

A STUDY OF SUKHI KANG'S *INVENTIO FOR PIANO AND ELECTRONIC SOUND*

Hooshik Hwang, B.M., M.M.

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APPROVED:

Adam Wodnicki, Major Professor

Jeffrey Snider, Minor Professor

Joseph Banowetz, Committee Member

Jesse Eschbach, Chair of the Division of Keyboard
Studies

Graham Phipps, Director of Graduate Studies in
the College of Music

James C. Scott, Dean of the College of Music

Sandra L. Terrell, Dean of the Robert B. Toulouse
School of Graduate Studies

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This comprehensive study of *Inventio for Piano and Electronic Sound* by contemporary Korean composer Sukhi Kang focuses on how the composer transforms music with Korean traditional rhythmic elements into electronic sound, and how he combines the electronic sound with piano. The study aims to aid performers and audiences in understanding and appreciating the work.

Besides providing a biography of Kang, including lists of his other compositions and significant performances and recordings, this study provides detailed information about books, articles, and academic publications by and about Kang. Interviews with the composer provide first-hand instructions for performers on how to play *Inventio*. All examples are from the score.

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I would like to express my appreciation to Sukhi Kang for his generous permission to reproduce the musical examples used in this dissertation.

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CHAPTER I

INTRODUCTION

Purpose of the Study

The purpose of this dissertation is to offer a comprehensive study of *Inventio for Piano and Electronic Sound* by a contemporary Korean composer, Sukhi Kang. There has been no research on this piece, and this paper will provide a detailed discussion of this work. The discussion will focus on how the composer transforms music with Korean traditional rhythmic elements into electronic sound, as well as how he combines the electronic sound with piano. Hopefully, this study can make the work better known to both performers and audiences.

Inventio was written in 1984 when Kang served as codirector for the Experimental Music Festival “Inventionen” in Berlin. Since then, it has been performed several times in various venues in Korea, Japan, and Germany, and some of the performances have been recorded and commercially released. Kang stated that *Inventio* is the best example of his live electronic music, and especially that using Korean traditional rhythmic elements within Western music.¹

All translations from Korean are by Hooshik Hwang unless otherwise noted.

Biography

Sukhi Kang was born in Seoul, Korea, on October 22, 1934. He graduated from the Seoul National University College of Music, and continued his studies in Germany at the Staatliche Hochschule für Musik in Hanover, as well as at the Technische Universität und Musik Hochschule in Berlin, from 1970 to 1975. Kang became professor of composition at Seoul National University in 1982, serving there for almost 20 years until his retirement in 2000.

He has been awarded numerous international prizes and honors, such as being selected for the International Rostrum of Composers, Paris, UNESCO in 1976; the Korean National

¹ Heekyung Lee, *Dialogue with Composer Sukhi Kang* (Seoul: Yesol Press, 2004)

Composers' Prize, Seoul, 1978; the Grand-Prix of the Korea National Composers' Prize, 1979; Musician of the Year Award given by the Association of Korean Musicians, 1989; and the Cultural Art Prize of the President of Korea in 1990.

Kang has been actively involved in international musical life as an organizer and director of music festivals such as the Seoul Contemporary Music festival from 1969 to 1992 and the Experimental Music Festival "Inventionen" in Berlin from 1982 to 1984. He was music director of the 1988 Seoul Olympic Games closing ceremony, and has been codirector of the Mosaico Festival with Krzysztof Penderecki in Kraków, Poland, from 1994 until the present.

Many of Kang's major works have been performed worldwide with renowned orchestras, such as:

- *Cantata*, performed by the KBS Radio Symphony Orchestra under the direction of Krzysztof Penderecki
- *Catena for Orchestra*, performed by the Solingen State Symphony in Germany
- *Dalha*, performed by the Bavarian Radio Symphony Orchestra and conducted by Georg Schmöhe
- *Fantasie*, performed by Ensemble Ricercata de Paris and conducted by Yves Prin
- *Legend*, performed by Ensemble AKI in Yokohama, Japan
- *Mosaicum visio*, performed by the Korean Chamber Ensemble and conducted by Piotr Borkowski
- *Mutatio Perpetua*, performed by Ensemble Kontrapunkt Wien
- *Penthesilea*, performed with the Elektronische Studio at the Technische Universität, Berlin
- Piano concerto performed by the Philharmonic Orchestra of Radio France and conducted by Bruno Ferandis
- *Sonata Bach*, recorded with the pianist Kayako Matsunaga and released commercially on the Vienna Modern Masters label in 1995

Many of Kang's works have been published in Asian countries; *Legend for Clarinet, Violin, Violoncello, and Piano* and *Parody for Flute and Organ* appeared also in Europe.

State of Research

There are a number of publications on the composer's life and works available. Articles and books in Korean include: *After Meta Music Festival in Berlin: Korean composer Sukhi Kang's Activity in the Festival*, the Korean Culture and Art Department (1977); "Composer Sukhi Kang who Inculcates Korea Into the World," Dong-A Newspaper, Korea (1984); *Korean Music on the World Stage: Korean Composer Sukhi Kang in Berlin World Music Festival*, Kwangjoo Son, the Korean Culture and Art Department (1985); and *Dialogue with Composer Sukhi Kang*, Heekyung Lee, (Seoul: Yesol Press, 2004).

Publications about Kang appearing in other languages include: *The Circumstance of Asia's Electronic and Computer Music*, Sendai Cultural Center in Japan (1993); "The Twentieth Century Observed from Today" in *Das 20. Jahrhundert von Heute betrachtet*, Schreyahner Herbst, Germany (1994); *In Search of the Lost Sound*, International Composers Symposium, Taiwan (1997); and "Contemporary Music in Korea" in *ISCM Report*, Germany (1997).

Moreover, the composer himself wrote three books: *Contemporary Music Analysis* (1995), which explains how to analyze contemporary music; *I Am a Composer Who Designs Music* (1998), dealing with the composer's musical life and philosophies; and *Multimedia and Music* (1999), which traces the relationship between multimedia and music, and its significance in contemporary composition.

Several master's and doctoral dissertations on Kang's works are available in Korean, including "Korean Traditional Music Elements in Sukhi Kang's Music," Sunjoo Park (1990); "Analysis of Cantata for Orchestra by Sukhi Kang," Meehae Lee (1992); "Comparison and

Analysis for Nong and Apex by Sukhi Kang,” Haejung Huh (1998); and “Analysis of Sukhi Kang’s Piano Concerto,” Daesoon Hwang (2000). These in general deal with Kang’s compositional techniques and his musical philosophy. Despite his reputation for electronic music composition, however, his piano works with electronic sound, as well as his electronic music, have never become a topic for a doctoral dissertation in Korean, English, or other languages. The most significant sources for the study of *Inventio* were my interview and correspondence with Sukhi Kang. *Inventio* has been recorded several times at live concerts; the recordings, however, are now out of stock and could not be located. However, a copy of the LP, owned by the composer, was available.

Since its premiere at Berlin in 1984, *Inventio* has been performed numerous times throughout Korea, Japan, and Europe. Kang stated that “*Inventio* is about 17 pages in length and lasts for about 23 minutes. The live electronic sound part should be performed as impromptu, but due to the difficulty of producing live electronic sound on stage, many performers have preferred to use recorded electronic sound with electronic instrument such as synthesizer. Electronic music, let’s say computer music these days, is not such a new genre any more, and it is gaining the approval of composers and audiences as well.”²

² Sukhi Kang, *I Am a Composer Who Designs Music* (Seoul: Life and Dream Press, 1998).

CHAPTER II

SUKHI KANG'S MUSICAL LIFE AND WORKS

Musical Life

Sukhi Kang is one of the most distinguished Korean composers still active today. Kang and his music have drawn particular attention from scholars, performers, and listeners, especially in Europe.³ He made his Korean debut in 1966 at the Korea National Theatre, featuring his composition *The Feast of Id*. Not only was this piece his first electronic music composition, but it was also performed in the very first electronic music concert in Korea. Since then, Kang has been deeply involved in contemporary compositional techniques, and electronic and computer music has become popular. Recently, Kang has been selected as one of the Twentieth Century's Leading 22 Composers by the Santori Music Foundation in Japan for his achievement as an orchestral and ensemble music composer; his piano concerto was also chosen for performance at the Summer Music Festival 2000 in Tokyo.

A fortuitous meeting with Isang Yun⁴ in 1968 proved to be a turning point in Kang's compositional life. This meeting resulted in Kang's pioneering efforts to develop so-called traditional Korean musical language in practice. Through this association, it was possible for Kang to learn many invaluable lessons, including how to understand Korean traditional elements, how to incorporate them into compositions, and how to present such works as a genre in the realm of contemporary composition. Furthermore, Kang extended his interest to Buddhism. Works that are representative of this aspect, especially during the late 1960s, are *Eungsin*⁵ and *Yebul*,⁶ both published in 1968. In two other notable works, *Nong* (1970)⁷ and *Apex* (1972),⁸ he

³ Heekyung Lee, *Dialogue with composer Sukhi Kang* (Seoul: Yesol Press, 2004).

⁴ Korean composer (1917~1995) who was professor of composition, Berlin University.

⁵ Cello, piano and percussion

⁶ Exclusively for male solo ensembles and male percussionists

tried to capture a synthetical sound from scattered sound.⁹ Thanks to these creative works, he was employed by the Japan Expo 1970 as the chair of the Korean Music Division, evidence that he was beginning to gain an international reputation. Moreover, he took a leading role in establishing the Contemporary Music Biennale in Korea, the first Korean modern music festival as well as the forerunner of the present Korean Fan Music Festival.

The second turning point in Kang's compositional career was his decision to study in Germany. During his residence in Germany, he experienced a major shift in his interests from the initial stage of incorporating Korean traditional elements into his composition toward the more logical stage.¹⁰ This means that he began to realize the necessity to develop more sophisticated types of technique in order to express the Korean elements with more accuracy by using Western musical instruments. To this end, he concentrated on developing various types of relevant infrastructures, such as sound conditioning, melodies, and grace notes.¹¹ His first work in Germany, *Nong*, represented such efforts to make the most of the Korean elements with such types of infrastructures. *Nong* is often regarded as an excellent example of combining Korean idioms with Western harmony. The other two works published in Germany, *Bansa* (Reflection) (1971)¹² and *Apex* (1972), are considered to be among the best examples of this compositional aim. When Kang composed these works, he was strongly influenced by his German tutors, Boris Blacher and Fritz Winkel. Some of his later compositions written in Germany show increased inclusion of Korean traditional elements. The best-known of these works are *Parody* (1972),¹³

⁷ Flute and piano

⁸ Piano solo

⁹ Sukhi Kang, interview by Hooshik Hwang, Seoul, Korea, 13 March 2007.

¹⁰ Heekyung Lee, *Dialogue with composer Sukhi Kang* (Seoul: Yesol Press, 2004).

¹¹ Sukhi Kang, interview by Hooshik Hwang, Seoul, Korea, 13 March 2007.

¹² Orchestra

¹³ Flute and piano

Banya (1973),¹⁴ *Sopum* (1973),¹⁵ *Byunyong* (1974),¹⁶ and *Sasul* (1975).¹⁷ Among these five works, *Sasul* is the most noteworthy, in that it was his last product during his time in Germany and has been known as the masterpiece that concluded his progress in Germany. It consists of three different large sections containing sixty short pieces. Each of the sixty short pieces is well-balanced and well-integrated into the main framework of the work. The nature of his works written in Germany, including *Sasul*, reveals the fact that Kang's main concern at the time was to develop definite types of technique to express the particular Korean elements.

After returning to Korea, Kang continued to produce such Korean (or Asian) particularity emphasizing performances. The main subject of two works from 1976, *Daehwa* (Dialogue)¹⁸ and *Buru*,¹⁹ was a fusion of Korean traditional religions such as shamanism, Buddhism, and Taoism. He composed three pieces in 1978, and all of these were closely related with Korean ancestral tales. These works are as follows: *Yongbi*,²⁰ *Myung*,²¹ and *Dalha*.²²

In 1980s, Kang gradually increased his interest in the electronic music field as well as continuing to work with various elements of Korean traditions. He visited Germany often and attended some musical events in order to stay abreast of the newest trends in electronic music. His well-known works from this period include *Chungdong Sidae*²³ (1980).

Since the beginning of the 1990s, Kang's music has acquired more progressive aspects. The changed focus of his music can be summarized as follows. First, he deals with more progressive subjects, such as global peace and national independence of Korea, as in his 1992

¹⁴ Double string quartet

¹⁵ Oboe, cello, and harp

¹⁶ The Korean word *byunyong* means transfiguration; string quartet and flute.

¹⁷ Catena

¹⁸ Piano

¹⁹ String quintet

²⁰ Cantata

²¹ Korean traditional instruments

²² Clarinet, trombone, cello, piano, and recorded tape

²³ The meaning of these words is "bronze age;" one percussionist and electronic sound

cantata, *Peace on the Brilliant Green Earth*. Secondly, he tends to use more striking and strident sound effects than ever before. A passacaglia for violin and piano (1991) is often considered to be one of the examples which show his changed preference in sound effects. Lastly, his music has become more accessible to the general public. The composer now makes more efforts to better communicate with his audiences.

Works

Orchestral Works

Kang has written many outstanding orchestral works, including *Generation '69* for orchestra, commissioned by Expo, Osaka, 1970; *Dalha for Orchestra*, commissioned by the National Symphony of Korea for a concert tour in the USA, 1978, and awarded the Grand Prix of Korean National Composers' Prize; *Mega-Melos for Large Orchestra*, commissioned by Berlin Festival, 1980; and *Succession for Orchestra*, commissioned by Horizonte Festival, Berlin, 1985 (see Appendix for complete list).

Chamber and Instrumental Works

Among Kang's important chamber and instrumental works are *Piano Sketch No.2 for Piano Solo*, 1966; *Roundtone for 7 Players*, commissioned by EXPO, Osaka, 1970; *Nong for Flute and Piano*, selected in 1970 by the American Flute Association as one of the twelve most important flute works written between 1960 to 1980; *Metamorphosis for Flute and String Quartet*, selected for International Rostrum of Composers, Paris, UNESCO, 1976 and recorded by Da Camera Magna, Heidelberg, 1975; *Sonate Bach for Piano*, commissioned by Pan Music Festival, Seoul, 1986; and *Legend for Clarinet, Violin, Cello, and Piano*, 1997 (see Appendix for complete list).

Vocal and Choral Works

Kang's compositions for voice and chorus are well known and important in his compositional career. Works such as *Yebul for Male Solo, Male Chorus and 30 Percussionists*, commissioned by Expo, Osaka, 1970; *Buru für eine Stimme und 5 Spieler*, commissioned by Meta-Music Festival, Berlin, 1976; *Cantata "Yong-Bi" (Fliegender Drache)*, commissioned by Sejong Cultural Theatre for its opening concert and awarded the Korean National Composers' Prize, 1978; and his opera *Chowol* (Transcendence), 1994, are considered particularly outstanding (see Appendix for complete list).

Electronic and Miscellaneous

Kang's electronic music works include *The Feast of Id*, 1966; *Bronze Zeit* (Bronze Age) *for a Percussion Player and Electronic Music*, 1980; *Mosaico for Electronic Music and Klangspuren for Electronic Music*, recorded by Pro Nova (Sonoton) in Munich, 1982; and *Mutatio Perpetua for 24 Players and Electronic Sounds*, commissioned by ISCM World Music Days in Graz and Vienna, 1982 (see Appendix for complete list).

CHAPTER III

INVENTIO FOR PIANO AND ELECTRONIC SOUND

Background and General Information

Electronic sound can be described as any sound that is generated through electronic tube or transformer. Composers around the world have used not only varied methods of producing electronic music but also all possible ways of mixing recorded electronic sounds with acoustic ones. Along with these new styles of composition, they have continued to introduce audiences to new styles of performance.

In *Inventio*, the electronic sound is derived primarily from the pitch G on the piano, which is manipulated electronically to achieve various ranges, rhythm, and timbre. The electronically generated pitch G is not only the main substance of the electronic sound of this piece but also a significant connection between piano and electronic sounds. The starting pitch G represents a major part of the themes, which ultimately develop, with various changes, into the fugue.

The electronic sound part was originally intended to be performed live. However, because of the practical difficulties, it is often performed with prerecorded electronic sound with synthesizer.

Analysis

The *Inventio* consists of three parts: Part A (mm. 1-60), Part B (mm.61-99), and Part C (mm.100ff: theme and ten variations, and fugue). The three parts, though they sound chromatic in general, are unified not only by the pitch G but also by thematic materials whose pitch components are centered on the pitch G. Appearing as a pedal point in the first two parts, the pitch G provides a sense of centricity. In the third part – theme and variations, and fugue – the

pitch G is incorporated into the theme and its development.

Part A

In mm. 1-26, the bass G is to be played by an electronic device, usually by the synthesizer. Over the drone-like sound, with the soft dynamic mark *ppp*, the piano should help intensify mysterious moods as if the notes of the right hand were overtones coming from the bass G. For such effect, the pedal needs to remain depressed for several measures at a time while the rhythm is to be accurately articulated.

In Part A, the first theme, gradually suggested throughout the first seventeen measures, appears in its complete form at the second half of m. 17 (see ex.1). The theme includes eighteen thirty-second notes, in which the seven pitches (E-flat, F, F-sharp, G, A-flat, B, and C) do not seem to suggest any specific scale but interact with each other as various intervals, such as major, minor, or augmented seconds (see ex. 2).



Throughout the entire work, accidentals apply only to the note before which they stand. According to the composer; particular importance is assigned in this piece to the number eighteen. The eighteen-note theme is very carefully planned and arranged throughout the first seventeen measures. Although the composer did not make any direct comment on the technical methods for this composition, eighteen groups of notes – each derived from the eighteen-note-theme – eventually emerge, each beginning with G, and each is found in the first seventeen measures. By adding one note at a time to the first note G, Kang appears to have grouped from one note up to eighteen notes, the complete form of the theme, and then distributed the eighteen groups in a random way throughout the first seventeen measures (see ex. 3). For the following section (mm. 18-26), he adds another eighteen groups. This time, starting from the last note G of the theme, he adds notes from right to left as if in retrograde, thus ending each group with a pitch G (see ex. 4).

Piano

ppp sempre

Synthesizer

6

9

12

15

17

5

7

15

10

12

4

8

6

2

9

14

16

17

11

13

18

Example 3. *Inventio*, Part A, mm. 1-17 .

The image shows a musical score for two instruments: Piano and Synthesizer. The score is divided into four systems, each containing two staves. The Piano staff is the upper staff in each system, and the Synthesizer staff is the lower staff. The measures are numbered 18 through 26. The Piano part is highly rhythmic, featuring many sixteenth and thirty-second notes, often grouped with slurs and fingerings. The Synthesizer part is simpler, with sustained notes and occasional rests. The key signature has one flat (B-flat), and the time signature is 4/4.

Example 4. *Inventio*, Part A, mm. 18-26.

In mm. 27-29, in contrast to the previous section, the pianist is to break the certain vagueness of sound by accentuating each note and pronouncing the sudden dynamic change from *ppp* to *ff*. As for the rhythmic change from quarter notes through eighth notes to sixteenth notes, the pianist should observe accurate rhythm and tempo marks, to avoid an actual *accelerando*. From mm.50ff., piano and synthesizer, respectively, play in two parts.

The second theme, at m. 29, consists of twenty notes in which seven pitches (E-flat, F, F-sharp, G, A-flat, B, and C) come from the seven pitches of the first theme, and five pitches (C-

sharp, D, E, A, and B-flat) are newly introduced (see ex. 5). As can be seen in ex. 6, these twelve pitches form a chromatic scale. Not only the pitch components but also augmented and diminished intervals within the theme lead it to sound atonal. Different from the composer's mathematical treatment of the first theme, the second theme, after its first complete statement at m. 29, repeatedly appears in block chords (from m. 30), incorporating the pitch G, while providing harmonic foundation for the electronic sound (from m. 38). The rhythm of the theme ranges in various ways from quarter notes through triplets to sixteenth notes (see ex.7).



Example 5. *Inventio*, Part A, mm. 29.



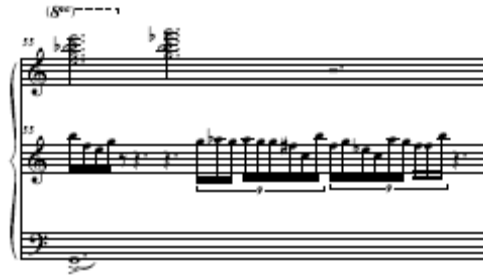
Example 6. *Inventio*, Part A, mm. 29.

The musical score is written for Piano and Synthesizer. It consists of five systems of staves. The first system shows the Piano and Synthesizer parts. The second system shows the Piano and Synthesizer parts. The third system shows the Piano and Synthesizer parts. The fourth system shows the Piano and Synthesizer parts. The fifth system shows the Piano and Synthesizer parts.

Example 7. *Inventio*, Part A, mm. 30-49 .

Example 7. *Inventio*, Part A, mm. 50-54.

At m. 55, the first theme returns with the note B instead of G at the end of the group, (see ex. 8) and it becomes repeated in different ranges and textures.



Example 8. *Inventio*, Part A, mm. 55.

Kang carefully, and rather mathematically, planned the two themes while introducing them in a seemingly random way. Figures and gestures in the first twenty-six measures serve as ornaments for the pitch G, emulating the idioms of Korean traditional woodwind instruments. Brief and yet irregular statements of the first theme lead the music to sound spacious and eternal, typical of Korean traditional music. In contrast to the linear and improvisatory statement of the first theme, however, the second theme in the following thirty-four measures becomes regulated by vertical arrangements of notes, a trait of Western counterpoint technique.

Part B

In mm. 61-99, the piano and synthesizer create a duo, requiring great precision in rhythm and tempo. After m. 99, according to the recording of the premiere, recorded material is inserted. It appears to emulate the basic rhythmic patterns of the Korean traditional drum, the *janggoo*, though it does not exist on the original score and is expected to be realized by computer on stage or, on occasion, by tape.

Part B includes the first theme as well as new themes from mm. 61 to 63 (see ex. 9). The repetition of the themes (mm. 65-69) is interrupted every other measure by the bass G. From mm. 71 to 75, each of the themes appears with the omission of the first three notes, then by gradually cutting down the number of notes down to one at the end of the section. Here, by presenting both subtonic (F) and the leading tone (F-sharp) to the pitch G, the composer seems to

intend tonal ambiguity (see ex. 10).

Example 9. *Inventio*, Part B, mm. 61-63.

Example 10. *Inventio*, Part B, mm. 64-99.

The musical score is divided into three systems, each containing three staves. The top staff is labeled 'Piano', the middle 'Synthesizer', and the bottom 'Piano'. The first system starts at measure 78, the second at measure 85, and the third at measure 93. The notation includes various musical symbols such as notes, rests, and dynamic markings like *pp* and *ppp*. The Synthesizer part features complex, rapid passages in the upper register, while the Piano parts provide a more rhythmic and harmonic foundation.

Example 10—*Continued*.

In Part B, the intensity of the texture and accentuation, although it gradually slows down toward the end of the section, alludes to the sound of the *janggoo*, the Korean traditional drum. The electronic bass G, by regularly responding to the statements of the thematic material, represents *chuimsae*, verbal sounds produced by a drummer in the Korean traditional vocal music, *pansori*.

Pansori (also spelled *p'ansori*) is a genre of Korean traditional music. It is a vocal and percussional music performed by one *soriggoon* (singer) and one *gosu* (drummer). The term *pansori* is derived from *pan*, meaning "a place where many people gather," and *sori*, meaning "sound." *Pansori* was very popular art form in Korea during the nineteenth century, and featured satires and love stories. A full story, *madang*, is so long that it usually takes hours to complete. A *madang* consists of certain alterations of *aniris* (descriptive speech) and *changs* (song). In a *pansori* performance, the *soriggoon* sings, standing with a folding fan held in one hand. The fan is waved to emphasize the singer's motions and unfolded to announce changes of scene. The *gosu* gives rhythm not only by beats but also by *chuimsae*, verbal sounds. A *chuimsae* can be a simple meaningless vowel, but short words of encouragement are also given. The audience is also supposed to give *chuimsae* during the performance, similar to the shouts of *olé* during flamenco performances. UNESCO proclaimed the *pansori* tradition a Masterpiece of the Oral and Intangible Heritage of Humanity on November 7, 2003.

Part C

Part C consists of two sections: theme and 10 variations, followed by a fugue. For both sections, the second theme of Part A also serves as the main theme (see ex. 11).



Example 11. *Inventio*, Part C, Theme.

The theme and variations section includes a great deal of syncopations, which require accurate articulations of rhythm and tempo. In Variation I, the sound of the piano needs to be distinguished from that of the synthesizer. In Variation II, the piano appears alone. Ornaments

should not be emphasized to avoid interfering with tempo and rhythm. In Variation 3, the left hand presents the main melody, while the right hand primarily provides ornaments. As long as the main melody in the left hand keeps its pace, the right hand may be played somewhat freely. In Variation 4, rhythmic complexity as well as subtlety caused by syncopations and soft dynamics should be considered. In Variation V, the left and right hands take turns, making it difficult to realize accentuation accurately. Pedal should be employed liberally.

In Variation 7, a series of thirty-second notes are to be divided by two hands; however, the division should not be noticed. The pianist should use sustaining pedal and legato without much accentuation. For Variation 8, piano and synthesizer play together; however, the sounds should be distinguished from each other. Rhythm and tempo should be observed. In Variation 9, the main melody appears in the right hand with heavy accents on each octave. A series of thirty-second notes in Variation X, slightly different from that of Variation 7, involves legato, but with accenting. In between variations, recorded material resembling the sound of *janggoo* is played contributing the improvisatory nature of the work as a whole. Not merely the melody of the theme itself but also its components are closely associated with such traditional forms of Western art music as variation and fugue. In the variation section, the composer employs a wide range of variation techniques. In Variations. I, 3, 6 and 8, the melody of the theme remains primarily the same, contrapuntally engaging upper voices (see ex. 12).

Var.I

$\text{♩} = 60$

Piano *mp*

Synthesizer

4

7

Example 12. *Inventio*, Part C, Variations I, 3, 6, 8.

VAR.3
♩ = 32

ca. 25"

VAR.6
♩ = 60
ff sempre

ca. 42"

Example 12—*Continued.*

VAR.8

$\text{♩} = 100$
leggero

Piano

ppp sempre

Synthesizer

6

ca.22"

Example 12—*Continued.*

In Variations II and V, the melodic outline of the theme is recognizable, despite figuration, simplification, and rhythmic recasting (see ex. 13).

Var. II

Example 13. *Inventio*, Part C, Variations II, V.

Var. V

$\text{♩} = 160$

ca. 30"

Example 13—*Continued.*

In Variations 4, 7, 9 and 10, the composer only alludes to the constructive elements of the theme. They are composed freely, but based on the components of the theme (see ex. 14).

VAR. 4

$\text{♩} = 180$

pp

ca. 12"

Example 14. *Inventio*, Part C, Variations 4, 7, 9, 10.

Var. 7

$\text{♩} = 180$

3

5

7

sfz

sfz

sfz

sfz

sfz

sfz

Example 14—*Continued.*

VAR.9

♩ = 140

[illegible]

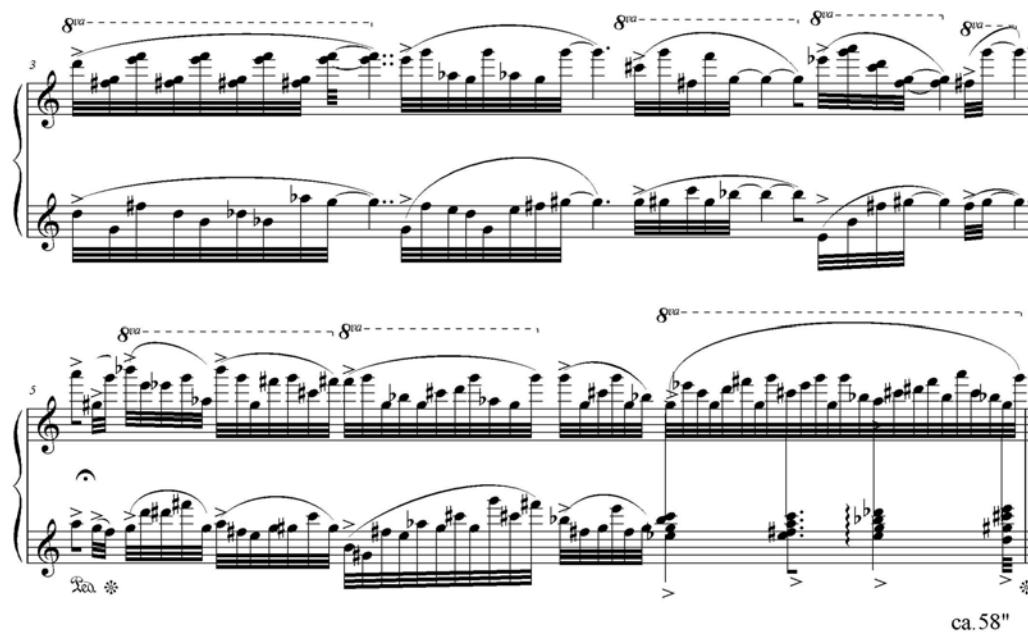
VAR.10

♩=120

legato

The image shows a musical score for the song "The Rose Tree". It is written for voice and piano. The tempo is marked as "♩ = 120" and the style is "legato". The key signature has one sharp (F#), and the time signature is 3/4. The score is divided into two systems, each with a vocal line and a piano accompaniment line. The first system contains measures 1 through 6, and the second system contains measures 7 through 12. The music features a mix of eighth and sixteenth notes, with some measures containing triplets. The piano accompaniment includes arpeggiated chords and sustained notes. The score ends with a double bar line and a repeat sign.

Example 14—*Continued.*



Example 14—*Continued.*

The final section of *Inventio* is a fugue. The subject, taken from the second theme of Part A, appears three times throughout the section, gradually gaining a high degree of complexity and sophistication (see ex. 15). The nature of the fugue, a kind of a dialogue between the piano and synthesizer part, requires precise rhythmic coordination between the players. Pedal is to be more sparingly used, so as not to obscure the main melody. Of particular difficulty for both performers is maintaining control throughout the fugue over a long crescendo, proceeding from *ppppp* to *fffff*.

$\text{♩} = 42$ legato

5

10

14

18

22

Example 15. *Inventio*, Part C, Fugue.

26

Piano

Synthesizer

30

34

38

8va

8va

Example 15—*Continued.*

The image displays a musical score for Piano and Synthesizer, spanning measures 42 to 53. The score is written in a key signature of one flat (B-flat) and a 4/4 time signature. The Piano part is on the upper staff, and the Synthesizer part is on the lower staff. The score is divided into four systems. The first system (measures 42-45) includes a dynamic marking of 8^{va} above the staff. The second system (measures 46-49) continues the musical progression. The third system (measures 50-52) includes a dynamic marking of 8^{va} above the staff. The fourth system (measures 53-54) concludes the piece with a final dynamic marking of 8^{va} above the staff. The notation includes various musical symbols such as notes, rests, and dynamic markings.

Example 15—*Continued.*

With the specified dynamic progression $ppppp > fffff$, the fugue becomes an effective finale of the piece. The use of a fugue as the finale, in the composer's own words, follows that of

Beethoven's, especially in his late piano sonatas. As Beethoven often combined contrapuntal technique with vertical progression/homophonic texture, placing a fugue at the end of large-scale work, Kang intended such teleological ending. However, Kang does not articulate the hitherto central pitch G at the final measures of the work. By including the pitch A in the bass, F-sharp in the treble, as well as the clash between B and B-flat in the middle voices, he chose to produce an ambiguous sonority (see last two measures of ex. 15).

CHAPTER IV

CONCLUSION

In *Inventio*, there is no use of twelve-tone technique, although the composer repeatedly employs and arranges certain notes in order. As can be seen in all three parts of the piece, notes that form a type of tone row serve not only as the components of the theme but also as the counterparts to nonthematic materials. Kang also applies a method by which he adds or deletes notes of tone row in succession, from the right to left and vice versa. This technique first appeared in his chamber work *Buru for Human Nature and Five Performers*, and since then in the Korean traditional dance *Chuyongmoo*, in which the dancer gradually adds up footsteps in order. By using such technique, Kang intends to keep the musical line alive in a linear, avoiding monotony that might otherwise result from repetition of a tone row. Along with the successive addition/deletion of the notes of a tone row, his arrangement of tone rows or note groups generates a double structure. In other words, by deleting the notes of a tone row one after the other, the composer creates a mathematical relationship between the notes that come to begin new rows, while producing another relationship between deleted notes.

In Kang's use of tone row, it is characteristic that he breaks the basic rule of the twelve-tone technique -- all the notes of a row are to be equally employed -- and freely omits and repeats the components of the row. According to his compositional technique, by which he freely develops motives out of a tone row, he seems to value such concepts as transformation and totality rather than equality and unity in use of twelve tones.

Another notable characteristic in Kang's composition is structural precision. He thinks that music, as invisible architecture, originates from structure rather than melody. As all objects and their beauty are represented by their structure, external beauty can be realized by internal

structure only. Thus, structure should be designed and calculated carefully in music. Although he does not ignore such elements as inspiration and fantasy in composition, he believes that they become valuable only when they go through the procedure of speculation and operation.

Kang has made an impact in composition by initiating Korean contemporary music, even though he had long devoted himself to purely abstract music. For him, developing Korean idioms is not the ultimate goal of his compositional career but a way of constructing his world as well as a breakthrough for him as a composer. Thus, Korean idioms, reflected in his works, should be understood neither as Westernization of Korean music nor as Koreanization of Western music. He developed idioms through his methodical interpretation of Korean traditional elements and included them within a work of art that represents logical structure. Through a conceptual understanding of Korean traditional elements, he aimed to construct an independent world of music. For him, seeking Korean tradition does not mean merely seeking of the primitive, return to the past, or modernization of the past, but rather returning to the origin of art. In so doing, he as a composer overcame his territorial limitations and obtained a broad perspective on the world. As can be proved in his composition *Inventio*, he is surely a composer who continues to experiment with traditional ideas in search of the new.

Kang's own comments on his compositional philosophy summarized an understanding of himself and his music:

During my entire thirty-year compositional life, Korean traditional music has been the most interesting part. Ironically, I have more intended to develop metaphysical/absolute music rather than to make music that sounds Korean. The most important goal of my musical life has been to complete myself. I have been truly hoping to become a composer who puts all efforts on creating a jewel of perfect sound. I would not say that my interest in Korean traditional music is "national value-seeking." I just want to stand in this world as one of the Koreans. The main principle of my philosophy can be summarized as two factors, "return to lost origin" and "searching for eternal future." For me, the question about how to express the spirit of the time is also important. Thus, my deep interest in the

mechanical world would continue to go on in order to renew my music. I would like to emphasize that it is very important for a composer to understand music both systematically and logically. This is the reason why I believe that music is “invisible but alive architecture,” and this perception has been one of the principal elements in my creation.²⁴

²⁴ Sukhi Kang, interview by Hooshik Hwang, Seoul, Korea, 13 March 2007.

APPENDIX
SUKHI KANG'S WORKS

Symphonies and Orchestral Works in Chronological Order

- 1969, *Generation for Orchestra*
1971, *Refleionen for Orchestra*
1974, *Catena for Orchestra*
1978, *Dalha for Large Orchestra*
1979, *Mega-Melos for Large Orchestra*
1983, *Symphonic Requiem*
1984, *Manpa for Orchestra and Clarinet Solo*
1985, *Succession for Orchestra*
1989, *Successions for Orchestra*
1991, *The Feast of Autumn for Orchestra*
1995, *Danse de Masques for Strings and Brasses*
1996, *Piano Concerto*
2001, *O Tell Me for Orchestra*
2001, *Mosaicum Visio for Small Orchestra*
2002, *Cello Concerto*
2003, *Chain Reaction for Orchestra*
2004, *Concerto for Large Orchestra*
2005, *Simphonico*
2005, *Concerto for Cello and Piano*
2006, *Four Seasons for Small Orchestra*

Chamber and Instrumental Works in Chronological Order

- 1966, *Piano Sketch No.2 for Piano Solo*
1969, *Nirmanakaya for Cello, Percussion, and Piano*
1969, *Rounditone for 7 Players (strings)*
1970, *Nong for Flute and Piano*
1972, *Apex for Piano*
1972, *Parodie for Organ and Flute*
1973, *Kleines Stück for Oboe, Cello, and Harp*
1973, *Banya for 8 Players (double string quartet)*
1973, *Strukturen for 4 Cellos*

1974, *Metamorphosen for Flute and String Quartet*
 1976, *Dialog for Viola and Piano*
 1980, *Dalha for Clarinet, Trombone, Cello, Piano, and Recorded Tape*
 1981, *Aniri I-A, Aniri I-B for Guitar Solo*
 1981, *Manpa for Flutes and Flute Solo*
 1983, *Thal for Double Bass and Flute*
 1983, *String Quartet No.1*
 1986, *Sonate Bach for Piano*
 1987, *Aniri IV for Harp*
 1989, *Get Back for Piano*
 1990, *Playing for 12 Cellos*
 1991, *Passacaglia for Violin and Piano*
 1994, *Impromptu for Flute and Bass Clarinet*
 1995, *Moulin D'ande for Violin, Viola, and Cello*
 1997, *Legende for Clarinet, Violin, Cello, and Piano*
 2004, *Vortex for Piano and 4 Percussions*

Vocal and Choral Works in Chronological Order

1968, *Yebul for Male Voice Solo, Male Chorus, and 30 Percussions*
 1978, *Yong-Bi (Fliegender Drache)*, cantata
 1983, *Aniri for Voice and Recorded Tape*
 1984, *The Rite of Sun*, cantata
 1984, *Aniri for Voice*
 1992, *Peace on the Brilliant Green Earth*, cantata
 1994, *Chowol (Transcendence)*, opera
 2002, *Ein Fest für Boris*, musical

Electronic and Miscellaneous in Chronological Order

1966, *The Feast of Id for Electronic Music*
 1977, *Luxurious Going Out for Movie Music*
 1978, *Myung for Korean Traditional Instruments* (hoon [Korean traditional woodwind], daegeom [Korean traditional woodwind], gayageom [Korean traditional string, played with fingers], and tamtam [Korean traditional percussion])

1980, *Bronze Zeit for 1 Percussionist and Electronic Sound*
1981, *Mosaico for Electronic Music*
1981, *Klangspuren for Electronic Music*
1981, *Vision for Voice, Guitar, and Electronic Sound*
1982, *Mutatio Perpetua for 24 Players with Electronic Sounds*
1984, *Inventio for Piano and Electronic Sound*
1985, *Penthesilea for Musical for Broadcasting* (Hörspiel)
1986, *Lung for Film and Electronic Sound*
1987, *Chwitahyng for Korean Traditional Orchestra*
1988, *Feng-Hwang for Computer Music*
1988, *Prometheus for Electronic Music* (music for 1988 the Seoul Olympic flame)
1990, *Stone Lion for Computer Music*
2000, *Five Scenes for Gayageom*

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