

The Music of Chinese Calligraphy

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1. What is Chinese calligraphy?

Calligraphy is one of the most beautiful of all the arts that have been cultivated in the East. It originated in China and spread from there to all countries that use Chinese characters. It is difficult to say in a word just what forms the basis for the beauty of the calligraphy of the East, but the greatest factor in producing this beauty is no doubt the construction of the Chinese characters themselves.

Chinese characters began as primitive pictographs, diagrams depicting things. From these pictographs of natural objects, another kind of character developed: the ideograph. The early pictographs were concrete signs, while these ideographs were symbolic, showing relative position, number, or expressing other relations. The combination of the concrete and the symbolic is the base from which all other varieties of characters developed.

Every character includes three elements: form, sound, and meaning. Whatever type of character it is, it will possess all three. But perhaps the most arresting of these three elements is the form - the remarkable graphic-design quality of the Chinese character. The fact that Chinese characters not only developed from but retained through time their pictorial or diagrammatic forms indicates just how central the element of visual form is in the Chinese character. Each era produced its own particular variations in form, and as these forms became established and were employed in writing, various styles of these forms were to develop.

The appearance of these styles marked the first emergence of calligraphy as an art, the art of writing beautifully.



Fig.1- Brush, ink, paper and inkstone, called "The Four Treasures of the Study" -

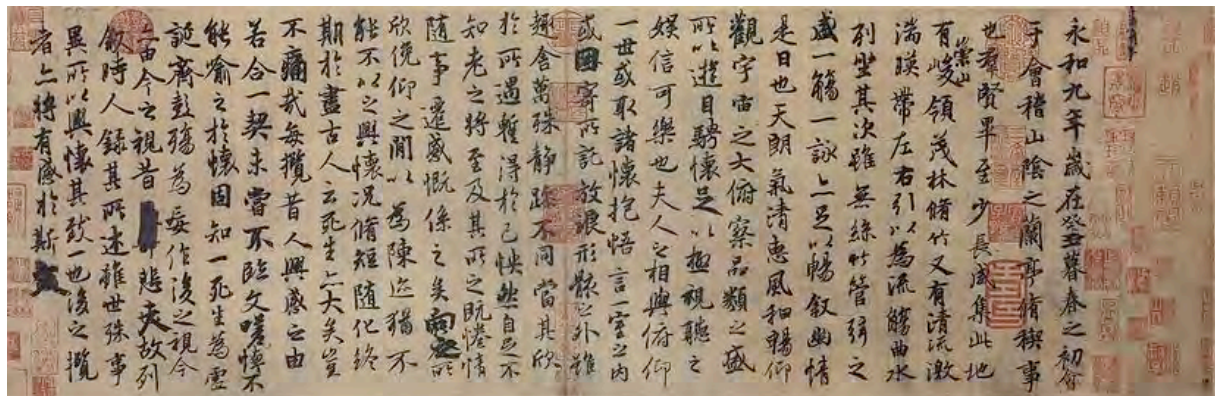


Fig.2- Copy of Wang Xizhi's Lanting Xu, the most famous Chinese calligraphic work

2. Calligraphic scripts

Chinese calligraphy has a three-thousand-year history. During these years the historical process of transformation of calligraphy has produced 5 forms:

- Seal Script (Zhuanshu)
- Clerical Script (Lishu)
- Running Script (Xingshu)
- Cursive Script (Caoshu)
- Regular Script (Kaishu)

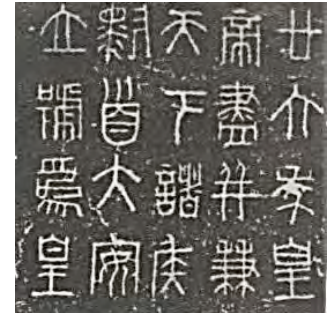


Fig.3 - Seal script

Seal script is an ancient style of writing Chinese characters that was common throughout the latter half of the 1st millennium BC. It was still widely used for decorative engraving and seals in the Han dynasty. The *clerical script* is popularly thought to have developed in the Hân dynasty and to have come directly from seal script. Clerical script characters are often "flat" in appearance. The *running script* approximates normal handwriting in which strokes and, more rarely, characters are allowed to run into one another. The *cursive script* is a script with drastic simplifications. Entire characters may be written without lifting the brush from the paper. Sometimes strokes are modified or eliminated completely to facilitate smooth writing and to create a beautiful, abstract appearance.

The regular script is one of the last major calligraphic styles to develop, emerging during the Hân dynasty and maturing in the Tang dynasty. As the name suggests, the regular script is "regular", with each of the strokes placed slowly and carefully, the brush lifted from the paper and **all the strokes distinct from each other**.

Chinese characters are basically logograms constructed with strokes. Over the millennia a set of generally agreed rules have been developed to determine the right order of the strokes. Namely the writing of the characters should be economical, with the fewest hand movements to write the most strokes possible. This promotes writing speed, accuracy, readability and, above all, an aesthetic guarantee for the beauty of the character.

Therefore, the affirmations that each character is made of a single "right" succession of strokes and that the character written in regular form consists of a sequence of distinct strokes, has led me to the choice the **regular script** for my work with music and calligraphy.

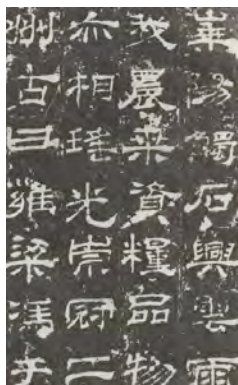


Fig.5 - Clerical script

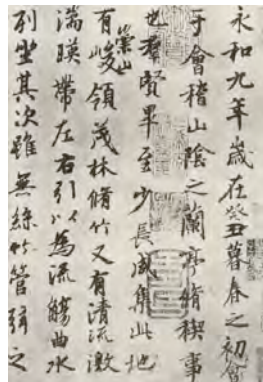


Fig.6 - Running script

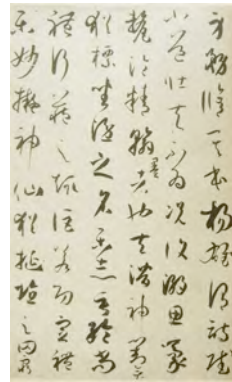


Fig.4 - Cursive script



Fig.7 - Regular script

3. Relationships between Calligraphy and Music

Since ancient times in the Eastern world both, calligraphy and music, have always played the role of major arts.

In many aspects, a calligraphic work can be compared to a musical work. Each calligraphic stroke (in "regular script" it corresponds to the sign made between the initial contact of the brush with the paper and its final lift) is like a note on the pentagram, each character (composed of a well-defined sequence of calligraphic strokes) is a succession of notes interrupted with pauses that are equivalent to the non-written between strokes.

Other similarities can be found in comparing the acoustic quality of music with the quality of the calligraphic strokes, the musical intonation with the calligraphy accuracy, the volume with the writing intensity, musical tones with calligraphic forms, the alternation in writing that determines a rhythm with the musical rhythm.

So, in the same way as a great musician brings his music to high values of harmony through his own phrasing, his pitch and rhythm, a great calligrapher reaches the same artistic harmony through the rhythmic movement of his own brush and allowing us to talk about "Music of Chinese Calligraphy".

Both, in music and calligraphy, the expression is given by a temporal sequence of well-defined acts. In the case of music we have a sequence of notes that compose a melody, while in the case of Chinese calligraphy we have a sequence of "strokes" that make up the character and, gradually, the calligraphic work.

Both, music and calligraphy, require a very long practice and great precision during the execution. In calligraphy as well as in musical interpretation, there's no remorse: each and every brush stroke, as well as each every note, cannot be retracted once executed. And, in both cases, the art is an interpretation via an instrument, which is not only the vehicle of the artist's psyche, but also influences the artist's hand.

"Musical Calligraphy Project" aims at combining calligraphy and music to create something new between the two. By matching "fundamental calligraphic strokes" to "musical notes" - obviously respecting their "lengths or durations" - it arrives at a transformation of Chinese characters into a corresponding musical melodies and, consequently, of calligraphic artworks into corresponding musical compositions. These musical compositions are usually transposed in "musical calligraphy performances" during which the calligrapher performs his calligraphy simultaneously with the musician who performs the music score obtained by the calligraphy itself.

MUSIC	CALLIGRAPHY
sound quality	stroke quality
intonation	calligraphic accuracy
volume	writing intensity
musical tones	calligraphic forms
musical rhythm	alternating of strokes and pause = calligraphic rhythm
sequence of well-defined acts to generate music	sequence of well-defined acts to generate calligraphy
long practice and great precision during the execution	long practice and great precision during the execution

4. Musicallygraphy Project

4.1 From Chinese character to musicallygraphic score

Starting from each character that make up a calligraphic work and, more specifically, from each calligraphic stroke and relative blank spaces between strokes, I can build, through "unique relationships" between strokes and notes, a composition of contemporary music.

These "unique relationships" connect in first instance "fundamental calligraphic strokes" and "fundamental notes" belonging to an appropriate musical scale.

In this first phase of the project, the fundamental strokes chosen are 6 (in contrast with other theories belonging to the calligraphic chinese culture) and are strokes that do not involve sharp variations of direction. Obviously it is possible to choose a different number of fundamental strokes and then a corresponding musical scale (for example, 8 strokes and an eight-note scale).

In agreement with the number (6) of fundamental strokes chosen, I have utilized an esatonal musical scale.

Obviously also the blank spaces between the strokes have fundamental importance because they will produce the relative musical rests.

In doing so, the only harmonious and correct sequence of calligraphic strokes that make up the Chinese character will produce a unique musical melody in which the duration of each musical note will be tied to the length of each calligraphic stroke and music pauses will be linked to the non-written gaps between a stroke and the following.

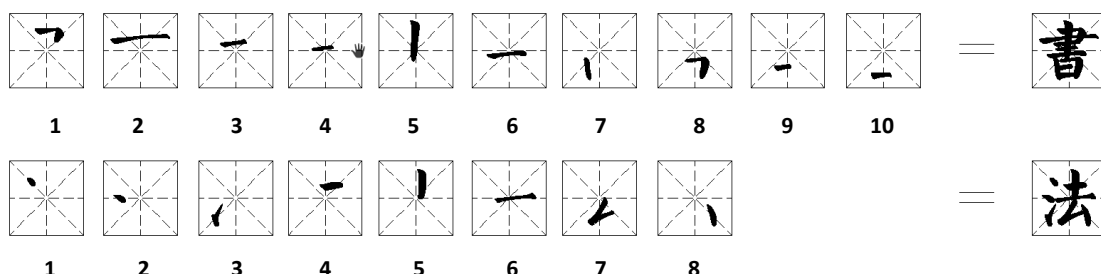
4.2 Sequence of strokes and Blank spaces and their measurement

STEP1: Realization of a calligraphic work in regular script.

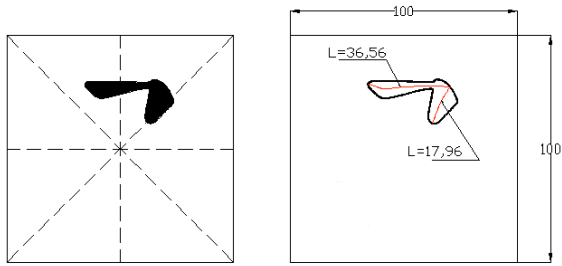


Fig.8 - The two characters of *Shufa* -

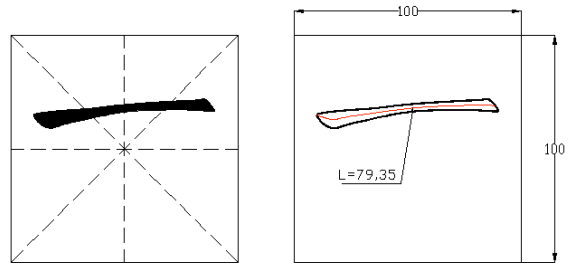
STEP2: Identification of the sequence of the strokes.



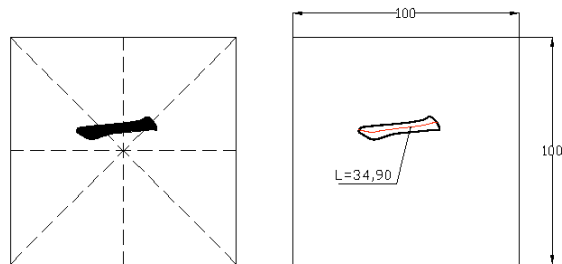
STEP3: Measurement of the length (mm) of the strokes (red line) in character



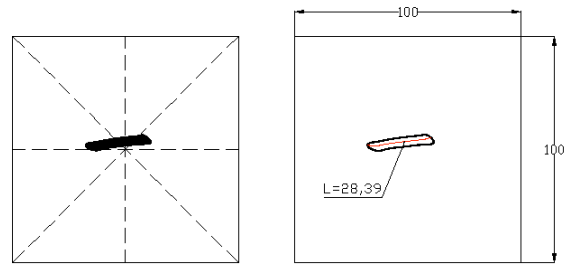
Stroke 1



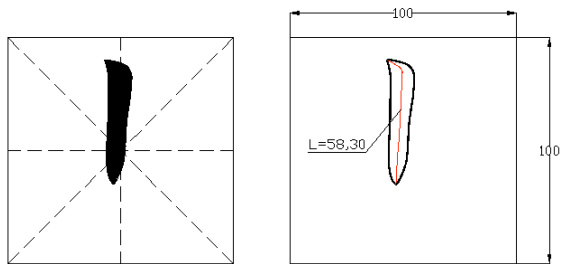
Stroke 2



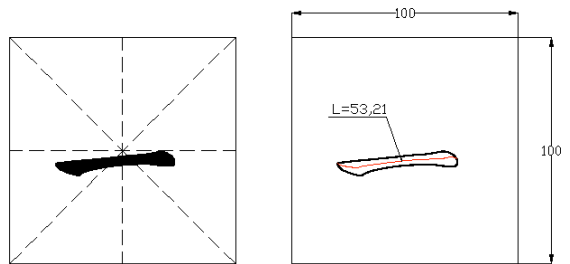
Stroke 3



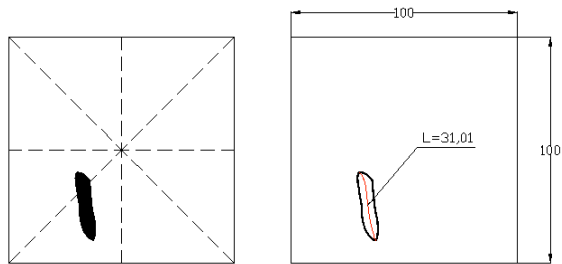
Stroke 4



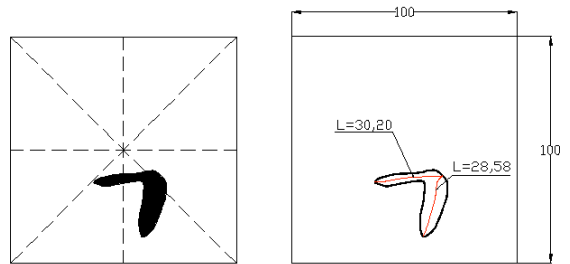
Stroke 5



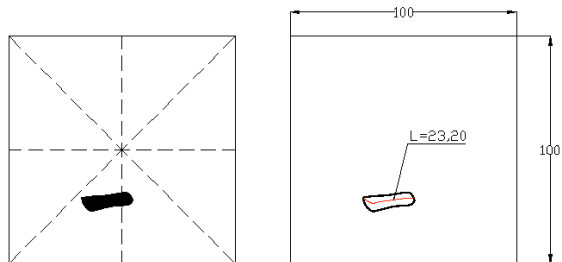
Stroke 6



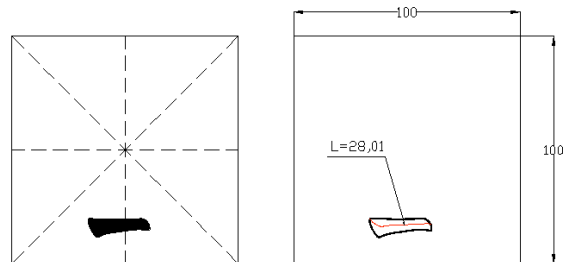
Stroke 7



Stroke 8

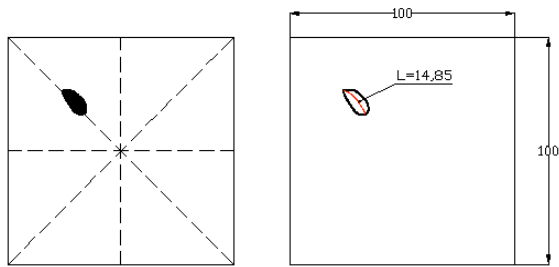


Stroke 9

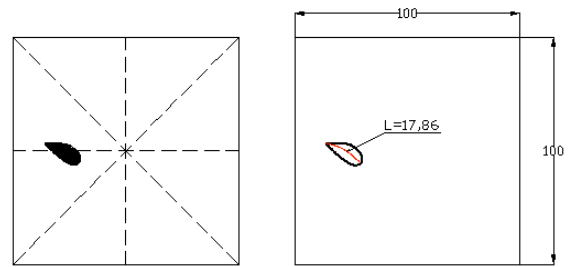


Stroke 10

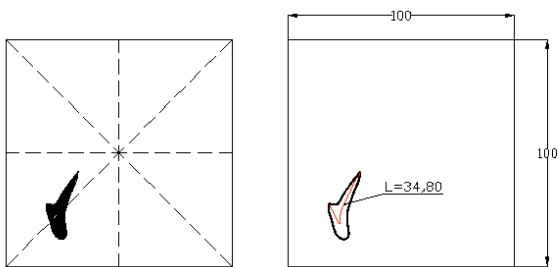
Measurement of the length (mm) of the strokes (red line) in character



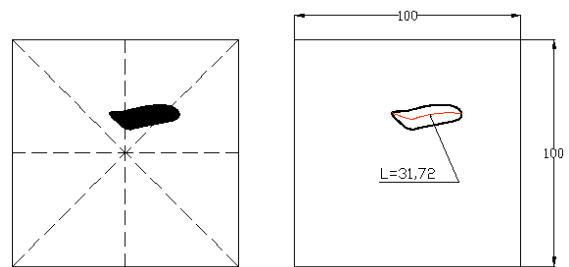
Stroke 1



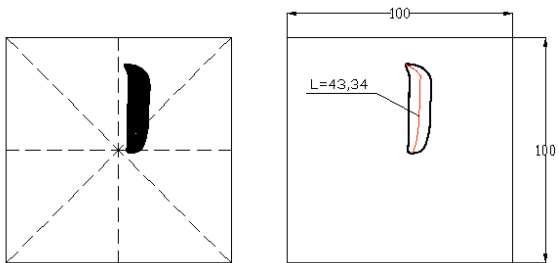
Stroke 2



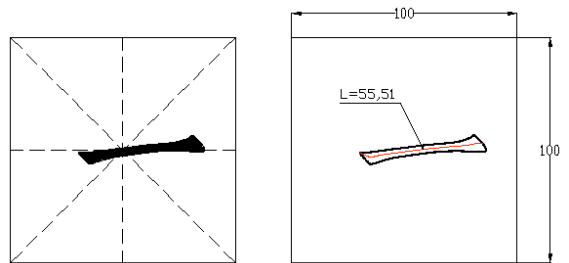
Stroke 3



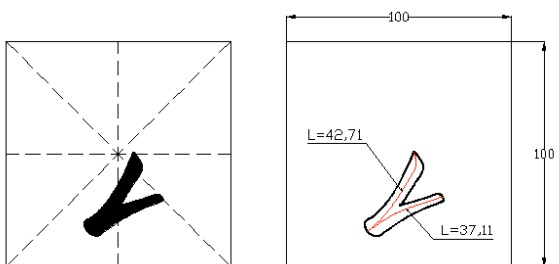
Stroke 4



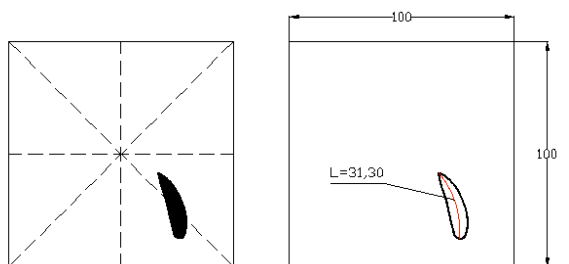
Stroke 5



Stroke 6

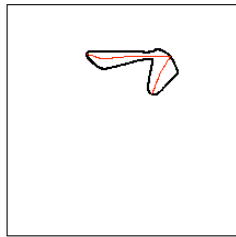


Stroke 7

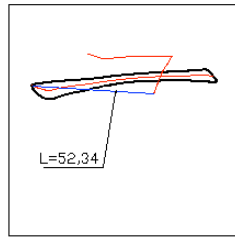


Stroke 8

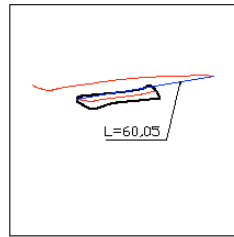
Measurement of the length (mm) of Blank spaces (blue line) in character



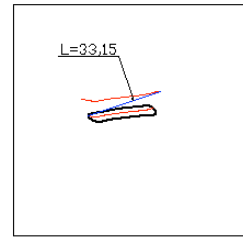
First stroke



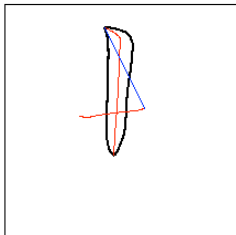
Blank space 1



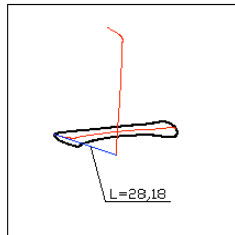
Blank space 2



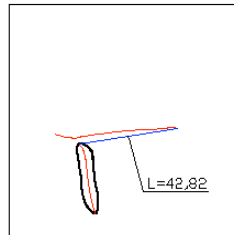
Blank space 3



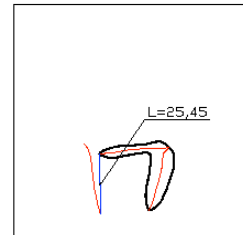
Blank space 4



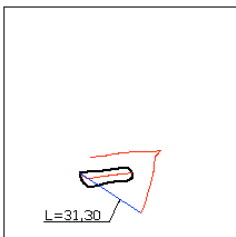
Blank space 5



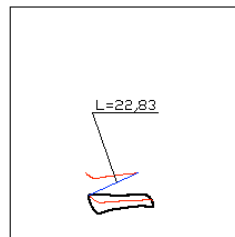
Blank space 6



Blank space 7

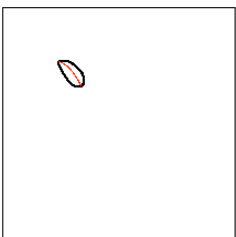


Blank space 8

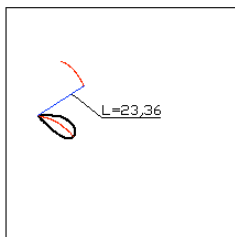


Blank space 9

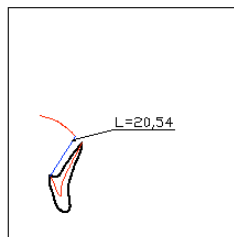
Measurement of the length (mm) of Blank spaces (blue line) in character



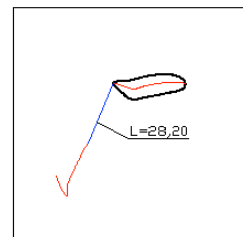
Blank space 1



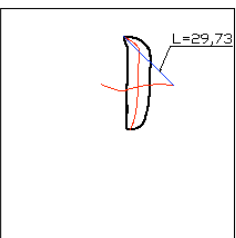
Blank space 2



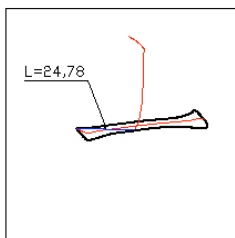
Blank space 3



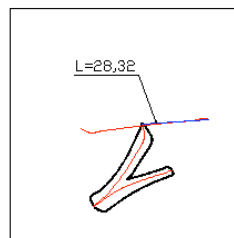
Blank space 4



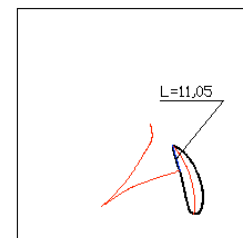
Blank space 5



Blank space 6



Blank space 7



Blank space 8

4.3 Normalization of the lengths (strokes and blank spaces)

Strokes:

NS = Number of Strokes **SLS** = Sum of Lengths of the Strokes

MLS = Medium Length of Strokes = **SLS/ NS**

LS = Length of Stroke

NLS = Normalized Length of Stroke = LS/ MLS
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Blank Spaces:

NBS = Number of Blank Spaces **SLBS** = Sum of Lengths of Blank Spaces


MLBS = Medium Length of Blank Spaces = **SLBS/ NBS**

LBS = Length of Blank Space

NLBS = Normalized Length of Blank Space = LBS/ MLBS
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4.4 Correspondences between lengths

Strokes and musical notes

NLS = 1 → 

Blank spaces and musical rests

NLBS = 1 → 

As a consequence of this choice in the relationships between geometric and musical lengths, all measured lengths of the different strokes and blank spaces will assume consistent musical values proportionally.

4.5 Correspondences between fundamental strokes and musical notes

Which and how many are the fundamental strokes? Through history different theories have been developed:

Emperor Zhang (Later Han Dynasty) = **14 types of strokes**

Lady Wei (272–349) (Eastern Jin Dynasty) = **72 types of stroke**

The classification of the great calligrapher *Wang Xizhi* (303–361) written in the book “*The eight components of the character Yong*” is today the most generally used in the practice.

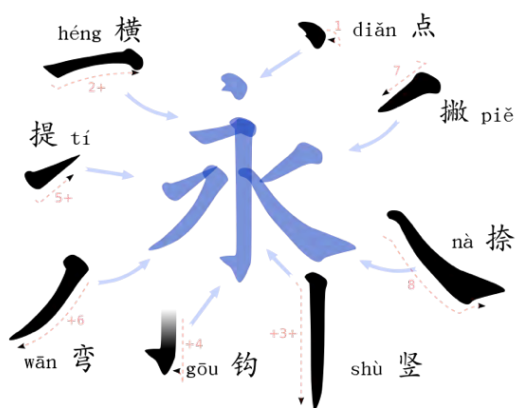


Fig. 9 – The eight components of the character Yong

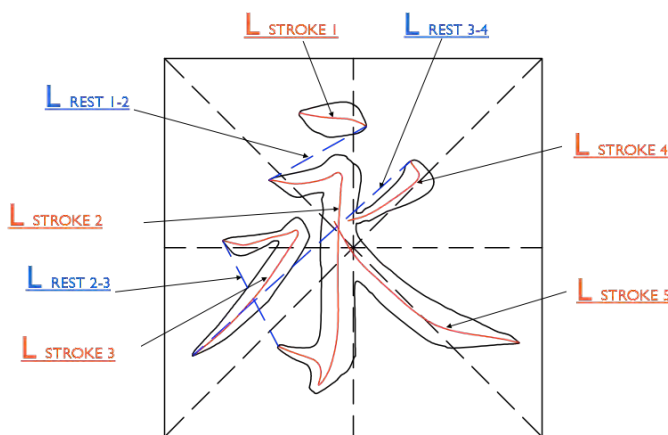


Fig. 10 – Character Yong – Strokes and Blank spaces

In my work, the choice of the number of fundamental strokes, derived from the model of *Wang Xizhi*, is reduced to 6. In fact there are 6 strokes so-called "simple" that do not involve rapid changes in direction in carrying them out.

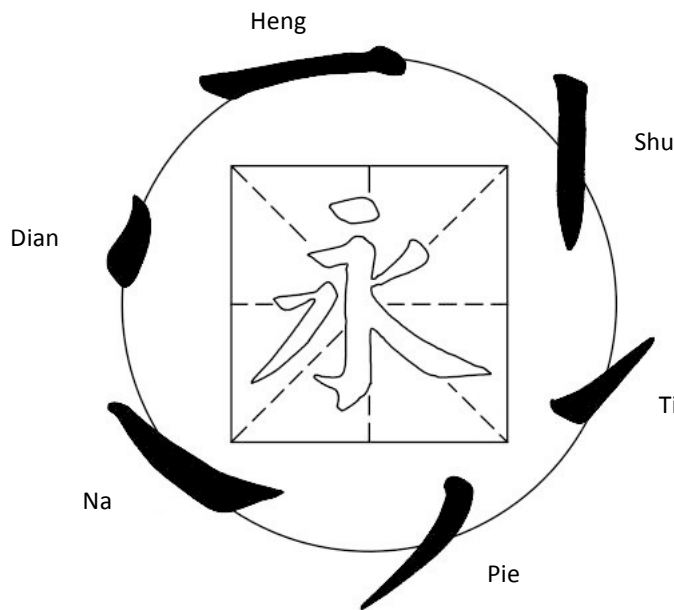


Fig. 11 – The six "fundamental strokes" derived from the *Wang Xizhi* model

Since the fundamental strokes choose in my theory are six, it follows that is convenient to use a musical scale with 6 notes (exatonic music scale) and set a direct correspondence stroke-note. The succession of strokes used is the same as that in the scheme of Wang Xizhi, then the stroke "Diǎn" (first stroke) coincides with the first note of the scale used (example C scale).

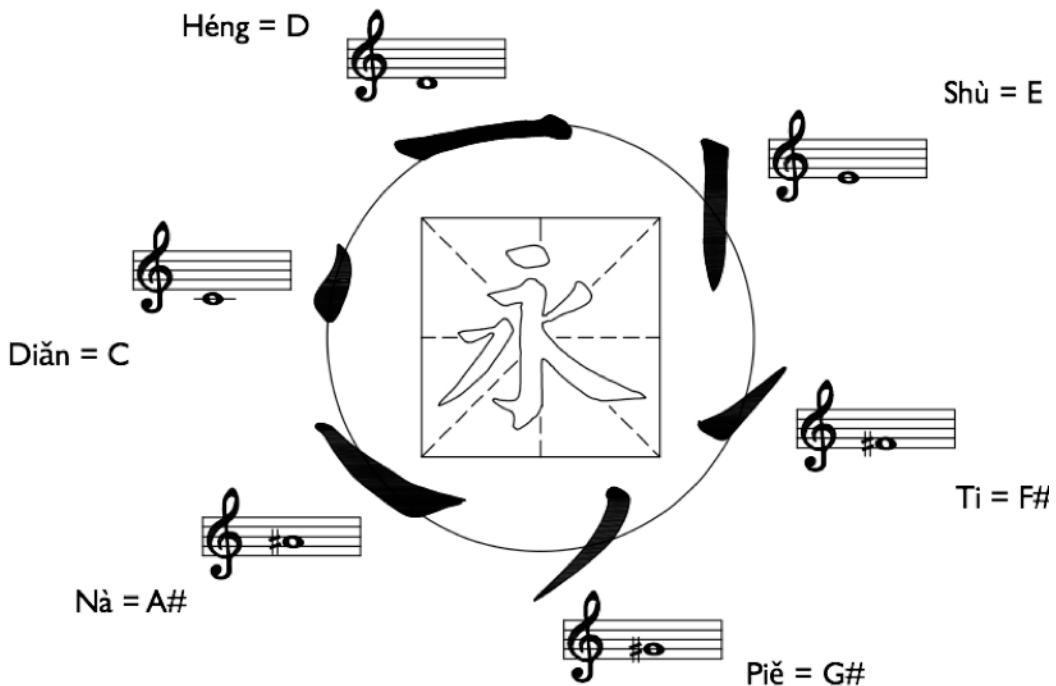
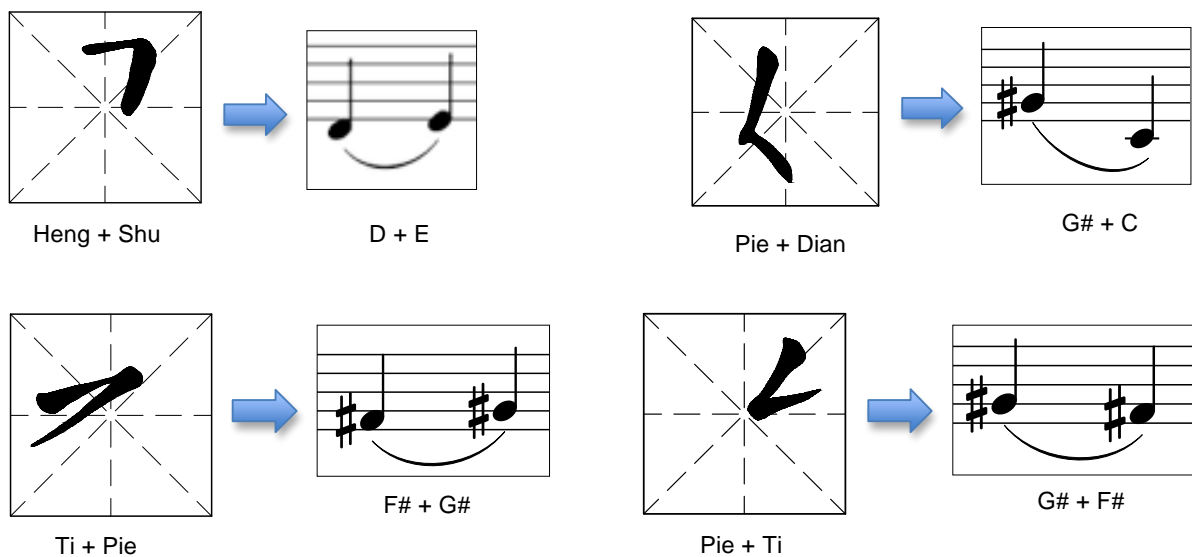


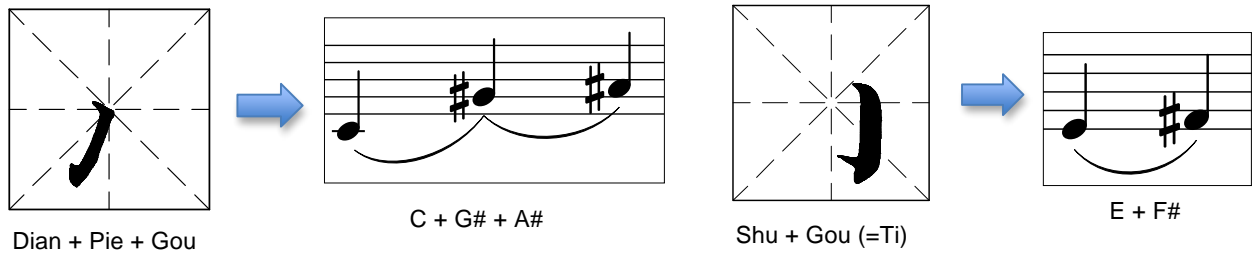
Fig. 12 – Correspondence between the six fundamental strokes and the six notes of the exatonic music scale

4.6 How to process non-fundamental calligraphic strokes?

The “other” strokes (non-fundamental strokes) will be considered as arising from fundamental strokes. Since, non-fundamental strokes, can be considered as a continuous sequence of fundamental strokes executed in a single calligraphic gesture and the musical correspondence generated will be a sequence of musically linked notes.

Below you can see some examples of “calligraphic events” that will appear in the phrase with 8 characters.





4.7 Musicallyigraphic score

In the musicallyigraphic score we have two parallel music lines in which both, calligraphic and musical events, evolve at the same time. This gives the sense of the deep link between the two artistic forms.

書

法

Fig. 14 – Musicallyigraphic score of the characters 书法

5. An 8-character phrase: 千里之行始於足下

This work was presented in "2013 World Calligraphy Biennale in Jeollabuk-do" - Korea. In this context, where the greatest exponents of oriental calligraphy show their masterpieces, my work "千里之行始於足下" has aroused great curiosity and stimulated several questions about the meaning of it.

From a graphical point of view, the work present in the upper part the eight characters of the title in seal script and, in the underlying part, the score on two lines with the unfolding in parallel of the calligraphic and music part.



Fig. 15 – Work presented in World Calligraphy Biennale and sequence of strokes of 8 characters



Fig. 16 – Measurement of the length of strokes and blank spaces in 千里之行 and their music translation

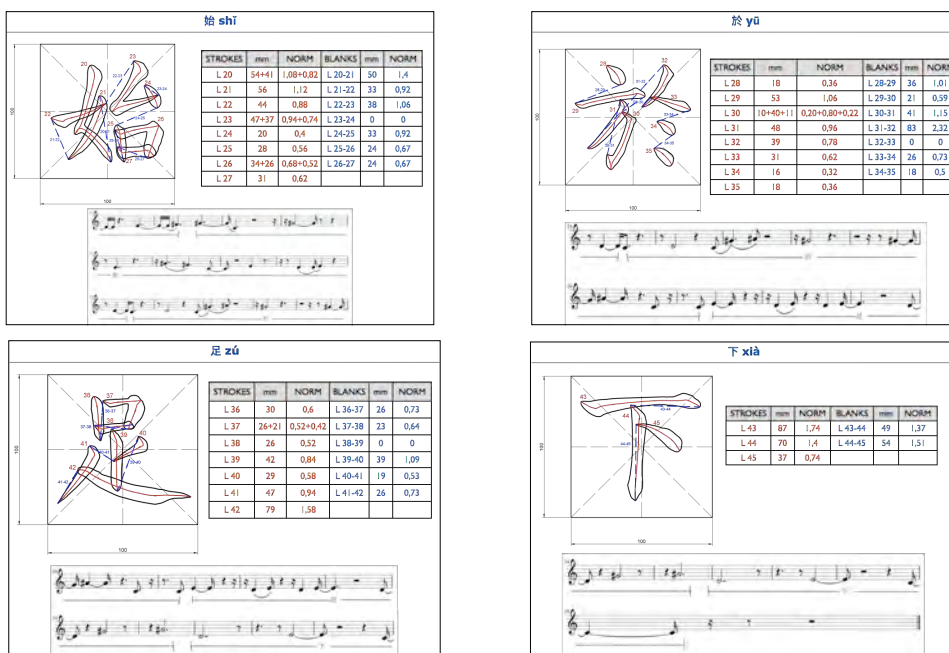


Fig. 17 – Measurement of the length of strokes and blank spaces in 始於足下 and their music translation



6. The Hangzhou event at “Zhejiang Conservatory of Music”



Fig. 19 – Musicallygraphy performance in Zhejiang Conservatory of Music in Hangzhou – China – October 2016 - Poster of the event “The Music of Chinese Calligraphy” and outside view of the Conservatory

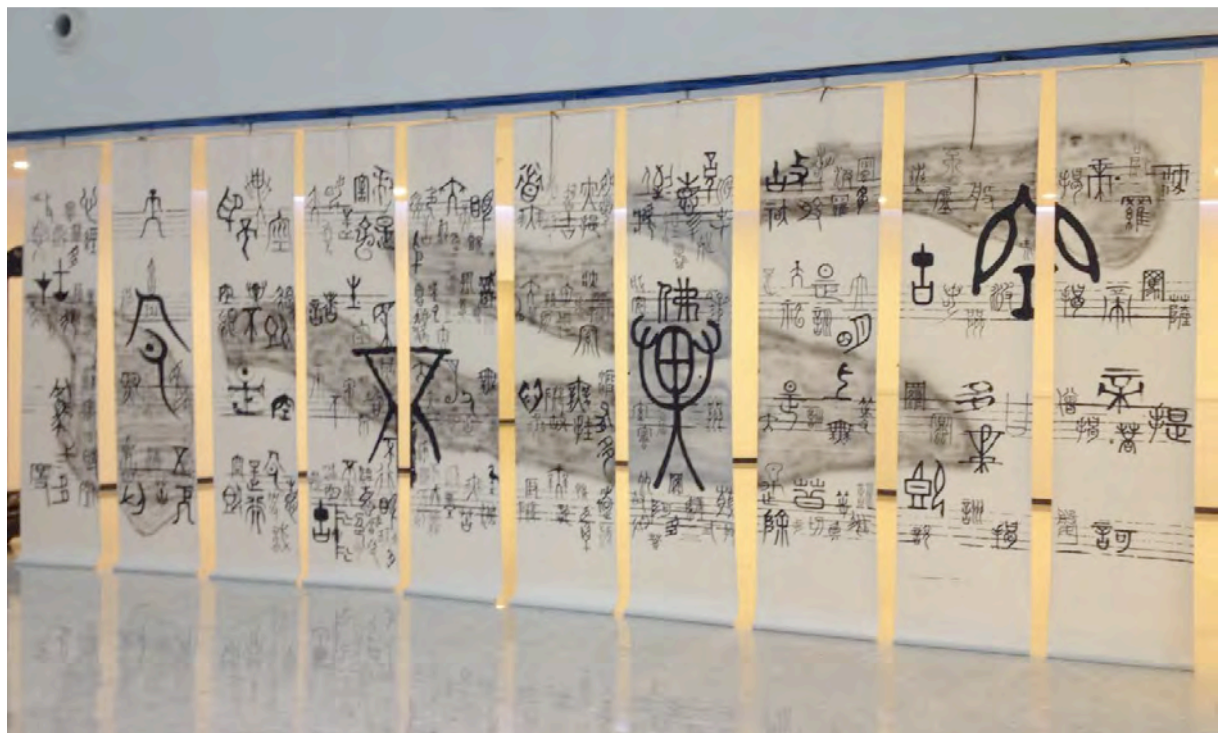


Fig. 20 – Exhibition and Musicallygraphy performance in Zhejiang Conservatory of Music in Hangzhou – Images of the Heart Sutra - 700x300 cm - China – October 2016



Fig. 21 – Musicalligraphy performance in Zhejiang Conservatory of Music in Hangzhou – Silvio Ferragina (brush) and Sandro Cerino (flute) - China – October 2016



Fig. 22 – Musicalligraphy performance in Zhejiang Conservatory of Music in Hangzhou – Cover of the Musicalligraphic score of 16 characters of the Heart Sutra -色不異空空不異色色即是空空即是色 - China – October 2016

The image displays a musical score for a performance of the Heart Sutra. The score is organized into two columns of staves, each with a page number at the bottom (1 and 2 on the left, 3 and 4 on the right). The Chinese characters '色', '空', '不', '異', '即', '是' are written vertically on the left side of each staff, corresponding to the musical notation. The notation includes various musical symbols such as notes, rests, and dynamic markings, all rendered in a traditional Chinese musical style. The overall layout is clean and professional, with a clear focus on the relationship between the characters and the music.

Fig. 23 – Muscilligraphy performance in Zhejiang Conservatory of Music in Hangzhou – Muscilligraphic score of 16 characters of the Heart Sutra -色不異空空不異色色即是空空即是色 - China – October 2016