Meaningfully learning Chinese characters: network based approach and original meaning based learning (Chinese Version)

Simplified character Go

The relations of the structural components of Chinese characters to teaching Chinese have been noticed by many scholars and educators, for example, Wang Ning, Lu Bisong, Zhang Peng Peng, Joël Bellassen. Understanding the subcomponent structure of a character, and the subcomponent meanings is a good way of understanding of the original meaning of the Chinese character. It also helps to understand how the character acts within a multi-character word, and acquisition of other related words, and even sentences. For example, "木wood", "林forest", "森forest", understanding one character allows us to understand 3 characters, the learning cost is greatly reduced. Our basic questions are: First, can we systematize all characters in this fashion? Second, if the substructure at the character level is common, then can we find an optimal learning sequence of all most used characters from such a connected map of characters? For the first question, we need to extract them in etymology and relate original meaning of all the characters to its etymology, and for the second question, we need to perform network analysis on the map of characters.

Based on our own research on these issues, as well as information collected by others, on the initial construction of the site, we provide the following resources:

- List of the decompositions (breakdown) of Chinese characters (of Simplified Characters, of Traditional Characters);
- Adjacency matrix of the networks constructed from the above decompositions(Simplified Characters, Traditional Characters);
- Learning orders according to our own definition of the distributed weight of characters(Simplified Characters Traditional Characters);
- Usage frequency and orders according to usage freqnecy of characters(Simplified Characters, Traditional Characters);
- Hierarchical levels (also orders) of characters(Traditional Characters);
- Our research papers (to be released);

- The full map of Chinese characters can also be downloaded in PDF format and its descriptions in more details;
- The decomposition of Chinese characters and the original meaning dictionary (see the middle of the main part of this website, still under development, the current data is in part from the network);
- A system for generating personalized Chinese character learning sequence and mornitoring personalized learning progress (under development, see description on the right side).

How to cite this: If your learning and research uses the data we provide, please reference our article (we will update our publication list) or our website (Meaningfully learning Chinese characters at http://www.learnm.org).

Futher details about this poject and this website, and also our references can be found at About the project and the website: Meaningfully learning Chinese characters.

中中史仲冲忠肿盅种贵钟衷堇遣囊中

Pronunciation zhōng

Original meaning

甲骨文和金文 「中」像豎立起來的旗杆 上面掛%3/0097%隨風飄動的旗幟。標準字形 字形與小篆相同。

Values and orders of usage frequency 0.00544820105645594 18 Orders of the distributed node weight:31

The structure of Chinese characters and the original meaning dictionary (see the middle of the main part of this website, still under development, the current data is in part from the network), and contains:

- Connection with other Chinese characters: In the center we have the target character. To the left we have its' components, and the right characters are those characters has the target character as its component. The inner (outer) characters have the frequency high (low) usage frequencies. When there are more than 30 participating characters, only the first, thus highest-usage 30 are shown in the main figure.
- Simplified character
- Traditioal character
- Pronunciation
- Etymology and ancient glyph
- Etymological illustration or photo
- Original meaning
- Illustration or photo for the original meaning
- Values and orders of usage frequency
- Orders of the distributed node weight

Learning system for register users: As guests or registered users, once loged in, users have access to a record of the most recent learned 10 characters and the 5 immediately needed to learn characters. After a user complete the diagnostic test, our system will be able to automatically estimate the unknown characters and their optimal learning orders tailed for the user, and will provide also a mornitoring service of the learning progress. Users can also choose to generate printable quality documents of the whole learning matrials in whichever order they prefer, such as the order of usage frequencies, the order of hierarchical levels, or the order of distributed node weights. This module is still under development, it should include

- Monitering users learning progress
- Generating and presenting on webpages for users custumized learning materials and learnig orders
- Printable learning materials for users
- Diagnostic tests of users known and unknown characters (without testing all characters)
- Record and processing user's feedback on character decomposition, original meaning, and etymology