

CHAPTER 4

THREE DIMENSIONS

Commissioned by the SABC to write a piano work containing indigenous elements, Zaidel-Rudolph composed the *Three Dimensions* in 1974. It was included in the prescribed repertoire list for the 1976 SABC Music Prize national piano competition.

The work shows a definite departure from the earlier style of the *Sonata no.1*. Zaidel-Rudolph's style has now changed from an abstract engagement with rhythmic and pitch ordering to a more free and intuitive approach where she exploits the changing colours and density of sounds.

The experimentation with sound colour is, with the hindsight of almost thirty years, conventional for the time in which this work was written. European composers such as Edgar Varèse (1885-1965), Iannis Xenakis (1922-) and Zaidel Rudolph's tutor György Ligeti (1923-) had long occupied themselves with the acoustical phenomena of timbre.

The *Sonata no.1* used conventional notation coupled with neoclassical formal structures. The *Three Dimensions* uses new methods of notation in a language where sound material is sculpted into different shapes, suited to the expression of a wide range of emotions.

Frequent use is made of proportional notation where "... the visual distance between the notes indicate how the performer should play them" (Composer's Notes 1974). This results in the indeterminacy aspect, another avant-garde trait.

The exploitation of new compositional trends is however not the issue. Far more interesting is the artistic manipulation of different sound patterns.

“The title ... indicates that the musical structure contains multi-level music at stages through the piece, ... the three-dimensional concept ... indicates three distinct style-atmospheres” (Composer’s Notes 1974).

The work bears three programmatic subtitles which have biographic origins in Zaidel-Rudolph’s music career. As a student in Europe, she was subjected to a multitude of new musical ideas, yet she felt herself drawn to her African home with its definitive rhythms and sounds. Philosophically and spiritually, she felt a strong affinity towards Eastern beliefs and principles.

The subtitles are:

- A European City Awakens (21 bars in length)
- An African City Pulsates (63 bars)
- An Eastern City Meditates (20 bars)

Acknowledging the composer’s deeply-felt patriotism towards the country of her birth, the homeland section constitutes the large centre piece.

The free-flowing construction of the work has the effect that each section calls forth the following one with growing necessity. The one section flows into the next uninterruptedly. The composer stresses that “barlines are (only) present to aid the performer ...; the music must have a continuity without any added emphasis ...” (Composer’s Notes, 1974).

4.1 MACRO SECTIONS

Roman numerals indicate the commencement of each big section. The large design is a three-part structure:

- A *A European City Awakens*; bars 1-21; a link (bars 14-21) provides a transition to
- B *An African City Pulsates*; bars 22-83; a short link to
- C *An Eastern City Meditates*; bars 84-103; with a short Coda (bars 102, 103)

The sections differ distinctly; the A structure juxtaposes three contrasting subsections, each maintaining a uniform timbre; the B structure simulates the sounds of Africa with motoric rhythmic activity; the C section focuses on timbre contrasts in effective experimentation with piano sound.

Zaidel-Rudolph exploits the expressive and esoteric nature of music at this point of her career. Timbre transformation depicting changing atmospheres becomes an important structural parameter. An analysis of this work can therefore not always be of a pure technical nature, but must of necessity also concentrate on the philosophical aspects.

4.2 MICRO SECTIONS

Because thematic structuring plays a subordinate role, there is no conventional phrase or period construction. Micro sections of irregular bar lengths contain opposing textural, metric and dynamic application:

Macro Section A:

- Micro Sections: 1; bars 1- 7
- 2; bars 8-13
- 3; link-bars 14-21

Macro Section B:

- Micro Sections: 4; bars 22-27
- 5; bars 28-36^{3a}
- 6; bars 36^{3c} - 42⁴
- 7; bars 42⁵ - 49

8; bars 50 – 58

9; bars 59 – 65

10; bars 66 – 79

11; bars 80 – 83

Macro Section C:

Micro Sections: 12; bars 84 – 96; subdivides into three subunits
(bars 84 – 89, 90 – 92, 93 – 96)

13; bars 97 – 103; subdivides into two subunits
(bars 97 – 101, 102 + 103)

the last one comprising a Coda

The micro sectional divisions are now discussed as regards their structural design:

4.2.1 A European City Awakens

Micro Section 1; bars 1 – 7

The opening 7-bar micro section exhibits the undulating repetition of 4-note vertical structures built of superimposed minor 6ths (viewed in closer spacing “chords” feature minor 2nd interval distances). The cross-related pitch content here negates a harmonic function.

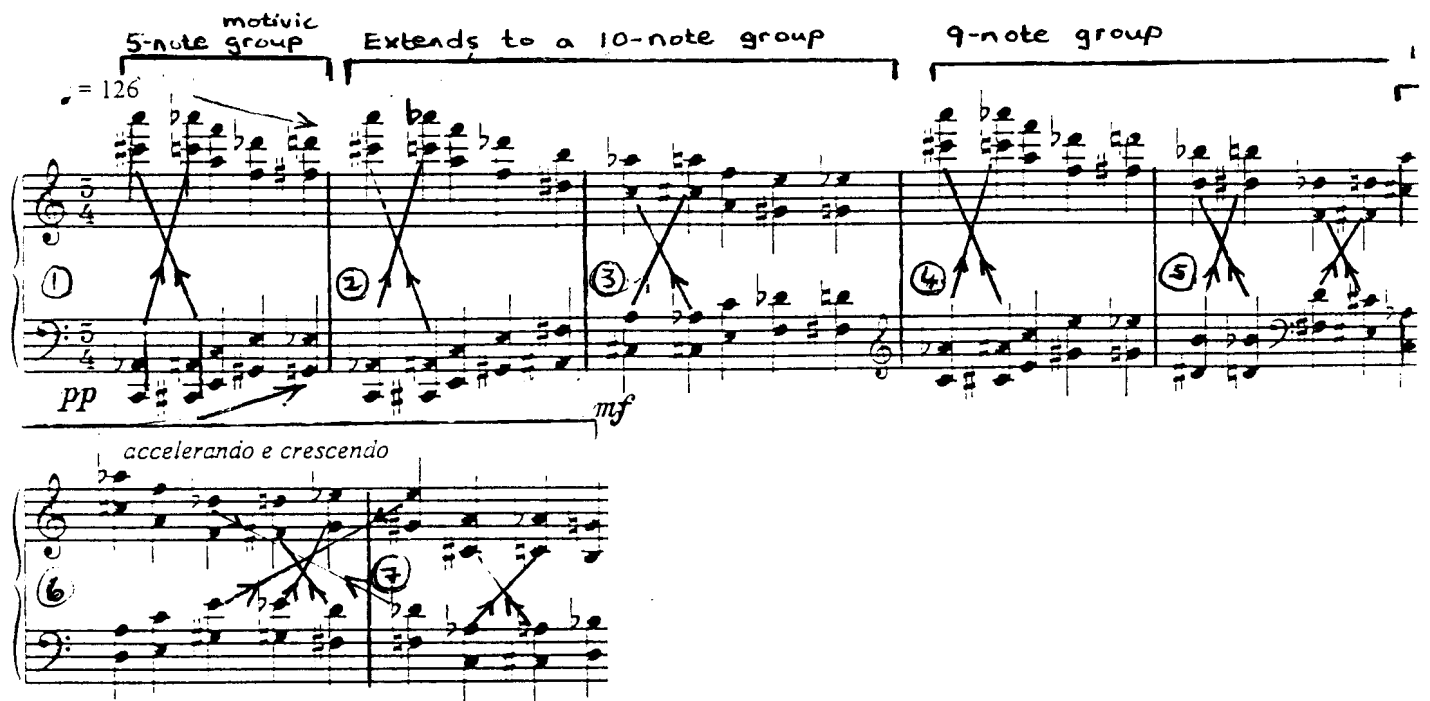
Horizontal lines show a “mirroring” of interval leaps and resultant contour. The hands start three octaves apart; at the end of the section, contrary movement (the right hand contour descends whilst the left ascends and *vice versa*) has guided them into close proximity.

Motivic structuring features the intervals of minor 2nds and minor 3rds. The pitches A-A^b (descending minor 2nd) play a pivotal role. Announced at various points in the top voice part, they serve to delineate motivic groups. The initial 5-note group (bar 1) is

extended by means of pitch accumulation to a 10-note group (bars 2,3), to a 9-note group (bars 4,5) finally to another 10-note group.

Vertical construction also shows a mirroring device. “Chords” are sometimes (specifically at the A-A^b delineating point as indicated in the following music example) inverted in consecutive structures.

Music example i, *Three Dimensions*; bars 1 – 7



The musical score for 'Three Dimensions' (bars 1-7) is presented in two systems. The first system (bars 1-5) is marked *pp* and *mf*. It features a tempo of quarter note = 126. The score is annotated with circled numbers 1 through 5, and brackets indicating '5-note motivic group', 'Extends to a 10-note group', and '9-note group'. Arrows point to specific notes in the upper and lower staves, showing vertical relationships and inversions. The second system (bars 6-7) is marked *accelerando e crescendo* and features circled numbers 6 and 7. The score is in 5/4 time and shows a gradual building of dynamic intensity.

The reiterations of the four-note structures create a chant-like reverie effect. The stately melodic line of the upper voice imitates the undulating ringing of church bells, a common early morning sound in a Western city. The repetitive character of the music suggests a static underlying element of urban life that does not allow for much change or development; a lack of direction, of spirit and of vital growth.

The gradual building of dynamic intensity creates the effect that the city noises are coming to life yet once again.

Micro Section 2; bars 8 – 13

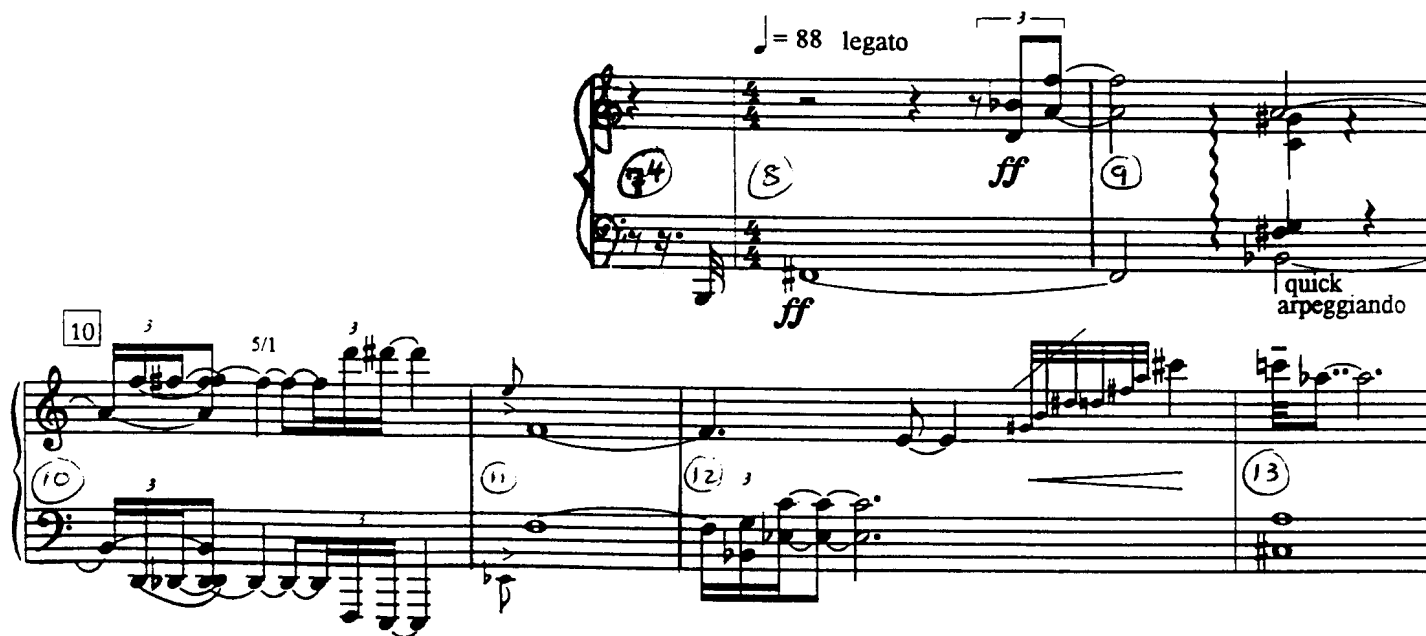
If compared to the previous one, this six-bar section is of a directly opposing structure and texture. Written in 4/4 metric division, the tempo slows down in conjunction with the rhythmic activity.

The irregular and disjointed rhythmic patterning depicts the sounds of early morning traffic noise whilst structurally building the musical tension.

Dynamically, it is also in contrast to the dream-like atmosphere of the first micro section. Off-beat punctuations of dissonance, (sometimes in the extreme piano registers, e.g. bars 10 and 12), trace angular melodic outlines of widely scattered sounds played at a *fortissimo* dynamic level.

Commencement of this section is once more characterised by the inverted interchanging of pitches (bar 7⁴ – 8¹; B to F#; bar 8⁴; B^b to F⁴). Intervallic use shows a continuation of major/minor 6ths combinations. The sustained pedal points in the bass part provide anchoring support; F# (bars 8 – 9²) to B^b (9³ – 10¹) to F^b (11,12) to C# (13).

Music example ii, *Three Dimensions*; bars 7⁴ – 13



The musical score for 'Three Dimensions' (bars 7⁴ – 13) is presented in a grand staff format. The tempo is marked as ♩ = 88 *legato*. The score includes several handwritten annotations: circled bar numbers (7, 8, 9, 10, 11, 12, 13), dynamic markings such as *ff*, and performance instructions like 'quick arpeggiando'. The bass line features sustained pedal points, while the treble line contains complex rhythmic patterns, including triplets and sixteenth-note runs.

Micro Section 3: Link, bars 14-21

The colourful, rhythmic punctuations of the previous section now make way for a complete change in timbre. Reminiscent of post-Webern pointillism, isolated sounds of contrasting dynamics gradually precipitate into denser cluster groups (e.g. bar 15), to then disperse again (bars 17, 18). In the final two bars (bars 20, 21) a sudden contraction of note patterns results in a tight *tremolando* announcing the commencement of something new. Proportional notation is used in this section. Barlines (dotted in the original manuscript) serve no other purpose than to provide approximate divisions. The interpretation is free; the performer conveys note durations according to the spatial proportions of the visual note-patterns. The music is thus indeterminate in time to a certain degree. This suspension of time serves as a philosophical preparation for the advent of Africa with its tradition of timelessness.

The C# bass note heard in the last bar of the previous section (bar 13) now becomes a prominent feature. A sonority of C-G-C# forms an anchoring pedal for most of this section.

A combination of various melodic intervals such as 7ths, 4ths, tritones and thirds are used to create the isolated cluster effects. However, the culminating climax (bars 19-21) balances the start of the composition by focusing on 6ths.



Music example iii, *Three Dimensions*; bars 14-21

14 *Ad libitum*
p *pp* *f* *mp*
All notes sustained until dotted barline

16 *pp* *crescendo* *f*

19 *6ths* *6ths* *red.* *Contraction of 6ths* *m.s.* *m.d.* *tremolando* *fff*

The musical score consists of three systems of piano accompaniment. The first system (bars 14-15) features a treble clef staff with notes and rests, and a bass clef staff with notes. Dynamics include *p*, *pp*, *f*, and *mp*. A performance instruction states 'All notes sustained until dotted barline'. The second system (bars 16-18) continues in the bass clef with a *pp* dynamic and a *crescendo* marking. The third system (bars 19-21) features a treble clef staff with sixteenth-note patterns and a bass clef staff with notes. Dynamics include *f*, *pp*, *f*, and *fff*. Performance instructions include '6ths', 'red.', 'Contraction of 6ths', 'm.s.', 'm.d.', and 'tremolando'.

4.2.2 An African City Pulsates

This section is characterised by frequent tempo and metric changes with dense rhythmic activity (it contains the fastest tempo indication, i.e. $\text{♩} = \text{ca. } 115$).

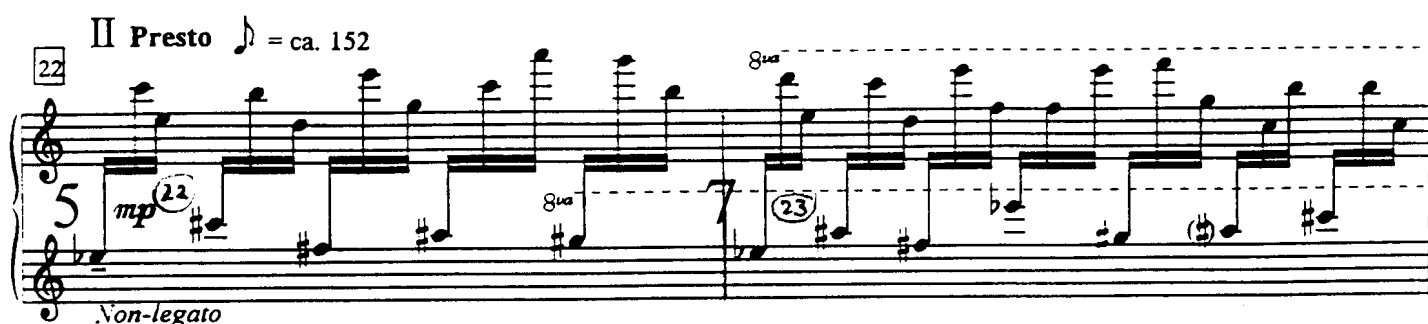
Unit delineation shows a close interdependence between structural elements. Specific thematic structures and metric divisions are encountered in each timespan. Subdivisions are further defined by strong contrasts in texture and timbre.

Micro Section 4; bars 22-27

Here the definitive feature is an *ostinato* rhythmic pattern in semi-quaver triplet figurations played in the upper register of the piano by both hands.

The pre-eminent pitch of C# (of the previous section) now moves up a tone to focus on E^b.

Music example iv, *Three Dimensions*; bars 22, 23



II Presto ♩ = ca. 152

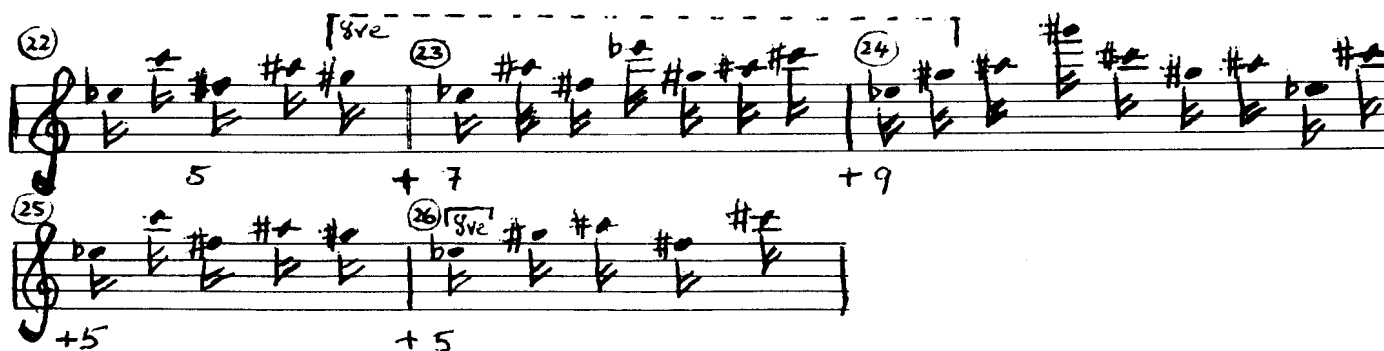
22 mp 22 8va 23 8va

Non-legato

Detailed description: This musical score shows two staves of music for bars 22 and 23. The tempo is marked 'II Presto' with a quarter note equal to approximately 152. The music is in 5/4 time. Bar 22 starts with a piano dynamic marking 'mp' and features a semi-quaver triplet pattern in both hands, with the right hand marked '8va'. Bar 23 continues this pattern. The notes are primarily in the upper register. The key signature has one flat (B-flat).

The E^b emphasis (recall the composer's favouritism of this pitch with its dark colour association in the sonata) also serves the function of a rhythmic spill-point, blurring the sense of barline division. Accented repetition of the E^b provides a natural subdivision into the following metric groupings.

Music example v, *Three Dimensions*; bars 22-26



22 23 24 25 26

5 + 7 + 9

+5 + 5

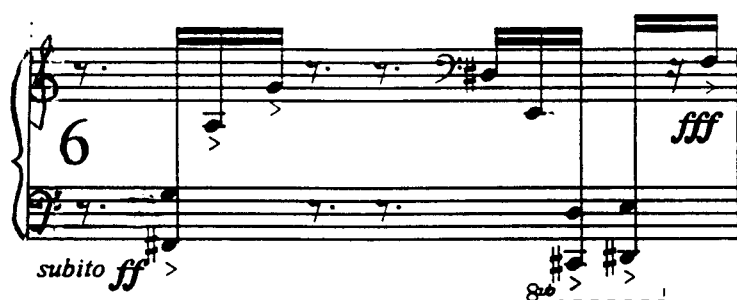
Detailed description: This musical score shows two staves of music for bars 22 through 26. The notes are grouped into metric units: 5 notes in bar 22, 7 notes in bar 23, 9 notes in bar 24, 5 notes in bar 25, and 5 notes in bar 26. The notes are primarily in the upper register. The key signature has one flat (B-flat). The tempo is marked 'Presto'.

A variety of melodic intervals are encountered in the construction of the triplet figurations. Initially, the minor 6th is retained; thereafter follow minor/major 7th, perfect 5th and major 2nd.

The function of this section is a rhythmic one, announcing the African character with fast and irregular metric displacements.

In the last bar, the triplets fragment and disperse; emphatic minor 9th vertical structures alternate with horizontal 7ths (first minor, then major) with a sudden dynamic intensification.

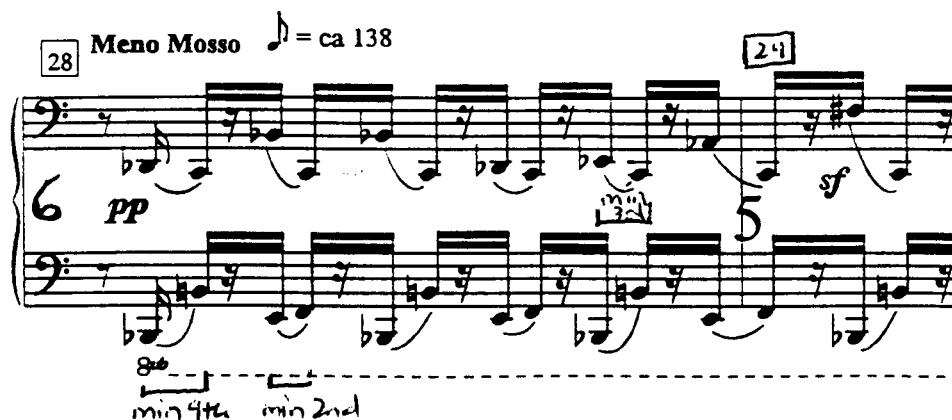
Music example vi, *Three Dimensions*; bar 27



Micro Section 5; bars 28 – 36^{3a}

The stamping effect of a Zulu dance is simulated, commencing at a *pianissimo* dynamic level with the sonority now switched to the low bass register of the piano. The hands play strongly punctuated ($\underline{\underline{\underline{E} E \underline{\underline{7}} E}} \underline{\underline{\underline{E} E \underline{\underline{7}} E}}$) rhythmic patterns in contrary motion. The pitch emphasis now changes to C (used as pedal point in the right hand part).

Music example vii, *Three Dimensions*; bars 28, 29



These rhythmic figurations are continued with metric unit-grouping decreasing in number; from 6 (bar 28) to 5 (bar 29) to 4 (bar 31) to 3 (bars 32, 33). Interval construction favours the minor 2nd and its octave jump (the minor 9th). In bars 32 and 33 minor 2nd cluster structures (in the right hand part) emphasize the *marcato* effect and build the dynamic tension. From bars 33 to 35 rhythmic activity of the left hand increases; an *ostinato* semiquaver pattern undulates round the intervals of descending perfect 5th and ascending minor 2nd and 9th. The lowest bass-line pitch, B^b, now gains eminence. The right hand rhythmic activity disperses with spread-out vertical structures preparing for the next section. The pedal sustains the sounds (bar 36) at a *fortissimo* dynamic level. In the following bar, there is a sudden drop to *piano*, with two quartads built of the superimposition of augmented 4ths (a characteristic African melodic interval) bringing the rhythmic activity to a halt.

Music example viii, *Three Dimensions*; bars 32 – 36^b

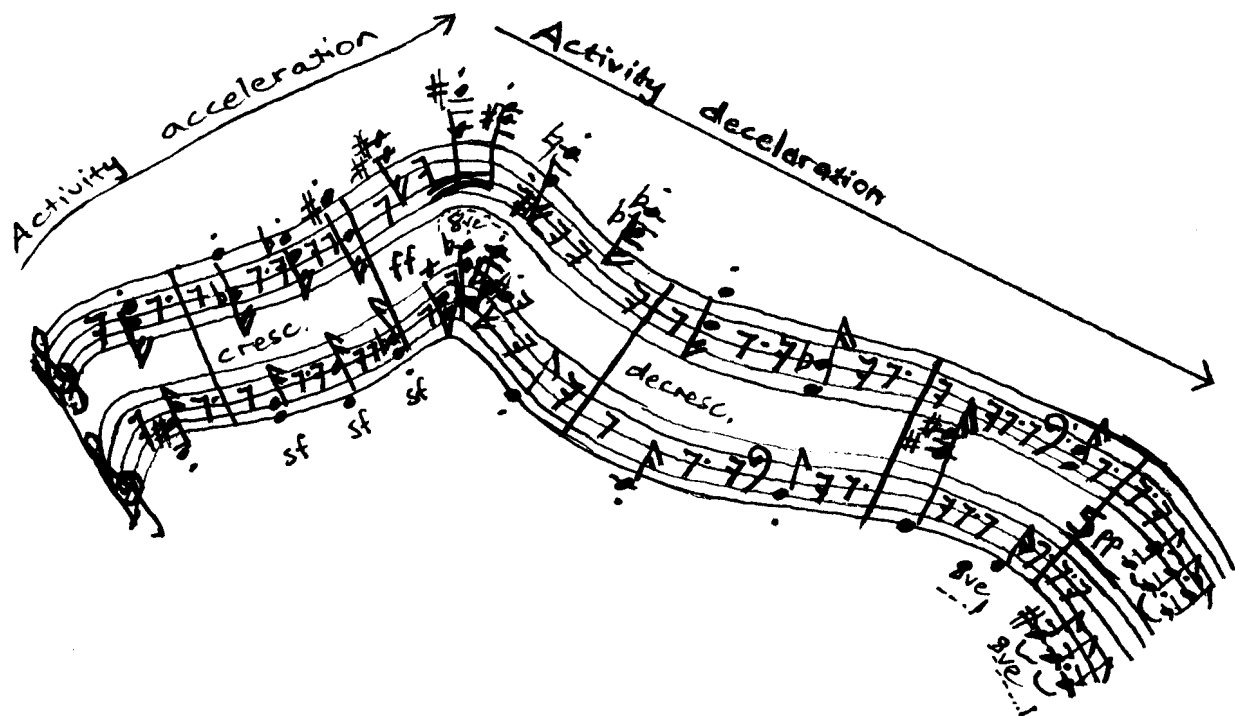
The musical score is presented in two systems. The first system (bars 32-33) shows the left hand with a steady semiquaver ostinato pattern in the bass line, primarily on B^b and F. The right hand features complex rhythmic patterns with various articulations like accents and tenuto marks. Dynamics range from fortissimo (ff) to piano (p). The second system (bars 34-36^b) continues the left hand's ostinato pattern while the right hand has more spread-out vertical structures. Dynamics range from fortissimo (ff) to piano (p). The score includes various musical notations such as accents, tenuto marks, and dynamic markings.

Micro Section 6; bars 37^{3c} – 42^{4b}

Continuing the rhythmic fragmentation of the right hand part in bars 34 and 35 (see the previous music example), the texture now has a disjointed feel. Rising four-note *staccato* vertical structures ascend from the middle register of the piano to contract in bar 39 with an increase of rhythmic activity. With the dispersion of rhythmic activity (spacing of note units), the pitch level descends to the low register.

The increase and decrease of rhythm and pitch is illustrated by the following graph.

Music example ix, *Three Dimensions*; bars 37^{3c} – 42^{4b}



The ascending melodic pitch contour of the upper right hand part focuses on the interval of a perfect 4th (C – F, E^b (D#) – G#, C# – F#).

This interval refers to the start of *The Call of South Africa*. In the foreword, Zaidel-Rudolph admits to using snatches of the country's former National Anthem. A conse-

quent reference to the Anthem (in a forthcoming section) which is more direct, is here anticipated.

The descending pitch contour of the right hand part features 6ths, linking this structure to former ones.

The section comes to a *fermata* halt (bar 42) with the C# in the lower bass serving a delineating function.

Micro Section 7; bars 42⁵ – 49

The agitated feeling of the previous section is now substituted by an atmosphere of tranquility. Rhythmic activity slows down with the slower tempo indication ($\text{♩} = \text{ca.}104$), and the fairly regular vertical linear grouping of 4- and 5-note structures. The one-bar phrases are written mainly in crotchet note values, with a rhythmic contraction on third beats to clarify the 5 metric division (i.e. 2 + 3 subdivision).

Pitch organisation is simple, with doubling of voice parts between the hands emphasizing the melodic structure. The interval jumps occur in correlation with the rhythmic contraction on third beats; rising minor 3rd figure (bars 43, 45) mirrored by a descending perfect 4th figure (bars 44, 46 and 47).

The sonority of this section contrasts with the previous one in that it remains in the middle and upper registers of the piano initially. Bars 46 and 47 constitute a registral jump to the bass register, with emphasis of an augmented 4th two-note structure in the right hand. (Rhythmic and melodic emphasis of the interval of the 4th is characteristic of African music)

Pitch anchoring (of the lower bass voice) is from B^b to C#. A two-bar textural deviation of a sharply ascending and descending pitch wave of three-note clusters disrupts the chant-like atmosphere, and serves as a bridge to the next section.

Music example x, *Three Dimensions*; bars 43 – 47



$\text{♩} = \text{♩} = \text{ca } 104$
 43
 5
 left hand cantabile
 marcato legato
 8^{va}
 47
 sim.
 4
 cresc. ad **ff**
 8^{va}

Micro Section 8: bars 50 – 58

This section comprises a typically African bilinear rhythmic construction. The one line maintains a consistent metrical pattern which serves as accompaniment to the non-metrical punctuation of the other line.

The right hand *ostinato* consists of a 7-pitch sequence cast into an undulating rhythmic pattern of $\square \square \square \square \square \square \square$. As a result, each of the twelve repetitions of the 7-note pattern has a different metric grouping. The sonority here imitates the sound of the *Mbira*, a traditional instrument of African tribes. The resonator of this instrument is either of globular (often the dried hull of a halved pumpkin) or rectangular (cut out of wood) shape. Metal staves, which are tuned to the pentatonic scale, are attached on top to be plucked by the fingers.

The left hand part is of an opposing construction. It comprises the use of different and varied intervallic pitches heard in cross-rhythms against the right hand *ostinato*.

The intervals of the left hand (albeit rhythmically transformed) make a more direct reference to *The Call of South Africa* than the previous instance (see music example ix).

In a socio-political context, the composer's quotation of snatches of an erstwhile national anthem serves a two-fold purpose. In its absorption into a sound world dominated by traditional African tribal effects, it functions as satire. In the proportionately small quantities of its reference, it symbolizes a premonition of political changes yet to come, raising its function to irony.

Music example xi, *Three Dimensions*; bars 50 – 52



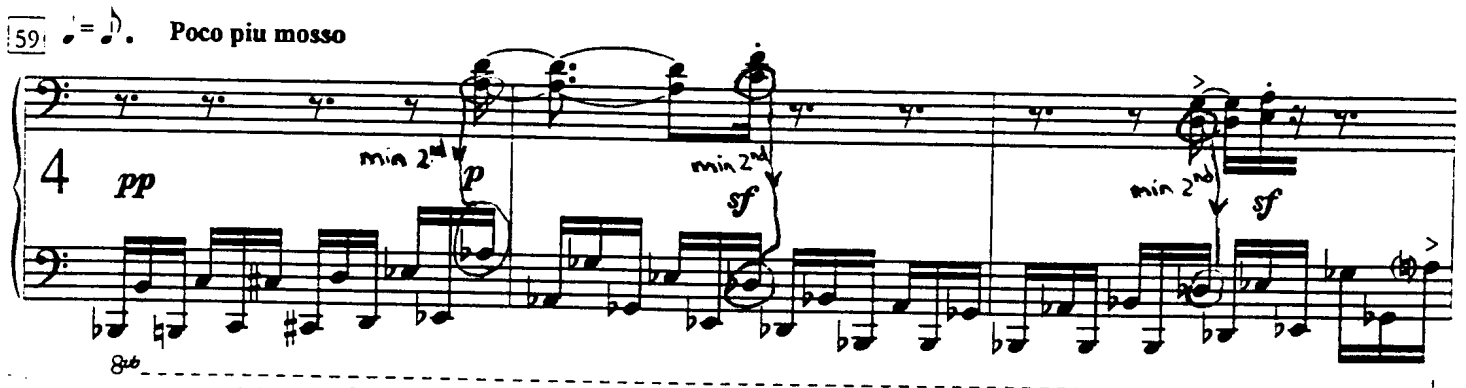
The section comes to a close in bars 57, 58 with regular rhythmic grouping reminiscent of the material of micro section 7.

Micro Section 9; bars 59 – 65

The return of triplet figurations echoes the beginning of the Africa macro section. They are now played by the left hand in a 4-metric division in an ascending and descending broken octave *ostinato* pattern.

Music example xii, *Three Dimensions*; bars 59-61

59. $\text{♩} = \text{♩}$. Poco piu mosso



Horizontally, the off-beat right hand exclamations comprise 2-note structures of consecutive 4ths. Vertically, the construction emphasizes minor 2nds (as indicated in the above music example). The regularity of the parallel 4th figures increases to cause an intensified rhythmic activity in bar 63. The wave-like contour of the left hand patterning reaches a stabile position in bars 65 and 66, creating an exciting *crescendo* (and *accelerando*) of bass sound as an introduction to:

Micro Section 10; bars 66 – 79

The rhythmic drive of this section is very contagious and most accessible to performer and listener alike.

The activity is now allotted to the right hand part with the left hand playing a demarcatory role to elicit metric sub-divisions. Vertically, minor 2nds are once again featured (see the following music example).

The right hand plays fast-moving semi-quaver patterns in duple subdivision. Melodic content of these figurations comprise either ascending or descending fourths; wave-like horizontal contours gradually spiral from the bottom to the top registers of the piano. The 2+2+2+2 subdivision of the first three bars (67—69) is substituted by the hemiola-type (3+3+2) in bars 70 and 71, with the left hand supporting the syncopated effects with accented triadic structures. Thereafter, the duple subdivision is resumed, with the left hand providing contrast with wide intervallic leaps and displaced accentuation.

Music example xiii, *Three Dimensions*; bars 67 – 76

Prestissimo



69



73

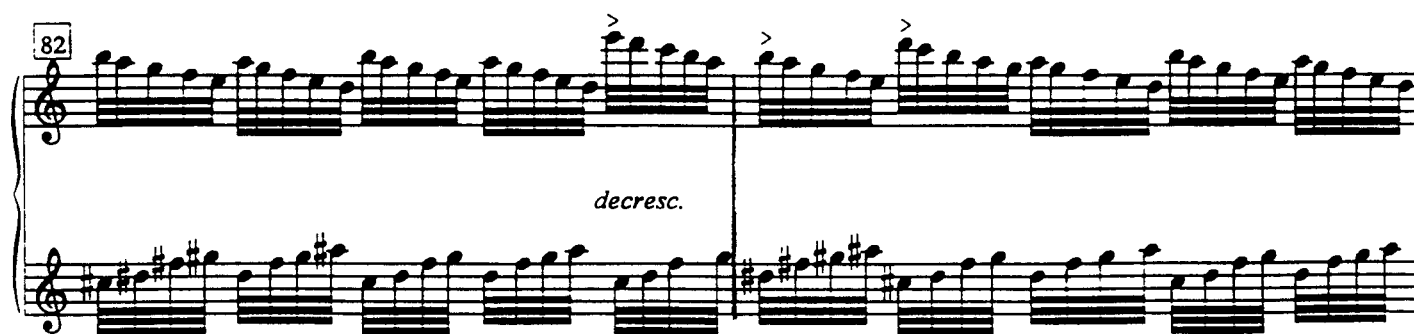


The section is delineated by two structures of sustained sonorities which contrast the dense rhythmic activity and the non-legato articulation of the afore-mentioned 10 bars. The melodic contour of the right hand part (bars 77 and 79) focuses on the interval of a descending major 2nd. This interval and its inversion are rhythmically extended to form the figurations of the next:

Micro Section 11; bars 80 – 83

Demi-semi-quaver figurations played in contrary motion (5 against 9) between the two hands anticipate the mystical qualities of the East. The right hand melodic contour temporarily abandons its major second parameter to feature the melodic intervals of descending major 4th and ascending minor 3rd. A last reference to Africa is thus made.

Music example xiv, *Three Dimensions*; bars 82, 83



The image shows a musical score for two staves, likely piano and right hand. The top staff is in treble clef and contains a complex rhythmic pattern of eighth notes with accents. The bottom staff is in bass clef and contains a similar rhythmic pattern. A box labeled '82' is at the start of the top staff. A vertical line separates bar 82 from bar 83. The word 'decresc.' is written between the staves in bar 83.

4.2.3 An Eastern City Meditates

In the foreword, the composer instructs the performer that this section “... is extremely free with an air of time-lessness. The note values are just an indication of the relative proportion of the notes and must not be taken too literally” (Composer’s Notes, 1974). There is no time signature to this section – it is thus virtually impossible to interpret the note values literally.

The rhythmic structure of the Africa section has now been substituted by a kaleidoscope of sound effects. A variety of colour mutation is evident, achieved by a limited palette of devices. *Glissandi*, *tremolos* and the plucking of the piano’s strings blend extreme dynamic contrasts across the various registers, resulting in novel cluster effects.

A visual investigation (here the presence of barlines proves extremely useful) reveals definite sectional structuring.

Two micro sections can be further subdivided into 3- and 2-bar units, each of individual sonority.

Micro Section 1; bars 84 – 96; subdivides into

Subunit 1; bars 84 –89 (3+3)

Subunit 2; bars 90 –92 (3); link to

Subunit 3; bars 93 – 96 (2+2)

Micro Section 2; bars 97 – 103; subdivides into

Subunit 4; bars 97 – 101 (3+2)

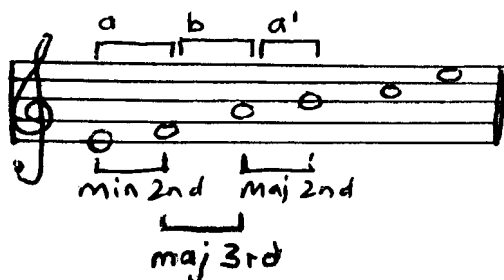
Subunit 5; bars 102, 103 (2); serving the purpose of a Coda

Pitch structuring of the oriental-sounding timbres has its origins in a pentatonic Eastern scale called the *hira-jōshi*.

It is interesting to note that a traditional Japanese instrument, the *koto* (also called the *zokusō*) often uses this scale tuning. This rectangular shaped instrument, made of paulownia wood, has silk strings attached to it which are played by ivory picks.

Interval combinations which characterise structural units are based on the germinal motives of this scale. The following music example illustrates the scale and the germinal motives.

Music example xv, the *hira-jōshi* scale



Micro Section 1; bars 84 – 96

In the first subunit (bars 84 – 89) the right hand introduces the first four notes of the scale, in demi-semiquaver note values in sustained fashion (in bar 84). Combined with the consequent effect of plucked strings, and a string *glissando*, the resulting sonority creates an exotic and distant atmosphere.

The note pitches of the demi-semiquaver pattern in bar 85 constitute a transposed version of the four-note motive. They now have G as root and exhibit the composer's fondness for octave displacement (as is the case with *ostinato* bass figurations in the Africa section; e.g. bars 59-61, music example xii).

In the next bar, the sonorities of a descending *glissando* on the piano strings and a descending chromatic scale on the keys are heard adjacently (with sustained effect by means of the *sostenuto* pedal). The descending motion balances the ascending contour of the opening bar.

Music example xvi, *Three Dimensions*; bars 84 – 86

III Ad libitum

84

Pluck strings in piano

adagio glissando on strings

presto gliss. on strings with back of nail

ppp

p

m.d.

Take over held down notes with left hand senza ped.

5/1

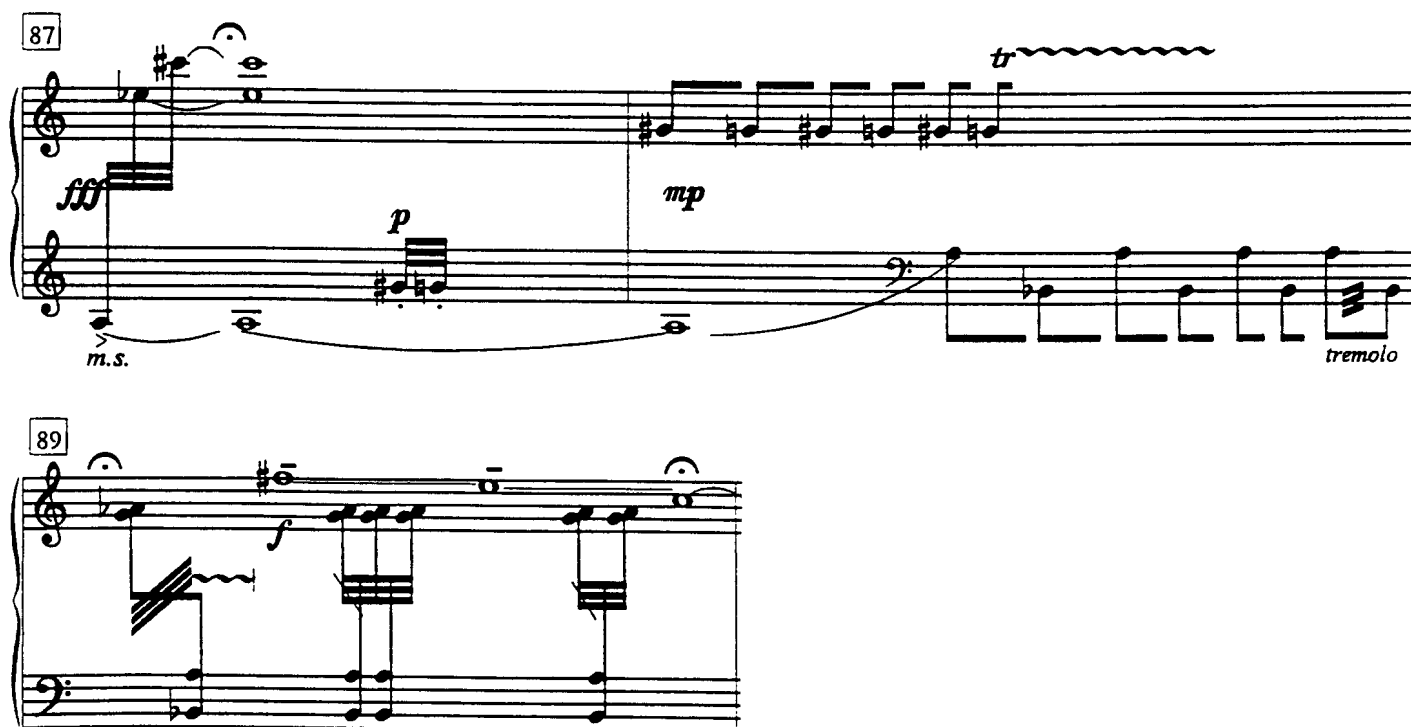
m.s.

The afore-mentioned three bars concentrate on delicate sound contrasts. The *crescendo* in the last bar serves a transitional function into the next three-bar sonority, where sound patterning is more dense and urgent. Bar 87 introduces a C# and E^b (2nd, 3rd and

4th notes of the *hira-jōshi* scale) with the sustained A as its lowest anchoring pitch. An oscillating figure which accelerates into a trill (G# to G \flat ; motive a), is introduced against its sonority. The low pitch level of the left hand part now follows suit to oscillate in a downward motion between A and B \flat (motive a, now inverted). It increases in rapidity and dynamic level to culminate in a tight *tremolo* (heard against this sonority of the trill in the right hand part). An alternating-hand *tremolo* results (in bar 89) to punctuate the introduction of three melodic accents; F#, E and C, in descending motion, played by the pinky of the right hand.

Apart from being based on the intervals of the Eastern scale, the melodic contour of these pitches (descending minor 2nd, followed by descending major third) bears a direct relation to the opening bar of the entire composition (see music example i).

Music example xvii, *Three Dimensions*; bars 87 -89

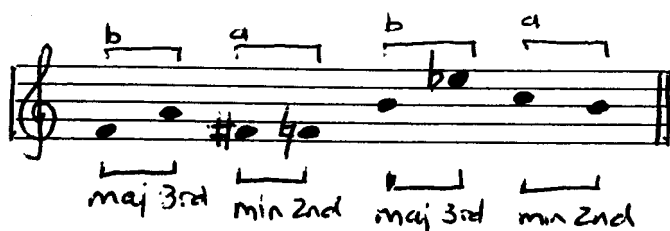


The musical score consists of two systems of piano music, labeled 87 and 89. System 87 spans two staves (treble and bass clef). The right hand part begins with a trill (G# to G \flat) marked with a wavy line and 'tr'. The left hand part starts with a sustained A in the bass clef, marked 'm.s.' (mezzo-sostenuto). Dynamics include *ff* (fortissimo) in the right hand, *p* (piano) in the left hand, and *mp* (mezzo-piano) in the right hand. System 89 also spans two staves. The right hand part features a descending melodic line with accents on F#, E, and C, marked with a wavy line and 'tr'. The left hand part continues the oscillating motion between A and B \flat . Dynamics include *f* (forte) in the right hand and *mp* in the left hand. The word 'tremolo' is written at the end of the system.

The last subunit (bars 93 – 96), echoes a previously heard (bars 88, 89) sonority. This version is now transposed to have E as its anchoring pitch.

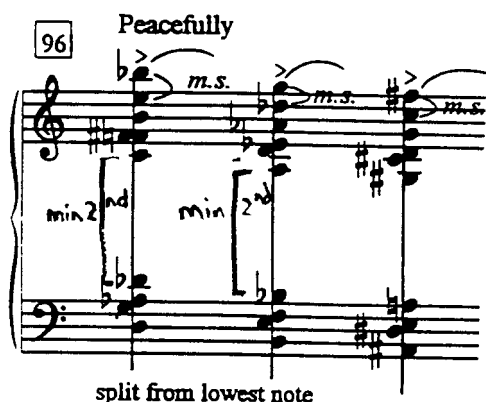
It is followed by a contrasting two-bar sonority which closes the entire section. The timbre comprises *glissandi* from the bottom to the top register of the piano. Pitch delineation emphasizes specific intervals. Reducing octave displacements to their basics, the intervals once again show a relation to the eastern scale motives. The following outlay illustrates:

Music example xviii, *Three Dimensions*; bar 95 (interval reduction)



Three arpeggiated ten-note vertical structures, built of superimposed major and augmented 4ths, provide a final delineation to the first micro section (bar 96; closer spacing exhibits minor 2nd distances between pitches). The horizontal pitch contour of the extreme bass and treble voices re-inforces motivic interval construction (descending 3rd followed by descending 2nd).

Music example xix, *Three Dimensions*; bar 96



Micro Section 2 (bars 97 – 103)

The timbre activity now changes to focus temporarily on a three-bar sonority of strict metric division (7/8; 2+2+3). A six-note motive, initially punctuated by split minor 9th (minor 2nds) *acciacaturas*, follows a descending contour. The intervals of the 3rd (descending minor) and 2nd (descending minor) are once more prevalent. The effect is almost like a brief and nostalgic reference to Africa. The solidity of the rhythmic impetus also serves a preparatory function to the final sonorities which emulate huge waves of cluster sounds.

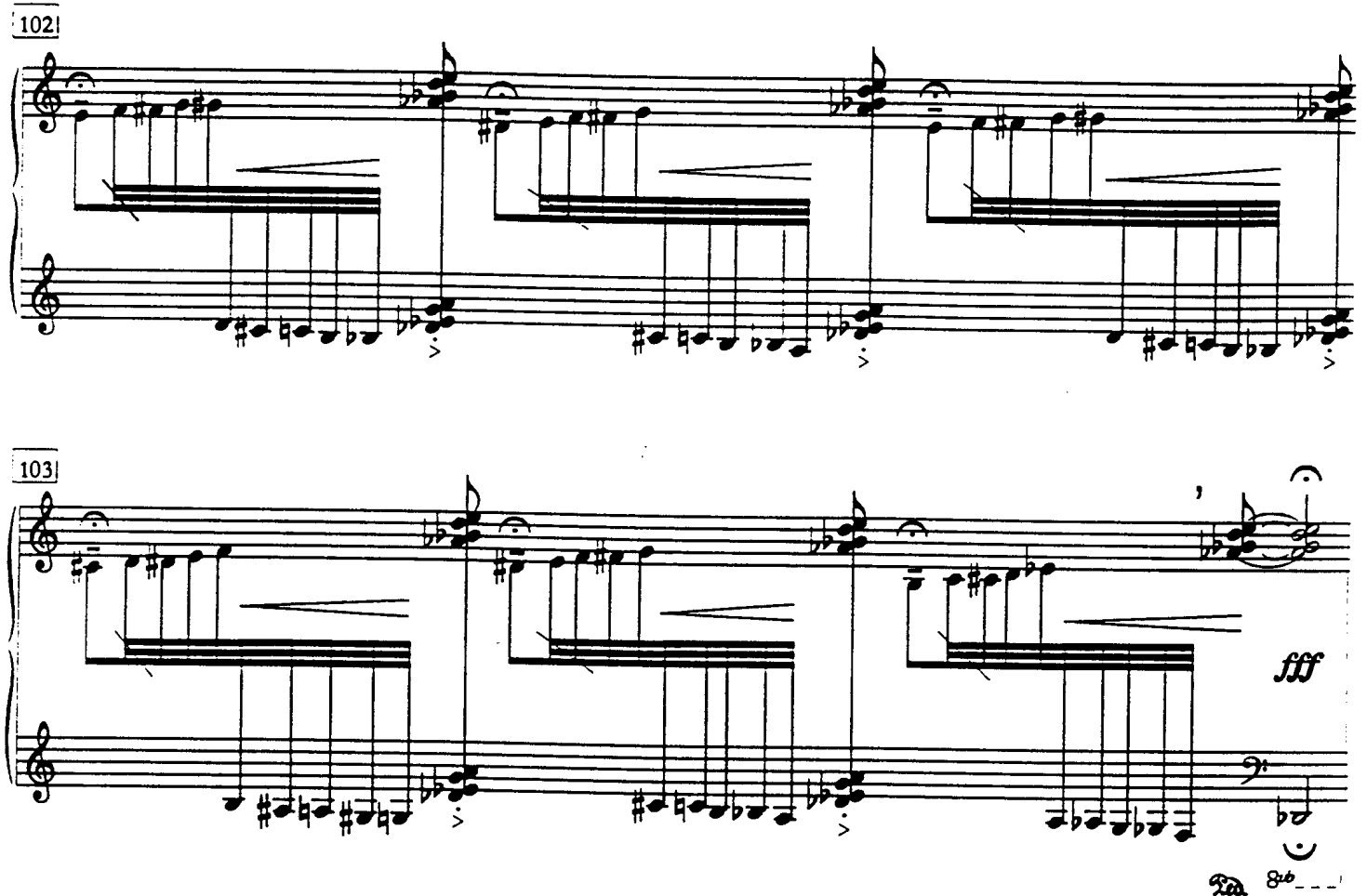
Music example xx, *Three Dimensions*; bars 97 –99



A major seventh *tremolo* in the lower bass register erupts in a two-bar sonority of enormous *fortissimo* colouration. In bar 101, the right hand demarcates with a succession of major 2nd clusters.

The Coda quotes the well-known religious theme, the *Dies Irae* (E-D#-E-C#-D#-B-[C#]). Accentuation of its melodic contour, which incidentally is built of 2nds and 3rds, is interspersed by frenetic waves of dissonant sounds. Chromatic scale *glissandi* and quaver-note vertical clusters feature the interval of the 2nd. Philosophically speaking, this tempestuous finale to the composition points towards the final apocolypse, when all continents will be united in a single dimension.

Music example xxi, *Three Dimensions*; bars 102, 103



The image displays two staves of musical notation, labeled 102 and 103. Each staff consists of a grand staff with a treble clef on the upper line and a bass clef on the lower line. The music is written in a key signature of one sharp (F#) and a common time signature (C). The notation includes various rhythmic values, accidentals, and dynamic markings. In bar 103, there is a prominent *fff* dynamic marking in the right hand. At the end of the piece, there are handwritten annotations: 'Red' and 'Sub' with a dashed line and a fermata-like symbol.

4.2.4 Conclusion

Deliberate experimentation with the fusion of avant-garde and African traits has resulted in an eclectic style. Although the work bears three programmatic subtitles, its true narrative goal rests on the emotive power of sounds. The juxtaposing of various sonic effects is achieved with convincing coherence throughout. Sound patterning frequently anticipates forthcoming structural material lending unity and allowing for smooth transitions. The mirroring of elements between opening and closing subsections creates further balance.

The first improvisatory section (*European City*) symbolizes the over-all construction of this work; three building-blocks of contrasting static timbres which are announced respectively.

The second section (*African City*), which represents the structural nucleus of the work, emphasizes rhythmic impetus. The language here comprises almost a ritualistic style of writing; subsections of sustained muted colouration are interrupted by spiky- and disjointed-sounding *staccato* structures. Dense undulating *ostinato* layers are frequently punctuated by dissonant cross-rhythms. Structural manipulation guides sharply ascending and descending pitch contours into the extreme registers of piano. Metric division is extremely varied.

The concluding third section (*Eastern City*) focuses entirely on colour effects. Proportional notation echoes the orientation of the third subsection of the *European City* section. Brief melodic motives, derived from a pentatonic Eastern scale pattern, form the pitch parameters for waves of *glissandi* and *tremolo* sounds. Cyclical patterns of chromatic sounds and bass *ostinatos* are combined; the plucking of the piano's strings creates interesting sonorities.

Apart from the brief references to the National Anthem and the *Dies Irae*, melody *per se* plays a subordinate role. Particular interval choices (generally 2nds and 3rds) govern horizontal and vertical groupings (without reference to controlling harmony) to provide homogeneity to the entire work. Specific intervals characterize the motivic pitch structuring of each subsection. The first section features major and minor 2nds and minor 6ths, the second, major and minor 2nds and perfect and augmented 4ths, the third, 2nds and 3rds (major and minor).

Dynamic application is extremely contrasting. The range varies from the *pp* at the composition's start to the *fff* at the conclusion.

CHAPTER 5

VIRTUOSO 1

From the mid-seventies to the mid-eighties, Zaidel-Rudolph concentrated more on the composition of orchestral and chamber works. When she wrote for the piano, it was mainly in combination with other solo instruments. Representative compositions are *The Fugue that flew away* for flute and piano (1979) and *Four Minim* for 'cello and piano (1982).

In 1987 she received a request from the Unisa Transnet Music Foundation to compose an appropriate solo piano piece for their forthcoming Fourth International Piano Competition. In accepting the commission, Zaidel-Rudolph inadvertently accepted a considerable challenge – to produce a work of technical difficulty without losing sight of its musical content.

Conquering the challenge, she produced the effective *Virtuoso 1*, a work which is not excessively difficult to perform. After having been featured as a compulsory set work of the competition, it did not vanish into obscurity. It has been recorded and re-recorded several times, and it is often included in recital programmes. It is also included in the Unisa Grade VIII syllabus for national piano examinations.

The work exhibits transcultural influences and effects. It contains elements of the African music tradition (in its ebullient rhythms and devices such as motive accumulation) as well as elements of the Jewish culture. The 3rd, or Victory Theme (bar 55), which comprises the central theme of the work, is a direct quotation of an internationally known Hebrew melody called the *Didon Netzach*.

The *Didon Netzach* originated in the early eighties as a result of an interesting incident. The legacy of the late Rabbi Scheerson, an invaluable collection of Jewish literature, was left to a New York library. A nephew of the Rabbi, convinced that it was his inheritance, lodged a hugely published legal claim against the library. In the course of the proceedings, Rabbi Scheerson's wife testified on his behalf, making it abundantly clear that the nephew had no claim to the books. She reaffirmed her late husband's wishes that the collection was to remain in a public place so that anyone could read or study it. Her testimony was so poignant that the judge dismissed the nephew's case as being invalid.

Overjoyed with the outcome, the Rabbi's numerous followers celebrated the victory by singing the *Didon Netzach*. Its tune symbolises the triumph of good over evil.

5.1 FORMAL ELEMENTS

The over-all formal structure shows division into two macro sections, the second a free repetition of the first. These two adjacent sections are supported by a long introduction and a coda on either side.

The outlay adheres to a free binary structure, also called fantasy form by certain cognoscenti (Leichtentritt 1973:374).

As is the case with the previous analyses, different sections are clearly defined by either alleviation, addition or variation of structural elements.

A broad formal scheme follows:

| | | |
|-----------------------|---|--|
| Introduction | ; | bars 1-26 ^a ; a declamatory section building tension for; |
| A | ; | bars 27 ^b -74; |
| 1 st theme | ; | bars 27 ^b - 35 |



| | | |
|---------------------------------|---|---|
| 2 nd theme | ‘ | transformation of 1 st theme material; bars 36 – 48 |
| Link | ; | bars 49 –54; transition to the |
| 3 rd (Victory) Theme | ; | the central theme; bars 55 – 74 |
| A ¹ | ; | bars 75 – 113; free repetition of A; |
| 1 st Theme | ; | bars 75 – 84 |
| 2 nd Theme | ; | bars 85 – 94; with extended and varied |
| repetition | ; | bars 95 – 104 |
| 3 rd Theme | ; | combined with link theme; bars 105 – 113 |
| Coda | ; | bars 114 – 128 |

The form can also be described as *rondo* (Ferreira 1995:60). The free binary interpretation is however preferred, because thematic material of all three themes of the respective A sections is closely related in motivic structuring. Another element to support this interpretation is the definite re-instatement of the 3rd theme to complete the A¹ section (albeit in a shortened version, bars 105 – 113).

5.2 TONAL STRUCTURE

The sections which contain triadic figures, e.g. the jazzy 1st theme (bar 28, see forthcoming music example vi) often exhibit bitonal structuring. The dual effect is also discernible in the 2nd theme where two implied key centres are superimposed. The left hand is centered round a G# pitch whilst the right hand emphasizes G \sharp (bar 37, see music example viii). The link to the 3rd theme (bars 49-52; music example xi) shows thematic material passing through three adjacent tonal centres (B, E^b and G). The 3rd theme in itself exhibits an E^b/D polarity (bars 55-58, music example xii).

However, triadic structuring does not comprise a general characteristic element. The afore-isolated instances of bitonality occur too seldom to establish it as the all-

pervading procedure. Suffice it to say, that although tonal centres are generally implied, they are never expressed literally.

Horizontal linear structuring, with melodic motives transformed to create a large variety of pianistic patterns, plays a more important role than vertical construction. Two-part texturing in fact constitutes about two-thirds of the composition's length. Closer investigation into melodic structures shows the emphasis of certain pitches by means of reiteration or accentuation to delineate sectional divisions (much in the fashion of *Sonata no. 1*).

The following scheme illustrates how certain pre-eminent pitches anchor the various sections

| Macro section | Micro section | Bar numbers | Anchoring pitch classes | Subsidiary pitches |
|----------------|--|----------------------|--------------------------|------------------------------------|
| Introduction | | 1 - 27 ^a | C# | E, D#, F#, E ^b (=D#) |
| A | | 27 ^b - 74 | C# | |
| | 1 st Theme | 27 ^b - 35 | C# | D, B |
| | 2 nd Theme | 36 - 48 | G#/G - B | G# - implied V function in C# |
| | Link | 49 - 54 | B | E ^b G |
| | 3 rd (Victory) Theme | 55 - 74 | D/E ^b - C# | A ^b / A , B |
| A ¹ | | 75 - 113 | C# - E ^b | |
| | 1 st Theme | 75 - 84 | C# | D, B |
| | 2d Theme; subunit 1 | 85 - 94 | A#/A | |
| | subunit 2 | 95 - 104 | G#/G | |
| | Link and 3 rd (Victory) Theme | 105 - 113 | B - E ^b (=D#) | |
| Coda | | 114 - 128 | E ^b (=D#) | |

Overall tonal-anchoring thus follows the pattern: C# - G# - C# - E^b (D#).

5.3 THEMATIC STRUCTURE

Transformation and variation constitute characteristic devices of thematic structuring, seen in e.g. the manner in which the 2nd theme grows forth from the 1st. Motivic manipulation plays an important role; intervallic constituents are frequently extracted from original surroundings to function independently or to be combined with other elements.

5.3.1 Introduction; bars 1 – 26^a

This section concentrates on the horizontal movement of figurations. The technical problem (fast moving patterns of varied intervallic content) has been transformed to serve a motivic function. Reminiscent of patterning in the Africa section of the *Three Dimensions*, the left hand plays fast-moving triplet quaver-figurations (bars 1 – 19⁴). The octave-jump device is prevalent with minor 2nds becoming minor 9ths.

Interesting is the bilinear construction of the left hand figurations. The top line forms a spill-motive, pivoting round C#, whilst the bottom line creates a C# pedal point.

Music example i, *Virtuoso 1*, bar 1

Ritmico ♩ = ca 144



S va bassa *pp*

The right hand entries also comprise triplet quaver-figurations; horizontal consecutive tritones form an ascending contour. This figuration re-appears in fragmented form at irregularly spaced metric intervals against the left hand *ostinato*, accumulating in length at each consecutive entry. The resultant urgency of each new extension, and the culmination of its contour (ascending with a *crescendo* through a registral compass of

three octaves in bars 6, 7) in the introduction theme, allots it an *anacrusic* character. A corresponding example of an *anacrusis* motive which gets extended is to be found in the *Rondo* of Beethoven's (1770-1828) Op.2 no.2 piano sonata in A.

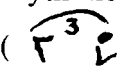
Music example ii, *Virtuoso 1*, bars 2 and 6, 7, R.H.



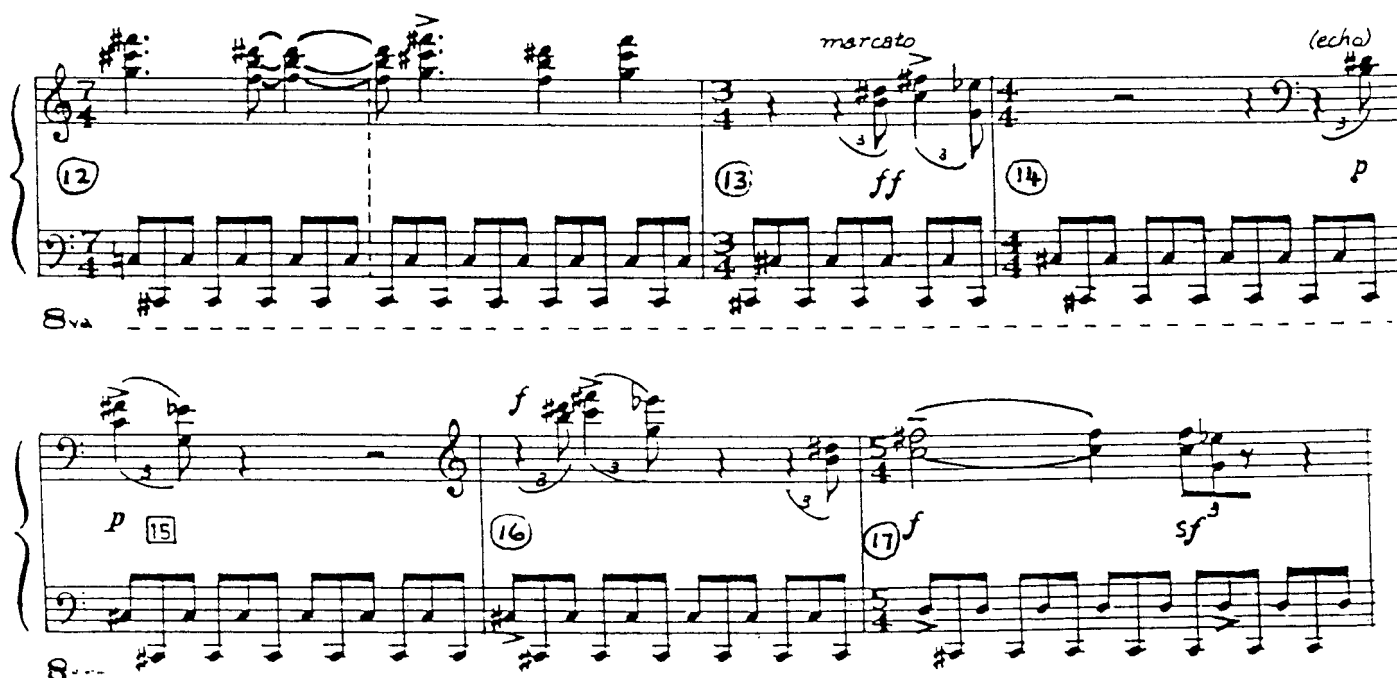
extended to:



The announcement of this theme is interrupted by a reiteration of the *anacrusis* motive by the right hand, now extended over three bars (bars 9 – 11). The device of textural interspersion to strengthen the impact of thematic structure is often favoured by the composer (e.g. the *Allegro* of the *Sonata no.1*).

A continuation of the triadic theme exhibits inversion of its initial melodic line as well as rhythmic extension. The right hand three-unit declamations which follow are rhythmic manipulations of the germinal minor 3rd motive (bars 13 – 19^{4b}). The rhythm () corresponds to Sergei Prokofiev's (1891-1953) in the bass part of the third movement of his seventh sonata (Op.83).

Music example iv, *Virtuoso I*; bars 12 – 17



Bars 19^{4c} – 23¹ constitute a textural condensation. The left hand abandons its triplet undulation to function as placement support for the right hand, emphasizing the regularity of rhythmic spurts by means of accentuation and octave doubling. The intervals of the 3rd and 4th are eminent.

From bar 23² a sudden drop in dynamic level to *pianissimo* highlights a further textural and thematic change. Balancing the opening bars of the composition, the music repeats the spill-motive (see music example i), now in *staccato* articulation in the right hand part. The left hand resumes its triplet *ostinato* pattern, confined here to a C# octave oscillation. A further elaborated version of the spill-motive follows (bars 25 – 26). The doubled-octave *tremolando* arrangement between the two hands allows for a truly pianistic climax-building.

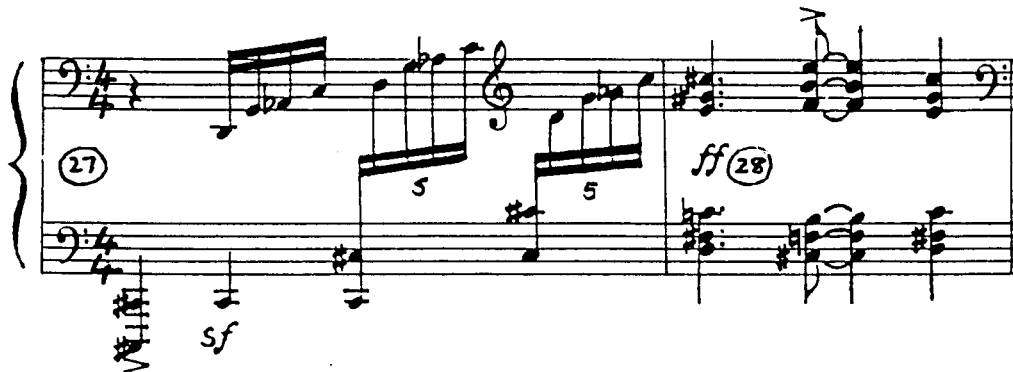
Music example v, *Virtuoso I*; bars 21 – 26



5.3.2 The A Section, bars 27 – 74

The 1st theme, which introduces the A macro section, symbolises a summarised reference to the elements of the Introduction, i.e. *anacrusis* pattern culminating in rhythmic pattern. The *anacrusic* 1-bar segment, a sharply ascending semi-quaver run, reaches its summit in a 1-bar segment of six-note chordal structures.

Music example vi, *Virtuoso 1*; bars 27, 28



The chordal segment (bar 28) shows a mirror-imaging of melodic contour between the two hands. Motivically, it shows a direct relation to the introduction theme (music example iii).

The accumulation technique is once again prevalent. The 1st theme grows in length at each of its re-statements. The first 2-bar announcement (music example vi, bars 27, 28), is followed by another 2-bar repetition, with metric extension of the chordal segment to complete the thematic material (bars 29, 30), with a 4-bar extension completing the subsection (bars 31 – 35). From bar 34^b the right hand part shows a textural change with the subtle introduction of semi-quaver motives which anticipate the advent of a subsequent structure.

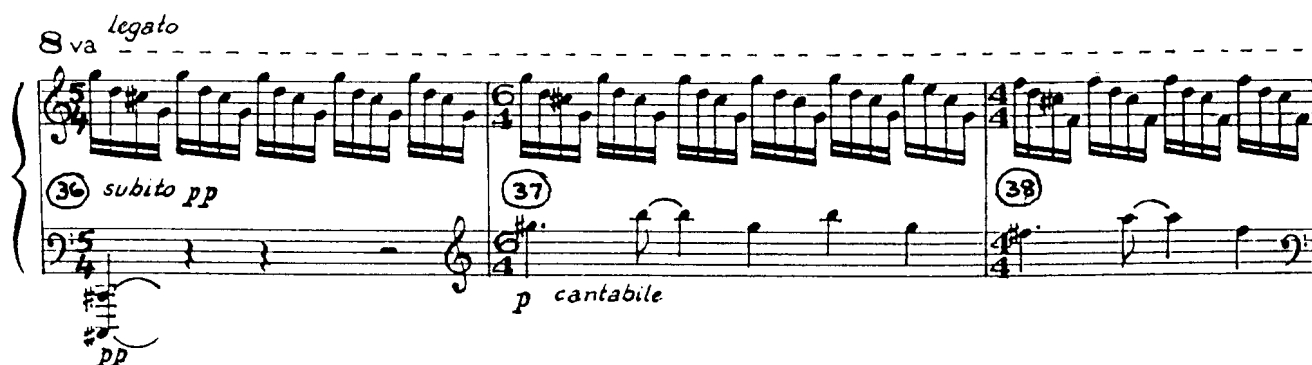
Music example vii, *Virtuoso 1*; bars 29 – 35



The musical score is presented in three systems. The first system contains bars 29 and 30. Bar 29 begins with a *mf* dynamic and features a melodic line in the right hand with a quintuplet of eighth notes. Bar 30 continues this melodic line with a *f* dynamic. The second system contains bars 31 and 32. Bar 31 has a *f* dynamic and continues the melodic line with quintuplets. Bar 32 also has a *f* dynamic. The third system contains bars 33, 34, and 35. Bar 33 starts with a *ff* dynamic. Bar 34 continues the melodic line. Bar 35 concludes the passage with a *ff* dynamic. The left hand throughout plays a cantabile melody in single note values against the right hand's accompaniment.

The 2nd theme, adhering to conventional use, is of a lyrical character, effecting in a contrasting change of sonority and texture. The right hand plays (at *pianissimo* level) an accompaniment of fluid semi-quaver figurations; melodic construction consists of the perfect 4th followed by the augmented 4th. The left hand completes the homophonic texturing by playing an expressive *cantabile* melody in single note values against the accompaniment. This melody is a transformed version of the 1st theme.

Music example viii, *Virtuoso 1*; bars 36 – 38



The *anacrusis* textural structuring is maintained in this subsection. In bar 39, an ascending semi-quaver run with rhythmic doubling between the hands anticipates the next theme entry.

Music example ix, *Virtuoso 1*; bar 39, L.H.



Subsequent entries of thematic material also exhibit a consistent use of motivic accumulation. The first 2-bar subunit (bars 37, 38, music example viii), by means of rhythmic and melodic extension, is transformed into a 4-bar subunit (bars 40 – 43). A further 2-bar subunit shows a new directional contour (bar 45, L.H.). This descending linear pattern (emphasizing a b minor 7th sonority) comprises an augmented contour version of the right hand figurations. Its intervallic content shows an inversion of the *anacrusis* (music example ix) content.

A gradual diminution of note values in the left hand (in conjunction with metric changes) adds to the textural density. The semi-quaver doubling and the *molto crescendo* dynamic application sharply delineates this subsection.



8va

45

46

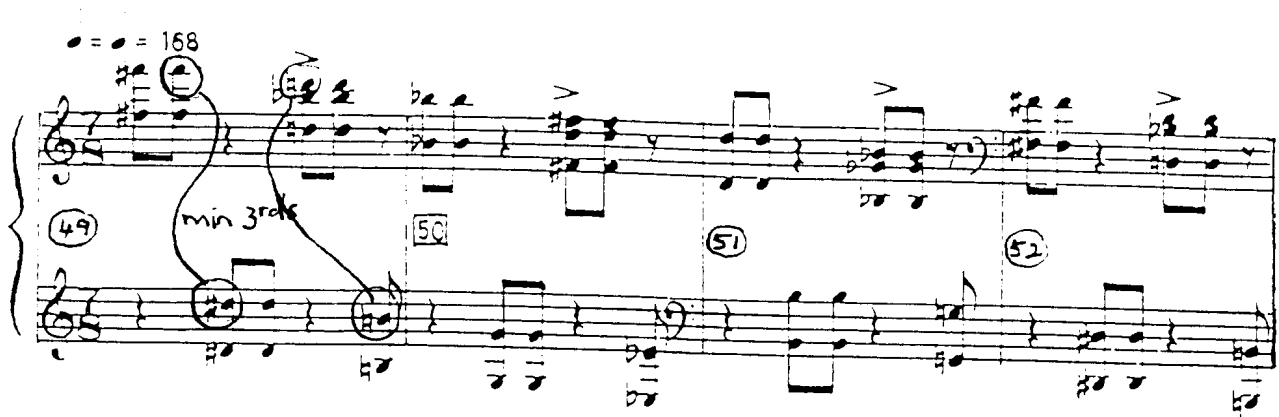
8va

47

cresc. molto 48

The link (bars 49 – 54) marks a rhythmic and textural change. A one-bar pattern of alternating octave and three-note structures featuring the descending minor 3rd interval (derived from the material of the previous music example) is repeated sequentially three times. These extensions result in a sharply descending contour to propel the sonorities into the middle and low bass registers.

Music example xi, *Virtuoso 1*; bars 49 – 52



♩ = ♩ = 168

49

min 3rds

50

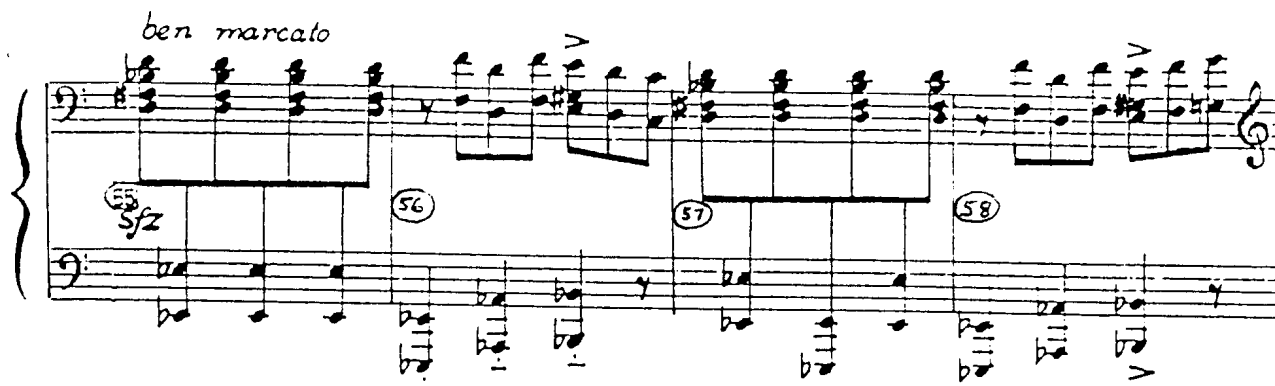
51

52

The following two bars align the sonority into a fixed position whilst anticipating the thematic material of the 3rd theme (the function is once again *anacrusic*).

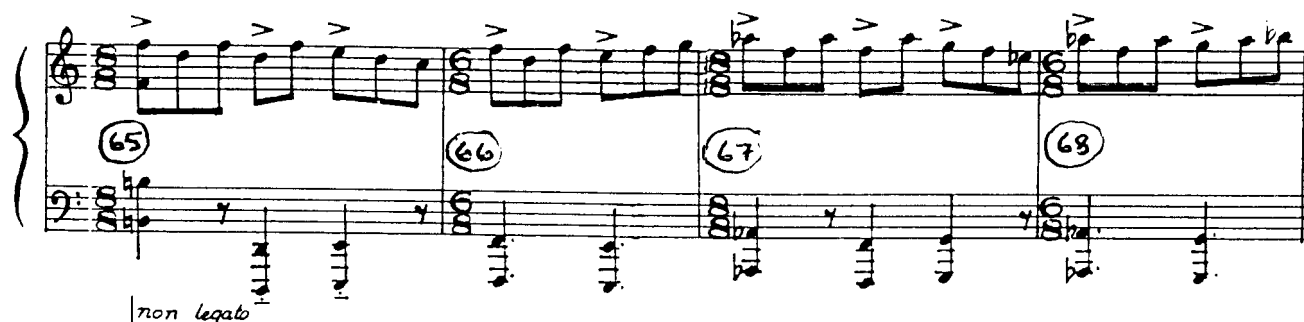
The 3rd (or Victory) theme, which symbolises the conquering of good over evil, comprises a 4-bar unit. The last 2-bar subunit (bars 57, 58) is, apart from an inverted tail-end in the right hand, an exact repetition of the first (bars 55,56). This jubilant rhythmic theme which exhibits melodic emphasis of the intervals of the 3rd (minor) and 2nd (minor and major) is built on an E^b left hand pedal. As mentioned already this results in a D/E^b tonal duality.

Music example xii, *Virtuoso 1*; bars 55 – 58



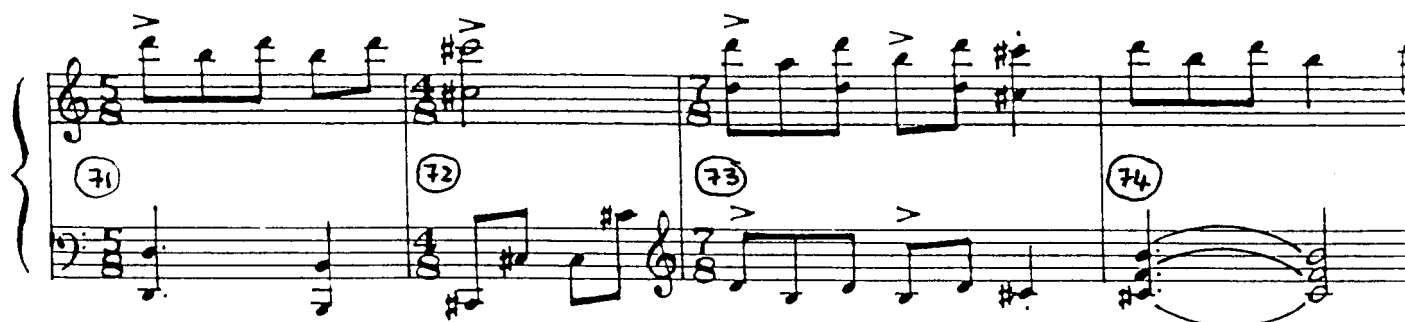
The four-bar unit is repeated sequentially in a higher register with transposition at the tritone (bars 59 – 62), resulting in an A^b /A[♯] tonal duality. A two-bar subunit (bars 63, 64) follows, which is an octave higher repetition of a previous subunit (bars 57, 58), to re-establish the D/E^b bitonal anchoring.

The following ten-bar unit can be subdivided into five two-bar subunits. It constitutes a percussive sounding sonority with rhythmic transformation of the motivic content of bar 56 into an urgently undulating linear structure. The left hand contour, which punctuates with octaves, is reminiscent of the spill-motive heard in the introduction.

Music example xiii, *Virtuoso 1*; bars 65 – 68


As can be seen in the previous music example, the 2-bar thematic structure is transposed sequentially in bars 67 and 68. Another transposition (bars 69, 70) follows, lending tremendous tension in accordance with the *molto crescendo* indication.

In bars 71 to 74, thematic material stabilises on a registral plateau. Two two-bar sub-units, with the second an extension of the first (71, 72 and 73, 74) mark a transition into the repetition of the A macro section. Noteworthy here is the emphasis of the C# pitch to prepare the subsequent structuring.

Music example xiv, *Virtuoso 1*; bars 71 – 74


5.3.3 A¹ Section, bars 75 – 113

The first theme is repeated in a slightly varied manner (bars 75 – 84). It is announced an octave higher than originally; it is also extended further. The subunit bar-division is now three (bars 75 – 77), plus five (bars 78 – 82), plus a two-bar extension of bar 82 (bars 83, 84).

Repetition of the second theme constitutes a longer version. The original statement (bars 36 – 48) is thirteen bars in length. The extended version is now constructed to divide into two subsections of respectively seven and thirteen bars long.

In the first subsection (bars 85 – 91), the textures are inverted; the left hand plays the water-like accompaniment whilst the right hand plays the *cantabile* theme, now with octave doubling. The pitch level also differs when compared to the original. Transposition has resulted in eliciting of an A#/B tonal duality.

Music example xv, *Virtuoso 1*; bars 85, 86



The second subsection (bars 92 – 104), is almost an exact repetition of bars 36 – 48; melodic material is once again allotted to the left hand, now also doubled in octaves. It commences without the one-bar *anacrusis* effect (bar 36) of the initial statement. The seven-bar subsection which precedes it, has now fulfilled the preparatory function. The

omission is now balanced by a rhythmic extension at its close, resulting in an additional bar (when compared to the original, music example x).

Music example xvi, *Virtuoso I*; bars 100-104

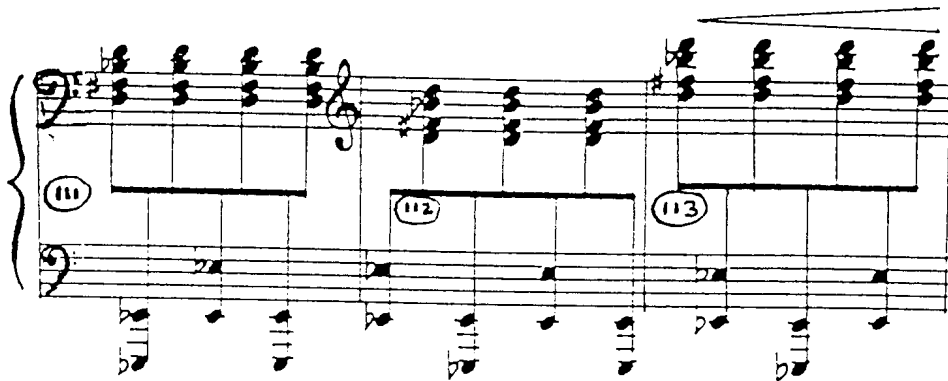


The musical score for Music example xvi, *Virtuoso I*, bars 100-104, is presented in two systems. The first system (bars 100-102) features a right-hand part with a steady eighth-note pattern and a left-hand part with a more complex rhythmic structure. The second system (bars 103-104) continues the right-hand pattern and introduces a 'molto cresc.' dynamic in the left hand. The instruction 'non legato' is written below the first system.

The final subsection of A (bars 105 – 113) combines shortened versions of the original link and third (victory) theme. It can be divided into four subunits of two (bars 105, 106) plus two (bars 107, 108) plus two (bars 109, 110) plus three (bars 111, 113) lengths.

The second subunit (bars 107, 108) makes a final declamatory reference to the third theme. The last subunit (bars 111 - 113), which constitutes the dynamic climax of this section, consists of three repetitions of the first segment of the third theme; right hand octave displacements result in a huge ascending sonority.

Music example xvii, *Virtuoso I*; bars 111 – 113



5.3.4 Coda

The virtuoso fifteen-bar long coda is characterised by dense rhythmic activity with both hands playing semi-quaver figurations in contrary motion. A wide descending thematic contour, and a dynamic range which extends from *pp* to *fff*, propels the music to the final bar.

Construction of the semi-quaver patterns is based on the intervals of the second theme's *ostinato* figurations (thirds and tritones, see music example x). The left hand patterns provide an E^b pedalpoint followed by a Lydian 4th. The rhythmic accentuations of the right hand highlight the interval of the (major and minor) third.

Music example xviii, *Virtuoso I*; bars 121 – 129



5.3.5 Rhythm and Metre

The *Virtuoso I* is characterised by an undulating rhythmic impetus creating an atmosphere of exuberant vitality. Analogous to its thematic construction, rhythmic structures frequently comprise single horizontal linear design. Quaver and semi-quaver figurations, in either triple or duple division, impart a fast and dense rhythmic motion.

Such figurations are used with a two-fold purpose; to lend articulation to the internal pulse structure, and to provide *ostinato* accompaniment layering for melodic material (e.g. the second theme). In some instances, brief rhythmic motives in cross-metric relation are used to punctuate the opposing *ostinato* layer (e.g. bars 13 – 17; music example iv).

The first subject material constitutes contrasting rhythmic textures. Fast semi-quaver density is succeeded by jazzy syncopated chord structuring employing longer note values (bars 27, 28; music example vi).

In the foreword to the score, Zaidel-Rudolph points out that “...the spirit of Africa is reflected in the ... constantly changing metre” (Composer’s Notes, 1988). Changes occur no less than 64 times throughout the entire composition. However, the changes do not occur at consistent intervals, nor do they exhibit a numerically ordered system. A subsection of e.g. the 3rd theme shows a metric change in every consecutive bar (bars 65 – 68; music example xiii). Material of 1st theme extensions also exhibits constant changes.



Music example xix, *Virtuoso 1*; bars 81 – 84

Metric subunit division is also extremely varied. In some instances, dynamic accentuation correlates with metric subdivision:

Music example xx, *Virtuoso 1*; bar 20

In other instances, accentuation of weak beats obscures the pulse:

Music example xxi, *Virtuoso 1*; bar 28



Regular metre sometimes exhibits irregular subdivision.

Music example xxi, *Virtuoso 1*; bar 69



Assymetric time signatures show different subdivisions. 7/4 is e.g. subdivided as either 4+3 or 3+4.

Music example xxii, *Virtuoso 1*; bars 105 and 73



5.4 CONCLUSION

This one-movement work represents Zaidel-Rudolph's return to a true idiomatic virtuoso style. Although exploiting the technical aspects of piano playing, it can be better described as an exercise in variety of touch and interpretation.

A marked vigour runs through its pages with well contrasted material lending structural balance to its close-knit form. Chordal structures in jazzy syncopated rhythms oppose the linearity of *moto perpetuo* figurations. Dynamic indications are well correlated to sectional and textural changes.

Although well contrasted, the melodic material comprising the various themes is inherently related. Similar to the *Sonata no.1*, organic growth from germinal motives is discernible. The interval of the minor third is predominant in motivic construction.

The structure shows a further parallel to the *Sonata no.1* in that certain pitch levels are used to anchor and delineate sections. Even though isolated instances of triadic harmony and bitonal implication are present, the cohesion rests on a system of free tonality. Where the structure of the *Three Dimensions* focused on timbral contrasts, the structure now focuses on rhythmic and technical variety.

A correspondence in rhythmic patterning between the *Three Dimensions* and this composition is to be found in the *ostinato* figurations. The rhythmic motion is defined by its frequent metric changes with dynamic accentuation lending propulsion to the fast-moving tempi. Motivic and rhythmic elaboration are interdependent with an extended range of metric subdivisions highlighting specific interval contours.