BEYOND / VISION
超象
1ST CYCLE: HA IKU 2, 4, 5 & 6

Kim Ho Ip

Submitted in satisfaction (or in part satisfaction) of the requirements for the degree of PhD in the University of Edinburgh
2004
Instrumentation

YANG-QIN (Chinese dulcimer)
HU-QIN (ER-HU & BAN-HU) (Chinese fiddle)
VIBRAPHONE
symbols explanation:

thinner rubber head on bamboo hammers, harder (for Yang-Qin)

thicker rubber head on bamboo hammers, softer (for Yang-Qin)

use a hammer with double heads, a third apart (for Yang-Qin)

the other side of the head of bamboo hammers (for Yang-Qin)

handels of bamboo hammers (for Yang-Qin)

bow arco

steel wire brushes

let vibrate

yarn mallet

plastic mallet

steel mallet
The Ripples,
Are melting
The ice of the lake
(Shiki)
hit the cymbal or body with the thumb. 
Use the other end of the handle.

(mate with finger)

Play on various strings behind the bridges.

Fading out

Slow down

Improvise
In the Cicada's cry
There's no sign that can foretell
How soon it must die.
(Basho)
Surrounding the stone silence
(Richard Thomas)
The Telephone rings only once
Autumn rain
(Nick Avis)
BEYOND / VISION II
HAiku 1 & 3
BEYOND / VISION
超象
2ND CYCLE: HAIKU 1 & 3

Kim Ho Ip

Submitted in satisfaction (or in part satisfaction) of the requirements for the degree of PhD in the University of Edinburgh 2004
Instrumentation

YANG-QIN (Chinese dulcimer)
SAN-XIAN (Chinese long-necked fretless lute)
BASSOON
VIBRAPHONE
TREE-CHIMES
symbols explanation:

thinner rubber head on bamboo hammers, harder (for Yang-Qin)

thicker rubber head on bamboo hammers, softer (for Yang-Qin)

use a hammer with double heads, a third apart (for Yang-Qin)

the other side of the head of bamboo hammers (for Yang-Qin)

handels of bamboo hammers (for Yang-Qin)

bow arco

steel wire brushes

let vibrate

yarn mallet

plastic mallet

steel mallet
Brushing the leaves, fell
A white camellia blossom
Into the dark well
start with air noise, gradually become actual pitch (microtones by alternate fingerings)

slow to fast

non vib.  \( \rightarrow \) molto vib.

improvise

improvise

[white keys]

[black keys]

glis., fast  \( \rightarrow \) Lv.

molto
ff as fast as possible
poco a poco rii.

slow to fast (not too much)
3 in the Cicada's cry
There's no iron that can foretell
How soon it must die

Tempo Rubato
HAIKU 7

Kim
HAIKU 7

Kim Ho Ip

Submitted in satisfaction (or in part satisfaction) of the requirements for the degree of PhD in the University of Edinburgh

2004
Instrumentation

FLUTE
CLARINET IN Bb (written in C in this score)
PIPA (Chinese 4-stringed lute)
VIOLIN I
VIOLIN II
VIOLA
VIOLONCELLO
Following the Train.
The Long Black Smoke is Crawling
O'er the Withered Plain ...
(Sosexi?)
Meno mosso. Poco a poco morendo

\( J = 52 \)
HE / PUTS / IN MY / MOUTH / A NEW SONG
HE / PUTS / IN MY / MOUTH / A NEW SONG

他使我口唱新歌

Kim Ho Ip

Submitted in satisfaction (or in part satisfaction) of the requirements for the degree of PhD in the University of Edinburgh

2004
(要模做单曲腔唱出)
AN OFFERING OF FLOWERS
(FA JAI)
AN OFFERING OF FLOWERS
“FA JAI”
花祭

Kim Ho Ip

Submitted in satisfaction (or in part satisfaction) of the requirements for the degree of PhD in the University of Edinburgh
2004
# Instrumentation

**SOPRANO SOLO**  
**ALTO SOLO**  
**TENOR SOLO**  
**BASS SOLO**  
**SATB CHOIR**  
**PIANO**  
**HARMONIUM**

<table>
<thead>
<tr>
<th>Location in score</th>
<th>sound</th>
<th>Chinese Character</th>
<th>meaning</th>
<th>languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>p.1,2</td>
<td>jü</td>
<td>如</td>
<td>as if ...</td>
<td>Cantonese</td>
</tr>
<tr>
<td>p.2</td>
<td>jü</td>
<td>魚</td>
<td>fish</td>
<td>Cantonese</td>
</tr>
<tr>
<td>p.2</td>
<td>whua</td>
<td>花</td>
<td>flower</td>
<td>Mandarin</td>
</tr>
<tr>
<td>p.3</td>
<td>jü</td>
<td>雨</td>
<td>rain</td>
<td>Cantonese</td>
</tr>
<tr>
<td>p.4</td>
<td>Blumen</td>
<td></td>
<td>flower</td>
<td>German</td>
</tr>
<tr>
<td>p.5, 6</td>
<td>mou</td>
<td>霧</td>
<td>mist</td>
<td>Cantonese</td>
</tr>
<tr>
<td>p.6</td>
<td>wuang</td>
<td>彎</td>
<td>curve/bay</td>
<td>Cantonese</td>
</tr>
<tr>
<td>p.7, 8</td>
<td>goang</td>
<td>開</td>
<td>Gate/closing a door</td>
<td>Cantonese</td>
</tr>
<tr>
<td>p.7</td>
<td>san</td>
<td>散</td>
<td>dissipate</td>
<td>Cantonese</td>
</tr>
<tr>
<td>p.8</td>
<td>san</td>
<td>山</td>
<td>mountain</td>
<td>Cantonese</td>
</tr>
<tr>
<td>p.8, 9</td>
<td>süt</td>
<td>雪</td>
<td>snow</td>
<td>Cantonese</td>
</tr>
<tr>
<td>p.10-13</td>
<td>fa</td>
<td>花</td>
<td>flower</td>
<td>Cantonese</td>
</tr>
<tr>
<td>p.14-19</td>
<td>fa</td>
<td>化</td>
<td>metamorphose</td>
<td>Cantonese</td>
</tr>
<tr>
<td>p.15</td>
<td>wuang</td>
<td>幻</td>
<td>change</td>
<td>Cantonese</td>
</tr>
<tr>
<td>p.17</td>
<td>flower</td>
<td></td>
<td>flower</td>
<td>English</td>
</tr>
</tbody>
</table>

Words in *An Offering of Flowers*  
*All vowels are pronounced as in German: (a e i o õ u ū)*
AN OFFERING OF FLOWERS

KIM-HO IP

Soprano
Alto
Tenor
Bass
Piano
Harmonium

A

Soprano
Alto
Tenor
Bass
Piano

play harmonics inside piano

ppp

Harmonium

ppp

A

A

J = 52

J = 52
(shout with same pitch as before)

(each singer improvises individually)
CALLIGRAPHY
CALLIGRAPHY I

Kim Ho Ip

Submitted in satisfaction (or in part satisfaction) of the requirements for the degree of PhD in the University of Edinburgh
2004
Instrumentation

BASS TROMBONE
TAM-TAM

- The Tam-tam is amplified by contact microphone.
- Player's fingers are prepared with resin in order to create the friction to draw on the surface of the Tam-tam.
- The bass trombone player should stand closely behind the Tam-tam in order to create resonance to the Tam-tam.
WHILE SCRIPT SPEAKS...
WHILE SCRIPT SPEAKS…

筆在說

Kim Ho Ip

Submitted in satisfaction (or in part satisfaction) of the requirements for the degree of PhD in the University of Edinburgh

2004
Instrumentation

2 BANGDI (FLUTE)
2 QUDI (FLUTE)
1 SOPRANO SHENG
1 ALTO SHENG
1 BASS SHENG
1 ALTO SUONA
1 TENOR SUONA
1 BASS SUONA
1 ALTO GUAN
1 BASS GUAN
1 ZHENG
LIUQIN
PIPA
ZHONGRUAN
DARUAN
1 SANXIAN
YANGQIN
PERCUSSION
GAOHU I/II
ERHU I/II
ZHONGHU
GEHU (VIOLONCELLO)
BASS GEHU (CONTRABASS)

TUNING FOR ZHENG:
IN CONTACT...
IN CONTACT...

Kim Ho Ip

Submitted in satisfaction (or in part satisfaction) of the requirements for the degree of PhD in the University of Edinburgh 2004
Instrumentation

1 FLUTE/ ALTO FLUTE
VIOLIN I
VIOLIN II
VIOLA
VIOLONCELLO
HARP
* (Use flute if alto is not available, plays an octave higher.)
use different fingerings of same note
INTRODUCTION
AND
PROGRAM NOTES

Kim Ho Ip

Submitted in satisfaction (or in part satisfaction) of the requirements for the degree of PhD in the University of Edinburgh

2004
INTRODUCTION

The compositions in the portfolio are categorized in three phases according to the chronological order of the works. Compositions in these three different stages represent an investigation of different aspects of creativity and interculturality. The following table is a list of materials submitted in this portfolio.

i) Introduction and program notes

ii) 1 floppy disc of computer files in Sibelius 2 program.

iii) 1 CD

iv) 10 Compositions
### List of compositions:

<table>
<thead>
<tr>
<th>Title</th>
<th>instrumentation</th>
<th>time</th>
<th>Recordings submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Zweisamkeit IV</strong></td>
<td>Oboe, Harpsichord, string orchestra</td>
<td>14'</td>
<td>performance in Edinburgh</td>
</tr>
<tr>
<td><strong>Beyond / Vision (1st cycle)</strong></td>
<td>Huqin (Chinese fiddle), Yang-Qin (Chinese dulcimer), percussion</td>
<td>10'</td>
<td></td>
</tr>
<tr>
<td>(Haiku 2, 4, 5 &amp; 6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Beyond / Vision (2nd cycle)</strong></td>
<td>Yang-Qin, Sanxian, Bassoon, percussion</td>
<td>8'</td>
<td></td>
</tr>
<tr>
<td>(Haiku 1 &amp; 3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Haiku 7</strong></td>
<td>Fl., Cl., String Quartet., Pipa</td>
<td>7'</td>
<td></td>
</tr>
<tr>
<td><strong>Phase 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>He / Puts / In My / Mouth / a New Song</strong></td>
<td>Chamber Choir</td>
<td>6'</td>
<td>performance in Hong Kong</td>
</tr>
<tr>
<td><strong>An Offering of Flowers (Fa Jai)</strong></td>
<td>SATB soli, Choir, piano &amp; harmonium</td>
<td>8'</td>
<td>performance in Hong Kong (commissioned by Hong Kong Bach Choir)</td>
</tr>
<tr>
<td><strong>Phase 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Calligraphy I</strong></td>
<td>Trombone &amp; amp. Tam-tam</td>
<td>8'</td>
<td></td>
</tr>
<tr>
<td><strong>While Script Speaks...</strong></td>
<td>Chinese instrumental orchestra</td>
<td>10'</td>
<td>performance in Hong Kong (commissioned by Hong Kong Chinese Orchestra)</td>
</tr>
<tr>
<td><strong>Commusico I / II / III</strong></td>
<td>amplified Yang-qin and solo Buto dancer</td>
<td>5'/5'</td>
<td>(no score but only description in the program notes)</td>
</tr>
<tr>
<td><strong>In Contact...</strong></td>
<td>Solo alto flute / flute, Harp &amp; String Quartet, orchestra</td>
<td>8'</td>
<td>performance in Edinburgh</td>
</tr>
<tr>
<td><strong>Contact</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. ... I, also, would like to look and smile, sit and walk like that ...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II. The Land of Heavy and Light</td>
<td></td>
<td>9'</td>
<td></td>
</tr>
<tr>
<td>III. The Ferryman</td>
<td></td>
<td>8'</td>
<td></td>
</tr>
<tr>
<td>IV. Drunken Madness</td>
<td></td>
<td>12'</td>
<td></td>
</tr>
<tr>
<td>V. In Contact</td>
<td></td>
<td>9'</td>
<td></td>
</tr>
<tr>
<td><strong>Midi version</strong></td>
<td></td>
<td></td>
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</tbody>
</table>
**Phase 1**

*Zweisamkeit IV (1999/2002)*

The earliest work in the portfolio was originally written as a double concerto for oboe, Pipa (Chinese 4-stringed lute) and string quintet. The piece was performed in 2002 by the Edinburgh University String Orchestra as the winner of the Emre Araci Composition Prize in 2002. For the occasion, the instrumentation was revised for oboe, harpsichord, percussion and string orchestra. The character of Pipa is preserved in the Harpsichord part with some expansions of harmonic complexity. The title of the piece is a created word from the German word “Einsamkeit”, which stands for loneliness or oneness. The word “Zweisamkeit” is derived for the meaning of two-ness, which corresponds to the two soloists, as well as the symbolic representation of the integration of occidental and oriental musical ideas.

*Zweisamkeit IV* is the fourth composition in a series which explores different musical styles within one work. It is especially apparent in the second movement. Starting with the use of extended techniques in various instruments, the first half of the movement is more discordant and gives a modernistic flavour. The two solo parts, which have been exposed one after the other in the first movement, do not establish real dialogue until the middle of the second movement. Their long anticipated musical unification is finally fulfilled in a romantic, Mahlerian kind of climax at the end of the second movement. It is followed by the brief third movement in attacca, restating some materials of the first
movement, but now with both soloists joining the orchestra together in jubilant singing and dancing.

**Beyond / Vision 超象 (1\textsuperscript{st} cycle: Haiku 2, 4, 5 & 6) (2000)**

**Beyond / Vision 超象 (2\textsuperscript{nd} cycle: Haiku 1 & 3) (2000)**

**Haiku 7 (2002 / 04)**

Japanese Haiku is a short evocative verse-form, often visual in nature. The poems are representations of an object alone, without further comment by the poet, who tends to let imagination and meaning grow from the object itself. It is a window opening up to the world of experience of the poet, going beyond the vision of the object itself. The composer has taken it as the inspiration for a series of short compositions. The title *Beyond / Vision* is the English translation of the two Chinese characters used as the name for the whole cycle.

Of the seven Haiku chosen here, five are originally written in Japanese. Graphic notation is used for unconventional musical gestures. Notational experiments are undertaken in looking for different ways of organizing materials from various musical parts without strict measure lines, including the writing of semi-improvisatory passages.

The second cycle of *Beyond / Vision* was performed in Edinburgh in 2000. The pieces are performed with Japanese Buto dance. For Haiku 1, the dancer acts as a gradually blossoming flower until the point at about two-thirds of the way through the piece where
the dancer, symbolizing the flower, falls onto the ground. For Haiku 3, the dancer plays with her own shadow with a lit candle in her hand.

*Haiku 7* was originally performed as the last piece of the cycle, as a short “song without words”. It was revised for flute, clarinet, Pipa and String Quartet and performed by the Shanghai New Ensemble at the Music Days 2002 of the International Society of Contemporary Music. The music attempts to express the image of the Haiku: the fragmented rhythmic patterns in the strings suggest the object of a train, an unexpected change in overall tonality imitates the Doppler effect from the approaching to the departing of the train, leaving behind a long nostalgic coda as if “the long black smoke crawls over the withered plain”.
Phase 2

Intonation and Spectra

Cantonese language is one of the tonal language systems among southern Chinese dialects, which is noted for having six, or sometimes nine tones, depending on whether the tones ending with stop consonants -p, -t, -k are included in the tone categories. The same syllable pronounced in different tones produces words with different semantic meanings. The melodic movement of a tone, or “neum”, is described in Chinese as Shēng, which means the flow of tones in one syllable in one breath. Shēng is also the synonym of the word “sound” in Chinese.

Table 1 presents the six tone categories, with the ancient Chinese distinction of Yin (upper) and Yang (Lower) registers. The numerical values for the tone contour are given by Chao\(^1\), which are commonly used by linguists in categorizing Cantonese tones. The syllable “Si” is taken as an example here to show how variations in the tones of the same syllable give different meanings.

Table 1. The six Cantonese tones

In order to have a closer look at these tone categories, the spectrographic program WINCECIL (Computerized Extraction of Components of Intonation in Language for Windows) is used for analysing the speech signals. Figure 1 shows a specimen of the six tones spoken by the composer himself. It shows the waveform, change of intensity against duration and the change of fundamental frequency. The pitches of the six tones in this specimen are summarized in Table 2.

Table 2. Fundamental Frequency readings from WINCECIL
(+ means less than a half-tone higher)
Figure 1. Waveforms of the six Cantonese tones (WINCECIL)
It has to be emphasized that many factors can influence the fundamental frequency of these tones. One speaker does not pronounce the same word with the same pitch on every occasion of its utterance. For example, in emotional states of anger and excitement the actual pitch of the tone can be raised or lowered drastically. The main thing is the general shape of the tone contours and relative distance separating them are more or less preserved. In other words, it is the relative pitch relationships among these tones that become recognizable features rather than their absolute pitch.

On the other hand, in phonology, the variations of the micro-structure of a tone contour are analyzed in researching the interaction between tone and intonation. The micro-structure of a tone contour can be divided into three stages: initial, medial and final – an initial fall or rise of a tone to its maximum point, and a final fall or rise to the end point. Figure 2 shows an example of the comparison of the structure of a tone contour of the same syllable with or without focus-stress in sentence\(^2\). The phenomenon of how a tone is inflected in expression is comparable to the way a musical note is expressed through intonation, dynamics and articulation.

These investigations of Cantonese tones have provided both the resources of musical materials and inspirational background for the Phase 2 compositions in the portfolio. The two vocal pieces have taken tone contour as the point of departure, creating musical materials in both melodic movement and texture. Microtones and glissandi gestures are used in association with the rising and falling tones in Cantonese. The exploration is carried on in the instrumental works in Phase 3, where the spectral analyses of certain

\(^2\) The charts are taken from the seminar in April 2001 at the department of Chinese and Bilingual Studies of the Hong Kong Polytechnic University, on the research “A Preliminary Acoustic Study of Focus-Stress in Hong Kong Cantonese” by Dr. Robert Bauer from Hong Kong Polytechnic University.
Figure 2. Comparison of the structure of a tone contour of the same syllable.
syllables are also used to generate harmonic structure, combining with the melodic movement of the tone contour.

**He / Puts / In My / Mouth / a New Song** 他使我口唱新歌 (2001)

The piece was commissioned to be performed by an amateur choir in Hong Kong. The intention is to write an experimental yet technically accessible choral piece using the Cantonese language. In many modern songs in Cantonese, the original tones of the lyrics seem to be completely ignored. The composition is also an attempt to bring back the intrinsic musical qualities contained in the tone contour of the language itself.

The title is the Chinese translation of the quotation from Psalms 40:3 of the Bible, which consists of seven characters. In order to preserve the actual tone contour to become the musical materials of the work, the seven Chinese characters themselves are used in the score as if they are a form of musical notation. Each character is developed to be one section in the music.

The first section uses the word “He” in Cantonese to depict the majestic image of God, who is the One the word *He* is referring to here. The second section is based on the word “Puts”. It uses all six tones in Cantonese with the syllable “Si”. Individual members of the choir are asked to recite the words in their corresponding tones. Symbolically, this creates the musical effect of “putting the song in various ways”. The following two sections are aleatoric and the imagined sound effect is presented with graphic notation. With the word “my”, the texture grows from one person shouting to the whole choir
altogether competing in shouting “me! me! me!...”. Then, they pronounce the word “mouth” as if the word is almost too difficult to be pronounced by their mouths. The last three sections, “New Song”, are based on a melody already hinted at earlier in the part sung by soprano solo. Finally, this new song becomes a paraphrase of a short passage in the style of Cantonese opera, which is a traditional singing style which naturally and skillfully has the words sung in their appropriate tones in Cantonese.

**An Offerings of Flowers (“Fa Jai”) 花祭 (2002)**

By looking into the intrinsic musical qualities in Cantonese language, the exploration of the common ground between speech, music and other sounds is advanced. The pitch relationship among the six tones in Cantonese, the melodic gesture in rising and falling tones, as well as tones ending with stop consonants -p, -t, -k, can all be regarded as music and noise derived from speech. Just as the Futurist theorist Russolo attempted to redefine noise as music in his manifesto of *The Art of Noises* (1913), and some Dada poets of the 1920s wrote poems with “noise”, or called “concrete poetry”, we can pay attention to the musical qualities of the speech and hear spoken words as music. If the choice of lyric seems to determine a lot of the pitch materials in a vocal piece using Cantonese language, the composition *An Offerings of Flowers* attempts to divert the attention more to the integration of words into the music itself.

The composition is divided into a two-part structure by using the same syllable “Fa” but pronounced in two different tones in Cantonese: the high level tones (in this tone, the word “Fa” means “flower”) and the mid level tones (this “Fa” means “metamorphose”,
"transform", "dematerialize" or "evanesce"). The work is almost a wordless choral piece, at least the words only emerge as a result of the gradual transformation from one sound to the next. It is the music of the speech which determines the choice of words, in a kind of "concrete poetry". Table 3 presents a list of recognizable words used in the piece. The apparent association one can make between their semantic meanings and the music might help in creating an aura or atmosphere in certain moments in the piece.

The piece was commissioned by the Hong Kong Bach Choir in 2002. The members include both local Cantonese speakers and others who do not speak Cantonese but can understand how Cantonese works as a tonal language with the help of the environment in Hong Kong. The conductor of the choir was looking for a new piece which could fit into the performance of Rossini’s Petite Messe solennelle. An Offering of Flowers is then inserted between the final chord of Prelude religieux (F-sharp Major) and the first chord of Ritournelle (C Major). The engaging of two distantly related harmonies for the transformation from one tone to the next actually reflects the intention to build a bridge between these two chords in the Mass.
<table>
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<td>flower</td>
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<td>English</td>
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</tbody>
</table>

Table 3. Words in *An Offering of Flowers*
*All vowels are pronounced as in German: (a e i o ö u ŋ)*
Phase 3
Spectra and Calligraphy

The melodic movement of tones in Cantonese is investigated by using the program WINCECIL in the previous section. On the other hand, samples of speech signals are also analysed by the Real-Time Spectra Analysis program of VoceVista, which gives the spectrogram of them in real time. In other words, this spectral analysis is providing more about the harmonic information of these speech signals. Figure 3a and 3b show two of these samples, using a pair of antonyms, “heavy” and “light” in Chinese as examples.

In these cases, the chosen words have a kind of onomatopoeic quality: the pronunciation of the word “heavy” in Cantonese contains an accented consonant, putting more complex noise constituent into the signal; whereas the word “light” gives a softer quality and purer spectrum. Musically they create the sensation of heaviness and lightness. Compare the two spectrograms taken out of the two spoken sounds, their acoustic differences are manifested visually in the formants of their spectra, producing a kind of calligraphy out of the speech signal: a deeper and heavier stroke for the word “heavy”, a light, swift and shallower stroke for the word “light”.

Imagine these spectra as the visual presentation of spoken words, they are very much like musical notations on a score, which is, in some ways, the visual presentation of the organization of sounds in time. The forms of these spectra are governed by how the speech signals are being expressed. The spectra can be regarded as the trace of the movement of sound in time. Calligraphy, on the other hand, is the trace of the movement
Figure 3a. The spectrogram of the word “heavy” (VoceVista)
Figure 3b. The spectrogram of the word "light" (VoceVista)
of brushwork on paper. The overall disposition of a piece of calligraphy, similar to the spectra, is governed by how the strokes are being expressed\(^3\).

Looking at music, speech and sound as well as calligraphy as related forms of expression reminds us that gesture is the most primitive means of expression, developed well before signs and symbols. The meeting point of musical gesture and calligraphic gesture is how they communicate emotions, feelings, transmit information and messages. They manifest a form of communicative musicality which Trevarthen and Malloch have pointed out in their research on Mother-infant communication\(^4\).

Compositions submitted as phase 3 in the portfolio are various attempts to compare and contrast how composers organize the structure of sound in time with how calligraphers organize brushstrokes and use of ink on a piece of paper. In other words, these compositions have taken the musicality of Chinese calligraphy as their source of inspiration, or principles in regulating musical parameters in them. The following aesthetics in Chinese calligraphy are important background information for understanding the musical language in these compositions.

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3 It is described as how the strokes are being expressed rather than the characters themselves, because some calligraphers believe that Chinese calligraphy is an abstract art. The brushwork and use of ink do not necessarily tie up with the meanings of the characters. For example, a character with the meaning of "heaviness" does not automatically go along with heavier use of ink. In other words calligraphers are expressing the strokes as if they are individual expressive gestures.

1) The “Bone-structure” of dots and lines:
Both dots and lines in Chinese calligraphy are characterized by the so-called “bone structure”. A proper dot consists of a head and a tail. No two dots are entirely the same. They usually vary in thickness and their tails indicate the direction of movements. A proper line usually starts with a halt, which prepares for the succeeding movement, and ends with another halt which completes the movement.

2) The relationship between brush angle, brush speed and use of ink:
From more-or-less a right-angle between the brush and the paper, to a more acute angle between them, a spectrum of brush angles, from the Center Brush to the Side Brush, is produced. If the alterations in angle are accompanied by change in pressure and velocity of the brush, then Turning Brush, Rolling Brush and Folding Brush result. Brushwork will then manifest itself as the distribution of ink in a piece of calligraphic work.

The use of ink in a stroke can be described as dry or moist, faint or dark. Apart from the control of brushwork, the decision about the amount of ink soaked up by the brush (the immersion of the brush-hair into the ink), and the frequency of refilling ink, are both factors affecting the use of ink that have to be considered. For example, a calligrapher might decide not to refill any ink even when the brush is already quite dry, in order to leave space within a stroke or between strokes. This can also create the contrast between drier and moister use of ink in different parts of a piece of work.

The change of brush speed produces a gradual and continual change in the density of ink. Changing the brush speed from fast to slow results in a stroke with increasingly denser
use of ink, which gives an image similar to the increase of dynamics, or crescendo, within a musical phrase.

The overall structure of a piece of calligraphic work is the result of a series of decisions taken by a calligrapher on the use of ink in different strokes, either within individual characters or among different characters. The size of the whole piece of paper is the boundary of a calligraphic composition. Generally speaking, calligraphers tend to use more ink for characters containing fewer strokes. In other words, the simpler the character is, the darker the use of ink would actually tend to be.

3) Yin-Yang contrast: White against black

Areas of white paper or voids are an integral part of calligraphy. The white space left between strokes is at least as important as the black ink itself. It plays a particularly important role in the so-called “invisible strings” that hold separate strokes together. The contrast between white and black is regarded as the visualisation of Yin-Yang.

4) Space-consciousness

Examples from Chinese painting using calligraphic techniques show the use of suggestive lines in brushwork to indicate movement and space. A calligraphy depicting a fish, by using only a few strokes, indicates also the space surrounding the fish, that is, the existence of water. This reflects the aesthetics of calligraphy which is to express nature, not to simulate nature; to create a denotation or suggestion of its very essence, not to produce the natural shape.
5) One-breath performance

An adept at calligraphy is required to give a kind of one-breath performance, described by Chinese as the level of Ch‘i in a piece of calligraphy, which largely relies on the use of the invisible strings to hold together strokes within a character, or in some cases, in between characters.

Calligraphy I (2002)

This composition is an experiment in exploring the relationship between calligraphic gestures and sound. Calligraphy is drawn on the surface of a Tam-tam by using a finger as well as mallets from different materials. The Tam-tam is amplified in order to capture the sound produced by these movements. The resulting sound, which can vary from one performance to another, ranges from white noise to purer overtones. The counterpart of the Tam-tam is the trombone, which contributes the element of speech as sonic material to the composition. The player is asked to sing and speak through the trombone, and sometimes play directly against the surface of the Tam-tam to enhance resonating vibrations. Dialogues are also created between the trombone and the Tam-Tam during the development of the piece.

The graphical notation of the piece makes reference to dance notational systems, such as Laban notation. The piece is a gradual process in constructing the imaginary “soundscape” of the eight basic strokes in Chinese calligraphy. At the end of the piece, all these eight strokes come together to form the Chinese character 永, which means “eternity”.

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**Commusico I / II / III (2001-4)**

In Japanese Buto dance, *Jo-Ha-Ku* is a triptych structure describing the process of how a dancer prepares, enters and leaves the state of performing. Such structure is almost analogous to the bone structure of every basic stroke in Chinese calligraphy: a line starts with a halt as preparation, enters the succeeding movement, and ends with another halt which completes the movement. Also, in phonology the analysis of the micro-structure of a tone contour is divided into three stages: initial, medial and final – an initial fall or rise of a tone to its maximum point, and a final fall or rise to the end point.

*Commusico* is a continuing project in which the composer collaborates with the dancer and choreographer, Anne-Marie Culhane, whose dancing is inspired by Japanese Buto. The compositions are aleatoric and no score has yet been finalised. In each composition, a five-minute boundary is set to complete one triptych unit. To be exact, the boundary is the concept of five-minutes projected by each performer, but not a fixed five-minute clock time. In each improvisation session (either in practice or performance), the musician and the dancer are communicating both with each other and within themselves. They are responding to the environment, including their counterpart, in order to attain an understanding of the space of five-minutes in time. The dancer reports that heart-beat rate and breath rate are important indicators of how the body reacts to the environment. *Commusico* can be described as a series of exercises in exploring the concept of time during a music and dance improvisation. The musical instrument used in the composition is a solo Yang-qin (Chinese dulcimer).
While script speaks...筆在說 (2002-3)

The piece was commissioned by the Hong Kong Chinese Orchestra in 2003. The orchestra comprises traditional Chinese instruments. The lay-out of the orchestra has taken the western symphonic orchestra as its model. Many traditional Chinese instruments are designed for playing only certain musical scales. Some melodic progressions and harmonies used in western instruments cannot be applied to these instruments effectively. For example, a diminished seventh chord scored for the winds section in the Chinese orchestra would sound out of tune. On the other hand, the richness of tone colours in the plucked-string instrument family is unique to the Chinese orchestra.

The composer intends to keep the flavour of traditional Chinese music but demonstrates new explorations in sound and texture in this composition. Melodic and harmonic materials are derived from the six tones in Cantonese, especially in the use of glissandi. Two or more sets of pentatonic scales are used complementarily in instrumental groupings. In this way, individual parts can simply be pentatonic and they contain technically transparent passages and idiomatic writing for individual instruments. But the combined effect of several instruments gives an unconventional sonority for the Chinese orchestra. The shape of musical phrases and the emphasis of rest and space between phrases reflect the aesthetics of Chinese calligraphy.

*While Script Speaks* is like an imaginary letter written not in words but in musical notes, or maybe it is the music of the words speaking for themselves. The piece is also written and dedicated to the people of Hong Kong who were fighting against adverse circumstances in the city in the first half of the year 2003.
Contact (2001-4)

The orchestral cycle is the most extensive work in the portfolio, which summarizes the exploration of speech and sound, gestures, expressive qualities in calligraphy and music all together in a composition. The five orchestral pieces are intended to be five individual compositions and each piece may be performed separately. They are also five successive parts of an epic orchestral cycle. The cycle as a whole is a journey in quest of a spiritual state that gives an answer to these questions about music, words, meanings and existence.

I. ... I, also, would like to look and smile, sit and walk like that ....

The piece unfolds with intermittent instrumental calligraphy. The opening phrase in 1st clarinet part gives an example of a highly ornamented phrase around a central tone structure. Such central tone structure is ubiquitous in the composition, decorated by rising and falling glissandi, microtonal inflections, trills, vibrato, repeated notes, sudden dynamic contrasts, etc. The way that individual tones are prepared and departed from resembles the “bone structure” of a stroke in calligraphy: a line starts with a halt, which prepares for the succeeding movement, and ends with another halt which completes the movement. Through successive phrases with different ornamentation in terms of orchestration centering on a particular tone or tone complex, the music emerges slowly as if undergoing a long awakening process. It accumulates into a long orchestral climax starting at rehearsal mark N till the end of the piece.

The title of the piece is taken from the novel Siddhartha written by Hermann Hesse. It is after Siddhartha meets with the Buddha and expresses his admiration for the way the Buddha looks and walks, showing he has conquered his Self. After this, Siddhartha sets off on his journey of awakening and Sansara. This quotation serves well to illustrate the
idea of the first part of the orchestral cycle, particularly the way its vigorous ending seems to unfold the journey of the cycle.

II. The Land of Heavy and Light

It is an imaginary landscape of the contrasting duality between heaviness and lightness. Musical materials are derived from the spectral analysis of the speech signals of the words “heavy” and “light” pronounced in Cantonese. As discussed in the section about spectra and calligraphy, the onomatopoeic quality of these words is explored in this piece. Figure 4 presents the harmonic structure derived from the spectrogram showing the formants of the speech signals.

Figure 4. Harmonic structure of the words “heavy” and “light”.
The first half of the piece is dominated by the musical world of heaviness. At rehearsal mark Q it shows how the central tone complexes (E flat and B flat) are given heavily accented pre-tone ornaments, and the tension is released by post-tone tails. Repeatedly it strikes like a hammer until it reaches the lowest register of the orchestra at the end of rehearsal mark S. Then high strings bring in the mist of sound mass depicting the world of lightness, ending with a gigantic calligraphic stroke built from the lowest register of strings and brass to the highest register of winds.

III. The Ferryman

Part three of the cycle opens with a nostalgic monologue by solo clarinet. High registered strings weave threads of harmonic structure integrating two sets of pentatonic scales. This shimmering layer of musical lines flows through the whole piece, like ripples on the surface of a river. Another layer of musical ideas is played by wind and brass, like a voice of calling, with a sense of urgency suggested by the rhythmic vigour. At the end, materials of the opening monologue are recapitulated by offstage horns and tubular bells which sound like distant echoes from the other side of the river.

The piece is dedicated to Mr. Alasdair Ferry who died tragically of car accident in October 2003.

IV. Drunken Madness 酒狂

The title Drunken Madness refers to the musical image depicted by an ancient Chinese tune: a drunken man speaking and singing recklessly of worldly sorrows with unsteady drunken footsteps. The idea is not too far away from Das Trinklied vom Jammer der Erde of Das Lied von der Erde by Gustav Mahler.

Frequent changes of time signature are employed in creating the slow-fast-slow, ebb and flow of rhythmic fluctuations with a more-or-less constant pulse. The contrast between thick musical texture and space suggests the constant change in pressure and velocity of a
brush in calligraphy, resulting in varied brushstrokes with either drier or moister use of ink. In this part of the orchestral cycle, musical materials taken from the spectra of speech signals are amalgamated with the surge of brushstrokes. It is like a voyage on a stormy sea, full of undulating textural changes and dynamic contrasts. Twice the music seems to land in a tranquil place, but the waves of vigorous rhythmic activities bring back the swirling textural tempest till the ultimate pinnacle at rehearsal mark NN. The piece fades away with rhythmic pulsation hinting at heartbeats in the aftermath of a musical storm.

V. In Contact...

The fifth part of the cycle is the spiritual core of the whole work. An instrumental trio of solo flute, solo viola and harp introduces heterophonic texture and melismatic melodic movements, integrating the central tone structure into the musical manifestation of calligraphic strokes. Two pentatonic scales often intermingle with each other in the highly ornamented flute part. Rests written out in time suggest the space-consciousness in calligraphy as well as the white areas or voids which are an integral part of calligraphy. The use of harmonics and microtonal inflections mimics the “invisible strings” that hold separate strokes together. The brevity of the piece allows only a brief encounter of this crystalline sound world and a spiritual state that has been sought for in the orchestral cycle. After a restatement of the opening trio of the piece, the music, like the “flowers in mirror and moon reflected on water” of Chinese idiom, dissipates in the air with pizzicato strings fragments.

A chamber version of the piece, written for solo flute, harp and string quartet, is submitted also as a separate piece in the portfolio.
ZWEISAMKEIT IV
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Kim Ho Ip

Submitted in satisfaction (or in part satisfaction) of the requirements for the degree of PhD in the University of Edinburgh
2004
Instrumentation

OBOE SOLO
HARPSICHORD SOLO

WOODBLOCKS (3)
SUSPENDED CYMBAL
BASS DRUM

VIOLIN I
VIOLIN II
VIOLA
VIOLONCELLO
BASS

Symbols Key:
quart-sharp
Quarter-flat
whole-tone trill
Half-tone trill
disappointingly

meno mosso.
Piu mosso expressivo, con spirito

right hand, black keys

left hand, white keys

solo

mf

p

tutti

mf

p

solo

mf

p

solo

mf

p

mf

p

mf

p

mf

p

mf

p
allargando

Largamente

Molto
CONTACT

Kim Ho Ip

Submitted in satisfaction (or in part satisfaction) of the requirements for the degree of PhD in the University of Edinburgh

2004
Instrumentation

PICCOLO
I. FLUTE
II. FLUTE / ALTO FLUTE
I, II. OBOE
COR ANGLAIS
I, II. CLARINET
BASS CLARINET
I, II. BASSOON
CONTRABASSOON

I, II, III. IV HORN
I, II, III. TRUMPET
I, II. TROMBONE
BASS TROMBONE
TUBA

TIMPANI
TENOR DRUM (CHINESE WAR DRUM)
BASS DRUM
TUBULAR BELLS
WOODBLOCKS (5)
CYMBALS
SUSPENDED CYMBALS
SMALL SUSPENDED CYMBALS (2)
CHINESE CYMBALS (1 PAIR)
FLEXATONE
BAMBOO WINDCHIMES
MARACAS
SNARE DRUM
TAM-TAM
GLOCKENSPIEL/ XYLOPHONE
VIBRAPHONE

HARP

VIOLIN I (I, II, III, IV)
VIOLIN II (I, II, III)
VIOLA (I, II)
VIOLONCELLO (I, II, III)
CONTRABASS (I, II)

ALL PARTS ARE WRITTEN IN C
I, ... I also, would like to look and smile,
sit and walk like that ...
rubbing a pair of Chinese cymbals)

 senza sord.
II. The Land of Heavy and Light

"Heavy"
III. The Ferryman

[Music notation image]
IV. Drunken Madness