pictographic qualities are even more pronounced. The evolution of this character demonstrates the gradual linearisation and stylisation of Chinese character forms.

2.3 Ideograph of 馬 Radical Characters

³ 林尹《文字學概說》p56

Within the Horse radical part, there is an indicative character , pronounced *zhù*. The graph is formed by adding the sign ‘二’ beneath ‘馬’ as an indicative marker. The added element indicates that the horse’s left rear leg is distinguished by a different coloration. It refers specifically to a horse whose left hind leg is white.

2.4 Associative Compound of 馬 Radical Characters

Associative compound (*huìyì*) refers to two or more semantic components that are combined to create a new character. Among the *ma* 馬 radical section, there is a special type of associative compound formed by the combination of two or more identical semantic elements - 羴.

In the *Shuowen*, 羴 is defined as “a group of horses.” Its tripartite structure—composed of three 馬 graphs—is often employed to describe the dynamic scene of horses galloping together.

2.4 Semantic–phonetic Compound of 馬 Radical Characters

Semantic–phonetic compounds are characters formed through the combination of multiple graphic components, in which the phonetic component provides a cue to sound, while the semantic component signals the relevant semantic domain.

This structural type represents the dominant developmental tendency of the Chinese writing system. Once the earliest single-element graphs became stabilized, the expansion of the script relied primarily on the semantic–phonetic strategy, which allowed new characters to be created efficiently while maintaining semantic categorization.

Among the characters under the Horse radical, semantic–phonetic compounds

constitute the overwhelming majority, and many of them remain in common use today, such as: 駿(Good horse), 駕(Drive), 馴(Training), 騎(Ride). All of these characters take 馬 as the semantic component, while the element on the other side functions as the phonetic component.

2.5 The Others

The final two categories of the Six Principles—mutually explanatory characters and loan characters—are not attested among the characters under the 馬 radical. In Dai Zhen’s reinterpretation, these two are regarded as principles of character usage rather than fundamental methods of character formation. Owing to their more restrictive conditions, they occur less frequently and are not represented in the 馬 radical.

3. Conclusion

The character 馬 and the characters under the Horse radical provide a representative case through which the four fundamental methods of Chinese character formation—pictographs, ideographs, associative compounds, and semantic-phonetic compounds—can be observed.

At the same time, these materials reveal the increasing tendency toward semantic-phonetic formation in the historical development of Chinese characters, together with processes of simplification and linearization in script forms.

From a historical perspective, the rich lexical distinctions within the Horse radical reflect the important role of horses in early Chinese society. Although many of these characters are no longer in common use today, the writing system, as a kind of “cultural fossil,” continues to preserve traces of earlier conceptual experience and

social structure.

Therefore, an examination of the Horse radical not only contributes to a clearer understanding of the fundamental principles of Chinese character formation, but also provides a concrete point of departure for further exploring the relationship between graphic evolution and cultural meaning.