THE TREES OF CHARACTERS

An Exploration of Hanzi Radicals

Chinese Characters, also known as **Hanzi** (simplified Chinese: 汉字; traditional Chinese: 漢字) are logograms used for the writing of Chinese. This visualization explores 20,903 distinct characters in the Chinese language, classified by an ancient graphical indexing system.

In English, words are made up of 26 letters and are indexed in the dictionary by the alphabets.

In Chinese, each character is made up of a number of strokes of the pen (or traditionally, the brush) and individual components. One of the key components in any character is the 'radical' (部首), which is used to index Chinese characters.

In Chinese dictionaries, characters are traditionally classified by the radicals, first by the number of strokes in the radical, then the number of strokes in the characters.

This visualization shows 214 Radical Families and their related Chinese characters.

* * *

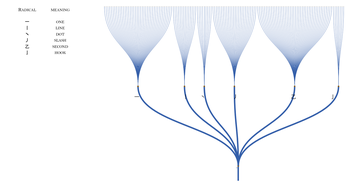
A Bit about Characters & Radicals

Many Chinese characters are derived from pictographs and some are ideographic in origin and express an abstract idea through an iconic form. The vast majority are picto-phonetic, in which a character is made up of a pictograph component which relates to the meaning of the character and a phonetic part that indicates its pronunciation.

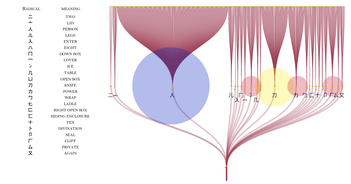
The 214 radicals were popularized during the reign of Emperor Kangxi (1662–1723), who commissioned the development of Kangxi Dictionary, which lists over 47,000 entries. In modern times, many dictionaries continues to use this system to list Traditional Chinese characters.

Some radicals are stand-alone characters and some are not. Chinese radicals can hold information about the meaning and/or sound of a character. Understanding the design of the character can give a visual representation of the meaning. Here are some examples:

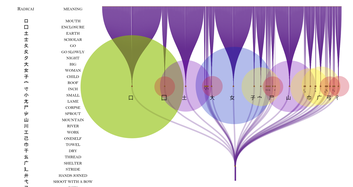
Radicals	Characters		
木 Wood (4 Strokes)	松 Pine	果 Fruit	枝 Branch
冫 Ice (2 Strokes)	冰 Ice	冬 Winter	冷 Cold



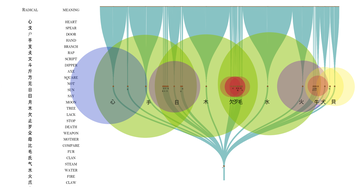
1 Stroke



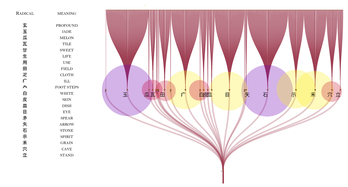
2 Strokes



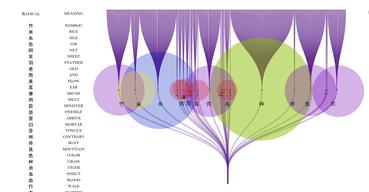
3 Strokes



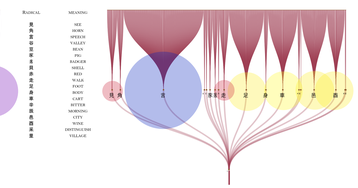
4 Strokes



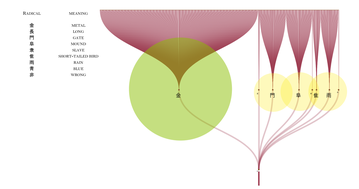
5 Strokes



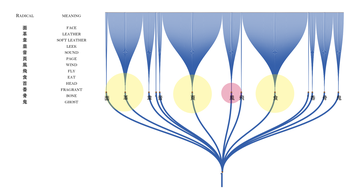
6 Strokes



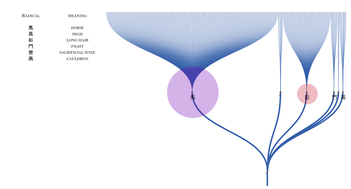
7 Strokes



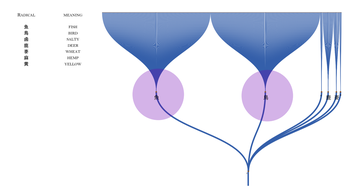
8 Strokes



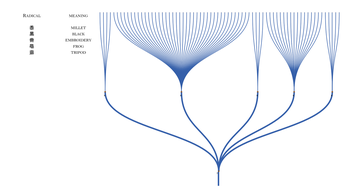
9 Stroke



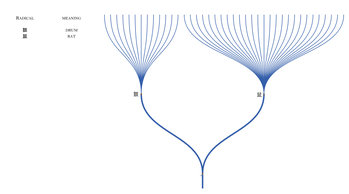
10 Strokes



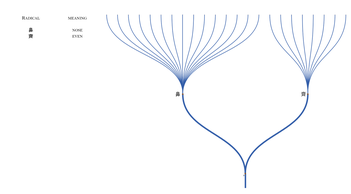
11 Strokes



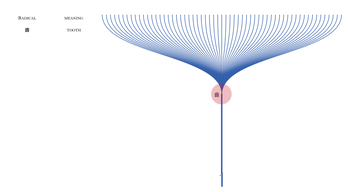
12 Strokes



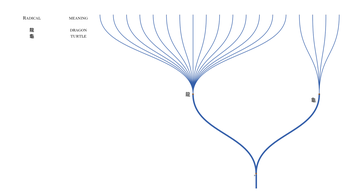
13 Strokes



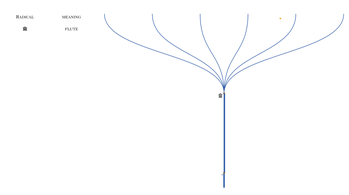
14 Strokes



15 Strokes



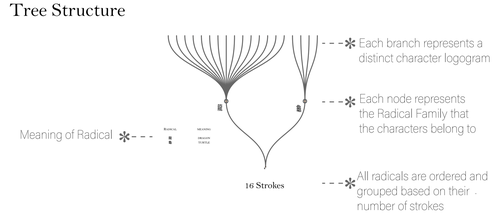
16 Strokes



17 Strokes

Legend

Tree Structure

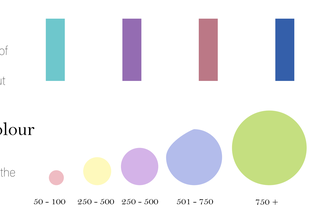


Branch Colour

Represents the number of characters in the Stroke Family (in percentage out of 20,903 characters)

Node Size & Colour

Represent the distinct number of characters in the Radical Family



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Data Sources:
https://www.yellowbridge.com/chinese/radicals.php
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