

Introduction to Chinese characters

Chinese is written with characters (汉字 [汉字] Hànzì). Chinese characters have two forms: traditional and simplified. The origin of Chinese characters dated back to the 14th century BC in Shang Dynasty, known as scripts on oracle bones (甲骨文 jiǎ gǔ wén, characters inscribed on bones or tortoise shells). Chinese characters are ideographical. Usually, one character represents one word or a morpheme (a unit for constructing a word), which means one character contains the combined information of sound (pronunciation), shape (what it looks like) and meaning.

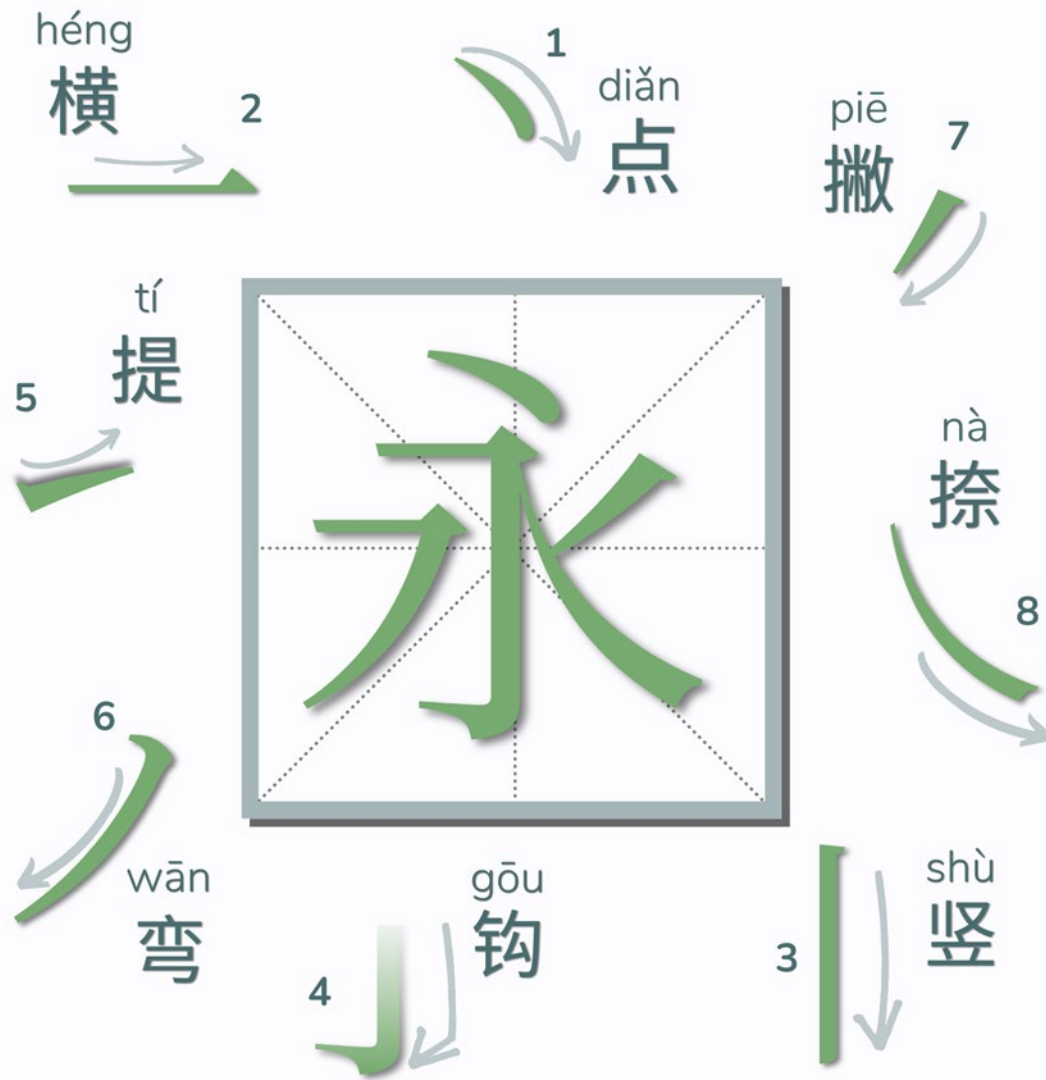
Types of Chinese characters

It is generally believed that Chinese characters were created and derived in six ways. They are: *pictographic* (e.g., 山 shān, *mountain, hill*, 人 rén, *person*, 口 kǒu, *mouth*), *indicative* (e.g., 一 yī, *one*; 二 èr, *two*; 三 sān, *three*; 上 shàng, *up*; 下 xià, *down*), *pictophonetic*, *semasiographic* (e.g., 明 míng, *bright*; 信 xìn, *believe*), *phonetically loaned* (e.g., 要 yào, *want* -> 腰 yāo, *waist*, 北 běi, *north*-> 背 bèi, *back*) and *mutually explanatory* (e.g., 考 kǎo, *test* -> 老 lǎo, *old*; 顶 dǐng, *top* -> 巅 diān, *peak*). Amongst all these, *pictophonetic* characters account for 90% of all the characters. There are mainly four types of *pictophonetic* characters: the left part of a character indicates the shape (often associated with the meaning of the character) and the right part indicates the sound of the character (e.g., 城 chéng, *wall, city*; 抖 dǒu, *shake*) and the other way around (战 zhàn, *fight, war*; 彰 zhāng, *evident, clear*); or the top part of a character indicates shape (meaning) and the bottom part indicates sound (e.g., 芳 fāng, *fragrant*; 岗 gāng, *hillock*) and the other way around (e.g., 想 xiǎng, *think, miss*; 熬 áo, *boil (for a long time)*)).

The part that indicates meaning of a character is called *radical*. Each character has one radical that is associated with the meaning of the character. You can see some most commonly used radicals in a separate document.

The structure of Chinese characters














Chinese characters are square-shaped. They are made up of strokes. For example, the following image shows different strokes that the character 永 (yǒng, forever) has.



Although Chinese characters are square-shaped, the structures of characters are not all the same. The structures include single-element characters; top-bottom structure; left-right structure; left-middle-right; three quarters/one quarter division; half-enclosed; fully-enclosed, etc.

The following image shows different structures of Chinese characters:

BASIC COMPOSITIONS OF CHINESE CHARACTERS

number	Structure diagram	Structure name	Example
1		up-down	思 杏
2		up-center-down	怠 草
3		left-right	休 明
4		left-center-right	粥 班
5		overall surrounded	囚 困
6		left-up-right surrounded	同 冈
7		left-right-down surrounded	凶 函
8		left-up surrounded	病原
9		left-up-down surrounded	匠 区
10		left-down surrounded	毯 建
11		up-right surrounded	司 句
12		whole	大 由
13		mosaic	噩 巫

There are general rules to follow in terms of writing Chinese characters. Broadly speaking, characters are written from left to right, top to bottom. If a character has an enclosed structure, what is inside the enclosure is written before the closing stroke. You can see examples in the character sheets.

If you would like to find out more about Chinese writing system, you can use the following links:

https://www.ancient.eu/Chinese_Writing/

<https://hanziyuan.net/#home>

<http://blog.tutorming.com/mandarin-chinese-learning-tips/how-do-chinese-characters-work>

<https://www.mandarintutor.com/resources/commonradicals>

<https://www.digmandarin.com/chinese-strokes-list.html>

https://www.archchinese.com/arch_chinese_radicals.html

You can also watch some of the videos here:

<https://www.youtube.com/watch?v=s0h18Rdhb44>

<https://www.youtube.com/watch?v=8MCnjfws0XQ>

<https://www.youtube.com/watch?v=troxvPRmZm8>

References:

Lu, J. P., Pi, Y. G., & Liao, W. Z. (2009, December). Study on the ichnography structures of Chinese characters based on topological theory. In *2009 International Conference on Computational Intelligence and Software Engineering* (pp. 1-6). IEEE.

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<https://ieeexplore.ieee.org/abstract/document/5364726>

<https://www.cultureyard.net/blog/how-to-write-chinese-characters-stroke-order>

<https://baike.baidu.com/item/%E6%B1%89%E5%AD%97>